

List of Research Projects Approved for Department of Energy Funding

Reduction of Engine and Compressor Noise - Study ways to mitigate/reduce compressor and engine noise; and develop guidelines regarding acceptable decibel levels for compressor units at established distances. Project Contact: Reuben Sanchez, Kingman FO (formerly Farmington FO), 928-692-4412

Assessment of Brine Impact on Aquifers in Seminole County, Oklahoma - Collect and characterize samples from streams, wells, rivers, and oil field to develop a gradient flow model; achieve point source determination and remediation of brine sources. Project Contact: Sanford Wells, Tulsa FO, 918-621-4141.

Web-based Resource Management Plan - Convert the Grass Creek Resource Management Plan (Wyoming) into a format to allow it to be posted on the world wide web. Investigate the advantages of a web-based planning document in terms of public accessibility, searchableness, and plan revisions. Project Contact: Bill Daniels (307) 775-6105.

Micro-annulus Study - Partnered with an industry consortium and the University of Waterloo (Ontario, Canada) to develop and test cement and cement additives that will minimize the creation of micro-annuli in casing cement jobs. Project Contact: John Ford, DOE Nat'l Petroleum Technology Office, Tulsa, OK (918) 699-2061.

Wyoming Air Monitoring Study - Establish a Wyoming Air Resources Monitoring System (WARMS) using a system of portable air monitoring stations to gather basic meteorologic data and concentrations of certain air pollutants. Data on concentrations of air pollutants were compared against other data sources for validity. Results will be used in environmental impact analysis. Project Contact: Susan Caplan, WYSO, (307) 775-6031.

Mapping, Modeling, and Monitoring of the northern San Juan Basin in Colorado - Perform geologic mapping, groundwater monitoring, and reservoir and hydrologic computer modeling of the Fruitland Formation to study the effects of coalbed methane production. Project Contact: Sherri Thompson, COSO, 303-239-3758.

Assessment of Brine Impact on Aquifers in Seminole County, Oklahoma - Conduct hydrologic sampling and lab analysis to investigate the effects of brine leakage from historic oil reservoirs on aquifer quality. Project Contact: Sanford Wells, Tulsa FO, 918-621-4141.

Coal Bed Methane Water Quality Monitoring in Wyoming - Drill and case a network of groundwater monitoring wells to determine if a specific casing and cementing program adequately protects usable groundwater zones from production zone water. Project Contact: Mike Brogan, Casper FO, 307-261-7640.

Effects of Oil and Gas Development on Wildlife in southwest Wyoming - Identify positive

and negative impacts of oil and gas development on certain wildlife species. Project Contact: Dave Roberts, WYSO, 307-775-6099.

Archaeological Predictive GIS Model - Create a predictive model for determining areas of high, moderate, and low occurrences of cultural resource sites in areas of expected oil and gas activity. Project Contact: Steven Wells, Nevada SO, (775) 861-6573.

Reconnaissance Level Airborne Contaminant Study in the National Petroleum Reserve - Alaska - Expands upon an ongoing study to monitor the air quality impacts of oil and gas development within four watersheds located in the northeastern portion of the NPR-A. Project Contact: Susan Flora, Alaska Northern FO, (907) 474-2303.

Effects of Land Application of Produced Water from Coalbed Methane Operations in the Powder River Basin in Wyoming and Montana - Study the changes in soil conditions as produced waters from coalbed methane wells are applied to the soils using various systems and application rates. Project Contact: Joe Meyer, Casper FO, (307) 261-7641 and Robert Mitchell, Miles City FO, (406) 233-2815.

Impact Assessment of Coalbed Methane Development on Wildlife and Wildlife Habitat in Southeast Montana - Study the impacts to wildlife and its habitat to assist in developing best management practices for operations to develop coal bed methane in Southeast Montana. Project Contact: Larry Rau, Miles City FO, (406) 233-2500.

Quantify Upland Erosion in the Largo Canyon Watershed of the San Juan Basin in New Mexico - Continue with an ongoing study to quantify erosion rates from areas disturbed by oil and gas operations, areas used for grazing; and undisturbed areas. Project Contact: Dale Wirth, Farmington FO, (505) 599-6320.

Comprehensive Conditions of Approval for Improved Management of Oil Fields in Wyoming - Study and assess whether the use of a standard field-wide set of conditions of approval is an effective means of managing activities conducted in oil and gas fields in Wyoming. Project Contact: Vic Seefeldt, Cody FO, (307) 578-5918.

Building an Ammonia Inventory for Wyoming - Review studies and reports to compile an inventory of sources and concentrations of atmospheric ammonia for use in modeling impacts to visibility and acid deposition. Project Contact: Susan Caplan, WYSO, (307) 775-6031.