COLORADO ASSOCIATION OF STORMWATER AND FLOODPLAIN MANAGERS



Looking forward to Riding the Storm Out

Looking forward toRiding the Storm Out CASFM's 13th Annual Conference September 11-13, 2002, Sheraton Steamboat Resort Steamboat Springs, Colorado

Registration is now going on for the 2002 conference. A \$40 discount is available for early registration before August 1, 2002. Hotel reservations should be made before August 10, 2002.

Complete conference information and on-line registration can be found at www.CASFM.org. You can also register by Fax, or by mail using the conference brochure mailed out at the end of June. Chris Pletcher of RTW, phone number (970) 224-5999, is handling the registrations.

Become a CERTIFIED FLOODPLAIN MANAGER (CFM). This year at the annual conference, CASFM will proctor the ASFPM CFM exam. A training session will be offered on Tuesday, and the test will be held Wednesday morning. You must register for the test through ASFPM, not CASFM. Register On-line at ASFPM's web site, www.floods.org. The cost is \$260 if you are not an individual member of ASFPM (which includes a two year membership) and \$100 if you are a member of ASFPM. CASFM will not charge an additional fee for administrating the test. PLEASE INDICATE ON YOUR REGISTRATION FORM (WRITE IT IN) IF YOU WILL BE TAKING THE TEST. IF YOU REGISTER ON-LINE FOR THE CASFM CONFERENCE, PLEASE CHECK THE APPROPRIATE BOX FOR THE CFM TEST.

The program this year promises to be a good one starting on Wednesday with a Keynote Address by Andrew Reese entitled "Stormwater Paradigms." A Principal Engineer and Vice President for AMEC Earth and Environmental Inc out of Nashville, Tennessee, Mr. Reese has authored numerous articles on Stormwater

issues, and has worked extensively with governmental agencies around the country. His presentation should prove to be very interesting. The Plenary Session following lunch will feature a panel discussion on "Setting up a Stormwater Utility." Then don't forget to attend the project presentations and vote for your favorite project. Thursday starts with three technical sessions in the morning followed by two workshops and a field trip in the afternoon. The workshops include "No Adverse Impact," and "Sediment and Erosion Control," and the field trip will look at successes and failures for a "Wetlands Mitigation Project." Be sure to attend the Association Dinner and awards ceremony on Thursday night to find out who the entertainment will be this year. The conference concludes on Friday with two concurrent technical sessions followed by the golf tournament at the Sheraton Steamboat Golf Course.



Cindy Thrush—Newsletter Editor Joe Busto — Layout

ASSOCIATION NEWS

Letter From the Chair - Stuart Gardner, P.E.

It seems like just yesterday that we were having our last conference, and here comes the next one right around the corner. This is a good time to reflect on what we've been doing as an organization and where we're headed. It's been a very busy year for our Association:

- We now have a Scholarship Committee. Thanks to John Hunt, Jamie Cribbs, and Jeremy Franz for spearheading this effort. The committee is preparing a program for a graduate level scholarship for a student pursuing a degree that is in line with the goals of CASFM. Details are being sorted through now, and with luck we'll be able to award a scholarship starting with the spring semester of 2003.
- We also started a Certified Floodplain Man agers committee this year. We are actively promoting the ASFPM Certified Floodplain Managers exam here in Colorado and will offer the exam for the first time in Colorado at the upcoming annual conference. A big thanks to the committee and especially to Kallie Sampish and Mark Matulik for their efforts in making this a reality.
- The Association has helped offer a number of classes this year:
 - Ø Phase II Stormwater Permitting classes were held in four locations around the state in a cooperative effort with the Denver Council of Regional Governments (DRCOG);
 - Ø Effective Sediment & Erosion Control on Construction Sites was held in Grand Junction in cooperation with the City of Grand Junction;
 - Ø Flood Hazard Mitigation classes will be held in four locations around the state in cooperation with the Colorado Water Conservation Board (coming in August);
 - Ø Hydrology classes in cooperation with the Urban Drainage & Flood Control District and the University of Colorado -Denver (this fall):
 - Ø The HEC-RAS Pilot course from the National Highway Institute (coming in August).
- We are working on revising the Association's bylaws to better reflect the manner in which we actually do business.
- A "Job Well Done" award goes to Doug Stewart, the Metro Regional Representative for hosting two regional social hours so far this year. A "Shame on You" award goes to the other Regional Rep's for not having any at all. (although at press time, Debbie Haferman was planning an upcoming event for the NE region) If you're in a region that hasn't had a social event yet this year and you'd like to have one, now is the time to bug your representative!
- The Association web site is up and running and serving the members well. Meeting minutes are being distributed through the site, as well as an events calendar and other Association news and information. On line conference registration is even available this year.

- We have enough presentations this year for the conference that we will have three concurrent technical sessions instead of the traditional two.
- We broke the Continental Divide barrier for a general membership meeting. The July meeting was held in the Hanging Lake Tunnels complex in Glenwood Canyon with record attendance.

In summary, the state of the Association is very strong. It looks like this year's conference is shaping up to be the best one yet, and you will not want to miss it. Be sure to register early and attend as many sessions as you can. The a nnual CASFM conference is hands-down the best opportunity in Colorado to meet and greet other professionals from the industry and take new knowledge back to your place of business.

This June I attended the Association of State Floodplain Managers' (ASFPM) national conference in Phoenix on behalf of CASFM. The ASFPM is moving forward with promotion of its No Adverse Impact philosophy of floodplain management. The ASFPM has recently adopted a resolution in support of the NAI position, and has requested that state chapters consider doing the same. Mark Matulik with the CWCB is working on a resolution for CASFM to consider, and we will be discussing this issue further at future association meetings. We are also sponsoring a No Adverse Impact workshop at the upco ming annual conference, which will be led by Rick McLaughlin who also attended the ASPFM conference. It should prove to be a very interesting and illuminating workshop.

I also attended a state chapter workshop to network with other chapter officials and discuss what they do. One point emphasized in that discussion is the importance of strategic planning for state organizations. I discovered that, as an association, CASFM is probably one of the more focused and vibrant associations in the country. Unlike several other associations, we haven't really had a "lag" period in our history and we've been able to maintain a high level of focus and achievement, but a strategic plan, particularly among the board, is lacking and would be helpful to our organization. As a result, we are going to have a board luncheon at the annual conference that will include newly installed officers and the i mmediate outgoing officers that will follow and build upon the discussions held during the morning general membership meeting. This should be a very productive time for the officers to gather in a small group and discuss how best to guide the association toward achieving its goals.

Another hot topic at the ASFPM conference is that Congress is considering an infusion of over 300 million dollars into updating floodplain maps around the country. Brian Hyde and Mark Matulik are assisting me with a letter from the association to our elected congressional representatives and senators in support of this effort. The CWCB will have a presentation on this issue the Friday morning of the conference.

COMMITTEE REPORTS

Committees, Committees, Committees

As you may have read in the Letter from The Chair, CASFM now has three active committees. These are:

Reaching Out to Colorado Communities

Members: Chris Carlson, Kallie Sampish, Roy Vestal, Debbie Haferman

Reaching Out to Colorado Communities Report By Chris Carlson, Ayres Associates

CASFM presented an overview of floodplain management, stormwater management, and stormwater quality to conference attendees at the 80th annual Colorado Municipal League (CML) conference in Breckenridge on June 20. The presentation occurred as one of several roundtable discussions about issues relevant to Colorado municipalities. Scholarship The purpose of the presentation was to introduce CASFM, to provide basic information and resource connections (e.g. CASFM, FEMA, UDFCD, EPA, etc. web sites), and to hear We appreciate the volunteers who are serving on these feedback from communities faced with floodplain or drainage related problems. CASFM brochures and a one page information flyer were handed out as well. The effort was a successful step forward to reach small communities and provide education and resource assistance. Special

thanks to Chris Carlson and John Burke for making the presentation and to Kallie Sampish, Debbie Haferman, Roy Vestal and Chris Carlson for their work on the Community Outreach Committee.

Certified Floodplain Manager

Members: Kallie Sampish, Mark Matulik, Mike Meininger, John Liou

It was decided at the last general membership meeting to combine the CFM committee and the Floodplain Committee. Because Mark is the CFM Committee Chair, and as Doug Trieste is stepping down as the Floodplain Chair, Mark was voted to be the Floodplain Chair by acclamation. Congratulations Mark!

Members: Jamie Cribbs, John Hunt, Jeremy Franz

committees. If you would like to participate on a committee, please contact one of the committee members.

CALENDAR OF CASFM EVENTS

2002 Classes/Workshops

CASFM is co-sponsoring a series of workshops with the Colorado Water Conservation Board (CWCB) on Flood Hazard Mitigation entitled, "Flood Hazard Mitigation 201." See the CASFM Web Site for Links to CWCB, or visit their web site at http://cwcb.state.co.us/

flood watch/workshops02.pdf

Date Location August 19th Pueblo Marriot August 20th Montrose Pavillion August 21st Glenwood Springs First

Choice Inn

Greeley Ramkota August 22nd

2002 General Meeting Schedule

Location Date

September 11-13th Annual Conference in Steamboat

Springs, Breakfast Meeting at

7:30 am

Boyle Engineering, Lakewood November 5th

9:00 am

A notice will be sent through e-mail to all members prior to the meetings. The notice will include directions. Directions and meeting agendas can be found from the calendar link at www.casfm.org.

Other Classes/Meetings

Date Event UDFCD Neo UDSEWER Aug 15-16 Class NHI HEC-RAS Course Aug 20-22 Aug 23 Stormwater Committee

Meeting

FEMA DFIRM Class Oct 10-11

For a complete list of current and future events, visit the calendar link at www.casfm.org.

REGIONAL NEWS

Northeast — Debbie Haferman

Plans are underway for a summer social. Activities will include a tour of CSU's floodproofing efforts with Chris Carlson as the tour guide, and then adjourning to some place cool for munchies and beverages. The date is in the process of being finalized.

Northwest — Rick Domis

The City of Grand Junction sponsored an erosion and sediment control workshop this spring. Sixty-one people attended including Contractors, City and County personnel, and a few Engineering Consultants. Gerald Fifefield of Parker Colorado was the presenter. One of the main points of the seminar was that hay bales, silt fence, and the like are not erosion control. They are sediment control measures. The best strategy is to prevent the erosion and not have to control the sediment.

Southeast — Joe Napoleon

No news this issue, busy coping with the fires.

Southwest — Steven Harris

A Flood Hazard Mitigation Workshop conducted by the CWCB and the Mitigation Assistance Corporation will be held in Montrose, Colorado on August 20, 2002 at the Montrose Pavillion. The workshop will begin at 8:30 and end about 4:30. Please contact Steve Harris at 970-259-5322 or scharris@frontier.net.

Metro Denver — **Doug Stewart**

Greetings to all fellow CASFM members. This is Doug Stewart, your Denver Metro Area Regional Representative. Today is a hot, dry, sunny day in beautiful Colorado and I'm looking to the sky to see some sign of rain. The creeks are running low, the ground is dry, and our reservoirs are not filling up like they should. Colorado is in a period of drought and we all need to do what we can to conserve water. Some simple things to do around the house are to fix leaky

faucets, which can waste up to 20 gallons of water per day; forget about the "green grass" competition with your neighbor and water your lawns only when necessary; don't run water over frozen foods to defrost them; and reduce your shower time by 5 minutes which can save up to 25 gallons of water. We want to all enjoy this precious natural resource, so think of what you can do to help conserve our water supply.

So, how many of you out there use Urban Drainage and Flood Control District (District) modeling programs such as CUHP, UDSWM, UDSEWER, and UDINLET? How many of you really understand them? You will have an opportunity to learn all of the fun details of these programs in a series of classes this year sponsored by the University of Colorado at Denver (UCD) and the District. Many new features and upgrades have been made to these models and this will be a great opportunity to learn about them. The District and UCD are in the process of developing the classes, so keep an eye on your email and stay tuned in to the CASFM web site to find out more details.

Are you ready for another CASFM social? So am I! All I need is a volunteer to give a 15-20 minute presentation on one of your successful (or unsuccessful) projects, or some other water resource related issue. You can even drink the beer of your choice while you give your presentation. It is a fun and informal way to get together with your peers and talk about what's happening in your community. I am eagerly waiting by the phone (303-987-3443) to hear from our next CASFM Social Hour volunteer.

ARE YOU GETTING ASSOCIATION E-MAIL?

If you are a member of CASFM, you should be receiving monthly e-mail updates from the Association. If you are not, it is probably because we do not have your current e-mail address, or your address is incorrect in the member database. If you have not been receiving

e-mail updates, and wish to, first check to see if you are a member at www.casfm.org by

following the "Member Roster" link. If your name is listed there, send a message to gingek@ci. loveland.co.us with your current e-mail address. If you are not listed as a member, then you'll need to join. Just follow the "Membership Forms" link to get there.

STORMWATER COMMITTEE

By Kevin McBride, Chair, Stormwater Committee

Fort Collins Utilities will be hosting a Stormwater Committee meeting and visit to stormwater projects with an emphasis on water quality Friday August 23rd. We will have a short meeting of the Stormwater Committee (how about joining) at 9:30 in the morning followed by a field trip. We will partake in stream sampling, lunch, and visit several sites including examples of filtration BMP's, a regional water quality wetland, stream rehabilitation and outdoor classrooms for water quality education. Call Kevin McBride at (970) 224-6023 or e-mail kmcbride@fcgov.com.

On the stormwater quality side an important date to remember is July 1. On this date, the size of construction projects that must be covered by an industrial NPDES permit goes down to one acre. Call Kathy Dolan (303-692-3596) or Nathan Moore (303-692-3555) at the Colorado Department of Public Health and Environment (CDPHE) if

you need more information. Of course everyone is aware that phase II stormwater permits for Municipally owned separate storm sewer systems (MS4's) will be required next March. The draft application will be out this fall. Maps of "Urbanized Areas" are now available on the CDPHE web http://www.cdphe.state.co.us/wq/PermitsUnit/ wqcdpmt.html. MS4's included in the urbanized area will be required to have permits. A couple of conferences to note the week of September 8, the 9th International Conference on Urban Drainage in Portland OR (See the ASCE web site). Breckenridge will host the 10th National Non point Source Monitoring Workshop for more information http://www. ctic.purdue.edu/NPS Workshop/Agenda.html. conference portions of the NPS workshop end on Tuesday so it does not conflict with our CASFM conference in Steamboat. I know that as an urban water quality practitioner I shouldn't say this but, hope for rain.

FLOOD COMMITTEE

Time To Step Down By Doug Trieste, Chair, Flood Committee

I have been Chair of the Flood Committee since 1996 and it is time for "new blood." It has been a rewarding experience. I have met many great people, made many friends, and have had the door opened for new business opportunities.

During those six years, I have organized workshops and meetings on timely issues, field trips, Floodplain Manager training classes, Happy Hour Socials, events at the Annual Conference, etc. However, I am running out of ideas so it is time for someone new with fresh ideas to step-in.

I thank all of those who have been supportive and helpful during my term as Chair, Flood Committee – I have thoroughly enjoyed working with such fine people.

See you in Steamboat!

FEMA Products available on-line

The FEMA map Service Center has all of the Colorado Flood Insurance Studies, Floodway Maps, and Flood Insurance Rate Maps available on 10 disc set. Visit the FEMA Map Service Center website for more information, http://msc.fema.gov/MSC/. The full set of CDs for Colorado is approximately \$2.000.

HAVE YOU VISITED THE CASFM WEB SITE?

If you have visited the web site you probably know what a wonderful resource this is, and how professional our web site is (for a volunteer organization, it's amazing!). You also probably know what mountain the goat is standing on. The Web site provides information on our Bylaws, our Calendar, CFM Page, Annual Conference, CASFM History, General Meeting Minutes, Membership Forms, Membership Roster, Newsletters, Officers,

Site Search, and Useful Links. Many thanks goes to the webmaster, Stuart Gardner, for putting this site together and maintaining it.

AN ADVENTURE – THE MAY 10TH CASFM MEETING IN HANGING LAKE TUNNEL



Thanks goes to the NW Region who hosted the May meeting in CDOT's Hanging Lake Tunnel Facility.

Members who attended the meeting and tour had nothing but positive things to say:

Cindy Thrush "The view from the roof was amazing" **Dave Bennetts** "My favorite part was peering down the hole at the cars"

David Hollingsworth "The peel out exit was exciting" **Stuart Gardner** "There are cameras monitoring you everywhere. watch out"

The meeting was a typical general meeting, but the tour was very interesting.

ASCE, the Presidential Design Award, and has been called the "Crown Jewel" of the interstate system.

This meeting place will be hard to compete with, but we needed something to entice people to drive over to the western slope for a meeting!

the canyon who manage a western slope communications

emergency response, maintenance of all facilities, snow

removal, and a myriad of other duties that most people never even think about. It's a lot of work to keep a canyon

running! The Glenwood Canyon project has won more

Outstanding Civil Engineering Achievement award from

than 30 awards since its completion, including the

center, traffic and incident surveillance,



Control Room for Hanging Lake Tunnel

The

Hanging Lake Tunnel was completed and formally dedicated in late 1992. The Hanging Lake Facility is the headquarters for CDOT's maintenance activities through the Canyon. The tunnel complex includes two 4,000 feet long bores and a four-story multi-functional maintenance facility. At this facility they monitor all the activities (through video cameras) that go on. There is a large control room at the facility as well as offices, a metal shop, parking for maintenance and rescue vehicles, two large fan rooms and more. There are eight 300hp fans that can move up to two million cubic feet per minute of air to keep the tunnels ventilated (almost as much hot air as congress moves in full session). The remainder of the Glenwood Canyon project includes 40 bridges exceeding six miles in total length, one additional tunnel, 15 miles of retaining wall, four full-service rest areas, and a 13 mile bike path along the Colorado River. The tunnel construction cost was \$85M and the total canyon construction cost was \$490M.

There are 33 full time around-the-clock employees in



Georgia, Stuart, and David enjoy the Roof Top Garden



CASFM Members on the Tour

PROJECT PAGE

Typically when we think of projects, many of us think of construction projects, but this project page is open to all kinds of projects. This edition features a project underaken by Larimer County to establish a stormwater utility

Stormwater Management Services as The Pizza Business by Rex Burns, Larimer County

Local governments have seen a change in recent years in the way they go about their work. Traditionally, citizens paid taxes, elected officials run the government and use the taxes to plan and build facilities. Recently, the shift has been toward greater citizen involvement, and away from traditional tax based sources of revenue. One big reason is that traditional sources of revenue have been variously limited. Another big reason is that today's citizens are better educated, better informed, and anxious to be involved. Larimer County has embraced this trend in a number of ways. One example is the Larimer County vision statement which reads:

Larimer County will:

- Build Partnerships
- Be Customer Driven
- Add Value to the Quality of Life
- Empower People to take Responsibility
- Be a Fulfilling and Enjoyable Place to Work

Governments as Service Providers and Citizens as Customers

Increasingly, governments are being cast in the role of service providers. And citizens are assuming roles as "customers" of government, selecting and even directing those services they are comfortable with and willing to pay for. Sounds very much like a business. How does this work? Let's take storm water management services as an example:

We like to think of a storm water service enterprise as a pizza business:

To Start out in the pizza business:

First, you gotta have a place to cook pizzas and take orders-2. you gotta have happy, hungry customers – how do you do this? Advertise! 3. you gotta have management to get the pieces together into a workable whole – 4. you gotta have pizza cookers, servers, and deliverers— and they have to be paid 5. Somehow, you gotta pay start up expenses AND 6. In the meantime, you gotta have positive cash flow.

Same thing with starting a stormwater management service enterprise:

To start a stormwater management service enterprise – 1. you gotta have a place to work – 2. you gotta have consenting, informed customers. This requires incredible amounts of public education, public involvement, and public process – 3. you gotta have big picture people to identify, plan and bring the parts together – 4. you gotta have engineers to figure out the details – and they have to be paid along with sick leave and maternity or paternity leave – 5. somehow, you gotta incur and pay start up expenses AND 6. In the meantime, you gotta have positive cash flow

In the pizza business:

The economics of the pizza business require efficiency and consolidation of administrative activities. Some pizza building activities are common to all outlets. Efficiency is favored if you have a common administrative site and multiple outlets. Say, you eventually plan to have six locations. Can't start six all at once. Start up expenses even for one site are enormous – ever bought a pizza oven? Gotta have the attorneys in there somewhere for the incorporation or LLC. Gotta buy or lease a space to build the pizzas. Maybe you decide to capitalize the startup expenses. Banks are reluctant to give a loan with no track record......so you need accountants to convince the bankers.....

Same thing with stormwater management services.

Can't start 6 basins all at once. Start up expenses for <u>each</u> basin include a basin master plan, an estimate of cost for improvements (engineers), a viable financial management plan (accountants), public process (advertising), and legal expenses for establishment of the utility. Stormwater master planning is expensive because it is first necessary to conduct detailed hydrologic studies, then prepare the master plan to identify and size needed improvements or management practices. Many services, however, are common to all basins. Efficiency favors common planning and administration of the enterprise.

Yeah, but how do we know how much to charge for a pizza? or for Stormwater Management Services?

For answers to these and other important questions, be sure to attend Rex's Presentation at the annual conference, or read his full paper in the conference proceedings.

CASEM

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