

**Powder River Basin Coal Bed Natural Gas Interagency Working
Groups Wildlife, Aquatics, and Hydrology Research Meeting
December 2-3, 2009
Holiday Inn, Sheridan, Wyoming**

Agenda

Wednesday December 2nd

8:00-9:00 Registration/Coffee

9:00-9:15 Welcome: Dale Tribby (BLM-Miles City) and Windy Davis (Montana Fish, Wildlife, and Parks)

Session 1 - Moderator- Brad Schmitz (Montana Fish, Wildlife and Parks)

9:15-9:40 **An ecological evaluation of the effects from Fidelity's MPDES discharges to aquatic life in the Tongue River**, Benjamin Parkhurst*(HAF, INC.) and David Pillard (AECOM Environment)

9:40-10:05 **Identifying the cause of laboratory whole effluent toxicity to *Ceriodaphnia dubia* from Fidelity's CBNG produced water discharges and assessing the potential effects in the Tongue River**, David Pillard* (AECOM Environment) and Benjamin Parkhurst (HAF, INC.)

10:05-10:25 **Characterization of biological communities in streams of the Powder River structural basin, Wyoming and Montana, 2005-2008**, David Peterson* and Katherine Foster (USGS)

10:25-10:40 Break-

10:40-11:05 **A discussion of the available data and methods that may be used to calculate a sodium bicarbonate water quality standard in the Powder/Tongue watershed of Montana and Wyoming**, Aida Farag*, David Harper (USGS), Trevor Selch and Don Skaar (Montana Fish, Wildlife and Parks)

11:05-11:30 **Bicarbonate interactions and effects with diel variations in metals concentrations in the Powder River Basin**, Rod McNeil*(Montana DEQ)

11:30-12:00 Panel Discussion (Parkhurst, Pillard, Peterson, Farag, McNeil)

12:00-1:30 Lunch (On your own)

Wednesday Afternoon -Concurrent Sessions

Session 2-Side A- Tom Bills (BLM, Buffalo)-

- 1:30-1:55 **West Nile virus ecology in sagebrush habitat and impacts on greater sage grouse populations**, David Naugle* and Brett Walker (University of Montana)
- 1:55-2:20 **Using solar powered GPS/Satellite transmitters on greater sage-grouse in northeastern Wyoming: An overview of objectives and preliminary results**, Chad Olson*, Matt Dzialak, Larry Hayden-Wing, and Jeff Winstead (Hayden-Wing Associates, LLC)
- 2:20-2:45 **Coda NetLauncher: A mobile tool for capturing Greater Sage-Grouse (*Centrocercus urophasianus*)**, Andrew Sutphin*, Tom Maechtle, Linette Sutphin, Tyler Emme, and John Fredland (Big Horn Environmental Consultants)
- 2:45-3:00 Break-
- 3:00-3:25 **Analyzing impacts of CBNG development on nesting raptors**, Courtney Frost* (BLM, Buffalo)
- 3:25-3:50 Herptile monitoring in the PRB, Bryce Maxell* (Montana Natural Heritage Program)

Session 2-Side B- Moderator- Kathy Brus (BLM, Buffalo)

- 1:30-1:55 **Modeling habitat availability in a Great Plains river system to assess the effects of energy development-related flow augmentation**, Anna Senecal* (Wyoming Game and Fish Department) and Wayne Hubert (USGS Wyoming Cooperative Fish and Wildlife Research Unit)
- 1:55-2:20 **Object oriented classification of riparian and aquatic habitats along a section of the Powder River in north central Wyoming using Quickbird and Aerocam Imagery**, Robert McDougal* (USGS) and Gretchen Meyer (BLM, Cheyenne)
- 2:20-2:45 **Evaluation of conceptual and quantitative models of groundwater impacts after 10 years of CBM development in the Powder River Basin, southeastern Montana**, Andrew Bobst*, John Wheaton, and Elizabeth Meredith (Montana Bureau of Mines and Geology)
- 2:45-3:00 Break-
- 3:00-3:25 **Considerations for evaluating coalbed methane infiltration pond sites based on site studies in the Powder River basin of Montana and Wyoming**, John

Wheaton*, Andrew Bobst, and Elizabeth Meredith (Montana Bureau of Mines and Geology)

3:25-3:50 **Regional Groundwater Monitoring in the Powder River Basin, Wyoming,** Chris Williams* (BLM, Buffalo)

3:50-4:15 Panel Discussion (Bobst, Wheaton, Williams)

Adjourn for the day

Thursday December 3rd

8:00-8:30 Registration/Coffee

Session 3- Moderator- David Wood (BLM, Montana State Office, Billings)

8:30-8:55 **Monitoring coal-bed methane development effects on surface-water quality of the Tongue and Powder Rivers,** Kyle Blasch* and Steve Sando (USGS, Montana Water Science Center)

8:55-9:20 **Fortification Creek and development of coalbed methane,** Jim Verplancke*, Annie Irwin, and Jennifer Spegon (BLM, Buffalo)

9:20-9:45 **Identifying disturbance mechanisms influencing resource selection by elk in a natural gas development field,** Clay Buchanan* and Jeffrey Beck (University of Wyoming)

9:45-10:00 Break-

10:00-10:25 **Sage grouse population dynamics: how important are individual vital rates for population growth?,** Rebecca Taylor*, Scott Mills, David Naugle (University of Montana) and Brett Walker (Colorado Division of Wildlife)

10:25-10:50 **Sage-grouse and energy development: a synthesis of biological knowledge,** David Naugle* (University of Montana), Kevin Doherty (Wyoming Audobon), Brett Walker (Colorado Division of Wildlife), Matt Holloran (), and Holly Copeland ()

10:50-11:15 **Identifying thresholds of persistence in a shrinking landscape: impacts of human disturbance in greater sage-grouse nesting grounds,** Jason Tack* (University of Montana)

11:15-11:40 Panel Discussion (Taylor, Naugle, Tack, Olson, Sutphin)

11:40-12:00 Wrap Up