

NATURAL STREAM & DESIGN AT COAL MINES

A TECHNICAL INTERACTIVE FORUM

April 28-30, 2009 ♦ Bristol, VA



GEOMORPHIC INFORMATION RECLAMATION

PROGRAM

MONDAY, APRIL 27, 2009

4:00 - 8:00 PM

Check in for Field Tour and Forum

at Holiday Inn, 3005 Linden Drive, Bristol, VA 24201; (276) 466-7725

TUESDAY, APRIL 28, 2009

7:00 AM

Continental Breakfast at Hotel

Check in for Field Tour and Forum

7:45 AM

Begin Loading the Vans for Field Tour

8:00 AM

Departure of Vans from Hotel for Field Tour

Long pants are recommended; wear field clothes appropriate for weather.

The tour will include:

- (1) Paramount Coal Co. Black Bear No. 1 Surface Mine stream channels restored using natural stream channel design;*
- (2) Lawson Hollow Surface Mine stream channel reconstruction & riparian vegetation; and*
- (3) Toms Creek Gob Pile Removal natural stream channel design & improved aquatic habitat.*

Lunch

(Included in Field Trip Registration)

5:00 PM

Return of Vans to Hotel from Field Tour

6:00 PM

Dinner at Hotel

(Included in Forum Registration)

WEDNESDAY, APRIL 29, 2009

7:00 AM

Continental Breakfast

(Included in Forum Registration)

Check in for Forum

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WEDNESDAY, APRIL 29, 2009 (Cont.)

- 8:00 AM** **Welcome**
- Jackie Davis**, Director, Virginia Department of Mined Land Reclamation, Division of Mines, Minerals and Energy, Big Stone Gap, VA*
- 8:10 AM** **Introduction and Purpose of Forum**
- Kimery Vories**, Forum Chairperson, Office of Surface Mining, Alton, IL*
- 8:20 AM** **1ST SESSION: ADVANCES IN GEOMORPHIC RECLAMATION**
- Chairperson: **Roger Calhoun**, Office of Surface Mining, Charleston, WV*
- 8:25 AM** **A Geomorphologist's Perspective on Stream Restoration in Mined Land**
- Dr. J. Steven Kite**, West Virginia University, Morgantown, WV*
- 8:55 AM** **Science Basis for Reclamation of Low-Order Streams**
- Dr. Peter R. Wilcock**, Geography and Environmental Engineering, Johns Hopkins University, Baltimore, MD*
- 9:25 AM** **Hydrological Functioning of Surface-Mined Watersheds in Western Maryland: Restoration or Reclamation?**
- Dr. Keith N. Eshleman** and **Brian C. McCormick**, M.Sc., P.E., Appalachian Laboratory, University of Maryland Center for Environmental Science, Frostburg, MD*
- 9:55 AM** **Refreshment Break**
- 10:25 AM** **Disturbed Land Reclamation Using Geomorphic Techniques: McKinley Coal Mine, New Mexico, Mining Area 12C**
- Richard Spotts**, P.E., Water and Earth Technologies, Inc. (WET)*
- Marie Shepherd**, P.E., Chevron Mining Inc.*
- Melissa Robson**, E.I., & **Ryan Wade**, E.I., (WET) Fort Collins, CO*
- Wayne Erickson**, CPESC, Habitat Management, Inc.*
- 10:55 AM** **Tools for Integrating Geomorphic Reclamation into Planning for Eastern Coal Surface Mines**
- Dr. Charles Yuill** and **Michael Hasenmyer**, Natural Resource Analysis Center, Environmental Design Visualization Group, West Virginia University, Morgantown, WV*

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WEDNESDAY, APRIL 29, 2009 (Cont.)

- 11:25 AM Interactive Panel Discussion
- 11:55 AM Adjourn to Lunch
(Included in Forum Registration)
- 1:00 PM 2ND SESSION: GEOMORPHIC RECLAMATION IN APPALACHIA
Chairperson: Craig Walker, Office of Surface Mining, Knoxville, TN
- 1:05 PM **Challenges of Applying Geomorphic and Stream Reclamation Methodologies to Mountain-Top Mining and Excess Spoil Fill Construction in Steep Slope Topography (e.g. Central Appalachia)**
Peter Michael and Lois Uranowski, Office of Surface Mining, Pittsburgh, PA
Mike Superfesky, Office of Surface Mining, Morgantown, VA
- 1:35 PM **Can Appalachian Mine Reclamation be called Sustainable using Current Practices?**
Nicholas Bugosh, Carlson Software, Ft. Collins, CO
- 2:05 PM **Geomorphic Restoration of Coldwater Fork Following Oct. 2000 Slurry Spill**
George Athanasakes, P.E., Stantec, Louisville, KY
- 2:35 PM **Modeling Sediment Loss on Geomorphic Regraded Forest Lands in Kentucky**
Dr. Richard Warner, Dr. Carmen T. Agouridis and Dr. Christopher D. Barton, University of Kentucky, Lexington, KY
- 3:05 PM Refreshment Break
- 3:35 PM **Stream Restoration on the Cumberland Plateau, Tennessee**
Dennis Clark, Office of Surface Mining, Knoxville, TN
Tim Slone, IRTEC, Caryville, TN
- 4:05 PM **Case Study - Kentucky: Recreating a Headwater Stream on a Head of Hollow Fill**
Dr. Carmen T. Agouridis, Dr. Christopher D. Barton, and R.C. Warner, University of Kentucky, Lexington, KY

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WEDNESDAY, APRIL 29, 2009 (Cont.)

4:35 PM **Use of Natural Stream Channel Design Techniques in the Coal Fields of Virginia**

Lance DeBord, D.R. Allen and Associates, Abingdon, VA

5:05 PM **Interactive Panel Discussion**

5:35 PM **Adjourn to Social Reception**

THURSDAY, APRIL 30, 2009

7:00 AM **Continental Breakfast**

(Included in Registration)

8:00 AM **3RD SESSION: GEOMORPHIC RECLAMATION IN THE WEST**

Chairpersons: Mychal Yellowman, Office of Surface Mining, Denver, CO

8:05 AM **Integrating Natural Processes with Drainage Reclamation Design in Montana**

Tom Golnar, Shannon Downey, and Julian Calabrese, Montana Department of Environmental Quality, Helena, MO

9:05 AM **The Application of Geomorphic Reclamation Methods in Wyoming**

Marcello Calle and Jonathan Stauffer, Wyoming Department of Environmental Quality, Cheyenne, WY

Scott Belden, Peabody Energy, North Antelope/Rochelle Mine, Gillette, WY

10:05 AM **Refreshment Break**

10:35 AM **Geomorphic Reclamation in New Mexico: A Regulator's Perspective**

Dave Clark, New Mexico Mining and Minerals Division, Santa Fe, NM

11:05 AM **Geomorphic Reclamation at BHP Billiton New Mexico Coal – Successes, Challenges and Future**

Daphne Place, Collette Brown, and Cary Cooper, BHP-Billiton New Mexico Coal, Farmington, NM

11:35 AM **Interactive Panel Discussion**

12:00 PM **Adjourn to Lunch**

(Included in Forum Registration)

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THURSDAY, APRIL 30, 2009 (Cont.)

- 1:00 PM 4TH SESSION: GEOMORPHIC RECLAMATION IN THE MID-WEST
Chairperson: Bryce West, Peabody Energy, Evansville, IN
- 1:05 PM **Anthropo-Geomorphology of Streams, Wetlands and Landscapes of the Illinois Basin, and Restoration Techniques**
Tim Sandefur, Wetland Services, Inc., Corydon, KY
- 1:35 PM **Current Stream Mitigation Requirements & Results**
Mike Ricketts and Sam Werner, US Army Corps of Engineers, Newburgh, IN
- 2:05 PM **From Rip Rap to Riffles: The Evolution of Stream Reclamation in the Indiana Coal Fields**
Ramona Briggeman, Indiana DNR, Division of Fish & Wildlife, Jasonville, IN
- 2:35 PM **Illinois Perspective – Past & Current Practices, Benefits and Challenges**
David Lamb, Associated Engineers, Inc., Madisonville, KY
Darrin Parrent, T.H.E. Engineers Inc., Lexington, KY
- 3:05 PM **Refreshment Break**
- 3:35 PM **Illinois Stream Restoration - Opportunities for Habitat Enhancement: Policy, Principles and Practices**
William G. O'Leary, Illinois DNR, Office of Mines and Minerals, Benton, IL
Jack Nawrot, Cooperative Wildlife Research Lab, Southern Illinois University, Carbondale, IL
- 4:05 PM **Industry Perspective: Past and Current Practices, Benefits and Challenges**
Scott McGarvie, Peabody Energy, Evansville, IN
- 4:35 PM **Interactive Panel Discussion**
- 5:05 PM **Where Do We Go From Here?**
Kimery Vories, Office of Surface Mining, Alton, IL
- 5:15 PM **Adjourn**

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