

FALL
2000



CASFM

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THE OPEN CHANNEL



*Photo by
John Pflaum*

HI JOHN! Bicyclists enjoy the Yampa River Greenway.

Not even a thunderstorm could derail the CASFM 2000 Conference "Storming into the New Century", August 30 – September 1, Steamboat Springs, Colo. It featured water-related topics such as best management practices and water-related workshops such as fundamentals of culvert design. A thunderstorm caused delay, but did not cancel, a bicycling trip along the Yampa River Greenway Trail.

Dr. Larry Roesner with Colorado State University kicked off the conference for floodplain and stormwater managers by addressing best management practices currently in use across the nation. For John Pflaum, conference chair, Dr. Roesner's presentation focused on what works and what does not work in best management practices.

Jamie Cribbs, program chair, was excited about the success of the panel discussion featuring representatives from growth and development as well as floodplains and stormwater management – groups that normally do not understand each other's perspectives.

"The representatives had a friendly, honest and frank discussion of what it took to accomplish their jobs," Cribbs said.

STORMING INTO THE NEW MILLENNIUM

YEAR 2000 FALL CONFERENCE

Two people representing growth and development industries addressed complying with budgets and time frames.

These two participants were Dan Strammiello, President, Westbrook Development Partners and John Moore, Associate, Martin/-Martin Consulting Engineers.

Glenn Rodriguez, aquatic biologist with the Wetlands and Watersheds Unit, Environmental Protection Agency (EPA), addressed EPA concerns regarding minimizing disturbance to drainage ways and wetlands.

(cont. on pg. 4)

LETTER FROM CHAIR

By Kevin Gingery

As Chair for CASFM, I attended the Association of State Floodplain Managers (ASFPM) Conference in June. Included below are highlights from the conference.

Theme: “No Adverse Impact Floodplain” Policy to Reduce Flood Losses

- Communities across the United States use the Federal Emergency Management Agency (FEMA) floodplain maps for day-to-day floodplain administration and building code enforcement. Projects between the floodplain and the floodway are allowed to increase base flood elevations by up to one foot. Current methodology to develop floodway boundaries is based upon the hydraulic impact of fill or encroachment into the floodplain. What is often overlooked is the cumulative impact of fill on available floodplain storage. This can have a significant impact because downstream flood discharges can increase and flood elevations can rise over and above the assumed one-foot level. Today’s structures may comply with current flood regulations, but in fact, they could be subjected to increased flooding because of the cumulative effect of floodplain fill.
- The loss of floodplain storage can adversely affect the stage, discharge, and frequency characteristics of streams. When floodplain fringe areas, normally used to store water during a flood event, are filled due to development, the capacity of the primary stream is reached much faster. This can cause larger and more frequent flooding events.
- The combination of urbanization and loss of floodplain storage can be a dangerous mix for citizens living on or near floodplains. These structures, even if they were elevated above the 100-year flood level when built, may now be subject to flood damage due to increased flood heights.
- The National Flood Insurance Program (NFIP) maps and hydraulic modeling requirements are based on existing hydrologic discharges and existing projects located in the floodplain at the time of the study. Future discharges based on watershed build-out and future floodplain permitted projects are not considered. This means that floodplain projects built with adequate flood protection today may sustain flood damages tomorrow as the watershed continues to develop and flood discharge and volumes increase.
- Flood experts have found that communities following the NFIP standards experience increased flooding and flood damages. ASFPM’s major recommendation is that flood prone areas be managed using a “No Adverse Impact Flood-

-plain” planning approach. This approach means that no new development in a watershed could adversely impact other property upstream or downstream. This is a significant change from current NFIP standards.

- ASFPM released “National Flood Programs in Review – 2000”, a major policy document that outlines several innovative approaches to controlling the staggering costs of flood damage. The heart of the report suggests that federal, state and local planning authorities adopt a new policy that reduces the impact of development in known floodplains. The policy report will serve as a visionary blueprint shaping the initiatives of ASFPM, federal agencies and others over the next five years.
- James Lee Whit, director of FEMA, has also called for new approaches to protect citizens’ lives and property. Federal programs have made significant progress in the past seven years. FEMA’s flood mitigation program includes buyouts of flood prone areas and assistance in elevating structures that exist in floodplains. FEMA is now planning to evaluate the “No Adverse Impact Floodplain” planning approach but they lack money for community Flood Insurance Restudies.

Chapter Breakfast Meeting:

- \$200/yr chapter dues, along with pay-as-you-go benefits plan, were adopted by ASFPM.
- CASFM has a voice in ASFPM when national issues arise. Issues are taken to each chapter for a vote.
- NFIP training is needed throughout the country for all of the floodplain administrators.
- ASFPM is asking that each state chapter offer Certified Floodplain Manager training and exams.

NFIP Initiatives and Red Cross Mitigation Discussion:

- The American Red Cross offers a course for children entitled “Masters of Disasters”.
- State chapters should coordinate with their local American Red Cross chapters.
- It’s time to begin thinking of stormwater as an asset and not our enemy.
- NFIP saves American taxpayers more than \$1 billion a year.
- www.FEMA.GOV/NFIP for more information.

(cont. on pg. 3)



*2001 Officers
(L to R): David Hollingsworth, Bob Saulmon, Debbie Haferman, Stuart Gardner, Terry Bowen, Cindy Thrush, Doug Trieste, Kevin Gingery. Not pictured: John Doerfer, Craig Houdeshell, Kerrie Ashbeck*

(cont. from pg. 2)

Mike Armstrong (Head of FEMA Mitigation Program) Discussion:

- The National Loss Prevention Model is almost done – first version will be issued in 2002.
- 75 percent of presidential-declared hazards are flood related.
- FEMA supports the ASFPM Certified Floodplain Manager training and exam program.
- NFIP standards are in the National Building Code – we should encourage local officials to adopt these standards.
- CIS (Community Information System) is now on the Internet – 33 reports are available in which to enter data.

Region 8 Breakfast Meeting:

- Region 8 is still the most pristine.
- Region 8 has already been working toward “No Adverse Impact Floodplains”.
- ASFPM’s Board has approved \$10,000 for public education about “No Adverse Impact Floodplains” over the next year.
- Currently, 34 projects are in the review process.
- Mark Matulik (CWCB) will inform CASFM members, via e-mail, of projects using the “No Adverse Impact Floodplain” concepts.”

Federal Partners Initiatives Supporting Strong Local & State Programs Discussion:

Natural Resource Conservation Service (NRCS) Comments:

- NRCS supports the ASFPM’s Certified Floodplain Manager program. NRCS has a certification program for its planners.

- Education is very important for the general public as well as engineers.
- Aging infrastructure – 10,000 dams have reached their useful life. A bill is moving forward for \$60 million a year to study these dams.

Army Corp of Engineers (COE) Comments:

- We need to work together to reduce flood damages and improve floodplain policy.
- The COE is considering nonstructural solutions in its designs.
- Between 400,000 – 500,000 acres of wetlands per year were lost in the 1980s; between 90,000 – 100,000 acres of wetlands per year are lost today. By 2005, the COE is working to get 100,000 acres of surplus wetlands per year to help restore the lost acres.
- We need to share our successes and our failures to learn. We still spend \$4 – 5 billion a year to repair flood damages.

United States Geological Service (USGS) Comments:

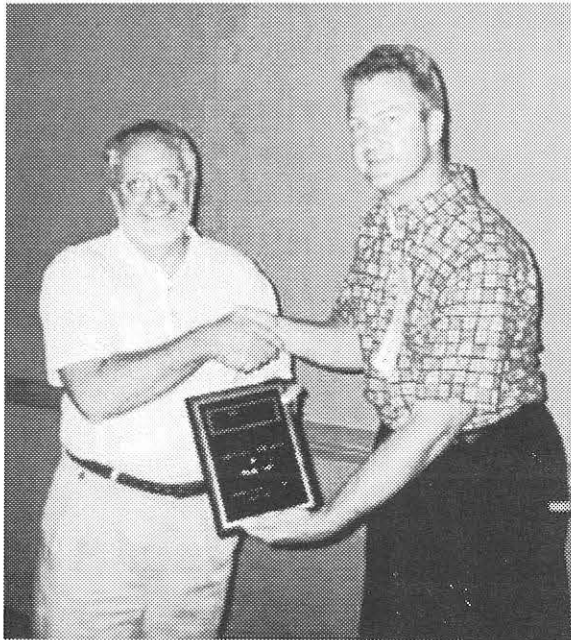
- Stream gaging – USGS lacks stable federal funds to keep up with the needs.
- The national streamflow information program needs federal funding across the country. Current funding stands at \$91 million a year, with \$130 million a year projected in the future.

END OF LETTER FROM CHAIR

NOMINEES RECIEVE GRAND PRIZE, HONOR AWARDS AT ASSOCIATION DINNER

(cont. from pg. 1)

GRAND PRIZE WINNER



GRAND PRIZE: Penn Gildersleeve (left) accepts the Grand Prize Award for the Marston Lake North Tributary Outfall. Presenting the award is John Doerfer.

Bill DeGroot, Chief, Floodplain Management Program, Urban Drainage & Flood Control District, provided comments on the plans that are typically submitted by developer's engineers for his agency to review – and what they could do to make his job easier.

The three-day conference also featured several technical sessions on water quality, bioengineering techniques, flood control/channel stabilization, hydrology/hydraulics and culvert design.

Ben Urbonas with Urban Drainage & Flood Control District presented an update on Volume III of the *Urban Storm Drainage Criteria Manual* in which design criteria and guidelines for Best Management Practices were revised.

Winners of Grand Prize, Honor Awards, Door Prizes

The winners of the Year 2000 CASFM Grand Awards and Project Honor Awards were announced at the association dinner, hosted once again by John Doerfer, in his inimitable style.

Grand Prize was presented to:

Marston Lake North Tributary Outfall

City and County of Denver Wastewater Management Division

City and County of Denver Parks and Recreation Division

Urban Drainage and Flood Control District

ICON Engineering, Inc.

Honor awards were presented to:

Bioengineered Stabilization on Sand Creek at Bluff Lake Environmental Education Center

City and County of Denver Airport Authority

Camp Dresser and McKee, Inc.

Aquatic and Wetland Company

Hollywood/Irish Storm Drainage Project

Larimer County

Ayres Associates

Lower Boulder Creek Stream Rehabilitation Project

Boulder County Parks & Open Space

Urban Drainage and Flood Control District

Love & Associates, Inc.

Nancy Steinberger

Left Hand Excavating, Inc.

Project award nominees presented their projects at a seminar earlier in the conference. Audience members selected the project they deemed best to receive the Grand Award and the other three were designated Honor Awards. CASFM does not have a "Most Bizarre Award" for a presentation, but if it did, Pflaum said, the top winner would have taken that, too.

Door prize winners were Basil Hamdan for early registration, and Jill Piatt for vendor's award. Each received a \$250 gift certificate to be used at the Sheraton Steamboat Resort, Steamboat Springs.



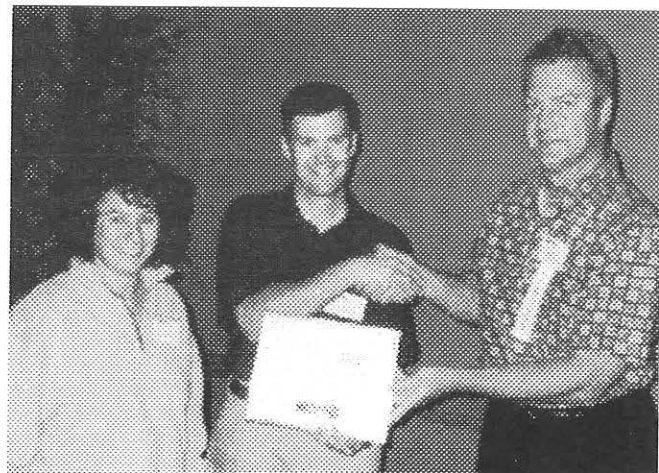
**Bioengineered Stabilization on Sand Creek at
Bluff Lake Environmental Education Center**
City and County of Denver Airport Authority
Camp Dresser and McKee, Inc.
Aquatic and Wetland Company

*Julie Ash, award recipient; John
Doerfer, presenter*



Boulder Creek Stream Rehabilitation Project
Boulder County Parks & Open Space
Urban Drainage and Flood Control District
Love & Associates, Inc.
Nancy Steinberger
Left Hand Excavating, Inc.

*Nancy Love (middle) and Dave
Bennetts (right), award recipients;
John Doerfer, presenter*



Hollywood/Irish Storm Drainage Project
Larimer County
Ayres Associates

*Lisa Dunn and Chris Carlson
(middle), award recipients; John
Doerfer, presenter*

“The representatives had a friendly, honest and frank discussion of what it took to accomplish their jobs.”

Jamie Cribbs

“One of highlights of the golf tournament was Kyle’s (DeLucero) remarkable solo eagle on the par five #18.”

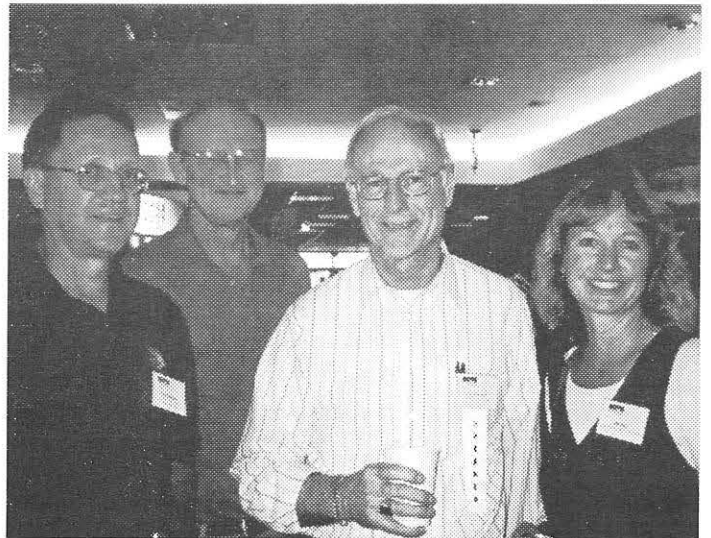
Stuart Gardner

“John Doerfer’s awards presentation during the Association Dinner was excellent. Thanks John for asking Debbie Haferman to explain the “Purple Wall” at the new Flatiron Crossing Mall project.”

Kevin Gingery



CONFLICTING INTERESTS MEET: (L to R): Bill DeGroot, Chief, UDFCD Floodplain Management Program; Dan Strammiello, President, Westbrook Development Partners; John Moore, Associate, Martin/Martin Consulting Engineers; and Glen Rodriguez, Aquatic Biologist, EPA Wetlands and Watersheds Unit.



After his keynote speech, Dr. Larry Roesner (third from left) chats with attendees Ron Degenhart (furthest left), Bill DeGroot (second from left) and Jill Piatt.

REGIONAL NEWS

NORTHEAST

MEET YOUR NEW REGIONAL REP -- DEBBIE HAFERMAN

Why did you choose to work in the stormwater/floodplain management industry?

My first fluids class hooked me on water-related design, and my interest has grown from there to my current interest in all things water- resource related.

What do you hope to accomplish as a regional rep?

I plan on scheduling a Fall, Spring and Summer social event, each social featuring speaker on one of the topics presented at the CASFM Conference Committee Breakfast meeting, or other topic suggestions as they are forwarded to me. I also would like to schedule a workshop in late winter or early spring. I am accepting suggestions for workshop topics also.

What do you hope to learn as a regional representative?

I would like to know what the Northeast region wants to see in terms of workshops, seminars, and speakers.

What are some projects in your region that CASFM is or has been involved with?

In the past, CASFM has sponsored workshops in conjunction with Federal Emergency Management Association/Colorado Water Conservation Board and others on map revisions and floodproofing. In Spring 1999, CASFM hosted a workshop at Colorado State University (CSU) in conjunction with the Environmental Protection Agency and CSU on channelization and channel modification. This past June, CASFM hosted a social event featuring Dr. Larry Roesner in Fort Collins.

What are the ongoing issues in your region that CASFM is involved with?

None that I am aware of.

What has been your top career achievement to date?

I did the offsite storm drainage design on the Flatiron Crossing Mall in Broomfield, Colorado. The design included large diameter storm pipe, drop structures, channel modeling through a divided culvert, a plunge pool and funky pond outlet weir, pond outlet structures, erosion control, and numerous design modifications and firefighting as the design was progressing just slightly ahead of construction. I spent the better part of two years working on this project. The mall opened August 1999.



NETWORKING: Attendees mingle during breaks at the conference.

NORTHWEST

A panel discussion addressed drainage issues past, present, and future in the Grand Valley at a November 2 CASFM social hour in Grand Junction. Panel members included stormwater officials from Mesa County, the City of Grand Junction, and the Grand Junction Drainage District. Regional representative Stuart Gardner moderated the panel. The Northwest social hour was held at the Grand Junction Grand Vista Hotel from 4 to 7 p.m.

A recent NHI Culvert Design course drew a full complement of attendees. Future hydraulic-related workshops are pending. The NHI HEC-RAS course will be the next in the series, but dates and arrangements have not been set.

SOUTHEAST

Jim Munch, planning director for the City of Pueblo, was the featured speaker at the Southeast Regional social hour, October 12, in Pueblo. He presented information on the Historic Arkansas River Project (HARP), after which several members participated in a walking tour of the nearby project. They learned that stormwater from the downtown area is piped under the HARP canal, so it is not visible, but functional.

A big thank you goes to Dennis Maroney, City of Pueblo for setting up both the speaker and meeting place.

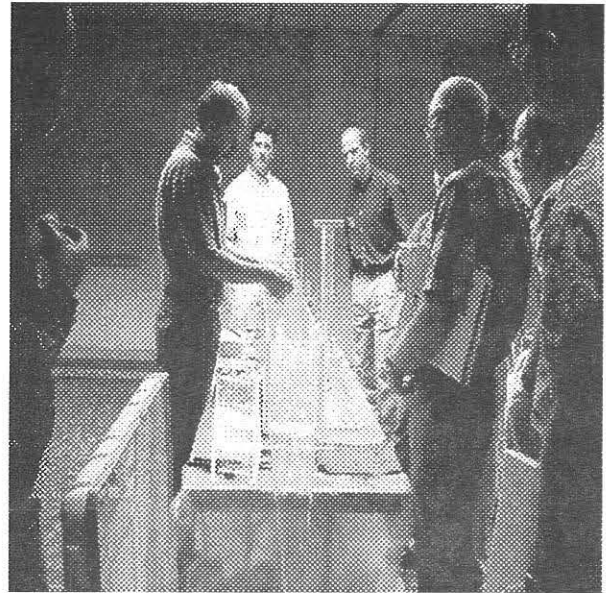
OTHER NEWS

FLOOD FACTS

- All streams, regardless of their size, flood from time to time.
- Floodwater is dirty and filthy and it leaves mud and grime covering everything. And the odor!
- Floods ruin carpet, walls, insulation, furniture and priceless personal effects.
- We can't predict when floods will occur, but we can usually tell where they will occur.
- Each year thousands suffer from floods. Most of them didn't even know that floods could happen and were shocked at the amount of damage.
- Just because it hasn't flooded in the past doesn't mean it won't in the future. You may not have lived there long enough to experience a flood.
- Also, just because you had a flood does not mean it won't happen again soon. Floods are caused by weather conditions and are unpredictable. If the conditions are right, floods will occur again.
- Real estate agents usually don't know whether flooding has ever occurred on the property.
- Government assistance after a flood is usually limited to loans that have to be repaid. Who needs a second mortgage?
- Homeowner insurance does not cover losses caused by floods, but you can buy a separate flood insurance policy.
- Many flood fatalities are motor vehicle related.
- Figuring out how to cope with flooding is your responsibility.

FLOOD MYTHS:

- Floods only happen to other people.
- It has never flooded here, so it never will.
- There was a flood problem, but it has been fixed.
- If flooding were a problem, someone would have told us. That's why we pay local taxes.
- It's only water. It's no big deal to be flooded.
- The government will bail me out.
- My homeowner's policy will cover any flood damage.
- We just had what the TV reporter called a "100-year flood." Therefore, my family will be safe from future floods for the rest of their lives.



FLUME DEMONSTRATION: Participants watch a demonstration performed by Ayres Associates staff during the "Fundamentals of Culvert Design for Designers & Reviewers" workshop.

DID YOU KNOW?

Percent chance of happening during the next year:

10-year flood	10 chances in 100
25-year flood	4 chances in 100
Involved in auto accident	3 chances in 100
Some form of cancer	3 chances in 100
Victim of larceny	2 chances in 100
50-year flood	2 chances in 100
Victim of burglary	1 chance in 100
Injured in auto accident	1 chance in 100
100-year flood	1 chance in 100
Victim of auto theft	1 chance in 300
Victim of aggravated assault	1 chance in 500
500-year flood	1 chance in 500
Victim of robbery	1 chance in 1,000
Residential fire	4 chances in 10,000
Killed in auto accident	3 chances in 10,000
Living near a stream	1 chance in 4 that a flood will occur for a 30-year mortgage



WISH YOU WERE HERE: Not even a thunderstorm marred our visit to Steamboat Springs. After the weather cleared, we were able to bike about five miles along the Yampa River Greenway. This scenic stop looked so inviting we had to stop and have our photo taken.

Yours truly,

(L to R) Ron Enserro, Tom Browning, Carolyn Fritz, Kevin Houck

URBAN FLOOD HAZARDS MAY CHANGE AFTER PUBLICATION OF FEMA MAPS

Flood risk information presented on the FEMA Flood Insurance Rate Maps is based on existing conditions of the floodplain and watershed. However, after publication of the maps, flood hazards may change significantly in areas experiencing urban growth.

When mapping of flood hazards was initiated under the National Flood Insurance Program (NFIP), the intent was to reassess each community's flood hazards periodically and, if needed, revise the maps. However, budgetary constraints have prevented updating flood maps with sufficient frequency to reflect the changing flood hazards brought about by natural and man-made changes. Although the existing conditions floodplain will continue to be mapped for flood insurance purposes, future conditions hydrology could also be mapped so that communities could use this information for floodplain management.

One of the objectives of FEMA's Map Modernization Plan is to evaluate the use of future conditions hydrology and to develop recommendations and specifications for its use. To help achieve that goal, FEMA has prepared a draft report titled *Modernizing FEMA's Flood Hazard Mapping Program: Recommendations for Using Future Conditions Hydrology for the National Flood Insurance Program*.

The report defines future conditions to be land-use conditions as shown on current zoning maps or comprehensive land-use plans. Future conditions hydrology is then defined as the flood discharges that would occur if the land use conditions on these maps and plans were realized. For more information, visit: www.fema.gov/mit/tsd/FT_futur.htm

2001 CALENDAR

<u>DATE</u>	<u>MEETING</u>	<u>LOCATION</u>
January 11	General Meeting	Urban Drainage & Flood Control District, Denver
March 15	General Meeting	City of Loveland
May 10	General Meeting	City of Lakewood
July 12	General Meeting	City of Longmont
September 18 – 20	Annual Conference	Steamboat Springs, Colo.
November 8	General Meeting	McLaughlin Water Engineers, Ltd., Denver
TBA	Workshops*	TBA
TBA	Social Hour Gatherings*	TBA

*Watch for future e-mail announcements.



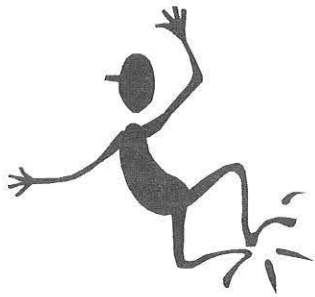
***WORK HARD, PLAY HARD:** Weary golfers relax after the CASFM Golf Tournament.*

THREE-MAN TEAM WINS CASFM GOLF TOURNAMENT

The three-man team of Kyle DeLucero, Stuart Gardner and Larry Lang received the Grand Prize Trophy for winning the tournament with a score of 71.

The Traveling Trophy of most use of the course went to the four-man team of Bill DeGroot, Cindy Thrush, Kevin Stewart and John Pflaum.

Altogether, 22 golfers competed on six teams. The tournament was held September 1, Steamboat Springs Sheraton Resort.



“The Diamond Hill Duffers (Traveling Trophy winners) are going to challenge for the Grand Prize next year.”

John Pflaum

WIN , SOLO EAGLE, PRANK HIGHLIGHTS OF WINNING TEAM

The highlight of the conference was when Larry Lang, Kyle DeLucero and I won the highly coveted CASFM golf championship. The highlight of that (outside of Kyle’s remarkable solo eagle on the par five #18) was on the back nine when Larry and I conspired to hijack Bill DeGroot’s and John Pflaum’s cart.

Unfortunately, Larry’s timing was a little off (by about three MGDs) and he didn’t wait quite long enough for them to get on the teebox, giving John a chance to catch up after a short foot chase and foil the plan.

I’m not sure why, but they didn’t seem to be quite as high in spirit as we were about the prank. I may be misquoting John, but I’m pretty sure I heard him say, “You guys just need to worry about speeding up the pace of play!!!”

What a grouch.

Stuart Gardner

2001 CASFM OFFICERS

CHAIR

Kevin Gingery
City of Loveland
200 N. Wilson Avenue
Loveland, CO 80537
(970) 962-3571
gingek@ci.loveland.co.us

VICE CHAIR

Terry Bowen
tabowen@msn.com
Terryabowen@hotmail.com

SECRETARY

Cindy Thrush
Urban Drainage & Flood Control
District
2480 West 26th Avenue, #156B
Denver, CO 80211
(303) 455-6277
cthrush@udfcd.org

TREASURER

David Hollingsworth
City of Longmont
408 Third Avenue
Longmont, CO 80501
(303) 651-8328
david.hollingsworth@ci.longmont.co.us

COMMITTEE CHAIRS

STORMWATER QUALITY
COMMITTEE
John Doerfer
Urban Drainage & Flood Control
District
2480 West 26th Avenue, #156B
Denver, CO 80211
(303) 455-6277
jdoerfer@udfcd.org

FLOODPLAIN COMMITTEE
Douglas Trieste
Flow Technologies
P.O. Box 260595
Lakewood, CO 80226
(303) 989-1427
dtrieste@classic.msn.com

REGIONAL REPRESENTATIVES

NORTHEAST REGION

Debbie Haferman
Sear-Brown
209 S. Meldrum
Fort Collins, CO 80521
Debbie.haferman@scarbrow.n.com

NORTHWEST REGION

Stuart Gardner
Colorado Department of Transportation
222 South 6th Street, Room 317
Grand Junction, CO 81501
(970) 248-7222
stuart.gardner@dot.state.co.us

SOUTHEAST REGION

Bob Saulmon
City of Canon City
P.O. Box 1460
Canon City, CO 80215
(719) 269-9011
bwsaulmon@canoncity.org

SOUTHWEST REGION

Kerrie Ashbeck
NCW Associates
P.O. Box 3688
Crested Butte, CO 81224
(970) 349-6384
ncwa@crestedbutte.cc

METRO DENVER REGION

Craig Houdeshell
EDRC, PMB #110
5616 S. Gibraltar Way, Suite H
Aurora, CO 80015
(303) 627-7162
craig970h@aol.com



C A S F M

**Colorado Association of Stormwater
and Floodplain Managers**
P.O. Box 22673
Denver, CO 80227-0673

John Pflaum
McLaughlin Water Engineers
2420 Alcott St.
Denver CO 80211

