THE COLORADO ASSOCIATION OF STORMWATER AND FLOODPLAIN MANAGERS

The Open Channel

ASFPM CFM Exam | 2009 Stormwater Quality Field Trip





It's annual conference time, and we will be in Crested Butte again this year. The conference will be held at the Crested Butte Mountain Resort September 16-18, 2009. The Certified Floodplain Manager's exam review class will begin a day earlier on September 15th, with the exam on the following morning. This is the 20th anniversary of the annual conference, and the theme of this year's conference is "20 Years of CAS-FM—Looking Upstream/Looking Downstream". The first day of the conference will feature a keynote address by Clancy Phillipsborn on "Evolutions in Stormwater and Floodplain Management'. During lunch we will have an introduction of the 2009 CASFM Scholarship recipient, and a presentation of the UWRI Scholarship from Ben Urbonas. Following lunch will be a plenary session looking back at some of the past award winners. That will be followed by the project presentations for the 2009 CASFM Grand Award. A happy hour will wrap up the first day, and give everyone a chance to get caught up with other conference participants. Thursday will be a full day with 44 technical presentations planned on a wide range of topics. The technical sessions include Stormwa-

ter Management and LID, Flood Hazard and Floodplain Policy, Stream Restoration, Technical Modeling, and BMP's to name a few. To see a complete list of the planned presentations, visit the CASFM website and click on the conference program link. We will finish the day with a happy hour followed by the Association dinner and awards ceremony. Friday morning will have one technical session and four field trips to choose from. The field trip options include a fly fishing tour with guides, a horseback riding tour, a mountain bike tour, and a bird watching tour. Following the field trips on Friday afternoon is our annual golf tournament at The Club at Crested Butte. To get more information on any of the field trips or golf tournament, check out the links on the conference webpage. We are looking forward to another great conference in Crested Butte. If you are interested in attending the conference, please see the conference webpage at www.casfm.org for more information. Registration for the conference is online only, and payment can either be made by Paypal or by check. Information and links for hotel reservations can be found on the registration page as well.

20 Years of CASFM Looking Upstream/Looking Downstream



ASFPM CFM Exam Wednesday, September 16 2009 Annual Conference Crested Butte

CASFM will proctor the ASFPM CFM exam Wednesday September 16th at the 2009 Annual Conference in Crested Butte, and will conduct a full-day review class the day before on Tuesday September 15th. You do not have to take the class in order to take the exam, but most people who do take the exam find the class to be a great benefit. You also do not have to take the exam in order to take the class. Some people just like to take the class as a refresher course or as a good seminar on floodplain rules and regulations.

- The CFM program is administered by ASFPM. You will need to apply for the exam and pay ASFPM directly at least 2 weeks before the exam at www. floods.org.
- While it is not required that you register for the CAS-FM conference to take the exam, you are strongly encouraged to do so, because attending the conference will count toward your continuing education requirements. The fee CASFM collects is for the review session and covers expenses such as reproduction costs, facilities charges, and refreshments.
- You need to acquire 16 Continuing Education Credits over a two year period to maintain certification (with a maximum of 12 for any given year). It is normally possible to obtain these credits by maintaining your membership in ASFPM and CASFM and attending the CASFM annual conference each year. CEC's are certified and maintained by ASFPM. CASFM conferences have been typically precertified by ASFPM for 12 CEC's each.

If you have any questions, please contact Kallie Bauer with Applegate Group, Inc, by phone at (303) 452-6611 or kalliebauer@applegategroup.com if you have any questions or need further information.

By Kallie Bauer

[Return to page 1]



For many, the month of June marks the time to plant a garden or take a vacation. For the CASFM Stormwater Quality Committee, June marks another special event—the annual stormwater quality field trip!

Some of you may know from my phone calls and emails that we receive site recommendations from our members and I start lining up field trip locations in March. Sites are selected based on the ability to accommodate a bus, a herd of people, general industry interests, as well as emerging BMPs, which means that we usually include a water quality detention BMP and runoff reduction or low impact development BMPs. This seems to be a winning combination, as there have been increasing numbers of stormwater quality aficionados on the field trip every year for the past three years. This year, we had 65 people on two buses participate and ASFPM offered four continuing education units for CFM certificate holders.

This year, Debbie Fisher, PE from Martin/ Martin led us on a tour of High Point @ DIA cascading water quality ponds that provide subregional water quality treatment for 85 acres of highly commercial development. To maintain a natural appearance, direct discharge of excess stormwater into the creek was avoided, in favor of a three-pool cascading constructed wetland pond, integrated into the existing topography. The creek and the pools are separated by combination berm/maintenance trails that double as pedestrian access to all portions of the ponds. Two outfall structures in the upper pools hold back the water quality volume to allow for settling of sediment, and control the release of storm events. A small outfall structure in the lowest pool controls water quality discharge for storm events less than a 2-year event. In storm events exceeding the 2-year event, excess stormwater spills through the cascading ponds whereupon both the middle and lower water quality pools become inundated by the creek just like a natural wetland area in the low-lying areas adjacent to a creek.

This site was followed up by maintenance of a cartridge filter at an office building parking lot in Greenwood Village. This was a unique opportunity as maintenance of the filter and replacing the cartridges was coordinated by CON-TECH and the owner of the building specifically for this field trip. The discussion was lead by Jim Lenhart P.E., D. WRE, CONTECH's Chief Technology officer, who travelled from Oregon for this occasion. Maintenance began when we arrived at the site, so the sixty five people on the trip were able to see the pre-maintained condition and observe the maintenance process which included removing the "muck" and the dirty cartridges from the large filter box and replacing them. Since the maintenance process can take several hours, CONTECH also sponsored lunch, which was set up near this site so folks could observe the maintenance steps and have lunch over the course of a couple of hours.

Conveniently, the next site was at a permeable interlocking concrete pavement system at the City of Greenwood Village office building, which was separated from the cartridge filter site by a couple of parking lots. This is helpful because buses and office parks don't mix very well. This system uses concrete paving units with 1/4 to 3/8 inch joint spacing underlain by layers of aggregate for structural stability and stormwater detention. We were met by Suzanne Moore, PE, the Public Works Manager for Greenwood Village and public works maintenance staff. Suzanne and staff talked with our group about the installation, operations and maintenance of this permeable paver system





that was installed outside of their office building last fall. Staff showed our group the "barrel test" that is common at permeable pavement sites. This is when a 30 gallon barrel is filled with water and dumped on the pavement so people can see that the water rapidly infiltrates into the surface of the permeable pavement instead of flowing across the surface.

Our last site was a revisit of the experimental Wal-Mart site at Tower Road and I-70, which was a stop during the 2007 field trip. This site includes pervious concrete, porous asphalt and bio swales and is useful because the BMPs are now several years old and allow people to see how they are wearing. The discussion was led by Ken MacKenzie, of Urban Drainage and Andrew Earles, PE, PhD with Wright Water Engineers. Ken and Andrew talked about the BMP goals, design and ongoing water quality testing.

The location, description and pictures from this and past field trips can be found in the photo database under the stormwater quality webpage on the CASFM website: http://www.casfm.org/stormwater_committee/

Now for the news part:

I have been the stormwater quality chair for three years and have enjoyed the discussion and opportunities that the committee has been able to bring forward. For example, the stormwater quality committee webpage offers current information on runoff reduction BMPs and a photo database of water quality and LID structures in Colorado. The annual field trip has increased in attendance every year. The interest in runoff reduction BMPs was at the foundation

of the theme of last year's CASFM conference and continues to grow.

As much as I enjoy the chair person role, I also believe it is best for an organization and its members if leadership continues to develop and rotate; and in CASFM, there is no shortage of talented people to fill leadership roles! Additionally, since stormwater quality and the role of runoff reduction BMPs continues to increase, the chair position will be shared by co-chairs, whom I believe will both serve the existing needs of the committee and bring additional dimension that reflects their interests and abilities. I am excited to say that Herman Feissner, PE of Feissner Consulting, L.L.C. (hfeissner@feissnerconsulting.com, 970-402-1020) and Holly Piza, P.E., CFM Project Engineer with Urban Drainage (hpiza@udfcd.org, 303-455-6277) will become stormwater quality committee co-chairs in mid September. Both Holly and Herman have an extensive history and terrific abilities in stormwater quality and runoff reduction BMPs. Holly is coordinating the revision of Volume 3 of the Criteria Manual and Herman designs runoff reduction BMPs. Please show them the support and interest that you have showed me over the past few years.

In August, I began working for Colorado Department of Public Health and Environment as an environmental protection specialist in the Water Quality Control Division. I will take on a support role as a stormwater quality committee member and hope that our paths continue to cross.

Best Regards,
Michelle DeLaria
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Summer 2009

Vol. 20 / Issue 2

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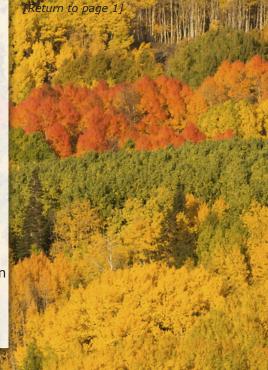
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My sincere thanks to everyone who contributed articles to this edition of Open Channel and helped with content review. Please send newsletter comments and suggestions to dmallory@udfcd.org.



[Return to page 1]