

The Open Channel

Summer 2016 Vol. 27 / Issue 2

2016 Annual Conference

Contents

A Word from the Chair—page 4

Committee News—page 6

Regional Reports—page 12

27th Annual CASFM Conference: Making a Difference September 13-16, 2016 in Crested Butte, Colorado

By Robert Krehbiel, Conference Chair and Sarah Houghland, Program Chair

We are back in Crested Butte for the CASFM annual conference! CASFM was previously there in 2008 and 2009 and the membership loved it so it was time to try it once again! If last year's attendance was any indication, we expect to see about 350 members gather for this 3½-day conference. Your attendance at the CASFM conference will earn 12 continuing education credits that can go toward your CFM or other requirements. Everyone that you need to meet will be at the conference so please join us!

This year's conference will consist of a keynote address, two educational workshops, 36 technical presentations, the 2016 Project Award for the CASFM Engineering Excellence Award. There are also options for two informative field trips, a mountain bike excursion, and the annual golf tournament. We have many great presentations on advancements in stream restoration, watershed protection, technical modeling, water quality, FEMA policy and professional development. The Thursday night banquet will include the presentation of the Project Award and a fun Bluegrass band. We are excited CASFM provides a venue for industry leaders to share their knowledge on these topics. The conference is also a great opportunity to network with your colleagues, peers and clients!



Key Address

Our theme this year, "Making a Difference" was inspired by Chad Pregracke as the 2013 CNN Hero of the Year, founder and president of Living Lands & Waters (a nonprofit river cleanup organization) and author. He is proof that one person can make a difference. Best known for starting out as a young man in East Moline, Illinois wanting a cleaner waterway, Chad has become the champion for the Mississippi River. Chad and his Living Lands & Waters crew have organized and led over 800 cleanups on 23 rivers in 20 states and removed an estimated eight million pounds of garbage. Ultimately, Chad's message inspires people to believe that they can make a difference.

This year, the conference committee presents a **Team Building Flash Talk** session that will be a succession of brief presentations that focus on one central theme. The idea is to highlight specific topics within an over-arching category. The Flash Talks will focus on 4 main topics within the Team Building theme: Importance of Community Drivers, Design Approach, and Design Disciplines.

Continued on page 2



Chad Pregracke

Workshops & CFM Training

The following three CASFM conference workshops are a great and relatively inexpensive way to get additional training and to learn about developments in stormwater and floodplain management.

» Floodplain 101 (Tuesday)

The Floodplain 101 workshop will cover 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.

» SRH-2D Workshop (Tuesday)

Scott Hogan, Hydraulic Engineer for Federal Highway Administration will conduct this 4 hour workshop to introduce hydraulic engineers to the US Bureau of Reclamation's SRH-2D two-dimensional hydraulic modeling program, recommended by FHWA for modeling channel and floodplain hydraulics through bridges and structures. The course will demonstrate data requirements, model capabilities, and application to hydraulic modeling of rivers at highway encroachments. Participants will be introduced to the SMS SRH-2D interface and new FHWA sponsored features (culvert modeling, weir flow, gates/ diversions, bridge pressure flow, etc.). The session will provide a hands-on opportunity to setup a model, run an analysis, and review results. Previous modeling experience is not required. Participants will be provided with the SMS SRH-2D software prior to the session.

» Community Rating System Showcase (Friday)

The CRS Showcase will highlight work that CASFM's CRS Committee has been conducting on local, state, and federal levels. Some of the goals of the showcase include: debunking some of the myths about the CRS program, providing insight to help communities get

started in the program, helping CRS communities move to the next level, and offering tips on public involvement and information dissemination. A series of presentations will touch on different aspects of the program ranging from FEMA's suggestions for best practices as a result of the 2013 floods, CWCB's demonstration of the new CRS website, lessons learned from the City of Boulder's last CRS Verification Visit, and UDFCD's sponsorship of the Denver Metro Program for Public Information Process.

Other Conference Activities

» **NEW THIS YEAR** How about starting your conference day off with **Yoga**? Susan Pearson of Pitkin County is a certified yoga instructor and will lead 7:00 AM sessions for anyone interested. CASFM Yogis should bring your own mats!

» Thursday morning will include presentations by two award finalists competing for the coveted **CASFM Engineering Excellence Award**.



» The **Mountain Bike Tour** has become an annual conference event. This year's bike tour will take place on the Woods Walk Trail while taking in the fall foliage and scenic views of Gothic Mountain. Danielle Beamer from the Crested Butte Land Trust will talk about the Land Trust's Peanut Lake restoration project. Join the tour on Friday morning!

» Slate River & Peanut Lake Restoration Field Trip

(Friday) The Crested Butte Land Trust led the charge in assessing the movement, studying causes and impacts of the erosion, and crafting a plan to restore the Slate River and Peanut Lake area. Peanut Lake is upstream from Crested Butte, and the Slate River feeds into the East River, providing drinking water for the City of Gunnison. Dozens of ranches pull their agricultural water from this river system. Identified as one of the biggest priorities in the Upper Slate River Valley, the 1.5 mile stretch encompassing Peanut Lake is in danger of capturing the lake, and a historic coal mine and silver ore processing plant have leached metals into the lake waters, even after reclamation. This restoration project returned this ecosystem to a functional condition, while protecting environmental and public health.



» **SNOTEL Field Trip** (Friday) Do you need to figure out backcountry conditions for your outdoor activities? Or to make informed decisions regarding resource management for work? CASFM is offering to kill two birds with one stone by offering the SNOTEL field trip.

Continued on page 3

The Natural Resources Conservation Service (NRCS) operated and maintained automated monitoring system SNOTEL (Snow Telemetry) provides snowpack water content data and collects data on snow depth, all-season precipitation accumulation, and air temperature. SNOTEL presents a reliable, cost effective way to collect snowpack and other meteorological data needed to produce water supply forecasts and support resource management activities (and your skiing obsession). Conference attendees will get a demonstration of an ice nucleus generator (cloud seeder) installed near Irwin Lake, approximately 25 minutes west of Crested Butte on Kebler Pass, as well as an explanation of the SNOTEL program.



» For those of you wanting an additional networking opportunity, the annual [Golf Tournament](#) will be held on Friday at The Club at Crested Butte.

Visit www.CASFM.org for conference updates and conference registration. Register early for the lowest possible rates! We are excited about this year's conference and hope that you can join us! Thanks to our presenters and volunteers! You make the conference a great success!



A Word From the Chair

By Shea Thomas, CASFM Chair

Hello CASFM!

This is an exciting time for our organization—the ramp up to the annual conference! As is probably the case for many of you, I used to think CASFM was the conference; I didn't know about everything else that happened throughout the year. I also never really thought about how much work goes into organizing an event like our annual conference. We seriously only have about a two month hiatus (if that) from the time one conference ends until we need to start planning for the next one. It's really fun planning these events, and if you're at all interested in what goes on behind the scenes I highly recommend joining the Annual Conference Committee. In my position at UDFCD, I'm fortunate to be able to attend a few national conferences throughout the year and I personally think our conference is one of the best around.... and for a much better value.

Speaking of other conferences, I was fortunate to get to represent CASFM at the ASFPM Annual Conference in Grand Rapids, Michigan in June. It was my first time to Michigan and only my second time attending that conference. There are around 1000 attendees with six different tracks running at the same time, along with lots of training sessions, workshops and committee meetings. My overall impression of the conference? We're doing pretty awesome in Colorado. Not that it's a competition, but it's refreshing when you experience our industry on a national level and realize that we are so ahead of the curve in many respects. One of the major accomplishments mentioned at the conference was the ASFPM Riverine Erosion Hazards White Paper (you can find it here: <http://www.floods.org/ace-images/ASFPMRiverineErosionWhitePaperFeb2016.pdf>), which is a collaborative effort among members of several ASFPM entities. Though I have not yet had a chance to read the whole paper, it looks to be a great



A portion of the Colorado contingent representing CASFM at ASFPM.

documentation of a hazard that goes hand-in-hand with flood hazards yet has often been treated as a side thought or neglected entirely. Thanks to CWCB, our state has been working to provide guidelines on mapping this hazard zone in the draft Fluvial Hazard Zone Delineation – A Framework for Mapping Channel Migration and Erosion Hazard Areas in Colorado, and recommendations on how to regulate them in the draft Fluvial Erosion Hazard Area Regulatory Guidelines Memorandum (both documents found here: <http://www.coloradohazardmapping.com/hazardMapping/phaseOneErosionMapping>).

One of my favorite parts of the ASFPM conference was the Chapter Meeting, where representatives from all the state chapters gathers to discuss happenings within their states and issues or concerns their organizations might be



Iain Hyde presenting at ASFPM on the Tools for Building Flood Resilience plenary session

having. Hearing some of the questions from other chapters (“How can we oust a current committee chair?” was my favorite) made me thankful for our Board and members that regularly attend the general membership meetings. Many of the questions they had were issues we’ve dealt with in the past, but rather than having to seek advice from outsiders we have always been able to come to a consensus within our own organization. I’ve never heard of any major disputes in the 27 years CASFM has been operating...unless you count men dressing up as women to give their Project Award presentation.

I guess what I’m trying to say is I’m proud of this organization and what it’s accomplished over the nearly three decades of existence. And I’m even more excited about what the future holds with all of the amazing volunteers that are currently serving time contributing to keep this chapter in the forefront. To all of you volunteers (and you know who you are) – thanks for the effort you’ve contributed to CASFM this year! Looking forward to seeing all of you in one of my favorite towns in Colorado, Crested Butte!

P.S. I can’t write an article without 14er pictures...so please enjoy these token photos from some of our hikes this summer. I ♡ mountains!

Shea Thomas
CASFM Chair



San Luis Peak—beautiful remote part of the state, I highly recommend this hike.



Can you guess how we felt hiking alongside a paved road on Pikes Peak?



Standing on Mt. Columbia, looking at Mt. Harvard (I never get sick of this view)

The Association of State Floodplain Managers turns 40



By Brian Varella

The Association of State Floodplain Managers (ASFPM) is celebrating its 40th year as an official organization! Those of you able to attend the June 2016 Annual Conference in Grand Rapids, Michigan, probably saw the logo celebrating this milestone. The Conference gave us the chance to look back at four decades of evolution and progress in stormwater and floodplain management, and recognize the continued evolution of the vision of our original Executive Director, Larry Larson (now Director Emeritus). If you would like to see some of the photos, videos and notes from the 2016 Conference I recommend you look up ASFPM on Twitter at @FloodsOrg and look for the trend #ASFPM2016. You will see plenty of reports from our CASFM Twitter feed there, and from our Colorado attendees.

The Board of Directors for ASFPM is comprised of nineteen (19) people, including four (4) officers, ten (10) Region Directors, and five (5) Chapter Directors. I am now entering my fifth year as your ASFPM Region 8 Director, repre-

senting the states of Colorado, Utah, Wyoming, Montana, North Dakota and South Dakota. It has been my mission for the previous four years to ensure the wants and needs of western states are well represented among the other nine (9) regions across the country. All ASFPM Regions are delineated according to FEMA's map, and Regions 7 and 8 are unique to the rest of the country in that we do not have coastal real estate attached to our states. Since sea level rise is such a hot topic to the Association right now, I work hard to keep the Board equally focused on wildfire mitigation and recovery, resiliency objectives, oil and gas development impacts on flood hazards, and representation of rural states in flood hazard mapping updates and funding availability. My Region 8 summary of priorities and recommended actions year-over-year, please visit the ASFPM website at <http://floods.org/index.asp?menuid=374&firstlevelmenuid=179&siteid=1>.

The news from our national affiliate is good this year. I am pleased to report ASFPM passed a balanced budget, and we showed a small profit as an organization for the second consecutive year. This is a critical achievement to help the Association move away from deficit spending and to return to building financial reserves and is expected to continue in the foreseeable future. I also participated on an ad-hoc committee for Goals and Objectives, and we reduced our total list of both from eight (8) pages down to three (3) over the course of two months. This list now

includes making the case for risk mapping of the entire nation (not just highly populated areas) and recruiting leaders from western states to ASFPM leadership roles. ASFPM continues to proactively support the tenants of President Obama's Executive Order 13690 from January 2015, especially as federal agencies initiate and complete their rulemaking processes. Other policy news and updates will be more frequently updated on the ASFPM website at www.floods.org as Michele and others at the Executive Office realize the NFIP guidelines and standards are changing at an accelerated rate...so tune in, ask questions, and get involved!!

Looking for training or continuing education credits? ASFPM has expanded its webinar series over the past 2 years and all members and non-members are invited to participate! Interest and involvement grew beyond all expectations, and Kait at the Executive Office was able to make upgrades to software and diversify the content offered in 2016. You can review the calendar and sign up for webinars and CFM continuing education credit opportunities here; <http://www.floods.org/n-calendar/webinars.asp>.

Most of all, and most importantly, as your ASFPM Region 8 Director I want to hear from you as often as possible. If you can think of ways for CASFM to get more involved nationally, or if you have questions or concerns to carry forward to the ASFPM Board or Executive Office, I am at your service.



Stormwater Quality Committee

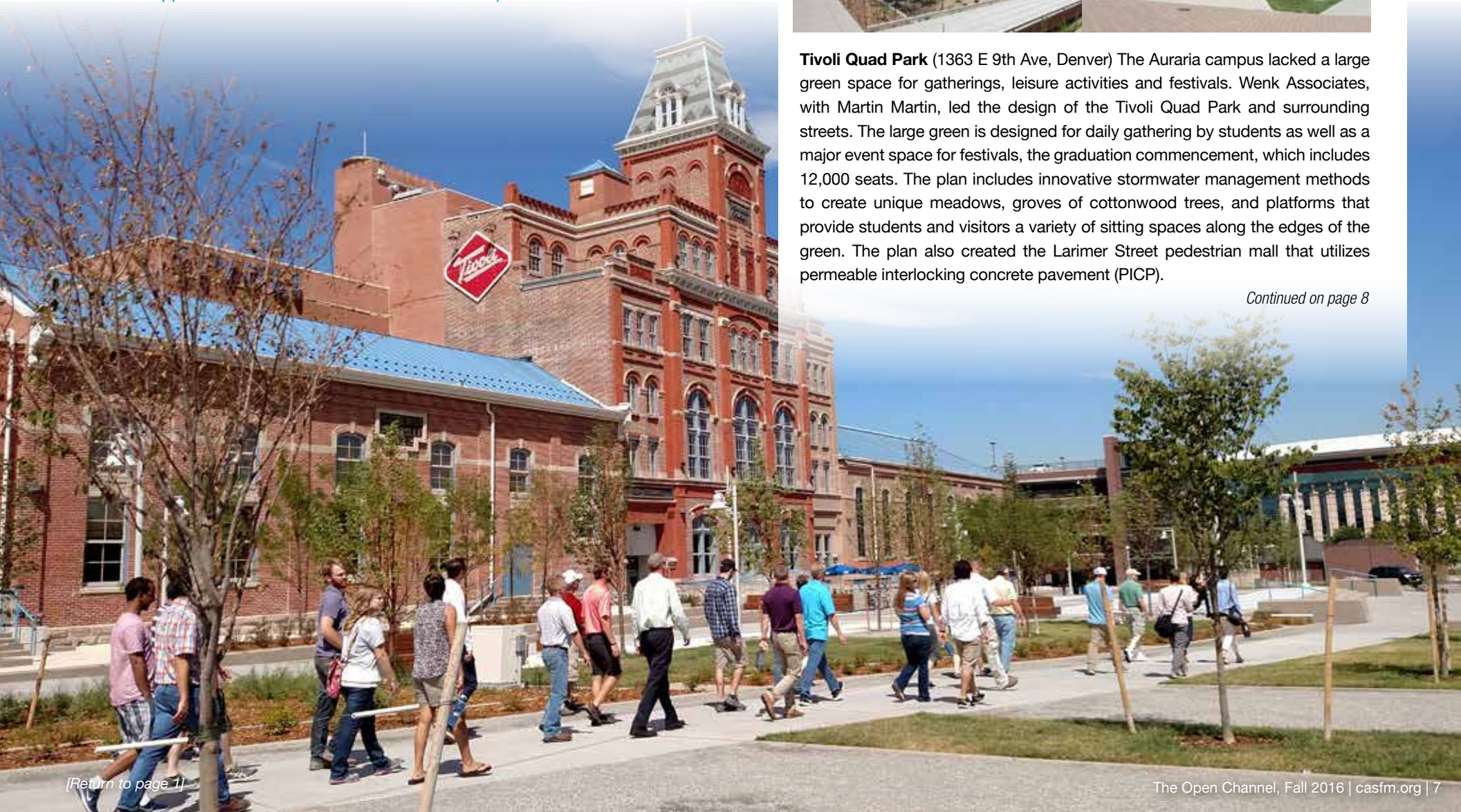
By Holly Piza

Each year the stormwater quality committee hosts an annual field trip to see good examples of water quality treatment within the Colorado Front Range. On July 19th, 55 attendees boarded a chartered bus and visited the below described sites. To see all sites visited since 2010, visit our Story Map (<https://www.arcgis.com/apps/MapTour/index.html?appid=5c142dea3829461e839576cddb7756f3>).



Tivoli Quad Park (1363 E 9th Ave, Denver) The Auraria campus lacked a large green space for gatherings, leisure activities and festivals. Wenk Associates, with Martin Martin, led the design of the Tivoli Quad Park and surrounding streets. The large green is designed for daily gathering by students as well as a major event space for festivals, the graduation commencement, which includes 12,000 seats. The plan includes innovative stormwater management methods to create unique meadows, groves of cottonwood trees, and platforms that provide students and visitors a variety of sitting spaces along the edges of the green. The plan also created the Larimer Street pedestrian mall that utilizes permeable interlocking concrete pavement (PICP).

Continued on page 8



Neenan Archistruction Office Building (3325 S Timberline Rd #100, Fort Collins) This manufacturing facility was redeveloped into office space and needed additional parking space. An open cell parking lot design was chosen as a means to attain the water quality requirements for the City of Fort Collins and meet LID criteria. Two additional parking lots were constructed; one with an open graded aggregate material supported by a proprietary cell matrix permeable pavement, the other, a grass filled matrix system using the same proprietary product.



Remington Bikeway Bioretention located at CSU Center for the Arts (1401 Remington St., Fort Collins) This bioretention stormwater treatment system was placed along a bike-way on Remington Street. It features a public art piece that was designed in partnership with a City of Fort Collins art program. This design included a bicycle safety feature for users of the new "Low Stress" bicycle network in Fort Collins.



Library Park (207 Peterson St., Fort Collins) This site includes some very creative and attractive bioretention areas incorporating each facility successfully into the landscape of the site. The system of interconnected rain gardens was designed to solve both a drainage and a safety issue in a parking lot in a downtown Fort Collins City Park. The result is a stunning educational display that fit well with the overall environment and serves a great educational purpose with its proximity to the downtown Fort Collins library.

Old Town Fort Collins Plaza and Mitchell Block (199 Trimble Court, Fort Collins), Seven years after its original installation date we revisited the LID installations in downtown Fort Collins. The LID components of this highly visible site include two PICP systems side-by-side design with alternative cross sections, rain gardens and tree filters. One of the tree filters was originally installed in 2010 and several were recently added with the Old Town Square rehabilitation. This site will allow us see the performance of these LID features over time and discuss what construction and maintenance challenges have been encountered at this site.



Scholarship Committee

By Jacob James

The scholarship committee will be ramping up our outreach this fall and we encourage members to start spreading the word about our three great scholarship opportunities. A lot of entities have summer internships, so please pass along this information to college students that you know. Also, please spread the word to local universities, professional organizations and even students that are in your household. CASFM's three scholarship opportunities for 2016 are:

- » The CASFM Ben Urbonas Scholarship is \$2,500 and available to graduate level students in the engineering field.
- » The CASFM Family Scholarship is \$4,000 and available to full-time students (Sophomore level or above), enrolled in an eligible program, and have a parent or legal guardian that is a current member of CASFM.
- » The CASFM Undergraduate Scholarship is \$2,500 and available to full-time students (Sophomore or Junior level), enrolled in an eligible program.

Please remember that CASFM is officially recognized as a 501(c)(3) with the IRS and all donations to the CASFM Scholarship Funds are tax free. If you have any interest in donating to any of the CASFM Scholarships please contact me or Brad Bettag, our current Treasurer.

The Scholarship committee is looking for more volunteers. This is a great opportunity to get involved with CASFM and build your experience in application review and interviewing. To volunteer with the Scholarship Committee please contact me at jjames@parkeronline.org

Information about the scholarship and previous recipients can be found on the scholarship page on the CASFM website.

CRS Committee

By Marsha Hilmes-Robinson

CRS Committee Hosts Special Presenters

The CRS Committee has included special presentations as part of the last several meetings. Diana Herrera, the FEMA Region VIII Flood Insurance Specialist, spoke at the April meeting. In June, Matt Buddie with FEMA Region VIII demonstrated the flood table that FEMA has available for communities to borrow for use at public outreach events. At the August meeting, the committee is inviting community building officials to join us for a presentation and question and answer session with Dale Thomure with ISO on the Building Code Effectiveness Grade Scoring (BCEGS) which is one of the creditable activities under CRS. Receiving specific BCEGS ratings are a prerequisite to achieving a CRS Class 6 or higher and this has been a difficult activity for many communities. The goal is to bring together building officials and floodplain management staff to gain a better understanding of the requirements of this important CRS activity.

Communities Make Improvements in CRS Ratings

The CRS Committee would like to spotlight the ongoing work of Colorado communities participating in the CRS. During 2016, several communities improved their CRS rating and one community joined the CRS program:

Effective May 1, 2016		
Community Name	New CRS Class	Flood Insurance Discount
City of Fort Collins	Class 2	40%
City of Loveland	Class 6	20%
City of Alamosa	Class 7	15%
Douglas County	Class 7	15%
Mesa County	Class 8	10%
Effective October 1, 2016		
Community Name	New CRS Class	Flood Insurance Discount
City of Cherry Hills Village	Class 7	15%
Town of Silverthorne	Class 8	10%
Adams County	Class 9 – New Community!!!	5%

Congratulations! A special welcome and congratulations to Adams County for joining the CRS!



City of Fort Collins Mayor Wade Troxel accepts the CRS Class 2 plaque from FEMA Region VIII representatives Nancy Dragani and Matt Buddie.

Fort Collins staff that assist with the CRS were at the City Council meeting for the special presentation. CASFM members include Dan Evans, Marsha Hilmes-Robinson, Dan Mogen, Heidi Hansen, Ken Sampley, Chris Lochra, Basil Hamdan and Sandra Bratlie.

Floodplain Management Committee *By Stephanie Dibetto*

This year's Annual CASFM Conference Floodplain Management 101 review course will take place on Tuesday, September 13th from 8am to 5pm (note: this is the same course that has been offered of Conference Tuesday since 2002). It can be signed up for when registering for the conference and is an additional \$70 fee. The course seeks to provide an overview of floodplain management in a nutshell and addresses the following topics: the National Flood Insurance Program's regulatory and non-regulatory standards, Flood Insurance Rate Maps, Flood Insurance Studies, and flood hazard mitigation. In addition to the course, the CFM exam will be administered the following Wednesday, September 14th from 7am to 10am. The review course is

not a requirement to take the exam, and should not replace studying for the exam. Additional study materials include FEMA 480, [ASFPM CFM Exam Prep Guide](#), and [ASFPM Floodplain Body of Knowledge](#). To take the exam you must register and pay through ASFPM. Goals of the CFM Program highlight the reduction of flood losses, protection and enhancement of natural resources and functions of floodplains, increased knowledge of floodplain managers, and better informed decision-making by local officials and the public. If you have questions about the review course or the exam, please contact Stephanie DiBetto by email at Stephanie.dibetto@state.co.us or by phone at 303-866-3441 x3221.



Outreach and Training Committee

By Alan Turner and Craig Jacobson

The CASFM Outreach and Training Committee supports the CASFM Board and Membership by disseminating information throughout the organization; providing training opportunities for members; and offering external outreach and support to associated professional organizations and regional communities. Here's a look at what we've been up to since the Spring newsletter:

Social Media Subcommittee

- » Provided internal and external outreach utilizing both Twitter and LinkedIn
- » Maximized Twitter with 4 to 5 posts per week and daily content sharing
- » Engaged LinkedIn with weekly posts
- » Conducted a membership survey to gain insight into how to benefit members through use of social media; also identified user preferences and possibilities for social media expansion

Young Members Group (YMG)

- » Met frequently to engage CASFM's young members
- » Introduced the "Slack" platform for multi-user engagement
- » Participated in Geeks Who Drink trivia event and finished 3rd out of 20 teams (Congratulations, YMG!)
- » Participated in the Greenway Foundations' Tour of the Great Divide's New Barrel Bar in RiNo
- » Will participate in a Fall River Sweep later this year

Completed Training & Networking Opportunities

- » February's CASFM Lunch and Learn presented the newly updated UD-Detention Version 3.0
- » April's CASFM Lunch and Learn hosted members of UDFCD's Design, Construction, & Maintenance Program who came to speak on water quality and regional detention basins
- » In June, hosted a HEC-RAS 2D Class on the Western Slope with over 20 participants

- » July's CASFM Lunch and Learn focused on nonpoint source pollution and BEST, a new Low Impact Development and Stream Restoration BMP Technique
- » Currently exploring new training opportunities and on the lookout for new ideas

We are excited with the progress that our committee has made this year, and we are looking forward to continuing this growth through 2016. Thank you to all of our volunteers who help move the goals of the group forward —we couldn't do it without you!

If you are interested in joining our committee, please feel free to reach out to one of us.

- » Craig Jacobson, P.E., CFM
Outreach and Training Co-Chair
cjacobson@iconeng.com
(303) 221-0802
- » Alan Turner, P.E., CFM
Outreach and Training Co-Chair
Alan.Turner@CH2M.com
(720) 286-0844

Outreach and Training Committee

Younger Members Group

The CASFM Younger Members Group is dedicated to creating a welcoming social environment that promotes the professional development and leadership of younger professionals through networking and collaboration within the stormwater community by providing opportunities and information related to technical training, educational outreach and community service.

The kick-off event for the YMG was hosted in February at Dave and Busters with over twenty professionals attending the event. The YMG participated in a Geeks Who Drink trivia event in July where the team finished third out of twenty teams. The team displayed an impressive knowledge base answering questions that ranged from who were the previous NCAA basketball champions, to which Harry Potter books have the highest word count, and which



Shakespeare's plays have repeating words in their title. In late July, the YMG was invited by the Greenway Foundation to participate in the Greenway Untapped Learning Happy Hour at Great Divide's new Barrel Bar. The event included a great presentation about water usage in the brewing / bottling processes along with a tour of the brewery.

The Younger Members Group looks forward to establishing more routine events to encourage participation as well as reaching out to students at local university in the upcoming semester to get future engineers involved with CASFM.

Ways to stay up to date on the CASFM Younger Members Group:

- » Mailing list/Slack Channel:
Email jdeischer@iconeng.com
- » Twitter: https://twitter.com/casfm_ymg

Outreach and Training Committee

Social Media

By Alan Turner and Craig Jacobson

In the spring of 2016, the CASFM Outreach and Training Committee's Social Media Subcommittee completed a member survey to evaluate CASFM's social media engagement. The goal of the survey was to determine if CASFM was effectively utilizing social media, and/or how we might improve our digital outreach to our members.

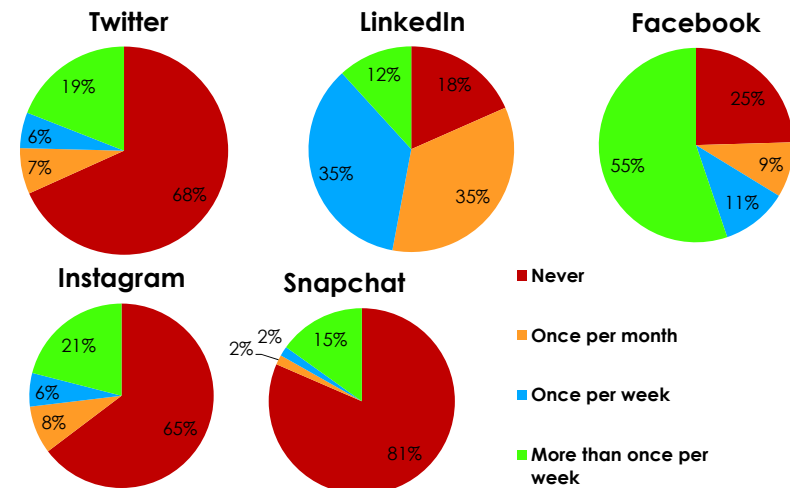
The survey consisted of 6 questions and offered a drawing for a \$25 gift certificate to participants. The questions included:

- » What is your age?
- » What platform(s) do you use to engage with CASFM online?
- » Generally, what forms of social media do you use and how often?
- » What type of content would you like to see from CASFM on Twitter?
- » What type of content would you like to see from CASFM on LinkedIn?
- » Other comments about social media?
- » A total of 138 members completed the survey, with relatively equal distribution of ages (32% 18-35 years, 35% 36-45 years, 21% 46-60, and 12% 61 and above).

The results of the survey indicated that, generally, CASFM members wanted to see enhanced social media engagement from CASFM. Nearly all respondents currently utilize the CASFM website to find information, with 30% tuning in to LinkedIn regularly. The survey found that 75% of respondents utilize Facebook, second to LinkedIn at 82%, with 55% of respondents utilizing Facebook more than once per week, by far the highest percentage of regular use. The survey showed that Twitter is used largely by public agencies and in support of local initiatives, where the website and LinkedIn are used primarily for local CASFM information. Finally, the majority of respondents supported CASFM's continued use of social media, with several requesting expanded presence. A handful of members did not identify social media as a critical tool for CASFM's outreach efforts.

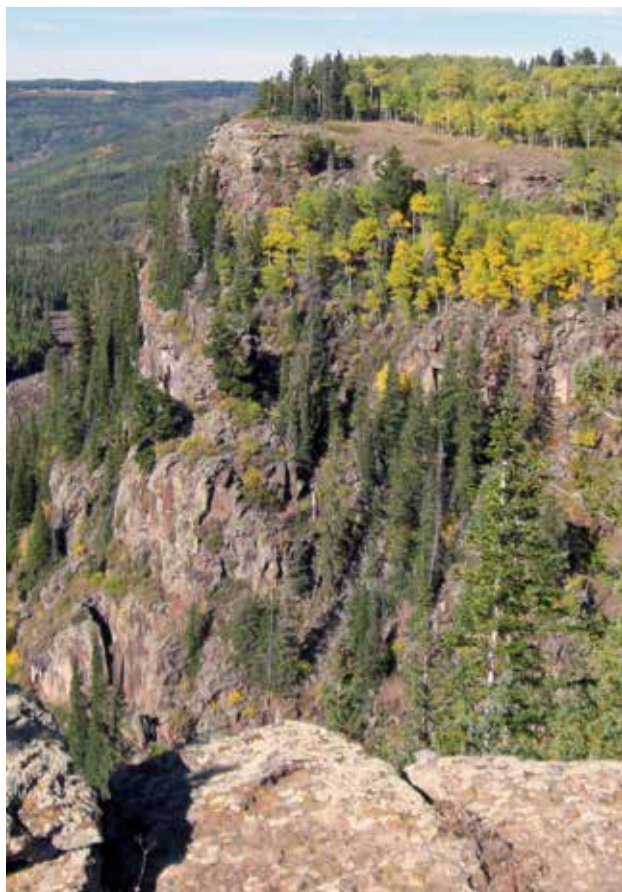
Given the results of the survey, CASFM has taken an active stance in updating our LinkedIn and Twitter outreach, and we are evaluating additional options.

Q3: What Forms of Social Media Do You Use and How Often?



Northwest Region By Betsy Suerth

The NW Region hosted a 3-day HEC RAS 2D course at Two Rivers Convention Center in Grand Junction June 13-15. The class was well attended by 24 students, with over a third of them from the West Slope. The course received good reviews, both for the instructor (Ray Walton from West Consultants) and the venue. Betsy Suerth and Rick Dorris kicked off the class with a warm welcome for the attendees on Monday morning, Rick also assisted the next two days, checking in on the instructor and the Convention center staff. Thanks to those who attended to make the class a success.



Metro Region By Drew Beck

The Metro area had some great socials this year on unique engineering challenges in both urban and rural environments. For our winter social on January 26th the project team for Denver's Ultra-Urban Green Infrastructure Guide presented the final version of the manual. The City and County of Denver with UDFCD, developed a new manual for post-construction BMPs. The manual builds off of concepts of bioretention and permeable pavements found in the USDCM Volume 3 and focuses on installations in the right-of-way and in high density urban areas where dispersed BMPs are desired. Due to the number of facilities required when BMPs are dispersed, planning and budgeting for maintenance and operation can be complex. Denver is developing policy related to potential public-private partnerships for when these facilities are located in public rights-of-way and is also exploring how best to address maintenance of these facilities.

On Thursday, March 3rd the Metro Region and the NE Region held a joint social event along with the Colorado Riparian Association and the American Planning Association in at C.B. Potts in Westminster. In addition to some great food and beer, attendees heard from the Emer-



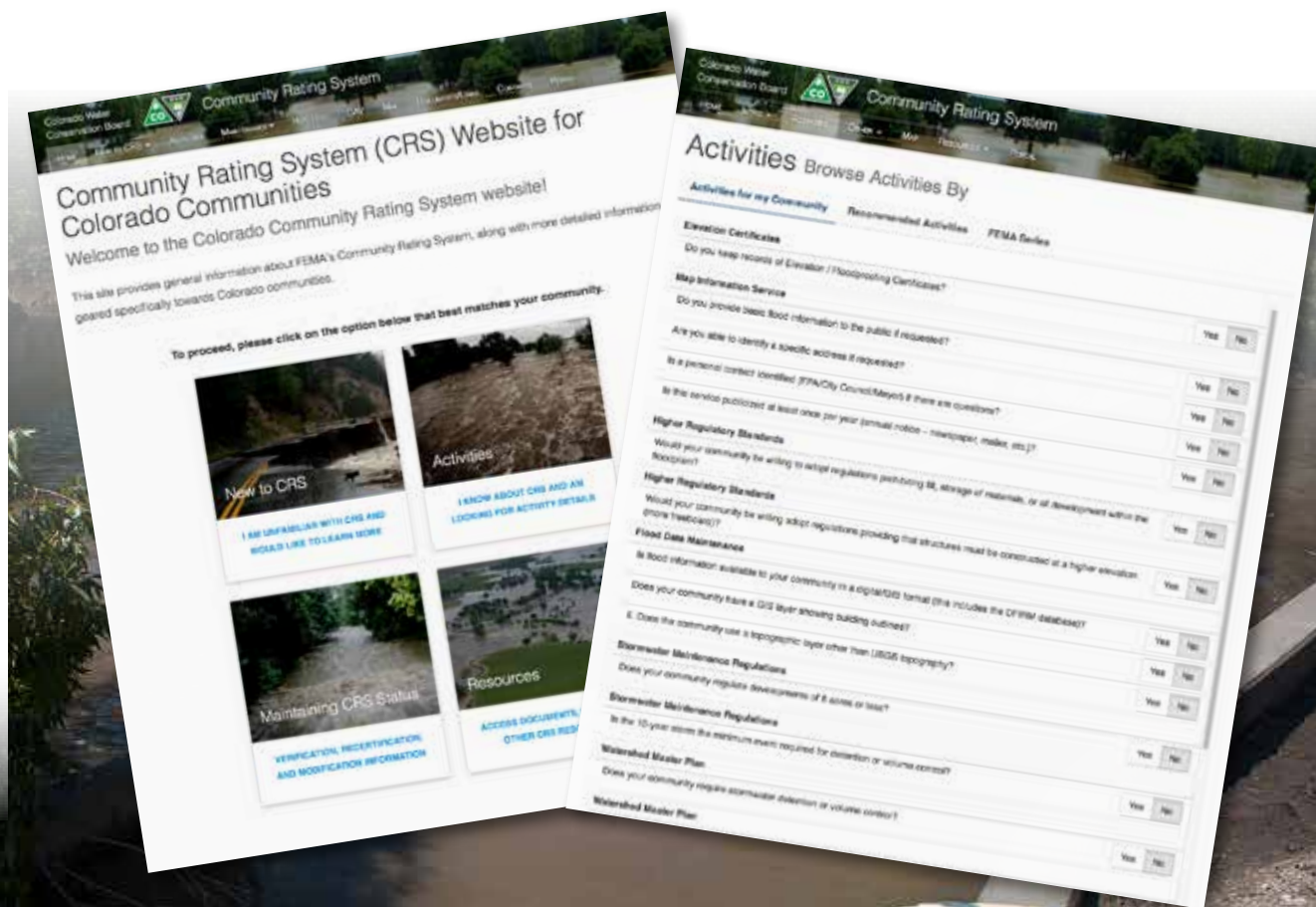
gency Watershed Protection (EWP) team on the flood resiliency work focusing on the 2013 flood recovery. The event was a huge success and facilitated cross pollination between engineers, landscape architects, floodplain professionals, planners, ecologists, and biologist.

As always if you, or someone you know, would like to present a project or research work, or if you would like to see a social event held at a specific location, please contact me at drew_beck@matrixdesigngroup.com.

CWCB's New CRS Website

By Stephanie DiBetitto, CWCB Community Assistance Program Coordinator

In May of 2016 the Colorado Water Conservation Board (CWCB) launched a new Community Rating System (CRS) website for Colorado: www.coloradohazardmapping.com/crs. The website is being used to help the CWCB reach one of its 2016 statewide resiliency goals to increase community participation in the National Flood Insurance Program's (NFIP) CRS. To date, only 46 Colorado communities out of the 244 participating in the NFIP are in the CRS. The website provides a "one-stop shop" for resources and information helpful to communities that are new to or already participating in the CRS. New users are able to quickly learn about CRS; use tools to determine if CRS might be a fit for their community; and consider the next steps towards participation. Participating communities have access to Colorado specific resources for CRS activities. To learn more about the website and CRS participation throughout the State, please join us at the CASFM Conference on Friday, September 16th for the CRS Showcase.



The Open Channel

Fall 2016 Vol. 27 / Issue 1

Officers



Chair

Shea Thomas, PE
Urban Drainage & Flood
Control District



Vice Chair

Brian Murphy, PE,
CFM, D.WRE
CDM Smith



Secretary

Danny Elsner, PE, CFM
CH2M



Treasurer

Brad Bettag, PE
CH2M



Immediate Past Chair

Brian Varrella, PE, CFM
CDOT Region 4

Regional Representatives



Northeast Region

Brian Varrella, PE, CFM
CDOT Region 4



Southwest Region

David "Sam"
Samuelson, CFM
Town of Telluride



Northwest Region

Betsy Suerth, CFM
SGM



Metro Denver Region

Drew Beck, PE, CFM
Matrix Design Group



Southeast Region

Keith Curtis, PE CFM
Pikes Peak Regional
Bldg. Dept.

Committee Chairs



Conference

Robert Krehbiel, PE
Matrix Design Group



Community Rating System

Marsha Hilmes-
Robinson, CFM
City of Fort Collins



Stormwater Quality

Holly Piza, PE
Urban Drainage &
Flood Control District

Floodplain Management

Vacant



Outreach & Training

Alan Turner, PE, CFM
CH2M



Craig Jacobson, PE,
CFM
ICON Engineering, Inc.



Scholarship

Jacob James, PE, CFM
Town of Parker



Website, Membership

Stuart Gardner, PE
Colorado Dept. of
Transportation

[Return to page 1]

