

celebrating

20
years



C A S F M

2009 CASFM CONFERENCE

SEPTEMBER 16-18, 2009

2009 ANNUAL CONFERENCE
CRESTED BUTTE MOUNTAIN RESORT
MOUNT CRESTED BUTTE, COLORADO

20 YEARS OF CASFM:
"LOOKING UPSTREAM / LOOKING DOWNSTREAM."

2009 CASFM CONFERENCE



This Year's Conference in Mount Crested Butte

The conference will be held at the Crested Butte Mountain Resort Mountaineer Square in Mount Crested Butte, Colorado, September 16-18, 2009. Mount Crested Butte is a spectacular ski resort at elevation 9,400 feet. This is an incredible area to enjoy Colorado's scenic fall beauty while taking part in this professionally valuable annual event. Mount Crested Butte is located at the base of the ski resort, and a convenient shuttle ride into town provides easy access to a variety of exciting restaurants, unique shopping, and exciting recreational opportunities for attendees and their families. Unspoiled mountain biking terrain and wild flower viewing is unparalleled in Crest Butte.

If you have questions about the resort facilities, contact:



**MOUNTAINEER
SQUARE**

**Crested Butte Mountain Resort
Mount Crested Butte, Colorado**



Free Shuttle

With the Crested Butte Town Shuttle and Crested Butte Mountain Express, there's no need for a car. The shuttles run the 3 miles between Mt. Crested Butte and the historic town from many convenient locations, and it's free.

Rental cars

Hertz Avis Budget Thrifty

Rental cars are available at the Gunnison Airport and reservations for rental vehicles can be made with Crested Butte Vacations.

REGISTRATION INFORMATION

September 16-18, 2009 – Mount Crested Butte, Colorado

Visit www.casfm.org and select the conference link to register.

Below you will find registration and cost information. If you have any questions, contact our registration coordinator Chris Butler at 720-286-5771.



Basic Conference Fees

The basic registration fee includes all written materials, three continental breakfasts, two lunches, refreshment breaks, receptions and the Thursday Banquet Dinner. Please note that all presenters are required to be registered and paid conference attendees.

Early Discount (Before August 18th).....	\$275
Regular (August 19th to September 4th)	\$315
Late/On-Site.....	\$355

Optional Workshops/Field Trips

CFM Exam Refresher Course (Tuesday 8 am – 5 pm).....	\$65
Bird Watching Tour (Friday 9 am – 12 pm, Lunch is provided).....	\$20
Fly Fishing Tour (Friday 9 am – 12 pm).....	\$100
Horseback Riding Tour (Friday, 9 am, 1.5 hours).....	\$55
Horseback Riding Tour (Friday, 9 am, 3 hours).....	\$85
Mountain Bike Tour (Friday 9 am – 12 pm, \$35 bike rental, free if you bring your own bike).....	FREE
Individual Community Rating System Session (Time arranged individually).....	FREE
Conference Golf Tournament (Friday afternoon).....	\$60

Additional Meals

The Conference Fee includes all meals listed above in the Basic Conference Fees Section. Meal tickets do not need to be purchased for the registered conference attendee. If desired, extra meal tickets may be purchased for the attendee's guest (spouse, children, etc) by checking the appropriate boxes in this section of the online registration form.

Wednesday Lunch.....	\$20
Thursday Lunch.....	\$20
Thursday Dinner.....	\$45

Cancellation Policy

Cancelled registrations will be refunded in full through August 31. Registrations cancelled after August 28 through September 8 will receive a 50% refund. Cancellations made after September 8 will not be refunded. Cancellations must be made by contacting Chris Butler at 720-286-5771.

Register online at www.casfm.org

2009 CASFM CONFERENCE SCHEDULE

Tuesday, September 15, 2009

8:00 am - 5:00 pm Certified Floodplain Manager Training Session

Wednesday, September 16, 2009

7:00 - 10:00 am Certified Floodplain Manager Exam

8:00 - 9:30 am Registration

9:30 - 10:00 am Introduction and Welcome
Kevin Houck - CASFM Chair

10:00 - 11:30 am **Keynote: Evolutions in Stormwater & Floodplain Management**
Address by Clancy Philipsborn,
Hazard Mitigation and Emergency Management Expert

11:30 - 1:00 pm **Lunch**
Introduction of 2009/2010 Officers
Introduction of 2009 Scholarship Recipients

1:00 - 2:30 pm **Plenary Session – 20 Years of CASFM**
A Look Back at Some of the Project Award Winners

3:00 - 5:00 pm **Project Presentations: 2009 CASFM Award Finalists**

1. **"Utah Park"**
Design Concepts
City of Aurora, CO
Urban Drainage and Flood Control District
2. **"The Big Pipe Flood Mitigation Project – Ranchmen's Ditch and Lower Leach Creek"**
ICON Engineering, Inc.
City of Grand Junction, CO
3. **"South Platte River Globeville and North Areas Flood Control and Greenways Project"**
Love & Associates, Inc. dba Belt Collins West
City and County of Denver
Urban Drainage & Flood Control District
4. **"Keep It Clean Partnership LID Checklist Development/Barrier Analysis"**
Wright Water Engineers, Inc.
Keep It Clean Partnership

5:00 - 6:30 pm **Happy Hour sponsored by SEH, Inc. in Vendor Exhibit Area**
Dinner on your own

Thursday, September 17, 2009

7:00 - 8:00 am **General Membership Breakfast Meeting**

8:00 – 12:00 pm **Four Concurrent Technical Sessions**

Stormwater Management and Low Impact Development (LID)

The Truth About Implementing Low Impact Design

Herman H. Feissner - Feissner Consulting, LLC

Use of LID Principles to Integrate Wildlife Habitat and Stormwater Management

Susan Nordstrom, Grant Gurnee – Walsh Environmental Scientists and Engineers, LLC

Tim McConnell – M&S Civil Consultants, Inc.

Expanding the International Stormwater BMP Database Reporting, Monitoring and Performance Analysis Protocols to Include Low Impact Development

Jane Clary, John O'Brien, Andrew Earles, Jonathan Jones - Wright Water Engineers, Inc.
Ben Urbonas - Urban Watersheds Research Institute, LLC

Union Place – A Comprehensive Approach to a Low Impact Design Development

Michele White - Nolte Associates, Inc.

LID in the Park - Using Infiltration to Improve Water Quality in Cherry Creek State Park

Noelle S. Beegle - Short Elliott Hendrickson, Inc.

Stormwater Quality Control Volume for Cold Regime

Dr. James C.Y. Guo, Professor

Dr. Andrew Earles – Wright Water Engineers

Flood Hazard and Floodplain Policy

A History of and Discussion about Meeting Non-Levee Embankment (or Levee-Like Structure) Requirements in FEMA Regulatory Floodplains and Floodways

Brian K. Varrella - City of Fort Collins Stormwater Utility

Sand Creek Levee Recertification

Clinton Weisz - City of Aurora

Alaina Smith - Tetra Tech, Inc.

FEMA Risk Map Program Status

Dawn Gladwell – FEMA Region VIII, Thuy Patton – CWCB

Dave Julia – Michael Baker Jr., Inc.

Inadvertent Detention: Lose it or Use it?

Kimberley A. Pirri - URS Corporation

How to Drain an Airbase in Korea - Watershed, Floodplain, Communication, and Cultural Challenges

Craig Wilkening, Douglas Stewart - CH2M HILL



Stream Restoration

Innovative Urban Stream Restoration and Flood Protection with Principles of Natural Channel Design and Fluvial Geomorphology

David Bidelsbach – Stantec

Is it Stable Yet? A Lessons Learned Approach to Predicting Long-Term Stable Channel Slopes

Alan Turner, Mark Glidden - CH2M HILL

Pieter Van Ry, David Van Dellen - Town of Castle Rock

2010 – A Drop Structure Odyssey – 40 Years of Drop Structure Innovation – From Then to Now

Scott Yanagihara - CH2M HILL

David Bennetts, Paul Hindman – Urban Drainage and Flood Control

Multi-Disciplinary Master Planning along the Fountain Creek Corridor between Colorado Springs and Pueblo, CO

Carol Baker - Colorado Springs Utilities

Kevin Shanks - THK Associates

Graham Thompson - Matrix Design Group, Inc.

Restoration of the Falls of the Chattahoochee River

Richard McLaughlin, Jacob James - McLaughlin Water Engineers, Ltd.

South Platte River Restoration Zuni/Sun Valley Reach

Kimberly Watanabe - City and County of Denver

Tim Fairbank - Matrix Design Group, Inc.

Stormwater and Floodplain Mangement

Engineering Construction Services for Floodplain or Channel Restoration Projects

Cory Hooper and Chris Butler – CH2M HILL

Cindy Thrush – Urban Drainage & Flood Control District

Alternative Delivery Method for Public Works

Kimberly Watanabe, R. Rodriguez - City and County of Denver

W. Plaehn – Parsons

The Long Road to Forming the Boxelder Basin Regional Stormwater Authority

Rex Burns - Local Government Solutions, LLC

Andrea Faucett - Ayres Associates

Enhancement of Streams on Southern Ute Tribal Lands

Mike Lighthiser, Vince Sortman, Claudia Browne - Biohabitats

Mich Burns - Southern Ute Indian Tribe Environmental Program

Overcoming Design Challenges in the Restoration of Rock Creek and Wetlands at the Carolyn Holmberg Preserve Rock Creek Farm, Boulder County, Colorado

E. Danny Elsner - SEH, Inc.,

Graham Thompson - Matrix Design Group, Inc.,

Cindy Thrush - Urban Drainage and Flood Control District

Stormwater Practices in New Zealand

Dan Evans - OPUS International Auckland, New Zealand

12:00 - 1:00 pm **Conference Attendee Lunch: Mountaineer Square – Grand Ballroom**
Board Member Meeting (All Board Members, Regional Rep's, and
Committee Chairs)

1:00 - 5:00 pm **Concurrent Technical Sessions**

Watershed Protection and Best Management Practices (BMP's)

eRAMS – A Web-Based Tool for Evaluating Stormwater Management Practices
Dr. Mazdak Arabi, Chris Olson, Dr. Larry Roesner - Colorado State University

The "CURE" For Pervious Concrete Problems
Ken MacKenzie – Urban Drainage and Flood Control District
Stephan Durham, PhD Civil Engineering - University of Colorado at Denver
Joe Rottman, Bernie Cawley - Colorado Ready Mixed Concrete Association
Bud Werner - CTL Thompson

Using Modular Block Pavement for Stormwater Detention
Terry Martin, Dan Hinzmann - SEH

Maintenance and Monitoring of BMPs in Grant Ranch
Holly Piza, Shea Thomas - Urban Drainage and Flood Control District
John O'Brien - Wright Water Engineers
Kevin Lewis - City and County of Denver

High Point Cascading Integrated Water Quality Pond
Deborah Fisher - Martin/Martin, Inc.

A Comparison of Engineered Soil Mixtures on Bioretention Cell Performance
Laura Hallam - URS Corporation

Technical Modeling

Composite Design Storm Development at the Parkdale Quarry
Kallie Bauer, Matthew Young - Applegate Group, Inc.

Calibration of Converted CUHP 2005 and EPA SWMM 5.0 Hydrology Models
Teresa L. Patterson - Moser & Associates Engineering

What Are Gages Telling Us About Our Models? Suggestions for Moving Forward
Lucas Babbitt, Matrix Design Group, Inc.

StormCAD to UD-Sewer Hydraulic Gradient Line Conversion
E. John Loranger, Jeffery Y.C. Cheng - AMEC Earth and Environmental
Ken MacKenzie - Urban Drainage and Flood Control District
Quang Nguyen - Southeast Metro Stormwater Authority

Comparison of HEC-RAS and EPA-SWMM for Unsteady Flow Routing through Bridges
Mike Vinson – Southeast Metro Stormwater Authority
George K. Cotton – George K Cotton Consulting, Inc.

Enhanced HEC-RAS Modeling Using Stream Tube Visualization
George K. Cotton, P.E.

Flood Preparedness and Hazard Mitigation

2009 Flood Season Review

Kevin Houck – Colorado Water Conservation Board

The Long Road to Forming the Boxelder Basin Regional Stormwater Authority

Rex Burns - Local Government Solutions, LLC

Andrea Faucett - Ayres Associates

This Floodplain Is My Home: Keeping Communities and Watersheds at the Center of Flood Hazard Mitigation

Brian Hyde, Iain Hyde - WCC

David Duclos - The COLE Company

Bringing Your Hazard Mitigation Plan To Life: Strategies For Success With Mitigation Grant Programs

Julie Baxter - URS Corporation

Rich Hansen - Colorado Division of Emergency Management

Douglas County, Colorado Flood Hazard Inventory Tool (FHIT)

Markus L. Ritsch - WET

Michael McMahon - HDR

Garth Englund - Douglas County

Familiar Hydrologic Prediction Tool Used for Large Rivers Offers Possible Model for Forecasting Flash Floods and Impacts on Small

Kevin Stewart - Urban Drainage and Flood Control District

Bruce Rindahl - Leonard Rice Engineers

UDFCD Preparedness Exercise 2009 – Dealing with a Flood in Morrison

Jeff Brislawn, AMEC Earth and Environmental

Kevin Stewart, Urban Drainage and Flood Control District

5:30 - 7:00 pm Cocktail Hour

7:00 - 9:30 pm CASFM Association Dinner and Awards Ceremony

Sponsored by Matrix Design Group, Inc.

Location: Mountaineer Square – Grand Ballroom

Stuart Gardner CDOT - Culvert Repair Technology in the Highway Environment

Friday, September 18, 2009

7:00 - 8:30 am Continental Breakfast in Vendor Area

8:30 - 9:00 am Closing Remarks

9:00 – 11:30 am Technical Session: Front Range Watershed-Wildfire Protection

Black Water Floods: Runoff and Erosion from Burned Watersheds

Deborah Martin, U.S. Geological Survey

Threats of Severe Wildfires to Colorado Front Range Water Supplies

Don Kennedy, Denver Water

A Watershed Assessment and Prioritization Process to Protect Source Watersheds from Wildfire Damage

Hal Gibbs, U.S. Forest Service

Preparing Critical Community Watershed-Wildfire Protection Plans in Colorado Front Range Source Watersheds

Chuck Dennis, Colorado State Forest Service

9:00 – 1:30 pm Field Trip Options:

1. Fly Fishing Tour

Coordination by Alan Turner, Chris Butler – CH2M HILL

2. Horseback Riding Tour

Coordination by Kimberly Watanabe, City & County of Denver

3. Mountain Bike Tour

Coordination by Rich Ommert - Moser & Associates

4. Bird Watching Tour

Coordination by Sarah Houghland, Michael Baker Jr. Inc.

12:00 - 5:00 pm Golf Tournament

Mike Bartusek – Associated Design Professionals

WHO: All Conference Participants, Family Members, Sponsors, and Exhibitors

WHERE: The Club at Crested Butte

WHEN: Friday, September 12, 2008 at 12:00 PM

COST: \$60.00 Entry Fee per Person payable to CASFM (includes cart, green fees & prizes)

FORMAT: Four-Person Scramble

This is an incredible opportunity to play this magnificent and challenging course. Sign up by checking the golf tournament box on the online registration form or print the online golf page, write your name, phone number and e-mail and send it with your payment to:

CASFM c/o Mike Bartusek

Associated Design Professionals

1861 Austin Bluffs Parkway, Suite 101

Colorado Springs, CO 80918

Telephone: (719) 266-5212

Fax: (719) 266-5341

Email: mbartusek@adpcivil.com



The Club at Crested Butte Course Information

Classification: Semi-Private

Total Holes: 18-hole Regulation

Designer: Robert Trent Jones, Jr.

Year Opened: 1984

Address: 385 Country Club Drive

Crested Butte, CO 81224

Phone: 970-349-6131

Professional: Mike Haslar,
Head PGA General Manager

Superintendent: Stephen Rau

Dress Code: No denim, collared shirt required

SPONSORS & CONFERENCE TEAM

Gold Level Sponsors	Silver Level Sponsors
	Anderson Consulting Engineers, Inc.
	Bowman Construction Supply
	Enginuity Engineering Solutions
	ERO Resources
	PBS&J
	Watersaver Company, Inc.



Conference Team	
Conference Chair Robert Krehbiel, P.E. Matrix Design Group 1601 Blake St, Suite 200 Denver, CO 80202 (303) 572-0200	Field Trip Coordinator Brian Murphy, P.E., CFM CDM 555 17th St., Suite 1100 Denver, CO 80202 (303) 383-2300
Program Chair David Bennetts, P.E. Urban Drainage & Flood Control 2480 W. 26th Ave. Suite #156B Denver, CO 80211 (303) 455-6277	Golf Tournament Mike Bartusek, P.E. ADP – Kirkham Michael 1128 S Tejon St Colorado Springs, CO 80903 (719) 266-5212
Registration Chris Butler CH2M Hill 9193 S Jamaica St Englewood, CO 80112 (720) 286-5771	Sponsors & Vendors David Krickbaum, P.E., CFM Olsson Associates 143 Union Blvd., Ste 700 Lakewood, CO 80228 (720) 962-6072
Facilities & Website Stuart Gardner, P.E. Colorado Dept. of Transportation 606 S. 9th St. Grand Junction, CO 81501 (970) 683-6354	Awards John Pflaum, P.E. ASCG 12596 W. Bayaud Ave., Suite 200 Lakewood, CO 80228 (720) 963-4347