

MONTANA AWRA and WATER RESOURCE CENTER ANNUAL MEETING

October 12 and 13, 1995

Montana State University - Bozeman

Strand Union Building, Room 275

AGENDA

Thursday, October 12

- 11:00-1:00 **Registration**
SUB Room 275 (Hallway)
- 12:00-1:00 **Get-Acquainted Social Lunch**
BYOL (Bring or Buy Your Own Lunch)
SUB Room 274
- 1:00-1:20 **Welcome**
AWRA -- Activities
Mark Story -- Montana AWRA
Don Potts -- AWRA Natl. President-Elect
- 1:20-1:30 **The 1964 Water Resources**
Research Act + 30 Yrs.
Dorothy Bradley and Kathy Stephens
The Montana Water Center, MSU
- SESSION I -- MONTANA WATER ISSUES**
Moderator: Sue Higgins
The Montana Watercourse, MSU
- 1:30-1:45 **Community Education through "Know**
your Watershed Workshops"
Mary Ellen Wolfe
The Montana Watercourse, MSU
- 1:45-2:00 **Domestic Rural Monitoring Program**
David Rise, George Algard, and Donna Rise
Montana Department of Agriculture
- 2:00-2:15 **Montana Livestock Grazing BMPs**
Tim Bozorth
BLM, Billings
- 2:15-2:30 **Beaverhead National Forest Riparian**
Guidelines
Peter Bengueyfield
Beaverhead National Forest
- 2:30-2:45 **Ruby Reservoir Task Force**
Mary Vandenbosch, Paul Moseley, George
Swan
Montana DNRC
- 2:45-3:00 **Design, Implementation, and Monitoring**
of Flushing Flows to remove Fine
Sediments Released from Ruby Dam
Chuck Dalby, Larry Dolan, and Mike
Downey
Montana DNRC

3:00-3:15 **BREAK**

SESSION II -- WATERSHED MANAGEMENT

- Moderator: Mark Story
Gallatin National Forest
- 3:15-3:30 **Watershed Management In Mountainous**
Terrain
David Malcolm and Bruce Edgar
Forest Technology Systems
- √ (#1) 3:30-3:45 **Comparison of ANUSPLIN, MT-**
CLIM-3D, and PRISM
Precipitation Estimates
Sarah Stillman and John Wilson
Geographic Information Analysis Center,
MSU
- 3:45-4:00 **Kootenai Forest Fires of 1994: Fire**
Suppression Rehabilitation
Steve Johnson
Kootenai National Forest
- 4:00-4:15 **Stream Rehabilitation of Fire Suppression**
Impacts
Steve Wegner
Kootenai National Forest
- √ (#2) 4:15-4:30 **A Comparison of Two Threshold**
Models Predicting Initial Bedload
Movement and Channel Stability
in an Upland Gravel-bed Stream
Andrew Whitaker
University of Montana
- √ (#3) 4:30-4:45 **Stream Channel Adjustment Following a**
Major Flood on a Northern Rocky
Mountain Front Stream
J. Moeckel
University of Montana
- √ (#4) 4:45-5:00 **Squaw Creek Precision Control and**
Topographic Survey Completed in the
Gallatin Range
William Christner, Kevin Cox, Steve
and Steve Custer
Whitfield,
Montana State University
- √ (#5) 5:00-5:15 **Baseflow Characterization in Western**
Montana Streams
Mark Dixon
University of Montana

√ (#6) 5:15-5:30 **Using the GINI Analysis to Monitor Stream Channel Morphology**

B.J. Rhodes and C.B. Marlow
Montana State University

5:45 - 6:30 **NO HOST SOCIAL**
KEG, lemonade, iced tea provided
Baxter Hotel Ballroom
105 W. Main Street

6:30- **ITALIAN BUFFET SUPPER**
Special Guest Speaker : Kelly Redmond,
Regional Climatologist, Western Regional
Climate Center (Desert Research Institute)
Reno Nevada
Title: **"Montana's Big Sky: Applying our
Knowledge of its Spatial and Temporal
Connections"**

FRIDAY, OCTOBER 13

7:00-8:00 **Working Breakfast**
The Montana Water Center
Advisory Committee Meeting
Topic: Setting Research Priorities 1996-97
(open to the public) **SUB 276**

SESSION III -- DRINKING WATER / WASTEWATER
Moderator: Kathy Stephens
The Montana Water Center, MSU

√ (#7) 8:00-8:15 **Economic and Social Value of Recovered Berkeley Pit Water Resources**
Steve Anderson
Montana Tech

8:15-8:30 **Sampling the Fox Hills-Lower Hell Creek Aquifer in Eastern Montana for Environmental Isotopes**
John LaFavre
Montana Bureau of Mines and Geology

8:30-8:45 **Occurrence and Movement of Viruses in Groundwater Impacted by a High School Septic System***
William Woessner and Dan DeBorde
University of Montana

8:45-9:00 **The Fate of Septic System Derived Nitrate in a Portion of the Rock Creek Valley**
Thomas McCamant
University of Montana

9:00-9:15 **Helena Valley Aquifer Groundwater Nitrate Concentration Trends**
Vivian Drake
Lewis and Clark County

9:15-9:30 **Hydrogeology and Assessment of TCE Contamination in the Southern Portion of the Pocatello Aquifer: A Case Study**
Roger Noble
Montana DNRC

9:30-9:45 **Assessment of Bioremediation Potential at Leaking Underground Storage Tank Sites in Montana**
Richard Veeh
Montana State University

9:45-10:00 **BREAK**

10:00-10:15 **AWRA Business Meeting**

SESSION III -- DRINKING WATER / WASTEWATER (continued)

Moderator: Greg Vandeberg
Reclamation Research, MSU

10:15-10:30 **The Conservation Effects of Block Rate Pricing of Residential Water**
Julie Hewitt
Montana State University

10:30-10:45 **Constructed Wetlands: Cold Weather Applications**
Robert Ferri and Otto Stein (MSU)
Environmental and Petroleum Consulting

10:45-11:00 **Implications of Local Transmissivity and Storativity at the Physical Sciences Complex, Montana State University, for Withdrawal and Disposal of Instrument Cooling Water**
Steve Custer
Montana State University

11:00-11:15 **Concrete Block Diversion Dams**
Tom Hughes
Montana DNRC

11:15-11:30 **Microbial Remobilization of Heavy Metals***
Bruce Wielinga and Jim Gannon
University of Montana

11:30-11:45 **Arsenic in Soils of the Madison and Upper Missouri River Valleys***
Kristin Keith and Jim Bauder
Montana State University

11:45-12:00 **Awards and Presentation of 1996 Officers**

12:00- **ADJOURN!!!**

*Project funded (in part) by Section 104(b) Water Center grant.

PLEASE NOTE✓

Presentations are strictly limited to 15 minutes. We request that each speaker conclude with a summary of the relevance of their work to current Montana

issues.

√ **VOTE** for student papers ! Mark your ballots for

**EXCELLENCE AND RELEVANCE TO PUBLIC
POLICY**

Awards: \$100 by the Montana Water Center and \$75
and \$50 by Montana AWRA.