

**2008 CASFM CONFERENCE PROGRAM**  
***“High Elevation – Low Impact***  
***Sustainable Stormwater Management”***

**Tuesday, September 9, 2008**

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

Location: Mountaineer Square – Elko Room

Chris Tagert - Michael Baker, Kevin Houck – CWCB, Craig Jacobson - ICON

**Wednesday, September 10, 2008**

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

Location: Elevations Conference Center – Anthracite Room

Chris Tagert - Michael Baker, Kevin Houck – CWCB, Craig Jacobson - ICON

**8:00 - 9:45 am Registration**

Chris Butler - CH2M Hill

**9:45 - 10:00 am Introduction and Welcome**

Location: Mountaineer Square – Grand Ballroom

Kevin Houck - CASFM Chair

**10:00 - 11:30 am LID from the Watershed Perspective and Decision-Making Process**

Keynote Address by Thomas Ballesterio - Professor at University of New Hampshire

Location: Mountaineer Square – Grand Ballroom

**11:30 – 1:00 pm Lunch in the Elevations Conference Center – Peak Ballroom**

Introduction of 2008/2009 Officers

Introduction to 2008 Scholarship Recipient - Jeffery Cheng Ph.D. Candidate at UCD

Scholarship Presentation by Ben Urbonas, UWRI

Stormwater and LID Development - Michelle DeLaria

ASFPM Foundation - Mike DePue, ASFPM Foundation Trustee

**1:00 - 2:30 pm A Tool for Determining Performance and Whole Life Costs of BMPs**

Location: Mountaineer Square – Grand Ballroom

Chris Olson and Larry A. Roesner, Ph.D., P.E.

Colorado State University, Department of Civil and Environmental Engineering

**2:30 - 3:00 pm Break in Vendor Areas**

**3:00 - 5:00 pm Project Presentations: 2008 CASFM Award Finalists**

Location: Mountaineer Square – Grand Ballroom

Moderator: John Pflaum - WH Pacific, Inc.

McIntyre Gulch Stabilization

Olsson Associates

Jefferson County Public School District

Fossil Creek Drainage Improvements

Stantec Consulting, Inc.

City of Fort Collins Utilities Department

Public Education Marketing Brochure

Urban Drainage & Flood Control District

Matrix Design Group

Montclair Storm Drainage Project

WHPacific, Inc.

City & County of Denver

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

**Thursday, September 11, 2008**

7:00 - 8:00 am      **General Membership Breakfast Meeting**  
Location: Mountaineer Square – Grand Ballroom

8:00 – 12:00 pm      **Concurrent Technical Sessions**  
(9:30 – 10:00 am      Break)

**Low Impact Development (LID)**

Location: Elevations Conference Center – Anthracite Room

Moderator:      Dennis Maroney - City of Pueblo

Stormwater Facilities Design To Minimize Impacts on Streams in Urbanizing Watersheds

Larry A. Roesner, Ph.D., P.E. - Colorado State University

Department of Civil and Environmental Engineering

Christine A. Pomeroy, Ph.D., P.E. - University of Utah

Department of Civil and Environmental Engineering

UDFCD Pavement BMP Demonstration Site at Denver Wastewater

Ken MacKenzie - Urban Drainage and Flood Control District and

Terry Baus - City and County of Denver

Waste Incorporated Porous Landscape Detention (PLD) and Pervious Concrete Pavement (PCP)  
BMPs for Sustainable Urban Stormwater Management

Angela S. Hager, PhD Candidate - University of Colorado at Denver

Shauna Kocman, PhD Candidate - University of Colorado at Denver

Jeffrey Y.C Cheng, PhD Candidate - University of Colorado at Denver

Optimal Subbase Dimension for Infiltrating Bed Design

Guo, J. C.Y., Professor - Civil Engineering, University of Colorado at Denver

Ben Urbonas, President - Urban Watersheds Research Institute

Ken MacKenzie, Project Manager - Urban Drainage and Flood Control District

Effectiveness Imperviousness Low Impact Development

James C.Y. Guo - Professor, P.E. Civil Engineering, University of Colorado at Denver

Tim Ho - Graduate Student and Matrix Design Group, Inc.

Effects of Land Development on Waterways and LID Solutions

Michelle DeLaria, Stormwater Quality Chairperson - Meza Construction

Stormwater Management for Urban Environments

Charles Taylor - Advanced Pavement Technology

**Stream Restoration**

Location: Elevations Conference Center – Beckwith Room

Moderator: Brian Murphy - CDM

Design Procedure to Determine Economic and Hydraulically Efficient Open Channel Trapezoidal Cross Section

Gerald E. Blackler - CH2M Hill

Howe-Haller Reservoir B Reclamation, Commerce City, Colorado

Jeffrey A. Butson, P.E., CFM - Tetra Tech

Could a River Run Through It? Envisioning the Restoration of Underground Urban Streams

Brian Hyde - WCC, and David Duclos - The COLE Company

Predicting Bank Erosion Using a GIS

Francis Rengers, CFM - Engineering and Hydrosystems, Inc.

Lessons Learned in Design and Construction of a Habitat-Based Restoration on Black Forest Creek at the U.S. Air Force Academy

Brian S. Mihlbachler, PhD, U.S. Fish and Wildlife Service and

Graham W. Thompson, P.E., Matrix Design Group, Inc.

Determination of Stable Sediment Load and Stable Longitudinal Slopes for Sandy Streams

Gerald Blackler and Mark Glidden - CH2M Hill

Ken MacKenzie - Urban Drainage and Flood Control District

**Technical Modeling**

Location: Elevations Conference Center – Conundrum Room

Moderator: Barbara Chongtouna - UDFCD

Reconciling Administrative Realities with State of the Art Analyses during the South Boulder Creek Flood Mapping Study

Mark Glidden - CH2M Hill, Cristina Martinez - City of Boulder, Alan Taylor

Gauge Adjusted Radar Rainfall Estimation and Basin Averaged Rainfall for Use in Local Flash Flood Prediction and Runoff Modeling

Beth Clarke - Weather Decision Technologies

Chad Kudym - Urban Drainage and Flood Control District

Bruce Rindahl - Leonard Rice Engineers, Inc

Evaluation of Summer Storms in Colorado with a Mobile Dual-Polarized Radar

Steven V. Vasiloff and Kenneth W. Howard - NOAA/National Severe Storms Laboratory

Joe Busto and Kevin Houck - Colorado Water Conservation Board

Physically Based Hydrologic Modeling – Cottonwood Creek DBPS

Lucas Babbitt - Matrix Design Group, Inc.

Urban Flood Modeling Using FLO-2D and CUHP

Don Jacobs, PE - PBS&J

Computer Model: Flow-SPA for Riprap Design and Scour Analysis

Hui-Ming Shih, Ph.D., CFM, and Eugene P. Vodjansky, CFM - Parsons Brinckerhoff

Hydrology Modeling of Level Spreader Systems and its Application on Low Impact Development

Jeffrey Y.C Cheng P.E. and Stephen McGaffick - AMEC Earth and Environmental Inc

12:00 - 1:00 pm

**Conference Attendee Lunch:** Mountaineer Square – Grand Ballroom  
Board Member Meeting (All Board Members, Regional Rep's, and Committee Chairs)  
Location: Mountaineer Square – Al Johnson Boardroom

1:00 - 5:00 pm

(2:30 – 3:00 pm)

**Concurrent Technical Sessions**  
Break)

### **Floodplain Management and Hazard Preparedness**

Location: Elevations Conference Center – Anthracite Room

Moderator: Mark Glidden - CH2M Hill

How NAI Principals Guided a Difficult CLOMR Review

David Mallory, P.E. - Urban Drainage &amp; Flood Control District

Jennifer A. Winters, P.E., CFM - Brown &amp; Caldwell

Craig D. Jacobson, P.E., CFM - ICON Engineering, Inc.

FEMA's Risk Map Concept as a Means to Pursue Floodplain Harmony

Variations on a Theme from Nashville, Tennessee

Brian Hyde and Iain Hyde - Dewberry

Accuracy of "Modernized" Zone A Floodplains – Where is Your Flood Hazard Delineated?

Greg Koch, P.E., CFM and Mark Kempton P.E., CFM - Anderson Consulting Engineers

2008 Flood Season Review

Kevin Houck - Colorado Water Conservation Board

Critical Repairs to the Sacramento River Flood Control System

Nikki Randall, PE; Richard Smith, PE; Andy Shoaf, PE;

Dustin Robinson, PE; Anthony Alvarado, PE - Ayres Associates

The City of Evans Provides Flood Risk Reduction through Irrigation Ditch Improvements

Brandon Luster, PE - HDR and Cameron Parrott, PE - City of Evans

Flood Mitigation Planning in Colorado: Recent Experiences, Challenges, and Opportunities

Jeff Brislawn and Julie Baxter - AMEC Earth and Environmental

### **Urban Stormwater Runoff**

Location: Elevations Conference Center – Beckwith Room

Moderator: Terry Baus, City &amp; County of Denver

Stormwater Planning, Stream Stabilization and Open Space on Haynes Gulch at Aurora Reservoir

Mark Donelson - Aurora Water and Tiffany McEachen, PE, CFM - CH2M Hill

Solving the Mystery – Untangling 50 Years of Re-Routed Wastewater and Stormwater Sewers

Craig Wilkening, P.E., CFM and Mark Glidden, P.E. - CH2M Hill

Breaking Down the Barriers to Low Impact Development in Colorado

Derek Rapp, Andrew Earles, Ph.D., and Jane Clary, Wright Water Engineers, Inc

Janice Lopitz - Keep It Clean Partnership

Getting Real with Bacteria, Stormwater BMPs, and TMDLs

Jane Clary and Jonathan Jones, P.E., D.WRE - Wright Water Engineers, Inc.

When Good Pipes Turn Bad – Evaluation and Inspection of a Major Pipe Outfall System in Aurora

Craig Jacobson, P.E., CFM and Stephen Brown, P.E., CFM - ICON Engineering, Inc.

Joe Kleiner, P.E. - City of Aurora

Colorado Stormwater Council – MS4s Working Together

Jill E. Piatt Kemper, P.E. - City of Aurora Water Department

Public Enforcement of Contractor Compliance: Sharing the Burden of Erosion Control Inspections in Madison, WI

Jason Sprague, PE - SEH, Inc.

### **Watershed Protection and Sustainable Stormwater Management**

Location: Elevations Conference Center – Conundrum Room

Moderator: David Bennetts - UDFCD

Burlington Mine VCUP Case History: An Ecological Approach to Mine Site Remediation

Maureen O'Shea-Stone and Julie Ash, P.E.

Walsh Environmental Scientists and Engineers, LLC

High Altitude Wetland Mitigation within Former Gold and Silver Mine Tailings: Lessons Learned

John Ewy - Drexel, Barrell & Co.

Scott Franklin - U.S. Army Corps of Engineers

High Altitude Stormwater BMP's

Peggy Bailey, P.E. and Alaina Smith, P.E. - Tetra Tech, Inc.

Willwood Diversion Dam Siltation Removal in Wyoming Phase I: Options and Alternatives Study

Hui-Ming Shih, Ph.D., CFM, and Patrick Horn, PE - Martin/Martin Inc.

Chih Ted Yang, Ph.D., PE - Dept of Civil and Environmental Engineering, CSU

Tackling Erosion Caused by Roadway Deicing Agents

Catherine Rafferty P.E. - City and County of Denver – Department of Aviation

Rich Ommert P.E., and Lee Rosen, E.I. - Moser & Associates Engineering

Innovative Techniques to Promote Sustainable Stormwater Management Strategies at a Light Industrial Site – The Arapahoe County Challenge

Julie Vlier, P.E. - Tetra Tech

Steve Miller - Arapahoe County

Optimal Siting for Construction Stormwater Quality BMPs – A New Look at the Old Universal Soil Loss Equation

Tiffany McEachen, PE, CFM - CH2M Hill

5:30 - 7:00 pm **Cocktail Hour *Sponsored by Matrix Design Group*** in Vendor Area

7:00 - 9:30 pm **CASFM Association Dinner and Awards Ceremony  
*Sponsored by Ayres Associates***

Location: Mountaineer Square – Grand Ballroom

**Grand Prize Drawings**, Stuart Gardner - CDOT

**2008 CASFM Project Awards Presentation**, John Pflaum - WH Pacific, Inc.

9:30 - 12:00 am **Hospitality Suite *by CH2M HILL at the Lodge at Mountaineer Square*** -  
Open to all registered conference participants

**Friday, September 12, 2008**

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

8:30 - 9:00 am      **Field Trip Instructions and Closing Remarks**

Location: Mountaineer Square – Grand Ballroom

**CASFM Chair, Stormwater/Flood Committee Chair**

**Conference Evaluation**

9:00 – 1:30 pm      **Field Trip Options:**

**1. Taylor Reservoir Tour**

*Coordination by Chris Butler/Cory Hooper – CH2M HILL*

The first stop on the tour will be to visit the Roaring Judy Fish Hatchery located in Almont, Colorado. The hatchery was designed to divert water from the East River under a fishing pond access road and then on to a point on the hatchery effluent channel. Flow is controlled by a headgate at the diversion structure. Five boulder check dam weirs are installed to control river flows immediately upstream and downstream of the diversion structure. The hatchery is home to several species of fish including Trout and Salmon.

The next stop will be at the Taylor Park Marina located at the Taylor Reservoir, which is on the Taylor River, a tributary of the Gunnison River. Join us in viewing this spectacular reservoir and learn more about the history of the reservoir and dam. The tour will include a boat around the reservoir with the tour leaders giving some interesting facts about the reservoir history.

**2. Crested Butte Bike Tour – Lower Loop Trail**

*Coordination by Rich Ommert - Moser & Associates*

The trail winds its way through the woods on very easy grade parallel to the Slate River. The tour will highlight channel restoration improvements which blend with the natural landscape of the area. Bring your own bike or rent a bike through the conference to join us on this adventure.

**3. Crested Butte Walking Tour**

*Coordination by Brian Murphy- CDM*

This field trip will begin with a presentation in the Elko Room in Mountaineer Square. Explore stormwater opportunities, flood history and land development issues in downtown Crested Butte. Start with an overview of Low Impact Development and Crested Butte Stormwater Criteria. Begin a walking tour of downtown Crested Butte with the City Planner, City Engineer, Town Historian, and Dr. Tom Ballesterio – Professor at the University of New Hampshire. Discuss opportunities to incorporate LID into the downtown area with national experts while gaining an understanding of the Crested Butte Mining Town History.

12:00 - 5:00 pm      **Golf Tournament**

Mike Bartusek – Associated Design Professionals

