

The Open Channel

Winter 2018 Vol. 29 / Issue 1

Save the Date! **2018 Annual Conference**

**2018 CASFM Conference, September 25-28, 2018
The Westin Snowmass Resort, Snowmass Village, Colorado**

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A Word From the Chair



By Deb Ohlinger, CASFM Chair

Hello fellow CASFM members!

It's an honor to serve as Chair of this fine organization. When I moved to Colorado 14 years ago and didn't know anyone, CASFM meetings, socials, and conferences were a helpful way to quickly get to know a lot of people and put faces and names together. Through the years, I have served CASFM as Secretary, Treasurer, Metro Denver Regional Representative, and have helped coordinate sponsors for the annual conference. Experiences like these have helped me to better connect with people and have enhanced both my professional and personal lives. Until recently, I still had every conference notebook and program since 2004—some fun memories! (I've been working on "minimalizing," so now I just have select scanned and electronic information.) I look forward to the annual conferences not only for the great content and networking opportunities, but also because now it feels like a chance to catch up with old and new friends. I'm always appreciative of the amazing people I find myself surrounded by at CASFM events. I'm looking forward to working with all of you this coming year.

CASFM wouldn't be where it is today without all of the people who have contributed to date. I'd like to thank our outgoing officers/chairs Shea Thomas (Chair), Brian Murphy (Vice Chair), Danny Elsner (Secretary), Robert Krehbiel (Annual Conference Chair), Brian Varrella (Northeast Regional Representative), Holly Piza (Stormwater Quality), and Craig Jacobson (Outreach & Training) for all of their time, foresight, and ideas over the years. Their efforts, along with those of our current Treasurer, Myles Gardner, and our new and continuing regional representatives, committee



Deb Ohlinger

chairs, and committee members, have allowed the organization to run smoothly and provided an atmosphere in which people can focus on new ideas and new or better ways to do things. One example is the Younger Members Group (YMG), which is now its own committee. This committee was the brainchild of a few of our younger members, in particular, Jeremy Deischer. The YMG is very active, with all kinds of fun networking and educational events on the calendar. They are on the website and all over social media, so it's easy to stay up-to-date. It makes me wish I qualified as a younger member.

My focus at this time is on how the organization can provide the most value to our members, and, like Shea, increasing active participation. Our networking and training opportunities are of great benefit to our members. In addition to participating in events, becoming more involved by serving on a committee or volunteering to help with a specific task or event is great for both the organization and the person doing it. When more people are willing to lend their

talents and share their time, we go from covering our basic/main functions to really being able to collaborate on ways to make CASFM and ourselves better. There are so many opportunities to get involved. Take a look at the committees listed on the new website <https://www.casfm.org/about/committees/>. If you are interested in a particular topic or committee, reach out and contact the committee chair. We would love to have more people who are passionate about or even just curious about an area actively participate. If you have a new idea about something you think CASFM would also be interested in, feel free to attend a general membership meeting or contact me directly.

So many people make this organization really work. In lieu of listing them all, check out the website and you'll see them. Kudos to Morgan Lynch for assembling her first CASFM newsletter. We hope you enjoy this condensed format for the winter newsletter. I hope to see many of you at the 2018 CASFM events!

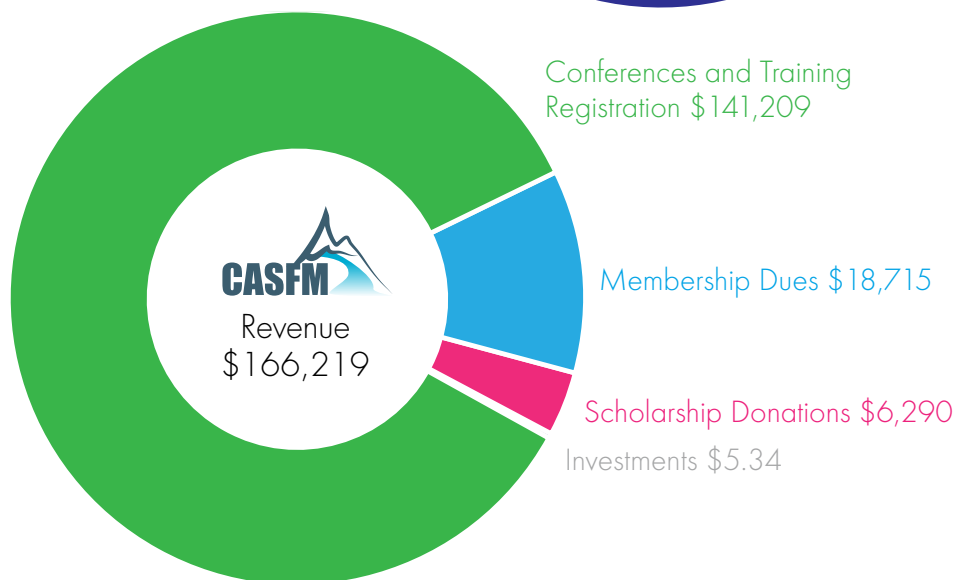
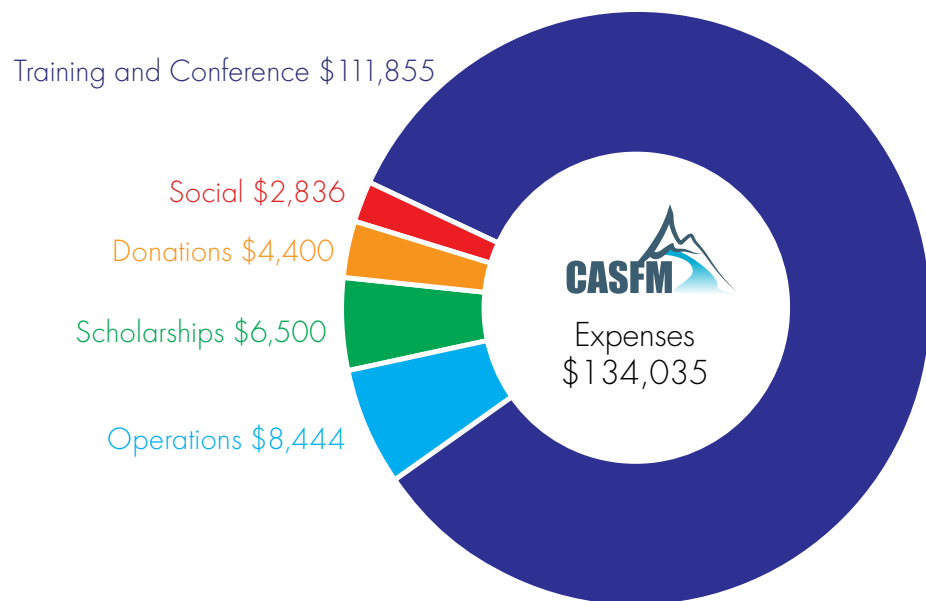
More about Deb

Deb is originally from Nebraska, where she went to school and worked as a consultant for a number of years. She moved to Colorado to be closer to the mountains and the things she likes to do such as hiking, cycling, skiing, aspen leaf peeping, and enjoying the much less humid summers. Her first concert was a-ha. She has been a consultant with Olsson Associates her entire time in Colorado. Her husband is also a consultant in the water arena.

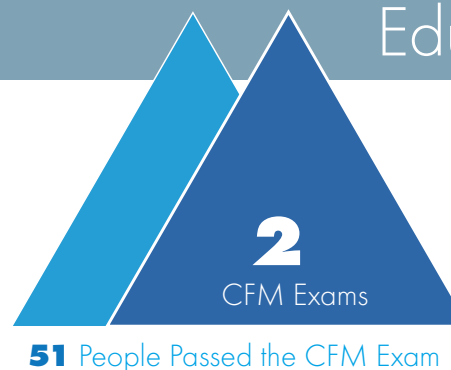
2017 – Year in Review



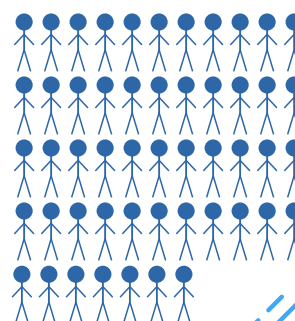
Budget



Education



51 People Passed the CFM Exam



13
Classes & Seminars

4
Lunch & Learns
210
Registrations

957
CASFM
Members

CASFM
Scholarships
3



1 Stormwater Quality Field Trip

Allocated **\$2400** grant money to Planning for Hazards

Outreach

179 tweets
+ 99 followers



#Harvey
3720 impressions
37 click throughs



LinkedIn
> 60 CASFM posts
> 536 Followers

1
New Website
CASFM.org



Conference Recap



By Sarah Houghland, Committee Chair



Sarah Houghland

For the second year in a row, we broke the annual conference attendance record! Over 415 people attended the conference, and got to experience fantastic speakers, outstanding workshops, and informative presentations. The Conference Committee would like to thank the numerous presenters, sponsors, volunteers, and attendees that make the conference a success. The conference survey results showed that a majority of the conference activities/events got high ratings, and the conference committee promises to make adjustments where necessary to make your conference experience more rewarding. Planning for the 2018 conference in Snowmass has already begun, but let's take a minute to revisit the highlights from the 2017 Breckenridge conference.



Chris Warner

Our theme this year—**Communication Meets Leadership: The Future of Water**—was inspired by Chris Warner, CEO, mountaineer, and instructor at the Wharton School of Business. Chris used his gripping mountaineering stories and Emmy-nominated footage to illustrate the need for all of us to build better teams. With over 30 years of experience guiding people to the top, Chris has led teams

up Everest, K2 and Kilimanjaro—nearly 200 international mountaineering expeditions. Chris knows how to inspire, educate, and entertain! His address offered insight on how we can all integrate networking and team building techniques into our daily activities.

Building on the leadership theme, the other featured speakers, technical track presenters, and project award nominees are representative of Colorado's outstanding leaders in the stormwater and floodplain management community. The conference program reflects the current state of the stormwater and floodplain management community in Colorado by highlighting the innovations in projects and programs located throughout the state.

Workshops

Three great workshops were offered last year:

» Floodplain 101

The Floodplain 101 workshop covered subjects including overall floodplain management, floodplain maps and Flood Insurance Studies, key National Flood Insurance Program (NFIP) regulatory and non-regulatory standards, flood insurance, and flood hazard mitigation. Colorado has around 500 CFMs and counting largely because of these workshops. This year's Certified Floodplain Manager Training led by Stephanie DiBetitto (CWCB), Natalie Phares (WWE), Kimberley Pirri (AECOM), Robert Jacobs (Summit County), Carrie Gudlof (Mesa County), and Christine Shepherd (Boulder County).

» Effective Community Engagement

As stormwater and floodplain managers assess and mitigate risks in their local community, effective communication is critical. The Effective Community

Engagement workshop, led by Kellie Mullen, Ogilvy Public Relations, focused providing best practices and tools to effectively communicate with multiple stakeholders – from county council members to elected officials to individual property owners. Attendees learned effective ways to make a complex message simple, how to build a bridge with contentious audiences, and new techniques for addressing tough questions.

» Code Camp for Engineers—A Crash Course in Python Programming

Led by Mike Bannister, RESPEC, this workshop covered the fundamentals of Python programming for water engineers. Workshop topics included python setup, coding basics, and interfacing with HECRAS, CUHP, and SWMM.

The panel discussion **Asset or Liability** was presented by a wide range of folks with expertise in this critical topic—Penn Gildersleeve, Philip B. Cardi, Bob Strine, and Susan Brown.

Travis Easton and Alan Gilbert's presentation **Lessons & Observations from the Middle of Major Stormwater Permit Litigation** offered management and legal perspectives drawn from the City of Colorado Springs ongoing permit litigation in federal district court that might benefit other permit holders and even regulators.

Fun Fact—Sarah's first concert was Warrant, Trixter & Firehouse.

Conference Recap



2017 CASFM Engineering Excellence Award



As always, one of the highlights of the conference is the project award presentations and the awarding of the CASFM Engineering Excellence Award. This year we were fortunate to have three outstanding projects to choose from! Our runner-up projects, **Lafayette-Louisville Boundary Area Drainage Improvements** and the **St. Vrain Creek Restoration—Town of Lyons** were strong candidates that showcase how local officials are committed to capital improvements to provide more resilience communities.



The City of Louisville undertook the **Lafayette-Louisville Boundary Area Drainage Improvements Project** with the objectives of reducing the regulatory floodplain to the maximum extent practicable, protecting public and private property, including the City's wastewater treatment plant (WWTP), and allowing eager developers to implement their plans.

Project sponsors included UDFCD, the City of Louisville, and the City of Lafayette. The design team consisted of Olsson Associates, Stream Design Landscape Architecture, Brierley Associates, Dewberry Engineers, ERO Resources while the contractor was Concrete Express, Inc. and RedPoint.

Prior to the Record Setting Floods of September 2013, the Town of Lyons recognized there were issues within the flood plain throughout the Town; creating risks to the Town during major storm water runoff events. The issues were related to older, historic installation of public infrastructure such as roads and bridges, along with construction of private homes and improvements to private land, all prior to the modern drainage standards and runoff conveyance considerations.



As part of the **St. Vrain Creek Restoration—Town of Lyons project**, Town Engineer Jim Blankenship identified a need for the floodplain improvements through the area of Town known as the confluence neighborhood and surrounding areas upstream and downstream, while simultaneously working on restoring the Town's water, sewer and electric systems, temporary roads and floodplain and restoration permits, due to the September 2013 flood.



The **2017 CASFM Engineering Excellence Award** winning project was the **Little Dry Creek Drainage and Flood Control Project**. In 2005, the 40-acre Little Dry Creek corridor between Federal and Lowell Boulevards in Westminster, Colorado was primarily a dumping ground that hosted homeless encampments and was mostly visited by locals quickly passing through on a broken regional trail. Fast-forward to 2017, the community now enjoys a transformed and engaging space hosting a new 2.3 acre lake, nearly 5 miles of trails and, an accessible creek edge designed to be inviting and explored. The Little Dry Creek Drainage and Flood Control project was a significant component within a greater \$80,000,000 investment in this once blighted area.

To begin the transformation, the City of Westminster collaborated with Design Studios West (now Matrix Design Group) to develop conceptual master planning documents for the area. Later, in 2009, the City signed intergovernmental agreements with the Urban Drainage and Flood Control District and Adams County and, embarked on the design and construction process by selecting Muller Engineering Company to lead a multi-faceted design team.

Conference Recap



This was all in preparation for integrating the flood control improvements to coincide with the construction of the B-Line, the City's first Commuter Rail with RTD! The City's vision allowed for direct access from the rail to this 40-acre park site, but without the Little Dry Creek project, the 100-year flood would cover the commuter rail line by more than 4-feet of water! In 2014, Concrete Express Inc. (CEI) was selected to engage in a construction manager/general contractor (CM/GC) method of contracting.

Field Trips

This year's **Mountain Bike Tour** met as a group in front of the BreckConnect Gondola before heading north along the Blue River via the Blue River Bikeway. Along the way, the tour stopped to look at some key points of interest. Peggy Bailey of Tetra Tech discussed interesting aspects of the project as the group traveled along the Blue River. The trip was an out-and-back trip, with approximately 200ft of elevation gain and loss over the course of 4.5 miles.

The **Dillon Reservoir Field Trip**, led by Steve Snyder with Denver Water, explored the power plant below Dillon Dam and visited the glory hole where the dam caretakers gave detailed explanations in a Q&A session about how



Denver Water operates the facility. The Dillon Reservoir, owned and operated by Denver Water, has an earth-filled dam approximately 5,600 feet long and roughly 230 feet above the Blue River streambed. The reservoir has a capacity of approximately 260,000 acre-feet of water and is the 7th largest reservoir in Colorado. Dillon Reservoir

water is diverted from the Blue River Basin through an almost 25-mile tunnel under the Continental Divide into the South Platte River Basin.



In 2015, CASFM conference attendees were offered the opportunity to visit the Swan River restoration project site before stream restoration work commenced. This year, we were fortunate to be able to go back for a follow-up **Swan River Field Trip** to see the completed stream restoration project. In 2016, the first phase of restoration work was completed on the Swan River near Breckenridge, CO. The work was a demonstration project showing a riverine system that had been lost due to placer mining and subsequently impacted by tailings deposition could be restored to approximate pre-mining conditions.

Troy Thompson, with Ecological Resource Consultants, Inc. along with Jason Lederer, with Summit County led the field trip and presented "Swan River—Reclaiming a River After a Century of Mining Impacts" at the Beaver Run Resort prior to meeting with everyone on-site.

Golf Tournament

The team of Brad Anderson, Brad Smith, Steve Salazar, Cameron Fowlkes were the winners of annual **CASFM Conference Golf Tournament**, that was held at Breckenridge Golf Club. Attendees had a chance to win give-away pin prizes and participate in a raffle to benefit the CASFM Scholarship fund.

Sponsors

Once again our corporate sponsors came through and provided amazing support. Your contributions allow the conference committee to plan great events and really help make the conference a special event! Be sure to secure your sponsorship early for the 2018 conference. Contact Amy Gabor for sponsorship opportunities—visit the Annual Conference Page on the www.CASFM.org on the website for more information.

2018 Conference

Preparations for next year's conference are already underway! The Call for Presentations and the Call for Project Awards are posted to the CASFM website and the deadlines for both are April 27, 2018 and June 29, 2018, respectively. CASFM members will receive updates via email and/or you can periodically visit www.CASFM.org for the latest information regarding conference planning.

An Update on the Colorado Hazard Mapping Program



by Stephanie DiBetitto, CWCB



Stephanie DiBetitto

Planning for erosion hazards is an essential component of effective river corridor management and the prevention of future flood damages. Broadly defined, the Fluvial Hazard Zone (FHZ) is the area a stream has occupied in recent history, could occupy, or could physically influence as it stores and transports sediment and debris during flood events. The objective of a mapped FHZ is to identify lands most vulnerable to fluvial hazards in the near term. In early 2015, Colorado's Legislature passed a funding bill for the Colorado Hazard Mapping Program (SB 15-245), which aims to provide a mitigation and land use framework in areas likely to be affected by future flooding, erosion or fluvial, and debris flow events.

Through this bill, the Colorado Water Conservation Board (CWCB) is mapping fluvial hazards as the leader of the Fluvial Hazard Zone Mapping program. The FHZ program is conducting studies in pilot locations throughout 2018, and will produce final map products, a database of spatial information used in the mapping, training and supporting materials, technical standards, regulatory guidance, and a model land use code by the Summer of 2019. Eight pilot communities were selected to participate through an application process. Communities selected include Boulder County, the City of Castle Rock, the City of Delta, Eagle County, the Town of Estes Park, the Town of Nederland, Saguache County, and San Miguel County. Communities were selected based on community willingness to adopt and use the maps in future planning and mitigation, physio-geographic location, geomorphic setting, existing data availability, and other technical elements. More information on the FHZ program can be found at <http://coloradohazardmapping.com/hazardMapping/fluvialMapping>.

Fun Fact—Stephanie's first concert was Janet Jackson.

