2023 ANNUAL CASFM CONFERENCE

September 17 - 20, 2023



Progress Through Calamity

KEYSTONE CONFERENCE CENTER AT KEYSTONE RESORT

633 TENNIS CLUB ROAD **DILLON, CO 80435** WWW.KEYSTONERESORT.COM

WELCOME TO THE 34TH ANNUAL CASFM CONFERENCE!

Welcome to the 34th Annual CASFM Conference! We are so happy to be heading up to Keystone Colorado this fall for our conference! Our goal as an organization is to connect people who keep Colorado's watersheds resilient, and our annual is conference is one of the best places we carry out this mission. Come ready to share information, new technologies, and innovative ideas. Also come ready to reconnect with old friends, meet some new ones, and enjoy the mountain scenery!

Your CASFM Conference Committee has been working hard over the last year to organize our annual conference, and we are excited to share numerous technical tracks from around the State. Our overall format is as similar to past in-person conferences as possible, but we are shifted earlier in the week due to venue availability. Instead of being mid-week, we are Sunday-Wednesday this year. The golf tournament and some of the field trips will take place on Sunday afternoon before our ice-breaker social at Rathbone Tap Room, which is happening Sunday night. Our official conference opening and keynote will be Monday morning followed by two days of technical sessions offered in concurrent tracks on Monday and Tuesday. There will also be a special session about the Chatfield Reservoir Expansion Tuesday morning, and we are introducing a new format for a select group of technical sessions this year we are calling CASFM's InsTED Talks. We will present project awards and have some fun at dinner Thursday night before enjoying Casino Night as after-dinner entertainment! Wednesday morning rounds out the conference with a few additional field trip opportunities and a FEMA Workshop. Check out the Schedule At a Glance and get the Socio app to make sure you do not miss anything.

It has been 10 years since widespread flooding hit Colorado in 2013. If you happened to be at the CASFM conference that year, you might remember a mass exodus of people starting Thursday while we were still in the middle of the conference. Most of those that had to leave served in the public sector and had to head home early to help with emergency response or were directly impacted by flooding. It was a time of rapid change for our organization as our expertise was vital to rebuilding. What did we learn during that time? How did we change? Where do we still need to grow? Our Keynote Speaker, Brian Varrella, will touch on "Progress Through Calamity" as he explores how the 2013 floods impacted CASFM members and how the organization has evolved since. Joining him will be Chris Sturm and Kevin Houck to share their unique perspectives on the event. As we reminisce about 2013 and the last decade, expect to come away from the session with a renewed sense of purpose for your job...Brian's passion for our profession is absolutely contagious! You will not want to miss this!

Thanks to all the volunteers that make this conference a reality! Just a glance at the overall schedule shows you how much work has gone into this event. I am especially excited for all the various social events going on this year. We have a great balance of technical training and social networking at this conference. A special thanks to all the sponsors too, who enable us to fund generous scholarships as an organization and keep our registration costs to a minimum.

Join your colleagues as we work to promote, enhance, and protect streams and floodplains for the benefit of all. Looking forward to seeing you in Keystone! And we hope to see you in Beaver Creek in 2024!

Jason Messamer Conference Chair

Colorado Springs Utilities

Drew Beck CASFM Chair Matrix Design Group



ACCESS THE CONFERENCE APP!

We're so glad you're joining us for the **2023 Annual CASFM Conference**! It's time to log in to the Event App and set up your networking profile. If you've already downloaded and logged into the Mobile App, great! Simply use the app's event search to find and download the **2023 Annual CASFM Conference**.

TROUBLESHOOTING: If you have used the WebEx App for past conferences, you may need to uninstall and reinstall the app if you have trouble finding the 2023 conference.

MOBILE APP INSTRUCTIONS:

1. Follow this link: WebEx Promo Link



- 2. Select the correct app download button for your device and download the app.
- 3. Open the app and enter your preferred email address, or use one of the social sign-in options.
- 4. If you entered an email, create a password and click Sign Up.
- 5. Fill in your networking profile and click Continue. Your profile information will help you connect with other attendees!
- 6. Now, browse for 2023 Annual CASFM Conference or use the search bar to find it. Once you've found it, tap on it.
- 7. A pop-up will appear asking for an Access Code. Enter KEYSTONE and tap SUBMIT.

You're in! Feel free to start exploring. If you have any questions about the Event App, or if you have trouble logging in, don't hesitate to reach out. Contact Stacey Thompson, sthompson@mhfd.org or 303.749.5451.

WEB APP (DESKTOP/LAPTOP) INSTRUCTIONS:

We recommend using the Google Chrome browser for the best experience.

1. Follow this link: WebEx Promo Link and click the Web App option



- 2. Enter your preferred email address or use one of the social sign-in options.
- 3. If you entered an email, create a password and click Sign Up.
- 4. Enter this Access Code: KEYSTONE
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JOIN THE CONFERENCE CONVERSATION: #CASFM2023

2023 CASFM Conference Committee



Michelle Danaher Vendors



Emily Villines Program Coordinator



Moderator Coord.



Saman Mehdi Stacey Thompson
Technical Sessions & Registration; WebEx



Dan Hill Scholarships



John Loranger Golf



Field Trip Coordinator



Venue Coordination Field Trip Coord.



Drew Roberts



Jeff Battiste Awards & Moderator

2022 - 2023 OFFICERS & REGIONAL REPRESENTATIVES

CHAIR

DREW BECK

Matrix Design Group



VICE CHAIR

DANNY ELSNER



SECRETARY

WILL WILHELM

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City of Colorado Springs



SW REGION

BRADLEY FLORENTIN

The Flow Path



METRO REGION

JEREMY DEISCHER

ICON Engineering



PAST CHAIR

MORGAN LYNCH

Freese & Nichols







CONFERENCE REGISTRATION

SEPTEMBER 17-20, 2023 - KEYSTONE, CO

To register, please visit www.casfm.org and select the Annual Conference link. Or you can use this direct link: https://registration.socio.events/e/2023annualconference

If you have any questions, contact Stacey Thompson at sthompson@mhfd.org, or 303.749.5451.

CONFERENCE FEES

The basic registration fee includes all written materials, three continental breakfasts, two lunches, refreshment breaks, receptions, and the Tuesday Banquet Dinner.

Please note that all presenters are required to be registered and paid conference attendees. Single day registration is not available.

EARLY DISCOUNT (THROUGH AUGUST 21) | \$495 REGULAR RATE (AFTER AUGUST 21) | \$695

Checks will NOT be accepted for conference fees. Payment is via credit card only. Some important instructions:

- A representative from an organization may register multiple people during the same transaction.
- If you need to purchase any conference activities using a different credit card, you will need to create a second registration for the additional activities.
- If you want to add workshops and/or field trip after initial registration has been completed, you will need to create a second registration that includes only workshop(s) and/or field trip.
- Conference registration is a required purchase with initial registration. If you are creating a second registration for the purposes outlined above, simply leave the default number of "0" for conference registration.

CONFERENCE CANCELATION

Canceled registrations will be refunded in full, minus credit card fees, through August 21, 2023. Registrations canceled between August 22, 2023 and September 8, 2023 will receive a 50% refund minus credit card fees.

Cancellations made after September 8, 2023 will not be refunded.

Cancellations must be made by contacting our registration coordinator Stacey Thompson at sthompson@mhfd.org, or 303.749.5451. If you cancel your registration, remember to call your hotel to cancel your hotel accommodations.

ADDITIONAL MEALS

The Conference Fee includes all meals listed above in the Basic Conference Fees Section. Meal tickets do not need to be purchased for the registered conference attendee. If desired, extra meal tickets may be purchased for the attendee's guest (spouse, children, etc.) by checking the appropriate boxes in this section of the online registration form.

MONDAY LUNCH | \$30 / TUESDAY LUNCH | \$30 / TUESDAY DINNER | \$60



HOTEL ACCOMMODATION & DETAILS

Keystone Resort

633 Tennis Club Rd, Dillon, CO 80435 MAP ON THE FOLLOWING PAGE

Lodging Options	Rate	Notes
Keystone Lodge & Spa King	\$170	Hotel closest to conference center
Keystone Lodge & Spa Queen	\$170	
Keystone Lodge Loft	\$180	
Conference Village Studio	\$170	Condos in the village near that hotel (further
Conference Village 1 Bedroom	\$174	walking distance to conference center)
Conference Village 2 Bedroom	\$199	
Lakeside 1 Bedroom	\$174	
Lakeside 2 Bedroom	\$199	
Lakeside Studio	\$170	
Evergreen 1 Bedroom	\$174	
River Run Studio	\$170	Condos up the valley (would need to drive or
River Run 1 Bedroom	\$174	shuttle to conference center)
River Run 2 Bedroom	\$199	
Hyatt Place Keystone King	\$170	Hotel up the valley but closer than purple (would
Hyatt Place Keystone Queen	\$170	need to drive or shuttle to the conference center)

LODGING INFORMATION

Room blocks end on Tuesday August 15, 2023

RESERVATION POLICIES

GENERAL

A taxable surcharge of 5.9% per room, per night, in addition to applicable state and local taxes (currently 6.375% combined) is assessed for each reservation.

The above rates are based on standard occupancy per bedroom. For each additional person over standard occupancy per bedroom, a charge of \$25.00 per night will be added to the room rate.

RESORT FEES

Keystone Lodge and Spa | \$25 Keystone Managed Condominiums | \$25 Hyatt Place Keystone | \$25

PARKING FEES

For Keystone Lodge and Spa, in addition to the guest room rates set forth above, there will be a daily valet parking fee of \$10.00 per vehicle.

CHECK-IN/CHECK-OUT TIMES

Check in time is 4:00 PM, Check out Time is 10:00 AM. Requests for early check-in or late check-out will be based on availability.

DEPOSIT & CANCELLATION

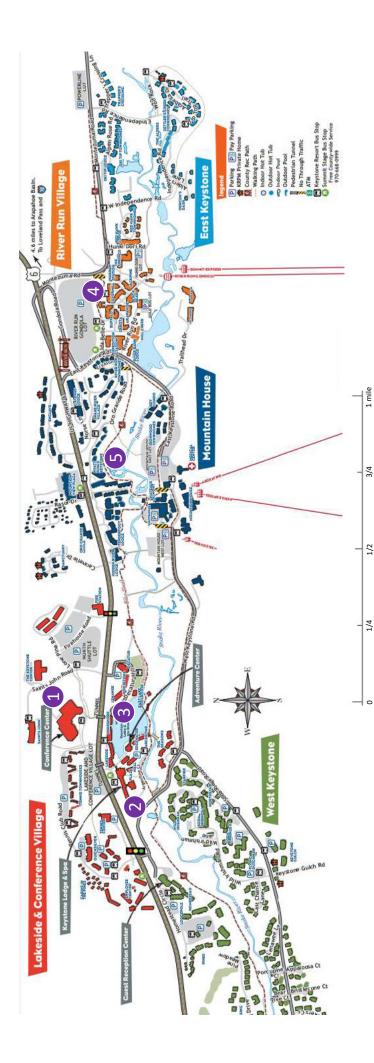
All reservations must be accompanied by a non-refundable deposit of \$50.00. The final deposit is non-refundable, will be equal to any remaining balance including room rate and all applicable taxes and fees; and is due 14 days prior to arrival.

Upon check in, each guest will be required to present a valid credit card, on which an amount of sufficient pre-authorization can be obtained to cover all applicable room charges for the length of the guest's stay, plus the anticipated use of the Resort's ancillary services. All charges which are the direct responsibility of the individual attendee must be paid in full upon departure either by check, cash, or credit card.

Cancellations for individual guest rooms will result in a cancellation fee equal to all monies received if made within 14 days of arrival. Any deposits received will be utilized towards said cancellation fee and any outstanding balance will be charged to the credit card on file. Reservations canceled outside 14 days prior to arrival will result in the loss of the \$50.00 deposit.



LODGING MAP & CONFERENCE CENTER



- 1 Conference Center (all conference proceedings held here)
- 2 Keystone Lodge & Spa (5 minute walk to Conference Center)
- 3 Conference Village Condos (2-10 minute walk to Conference Center)
- 4 River Run Village Condos (shuttle to Conference Center)
- 5 Hyatt Place Hotel (shuttle to Conference Center)

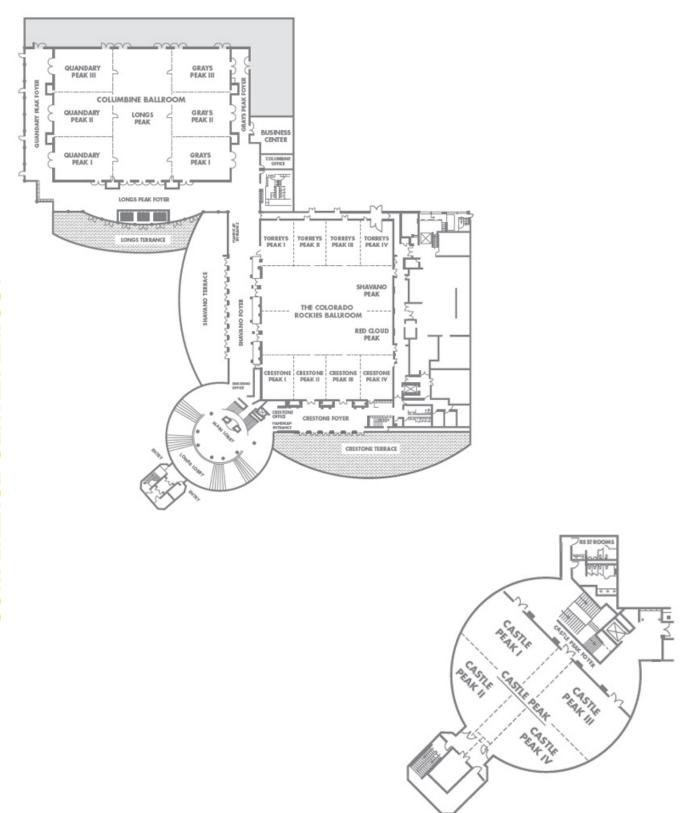




IMAGE CREDIT: ANDY CROSS, THE DENVER POST





KEYNOTE

PROGRESS THROUGH CALAMITY

10 YEARS SINCE 2013 FLOODING

Brian Varrella was elected CASFM Chair and officially took office during the annual conference in September, 2013. On his first official day, he awoke to newspaper headlines that the Front Range was underwater, and found himself in the middle of one of the most challenging natural disasters Colorado has ever experienced. Brian saw CASFM expand its external influence and "grow-up a bit" as members were called upon for expertise and guidance as recovery efforts ramped up throughout Colorado. So what did we learn? What do we do differently now when flooding happens? What do we still need to do better? Join Brian as he leads an interactive session that will celebrate the work that CASFM members performed in response to the flooding and inspire us to continue the mission we work toward every day.

Guest speakers will include Kevin Houck and Chris Sturm, who also had first-hand experience with the 2013 flooding, and will be bringing their unique perspectives into the discussion. As Section Chief for the Watershed and Flood Protection Section of the Colorado Water Conservation Board, Kevin's life was consumed with the aftermath of the flooding for the next five years. He will share experiences related to participating in public outreach, watershed recovery, program management, and regulatory changes. Chris Sturm is the CWCB's Watershed Program Director and leads activities related to watershed protection and restoration. He'll be highlighting some Big Thompson projects that have been tested with post-fire flooding and talk about what worked and what didn't with some specific examples of projects - and lots of pictures!







BRIAN VARRELLA



KEVIN HOUCK





JOIN US FOR THE SUNDAY SOCIAL!

RATHBONE TAP ROOM

8PN

0172 Argentine Ct, Keystone, CO 80435 Inside the Keystone Adventure Center at Lakeside Village.

FIELD TRIPS

DILLON RESERVOIR HISTORICAL PONTOON BOAT TOUR

\$37 | Space is Limited | Deborah Snyder (dsnyder@silverthorne.org)

This tour will be given on the Reservoir via pontoon boat. The Summit Historical Society will provide information on the original Town of Dillon's location, the move of the buildings in the Town, and the flooding of the Town to construct the dam and reservoir. Tour is approximately 2 hours and participants must sign waivers and be able to navigate from dock to boat.

Signed waiver is required.

DILLON DAM TOUR

\$20 | Space is Limited | Deborah Snyder (dsnyder@silverthorne.org)

Denver Water will take participants inside the dam to share details on its operations. This is a unique opportunity to view one of Denver's major water storage facilities. There is limited space available and participants must complete a form, wear closed-toe walking shoes, and be able to navigate smaller corridors.

Signed waiver is required.

DILLON DAM BREWERY TOUR \$10 | Space is Limited | Dan Hill (dhill@mhfd.org)

Dillon Dam Brewery gets its name from the Dillon Dam which created Dillon Reservoir. We will be touring the brewery alongside one of their brewers, and then sample some of their "DAM GOOD BEER!". There are two separate floors which seat up to 220 people inside the building (https://www.dambrewery.com/). Final details are being worked out for the tour. This brewery is about 6.5 miles (10 minute drive) from the Keystone Conference Center. We will likely meet at the brewery around 3:30-4:00 pm on Sunday, September 17. PLEASE NOTE: Transportation from Keystone Conference Center will likely not be provided as conference attendees cannot check in to their rooms until 4:00 pm on Sunday.

Must be 21+. Contact Dan Hill (dhill@mhfd.org) with any questions.

https://www.dambrewery.com/the-brewery/







FIELD TRIPS (CONTINUED)

KEYSTONE AQUEDUCT GROUP HIKE - KEYSTONE AQUEDUCT TRAIL \$10 | Space is Limited | Will Barkman (<u>wbarkman@mhfd.org</u>) | 10 AM WEDNESDAY

A short hike located near the Keystone Resort, the 3-mile out and back hike runs parallel to the historic Keystone aqueduct.

Light snacks will be provided.

https://www.trailforks.com/trails/keystone-aqueduct-trail/

KEYSTONE MOUNTAIN BIKE RIDE | 10 AM WEDNESDAY \$10 | Drew Roberts (droberts@mhfd.org)

Keystone Mountain Bike Ride: Appropriate for intermediate to advanced riders, this group ride will be approximately 16 miles and 2,500ft of climbing. Come join us for a great day on the trails! Please bring a bike and helmet. Riders will not be allowed to participate without the appropriate safety gear.

MORNING YOGA

Yoga will be hosted in the Castles Room from 6:30-7:30 on Monday, Tuesday, and Wednesday morning. We will be led by yogis from Keystone's Studio K.

INSTED TALKS

In an effort to keep the conference fresh and interesting, we are introducing a new concurrent track concept to this year's agenda which will consist of a group of presentations similar to "TED Talks." TED Talks have grown in popularity over the years and are seen as the gold standard of modern presentations - and why wouldn't we want CASFM to mimic the gold standard?

CASFM's InsTED Talks will be simple and concise presentations that will convey accurate, easy-to-understand information to a target audience. Of course, that doesn't mean the subject matter will be simple by any means, but through good preparation, even the most complex subject matter can be communicated in a way the audience can easily digest. We're still working out the details, but the format will generally consist of three back-to-back 10 minute talks, followed by a Q&A period for all presenters.

We hope you're excited to be part of the inaugural team of CASFM InsTED Talks!











Casino Night is back by popular demand! Join your fellow stormwater and floodplain managers for Craps, Roulette, Black Jack, Texas Hold'em, Three Card Poker, Let it Ride, and Caribbean Stud and even Bingo!

Dress up as a poker player to double your starting chips. We're talking western gear, hoodie and sunglasses, or suit and bowtie...really almost anything works if you have a convincing story.



12:00 PM SHOTGUN START | FORMAT: 4 PERSON SCRAMBLE | COST \$80

Contact: John Loranger, WSP; john.loranger@wsp.com

At the Keystone River Course, the par-35 front nine follows the Snake River and the par-36 back nine winds through a lodgepole pine forest. Elevation changes, bunkers, water hazards, and five sets of tees on each hole will challenge golfers of all abilities. Add magnificent views and frequent visits from wildlife and it's an experience unlike any other.

Who: All conference participants, family members, sponsors, exhibitors. Limit to 60 players. Where: Keystone River Course

https://www.keystoneresort.com/explore-the-resort/activities-and-events/golf/river-course.aspx



THANKS TO OUR MODERATORS!

Jeff Battiste - MHFD
Robert Rivera - City of Denver
Andrew Earles - Wright Water Engineers
Erika Vega-Bazan - Atkins
Drew Roberts - MHFD
Brandon Coleman - City of Boulder
Allison Wolfe - City of Boulder

Frans Lambrechtsen - Kimley Horn
Brent Kaslon - Valerian
Michelle Iblings - Drexel Barrell
Kimberley Pirri - City and County of Denver
Kevin Doyle - Michael Baker
Sara R. Johnson - Muller Engineering
Debbie Fisher - City of Boulder



Monday, September 18

12:00 PM - 1:00 PM
GLO AMBASSADORS PROGRAM:
REIMAGINING THE FUTURE OF PUBLIC OUTREACH

The Grassroot Leadership Opportunities (GLO) Ambassadors share a firm belief that youth have the capacity to connect with their communities in ways no one else can.

From parks in the Five Points neighborhood in Denver to creeks in Aurora, the GLO Ambassadors Program has built successful community outreach groups, composed exclusively of local youth leaders.

Now, in partnership with The Greenway Foundation, we continue to spread our successes with new design projects throughout Colorado, each of which recruits and trains new leadership youth groups and brings them to the forefront of their community.

Our efforts educate and link the community to public works projects happening near them; providing a voice to the voiceless and encouraging individual growth, accountability, and passion-driven initiatives.

We believe each community has unique needs and requires its own representation. By inviting local youth to help us navigate public outreach in their community projects, we guarantee the "public" is included in "public works projects," and ensure that meaningful and relevant improvements are constructed in every community.

OPTIONAL WORKSHOPS

WEDNESDAY, SEPTEMBER 20

9:00 AM - 11:00 AM
FEMA WORKSHOP – NEW FEMA ELEVATION CERTIFICATE AND FLOODPROOFING CERTIFICATE FORMS, AND MORE!

Description:

FEMA announced the approval of the Elevation Certificate and Dry Floodproofing Certificate on July 7, 2023. The new expiration date of these forms is June 30, 2026. Diana Herrera, Regional Flood Insurance Liaison with FEMA Region 8, will walk through the new forms, highlight the changes and new sections, and provide guidance on use of the expired forms.

Time permitting, the presentation will include an overview of FEMA's National Flood Insurance Program (NFIP) Transformation. The NFIP Transformation started with the implementation of the NFIP Rating Methodology. Diana will highlight the new pricing methodology, and what hasn't changed.

There will be opportunity for Q&A.

Who should attend:

Floodplain Administrators, CRS Communities, Engineers, Surveyors, or anyone with interest.



CASFM GIVES BACK 2022-2023 CASFM Scholarship Recipients



BEN URBONAS SCHOLARSHIP ELISABETH MILLER

The 2022-2023 CASFM Ben Urbonas Scholarship recipient is Elisabeth Miller. Elisabeth is pursuing her PhD in the Engineering and Applied Sciences program specializing in Hydrology and Hydraulic Engineering at the University of Colorado - Denver. Through her PhD research on the modernization of the Rational Method and work with the Colorado Water Quality Control Division she aims to help develop standards and guidance to support engineers in urban stormwater design. It is her hope to continue this work so communities not only here in Colorado, but around the globe can have access to beautiful green and blue spaces, as well as be protected from flood and storm damage.

FAMILY SCHOLARSHIP JESSICA ROBINSON

The 2022-2023 Family Scholarship award recipient is Jessica Robinson. Jessica is the daughter of CASFM member and former CRS Committee Chair, Marsha Hilmes-Robinson. Jessica graduated in 2021 from Rocky Mountain High School in Fort Collins and is currently a sophomore at the University of Northern Colorado. She is majoring in speech pathology with a minor in special education. She hopes to give the community a voice by working with children to help them overcome their speech or language delays so they can grow to become confident adults who are able to communicate and solve issues arising in future generations. During the summer, Jessica works as a tennis instructor. In addition to being a full-time student, Jessica participates in several academic clubs, plays club tennis and volunteers weekly at the food bank on campus.





UNDERGRADUATE SCHOLARSHIP BROOKE PENNINGTON

The 2022-2023 Undergraduate Scholarship recipient is Brooke Pennington. She is a junior studying Civil Engineering at the Colorado School of Mines. After graduating in 2024, she hopes to continue her education and get a master's degree in water resources. She is passionate about river restoration, recreation, and water quality and desires to apply engineering principles to protect and promote our river systems. At Mines, she is also on the Mines Women's soccer team and always strives to give her best performance on the field as well as in the classroom.

SILENT AUCTION

The CASFM Silent Auction is online at https://web.bidbeacon.com/share/auction.php?code=CASFM23.

The Silent Auction will go live at the beginning of the conference and will be open to all of CASFM membership, not just the in-person attendees! Check back throughout the conference as new items are added. We have our classic items like Broncos tickets and a PE Exam Fee waiver, but much, much more this year!

Proceeds from the Silent Auction will help fund our scholarships. Since we began our scholarship program in 2002, CASFM has awarded more than \$70,000 in scholarship funds to students in Colorado. If you have questions about scholarships or the silent auction, please contact Drew Roberts, 303-455-6277, droberts@mhfd.org.



CASFM Engineering Excellence Project Award

2022 CASFM AWARD RECIPIENT: CHERRY CREEK (QUEBEC TO ILIFF) CORRIDOR IMPROVEMENTS

In 2014, the Mile High Flood District (MHFD) and the City and County of Denver set out to provide channel stabilization on a severely eroded reach of Cherry Creek downstream of the Cherry Creek Reservoir. The project joined efforts from eight public agencies to transform this reach of Cherry Creek from a public and environmental hazard into a 40-acre open space.



	PREVIOUS CASFM AWARD RECIPIENTS			
Year	Winning Project	Companies & Agencies		
2021	Globeville Stormwater Systems Study	Merrick & Co.; City and County of Denver; OV		
2020	Sanderson Gulch Channel Improvements	ICON Engineering, City and County of Denver DOTI, MHFD, Valerian, Great Ecology, San Engineering		
2019	US 34 Big Thompson Canyon Flood Recovery	Jacobs, Ayres, Kiewit, Muller, State of Colorado, CDOT		
2018	Colorado Emergency Watershed Protection Program	Colorado Water Conservation Board		
2017	Little Dry Creek Park	City of Westminster, MHFD, Adams County, State of Colorado, Muller, Matrix		
2016	South Platte River Vision Implementation Program: Grant- Frontier Park to Overland Pond Park	The Greenway Foundation, City and County of Denver Parks and Recreation Department, CDM Smith		
2015	Cherry Creek Balley Ecological Park	Arapahoe County Open Space, SEMSWA, MHFD, Cherry Creek Basin Water Quality Authority, Muller, Valerian		
2014	To Move a River- Saving Loveland's Water Supply	City of Loveland, Ayres Associates, and Tetra Tech		
2013	Lefthand Creek Flood Control Project	City of Longmont, Muller, Went, ERO, Naranjo		
2012	Canal Importation Pond and Outfall Design	City of Fort Collins, Ayres Associates, and Anderson Consulting		

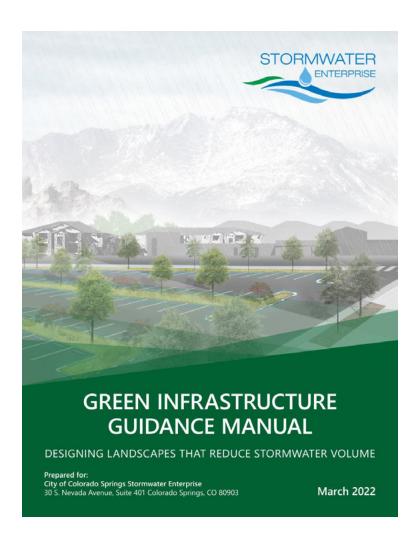


2023 CASFM Project Awards

Beginning in 2020, the CASFM Engineering Excellence Project Award was divided into two main categories: Construction and Non-Construction projects. The awards are given in alternating years. For 2023, CASFM is awarding a Non-Construction project award that focuses on planning studies, public education programs, flood response plans, criteria manuals, etc.

The following entries have been selected to present during the conference, and members will have the opportunity to vote for their favorite in real time during the presentations. The results will be announced during the closing session of the conference.

Nominees are shown in alphabetical order.



COLORADO SPRINGS GREEN INFRASTRUCTURE MANUAL

Although grass buffers and swales have been promoted in stormwater manuals for years, volume reduction by routing impervious areas to vegetated landscape is a largely unrecognized opportunity that has been underutilized in practice. The City of Colorado Springs (the City) recognizes that the volume of stormwater infiltrating into the soil can benefit individual sites and, with widespread application, can reduce negative urban runoff impacts to make a positive difference in watersheds and receiving streams.

Therefore, the City of Colorado Springs Stormwater Enterprise prepared this comprehensive <u>Green Infrastructure Guidance Manual</u> - focused entirely on practices that direct runoff from impervious surfaces through dense vegetation (e.g., grass buffers, grass swales, and similar features) to slow runoff down, spread it out, filter it, and soak it in. In addition, the City adopted quantitative requirements for volume reduction on new development and redevelopment within its boundaries and developed a simplified volume reduction methodology to support the practice. The goal is widespread application of stormwater volume reduction in the City from this point forward.

This innovative approach provides a model for other municipalities as they seek to encourage stormwater volume reduction to reduce urban runoff impacts, enhance communities, and manage rainfall to preserve precious water resources.

Link: https://coloradosprings.gov/document/ greeninfrastructuremanual03.11.2022.pdf



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DENVER ONE WATER PLAN

IMPLEMENTING THE VISION

In Denver, historical institutional and regulatory paradigms have resulted in a diverse group of water management agencies. Drinking water, wastewater, water reuse, stormwater, and flood management are overseen by separate entities, each with its own service area with independent policies, programs, and goals. A coalition of public agencies decided to re-imagine Denver's water management practices through the holistic, united, and sustainability-centered approach of One Water.

One Water recognizes the interconnected nature of the urban water cycle and encourages collaboration between multiple water agencies to achieve common objectives. Denver's One Water Plan takes this further by institutionalizing inter-agency collaboration. In Denver, urban infill creates significant opportunities for One Water approaches to be worked into newly developed and redeveloped areas.

The Plan represents the guiding principles for a shared water vision in Denver. Using its directions, sustainable solutions can be implemented encompassing the entire water cycle through deliberate policies, consistent approaches, and streamlined inter- and intraorganizational partnerships.

In the first year of implementing the Plan, the One Water Leaders (OWLs) prioritized several of the Implementation Actions identified in the Plan for initial development, along with spotlighting 8 key "one water project opportunities" that are at a formative stage where integrated water planning and management approaches can provide previously-unforeseen benefits.

The OWLs have also formed topical collaborations around:

- Urban redevelopment projects
- A water footprint awareness initiative
- Landscape transformation opportunities
- Denver's unprecedented Waterway Resiliency Program
- Community engagement and communications

Denver's initiative – supported by state-level funding and active state agency participation – provides an inspirational foundation for smaller communities around the state to transform how they manage water. The example set by Denver as the One Water Plan moves into a second year of implementation shows how collaborative partnerships can broaden the impact of planning and implementing water policies and projects.

Web link: www.denvergov.org/ onewater





2023 CASFM Project Awards

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WILDFIRE READY WATERSHEDS

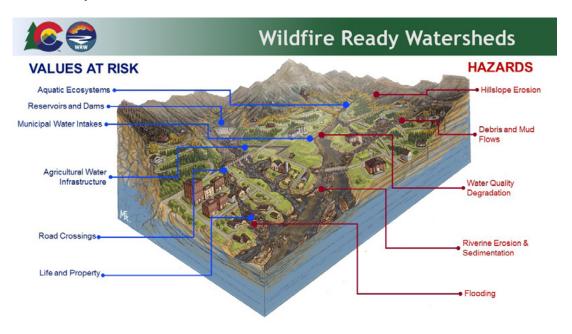
Wildfire Ready Watersheds is both a strategy and program developed by the Colorado Water Conservation Board that provides a proactive approach to address post wildfire impacts. Impacts are defined as risks posed by post fire hazards to community values such as water supplies, life and property, and transportation corridors. Common post fire hazards include increased runoff, debris flows, hillslope erosion, water quality impairments, flooding, and associated erosion and deposition. The mission of Wildfire Ready Watersheds is to assess the susceptibility of Colorado's water resources, communities, and critical infrastructure to post-wildfire impacts and advance a framework for communities to plan and implement mitigation strategies to minimize these impacts – before wildfires occur.

The Wildfire Ready Watersheds program has a two-part focus: (1) a statewide post-fire susceptibility analysis and (2) a framework that communities can use to perform watershed scale planning to address post-fire hazards.

The susceptibility analysis consisted of several phases: data collection, data development, analysis, mapping, and reporting. This effort relied on existing and new statewide datasets for wildfire hazards, critical water supplies, populations at risk, and other infrastructure layers. The data was used to perform a susceptibility analysis that intersects post fire hazards with known values/assets at risk to determine impacts to life safety, infrastructure, and property. The results, displayed on the Statewide Post-Fire Susceptibility Explorer, further an understanding of which watersheds will be most susceptible to post wildfire impacts and where community stakeholders should focus their efforts in their wildfire mitigation efforts.

The framework provides guidance for local communities and stakeholders on how to perform more detailed susceptibility evaluations at watershed scales. It serves as a guide for best planning practices in advance of a wildfire and supports preand post-fire mitigation strategies. Planning efforts will identify projects that can be implemented before and after wildfires.

Web link: www.wildfirereadywatersheds.com





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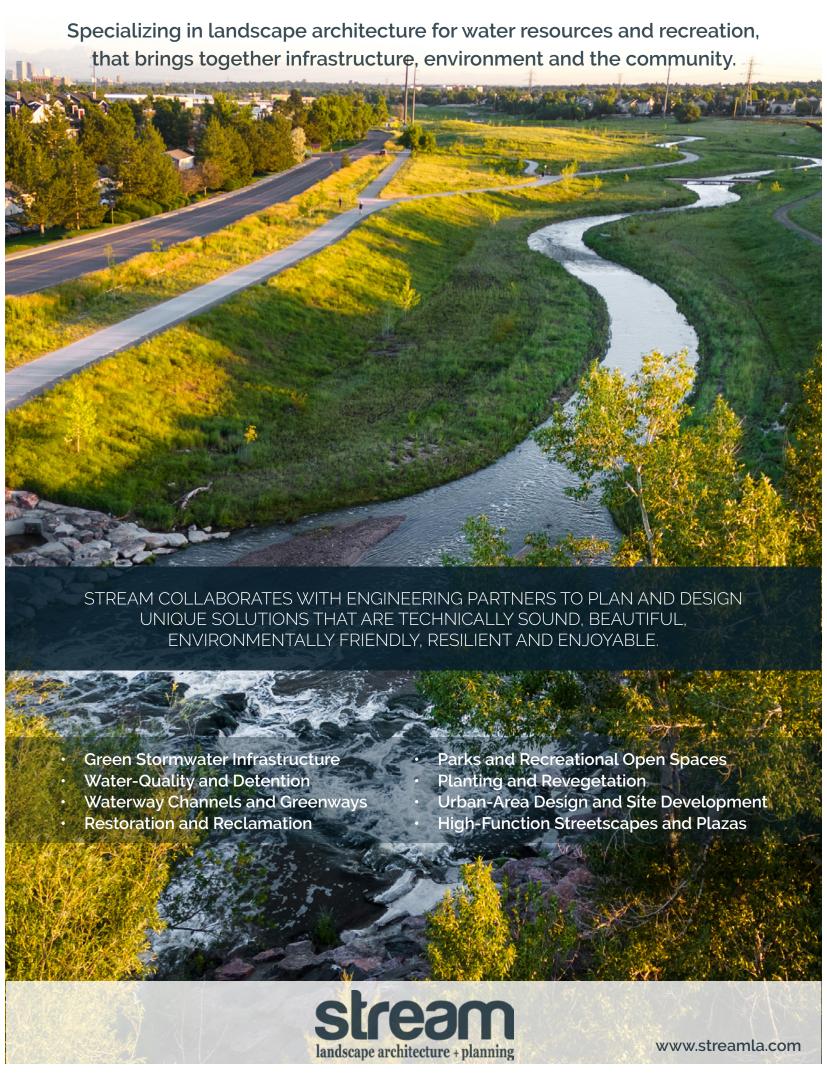


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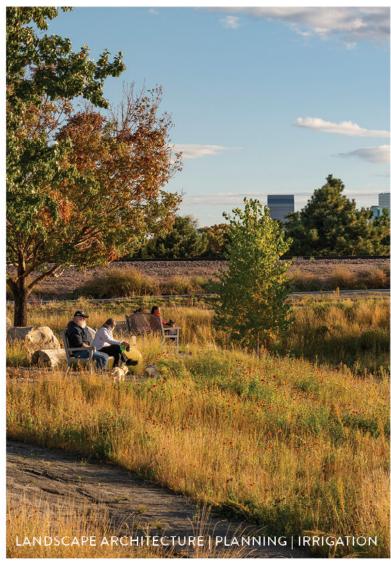
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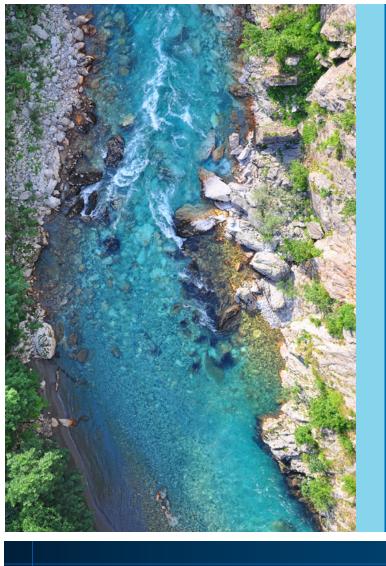
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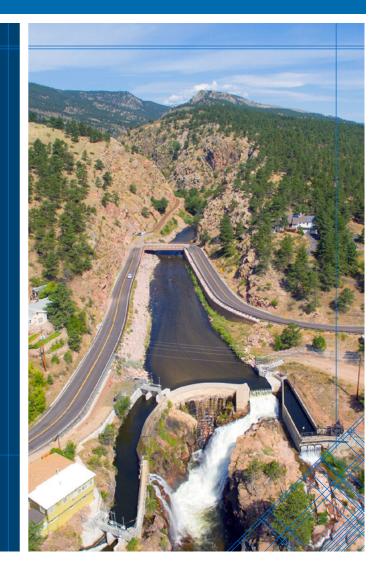
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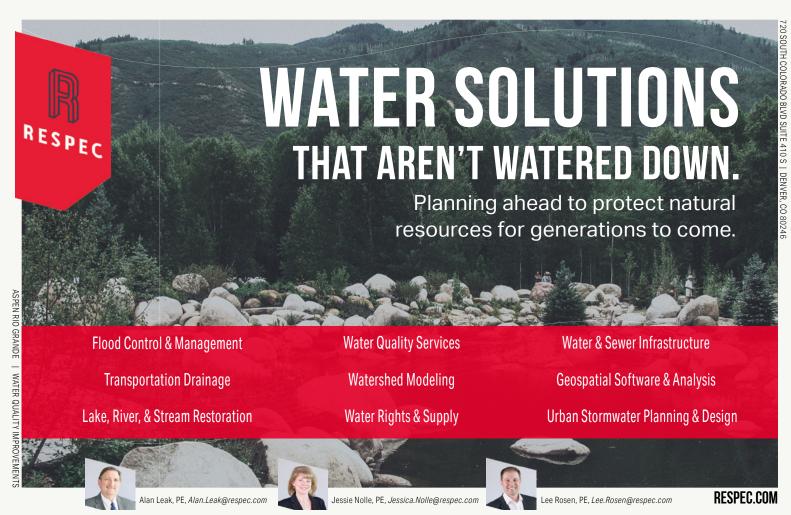
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SCHEDULE AT-A-GLANCE

Sunday, September 17, 2023 Sponsored by Merrick & Company				
11:00 AM	•	_	·	
12:00 PM				
1:00 PM	Calf Taumanana		Historical Cosiaty	
2:00 PM	Golf Tournament		Historical Society Boat Tour	
3:00 PM	Keystone River Course		boat rour	
4:00 PM	Course	Dillian Dam Brancam		
5:00 PM		Dillion Dam Brewery Tour		
6:00 PM		Tour	YMG Dinner	
7:00 PM			6:30 - 8:00	
8:00 PM	Ice Breaker Social in Rathbone Tap Room			
9:00 PM	Lakeside along Keystone Lake			
10:00 PM	0172 Argentine Ct, Keystone, CO 80435			

Monday, September 18, 2023				
Sponsored by Valerian, LLC				
6:30 AM	Morning Yoga Castle Peak Room			
7:30 AM	630-730	Registration and Breakfast		
8:00 AM				
8:30 AM				
9:00 AM	Welcome and Conference Kick-off			
9:15 AM	InsTED Talks Preview			
9:30 AM	Keynote - Progress through Calamity Remembering 2013 Flooding with Brian Varrella			
10:15 AM	2023 CASFM Award Finalists			
11:45 AM				
12:00 PM	General Membership Meeting and Lunch			
12:30 PM	Presentation by Youth Ambassadors			
1:00 PM	Break			
1:30 PM	Hazard Management	Stream Restoration Personal		
2:00 PM	Torreys	Grays Peak	Development	
2:30 PM		•	Shavano	
3:00 PM	Break			
3:30 PM	Hazard Management	Stream Restoration	Technical Modeling	
4:00 PM	Torreys	Grays Peak	Shavano	
4:30 PM	Grays i Cark Shavano			
5:00 PM	Happy Hour (CASFM Toastmasters meeting in Shavano - grab a drink first!)			
5:30 PM				
6:00 PM				
6:30 PM	Dinner on your own			
7:00 PM	,			

Sessions and Workshops			
Meals			
Social Events			
InsTED Talks			

Tuesday, September 19, 2023					
Spons	Sponsored by Stream Landscape Architecture and Planning				
6:30 AM			ng Yoga		
7:30 AM	Ca	astle Peak R	oom 630-73	30	
8:00 AM		Breakfast			
8:30 AM	DIEditast				
9:00 AM	Special Sess	ion Chatfie	ld Reservoi	r Expansion	
9:30 AM	.,				
10:00 AM	InsTED Talks	-	I	nsTED Talks	
10:40 AM	Hazard Managei		Stre	am Restoration	
10:40 AW	Grays Peak Torreys			Torreys	
10:45 AM	InsTED Talks		nsTED Talks		
11.25 414	Technical Modeling Pe		Perso	onal Development	
11:25 AM	Grays Peak			Torreys	
11:30 AM	Lunch			Board Meeting	
12:00 PM	Committee Meetings			Crestone	
12:30 PM	Committee weetings Crestone				
1:00 PM		Bre	eak		
1:30 PM	Technical Modeling Water Quality Torreys Shavano		Planning		
2:00 PM			•	Grays Peak	
2:30 PM	,			,	
3:00 PM	Break				
3:30 PM	Technical Modeling	Water	Quality	Planning	
4:00 PM	Torreys Shav		vano	Grays Peak	
4:30 PM					
5:00 PM					
5:30 PM	Happy Hour				
6:00 PM					
7:00 PM	CASFM Dinner, Awards Ceremony, Silent Auction				
8:00 PM	Cosino Niekt				
9:00 PM	Casino Night				
12:00 AM	Dress up for bonus chips!				

Wednesday, September 20, 2023				
Sponsored by Merrick & Company				
6:30 AM	Morning Yoga			
7:30 AM	Castle Peak Room 630-730		Breakfast	
8:00 AM				Dicariast
8:30 AM	Closing Statements			
9:00 AM				
9:30 AM	FEMA Workshop			
10:00 AM	Grays Peak		Piko Tour	
10:30 AM	Grays Peak	Mountain		
11:00 AM		10 AM Start	Group Hike	
11:30 AM		10 AIV	10 AIVI Start	Keystone Aqueduct
12:00 PM				Trail - 11 AM Start
12:30 PM				i
1:00 PM				
1:30 PM		Dillion D	am Tour	
2:00 PM			Waiver of	
2:30 PM		Liab		
3:00 PM		Liub		

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