

## Symposium Location

### Fort Collins

Fort Collins is a city of 134,000 located 60 miles north of Denver. "The Fort" seems to have something for just about everyone – several shopping malls, hundreds of restaurants, multiple movie complexes, a regional cultural center, natural areas, miles of bike trails, exceptional microbreweries, and cozy coffee houses – right here in town. And for outdoor enthusiasts, camping, hiking, rafting, fishing, and water skiing are all within a short drive.

### Colorado State University

Our campus is in the center of Fort Collins, Colorado, just at the base of the Rocky Mountain foothills. It's an ideal location to live and learn – a unique blend of big city advantages and small town friendliness with easy access to the great outdoors.

### Lory Student Center

The Charles A. Lory Student Center at Colorado State University is the hub of campus and offers a variety of programs and services to build community at Colorado State University.

### Symposium Lodging

Best Western University Inn  
914 S. College Avenue  
Fort Collins, CO 80524  
970-484-1984  
www.bwui.com  
Limited # rooms available @ \$70/night  
Group Name: "Piceance Meeting"

Hilton Fort Collins  
425 West Prospect Road  
Fort Collins, Colorado  
USA 80526  
970-482-2626  
<http://www.hilton.com/en/hi/groups/personalized/FNLCOHF-MPC-20100908/index.jhtml?>

Forest Rangeland and Watershed Stewardship  
1472 Campus Delivery  
Fort Collins, CO 80523-1472

## Restoration of Disturbed Sagebrush Steppe



## Lessons From 35 Years of Research on Oil Shale Lands in the Piceance Basin

# Symposium

Fort Collins, Colorado  
September 8-9, 2010

<http://warnercnr.colostate.edu/REL-Piceance-Conference/>



## Symposium Schedule

In 1976 a large interdisciplinary research project was initiated in the Piceance Basin of NW Colorado in order to provide basic and applied information that would aid in the reclamation of land disturbances associated with oil shale extraction. The project involved approximately ten independent field studies, which were established on a 20-ha site located near what was then the focal point of oil shale activity in the Piceance Basin. The oil shale boom of the 1970's never materialized but now there is growing interest and developing technologies for capturing this resource.

Since this study was established over 35 articles in peer-reviewed scientific journals have resulted. Results from these studies have led to many practices currently used in the restoration of disturbed lands. In addition, dozens of thesis and dissertations have been produced. Many of the graduate students that have worked on studies at this site have advanced to become leaders in the fields of reclamation and restoration science.

In recent years, the Piceance Basin study site has become valuable as a unique source of long-term data on ecosystem development resulting from a variety of reclamation approaches. Many insights have been gained regarding the utility or futility of various approaches. Both the initial and long-term findings have proven useful for making management recommendations regarding reclamation practices in semiarid ecosystems throughout the world.

You are invited to join us at the CSU campus on September 8 and 9, 2010 for a symposium celebrating these studies. Researchers will present results and share insights gained from 35 years of data from the site. Scientists, land managers, and regulators will benefit from these shared lessons. The conference is made possible by the generosity of Shell Oil Company.

### Wednesday September 8, 2010

- 8:00 Conference Check in / coffee
- 9:00 The Piceance Basin long-term study sites - Intro and background (Ed Redente)
- 9:30 Current and future technologies for oil shale utilization (John Karanikas)
- 10:00 Overview of Shell's oil shale activities in Colorado (Tom Fowler)
- 10:30 Break
- 11:00 Belowground components of successional plant and soil microbial communities in a sagebrush ecosystem (Terry McLendon)
- 11:30 Effects of soil fumigation and seeding on secondary succession (Tim Hoelzle)
- 12:00 Lunch
- 1:30 Plant-soil feedbacks on cheatgrass invaded soils (John Stark)
- 2:00 Long-term plant community development on top-soil treatments overlying retorted shale (Rusty Sydnor)
- 2:30 Break
- 3:00 Long-term plant community development as influenced by revegetation techniques on intensively disturbed soils (Gregory Newman)
- 3:30 Long-term effects of biosolids on revegetation of disturbed sagebrush steppe (Mark Paschke)
- 4:00 – 5:30 Open
- 5:30 Social Hour
- 6:30 Dinner

### Thursday September 9, 2010

- 9:00 Development of a sagebrush steppe plant community 32 years after surface disturbance (Brock Bowles)
- 9:30 Effects of climate and disturbance severity on long-term recovery of sagebrush steppe (Brett Wolk)
- 10:00 Nitrogen and phosphorus effects on secondary succession in a sagebrush ecosystem (Terry McLendon)
- 10:30 Break
- 11:00 Effects of nitrogen limitation on secondary succession (Tim Hoelzle)
- 11:30 Summary and Conclusions (Mark Paschke)
- 12:00 Conference closes

## REGISTRATION

### Restoration of Disturbed Sagebrush Steppe: Lessons From 35 Years of Research on Oil Shale Lands in the Piceance Basin September 8 - 9, 2010

#### Four Ways to Register:

At: <http://regstg.com/Registration/Registration.aspx?rid=a04b9dff-478d-42a6-bd0b-f90efff7e82f>

By mailing this form

By telephone at 970-491-7501

By FAX at 970-491-7747.

Name \_\_\_\_\_

Affiliation \_\_\_\_\_

Mailing Address \_\_\_\_\_

City \_\_\_\_\_

State \_\_\_\_\_ Zip \_\_\_\_\_ Telephone(\_\_\_\_) \_\_\_\_\_

Fax \_\_\_\_\_ E-mail \_\_\_\_\_

Regular registration (includes 1 lunch, banquet and proceedings) @ \$100.00 (\$125.00 if postmarked or paid after August 9) \$ \_\_\_\_\_

Full-time student registration (includes 1 lunch, banquet and proceedings) \$20.00 with valid student ID, which must be presented at registration check-in (\$40.00 if postmarked or paid after August 9) \$ \_\_\_\_\_

Exhibitor space: (includes registration for one person) \$ \_\_\_\_\_

Exhibit Size	Regular Fee	Fee after Aug 9
Up to 12'	\$150	\$200

I would like vegetarian meals

ADA special needs: \_\_\_\_\_

**TOTAL DUE AND ENCLOSED** \$ \_\_\_\_\_

Method of Payment:  Check  VISA  MasterCard  AMEX  
Credit Card # \_\_\_\_\_ Exp. Date \_\_\_\_\_

Form and payment should be mailed to: Piceance Meeting, Office of Conference Services, Colorado State Univ., Fort Collins, CO 80523-8037. Make check payable to Colorado State University.

A \$17.00 service charge will be made on all returned checks. Cancellation refunds, less a \$36.00 handling fee, will be made for cancellations received by the Office of Conference Services by 5:00 p.m. MST, September 7, 2010. No refunds will be granted after that time, although a designated alternate may attend.