Atlantic Rim Review Team Meeting

Wildlife Performance Goals and Monitoring Updates

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Wildlife Performance Goals

- Muddy Creek Sensitive Fish
- Sage and Sharp-Tailed Grouse
- Shrub-Dependent Song Birds
- Big Game Migration Routes
- Big Game Crucial Winter Range

Muddy Creek Sensitive Fish

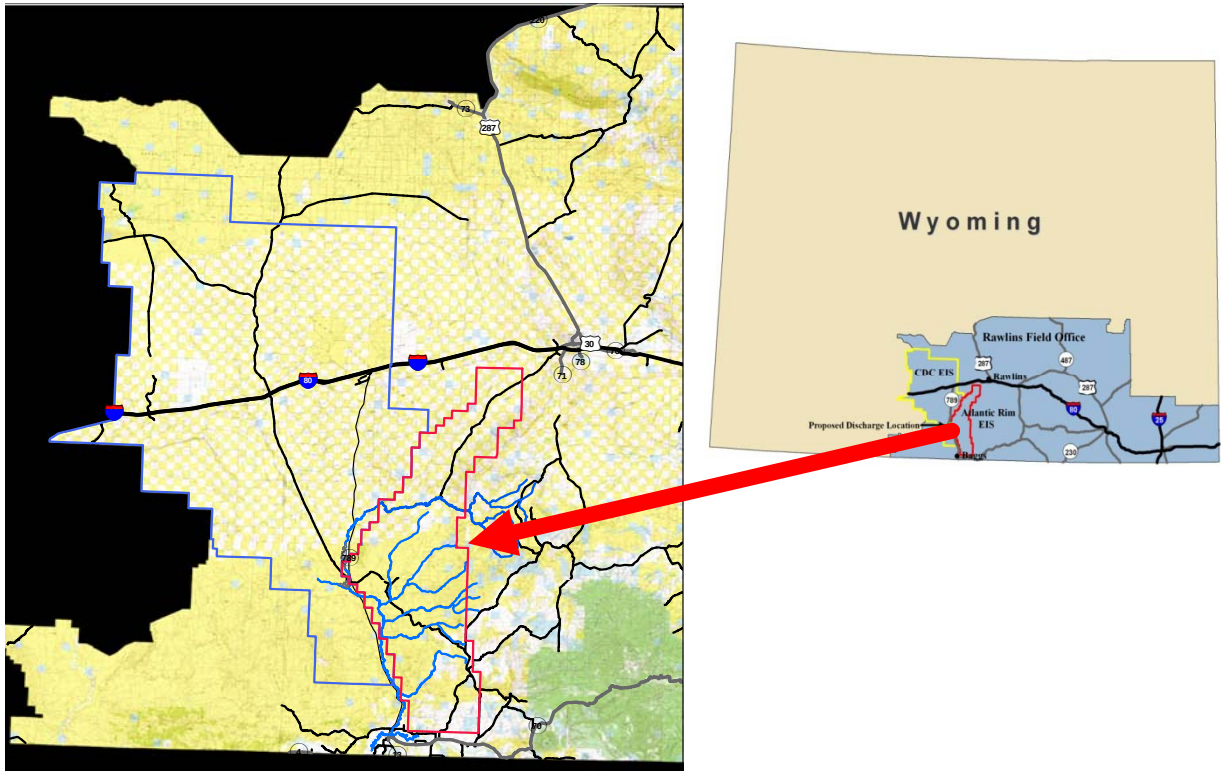
- BLM Lead – Shawn Anderson (Fish Biologist)

- Maintain adequate water quality, water quantity, species distribution, and aquatic habitat components

Muddy Creek Sensitive Fish

Overview of Past Monitoring/Research

- The majority of research has focused on upper Muddy Creek
- Limited information on lower Muddy Creek and the Little Snake River



Muddy Creek Sensitive Fish Monitoring Efforts

- Habitat Monitoring Plan (CDM Consultants) 2008-2009
  - Baseline Report Completed
  - Geomorphology in Upper Muddy Creek within the ARPA
  - Bank stability
  - Substrate
  - Overhanging vegetation
- Fish Monitoring (BLM)
  - Trib. Monitoring
  - 2009 Population Estimate Completed by BLM – Report 2010

Muddy Creek Sensitive Fish Monitoring Efforts

Task	2008	Annually
Level II Geomorphic Survey		
Longitudinal profile	Yes	No
Cross sections	Yes	No
Permanent cross sections	Yes	Yes
Riffle – pool spacing	Yes	No
Residual pool depth	Yes	Yes
Bed Measurements		
Bed material size	Yes	Yes
Embeddedness	Yes	Yes
Bank Stability		
Erosion Pin Measurement	Yes	Yes
Bank Hazard Erosion Index	Yes	Yes
Aquatic Habitat Features		
Overhanging Vegetation Cover	Yes	Yes

Muddy Creek Sensitive Fish Monitoring Efforts

- Catalina Produced Water Project Monitoring
  - Water quality
  - Photo points
  - Cross sections
  - Temp. Loggers (BLM)

- Toxicity Study

Future Monitoring

- Continuation of Existing Monitoring Efforts
- Upland Erosion Monitoring
  - Identified as a need from the beginning of the working group
  - Look at erosion from roads
  - Draft of monitoring effort should be routed within the month

Summary of Wildlife Working Groups

- Muddy Creek Sensitive Fish
- Triggers/Thresholds
  - Water Quality-State of Wyoming
  - Populations
  - Habitat
- Threshold that Trigger Management Decisions

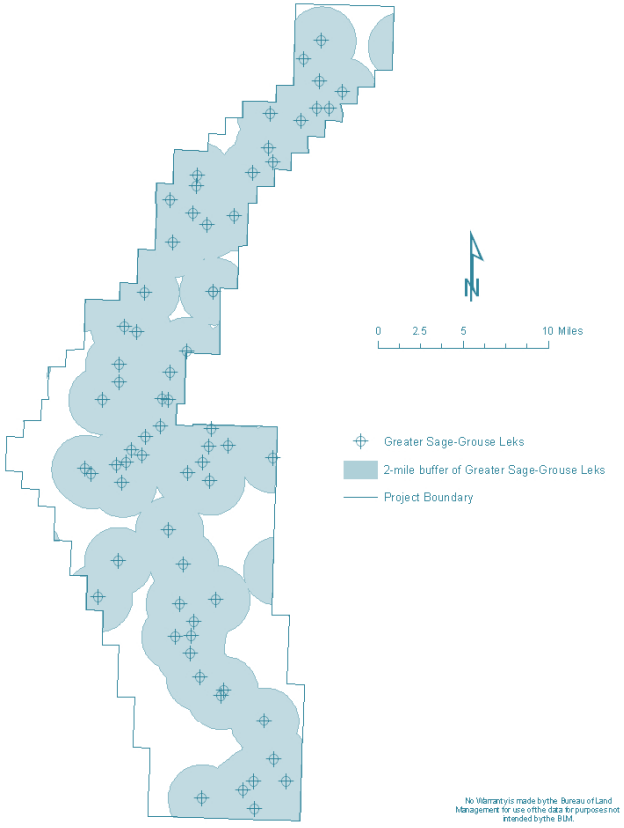
Sage and Sharp-Tailed Grouse

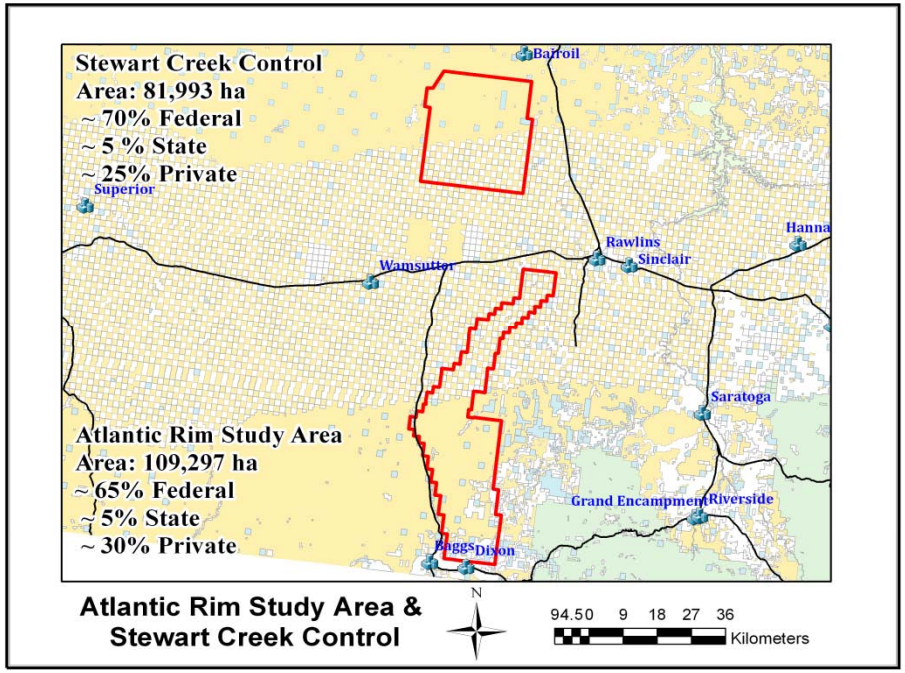
- BLM Lead – Frank Blomquist (Wildlife Biologist)

- Provide well dispersed sage-grouse breeding, nesting, brood rearing, and winter habitat

Sage Grouse Monitoring Efforts

- Atlantic Rim Sage Grouse Study





- 100 Atlantic Rim Sage Grouse
- 40 Control Sage Grouse

Sage Grouse Monitoring Efforts

- Atlantic Rim Sage Grouse Study
- Objectives
  - Generate seasonal probability-of-occurrence maps
  - Identify source habitats (high probabilities of survival and chick production)
  - Generate areas-of-critical-conservation-concern maps
  - Validate occurrence and fitness models/maps with control area
- Field Data Collection Completed, Analysis Underway preliminary results expected this spring
- Flight Data Collection Through March 2010
- Lek Count Monitoring – Assigned at next monitoring without borders meeting

Sage Grouse Monitoring Efforts

- Winter Habitat Mapping
  - UW Research Assistant Compiling BLM and WGFD Data. (Summer 2010)
- What's Next
  - Sage Grouse Trend Analysis – Bradley Fedy (CSU/USGS)
  - Draft proposal received by group for review
  - Meeting Scheduled for Thursday 12-10-09

- Finalize Trend Analysis Methods
  - Secure Funding 28K for first year
  - Establish Thresholds /Triggers
  - Implement BMP's

Sharp -Tailed Grouse Monitoring

- Lek Counts
- Winter Habitat Mapping Using WGFD Data
- Grouse Working Group has Determined that Sage-Grouse is Higher Priority Because of Current Development Location

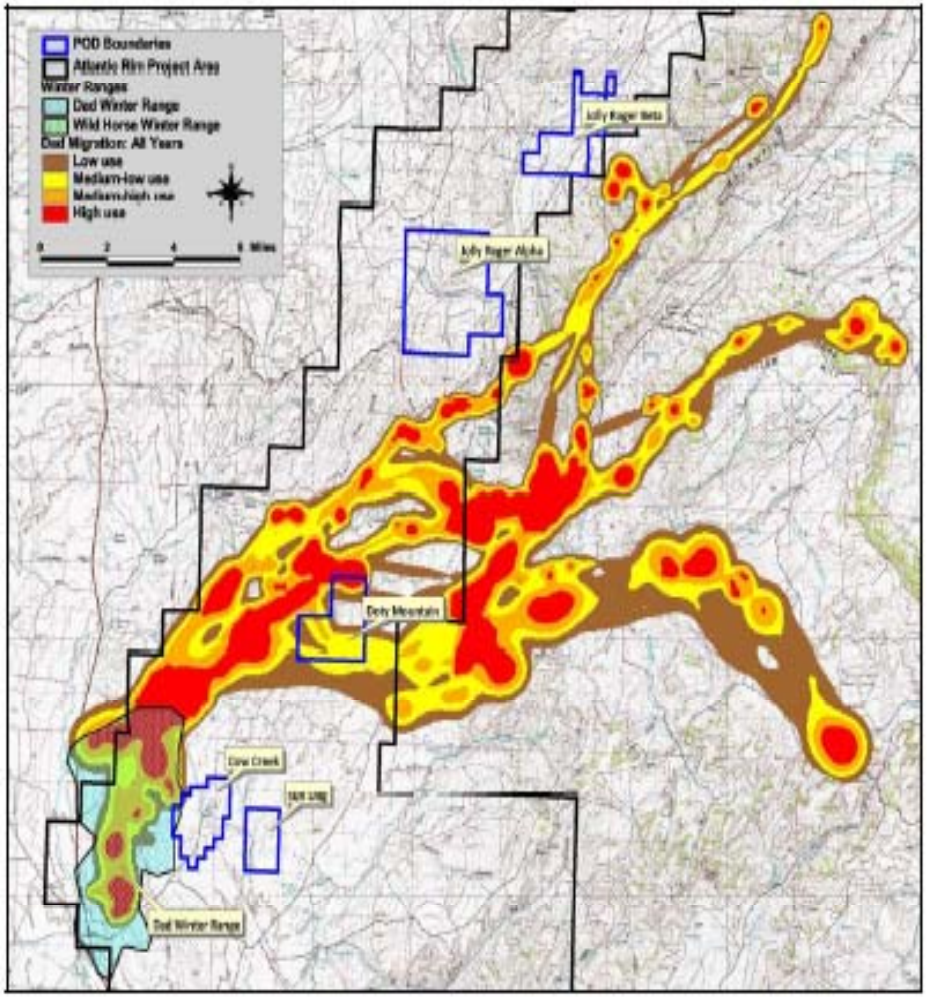
Atlantic Rim Big Game

- BLM Lead – Frank Blomquist (Wildlife Biologist)

- Maintain Functional Migration Routes Through or Around Development Areas
- Provide an Adequate Amount of Suitable, Undisturbed Crucial Winter Range for Big Game Animals

Atlantic Rim Big Game

- Mule Deer Migration Study
  - 47 GPS Collars
  - Phase I (Completed 2008)
    - Baseline (Limited Drilling)
  - Phase II (April 2010)
    - Determine Mule Deer Response to Development
  - Frequency of Future Collaring Studies
- Vegetation Analysis Within Loafing and Resting Areas Along Migration Corridor
  - Data Collection Fall 09 – Spring 10



Atlantic Rim Big Game

- Big Game Monitoring Efforts
  - Mapping of Fences within Atlantic Rim - Ongoing
  - Elk Collaring Study
    - Draft Proposal Sent to Group - Available
    - BLM has $8,000 to purchase collars – need for additional funding
  - Pronghorn
    - Coordination with Pronghorn Study in CDC

Atlantic Rim Big Game

- What's Next
  - Secure Funding for Elk Study
  - Review Fence Mapping Results
  - Review Mule Deer Study
- CWR Vegetation Monitoring
  - Species Composition and Browse Data
- Collection and Annual Review of WGFD Big Game Surveys (All Big Game)
- Determine Thresholds/Triggers
  - Sub-Group Identified to look at population variance from WGFD data and controls.

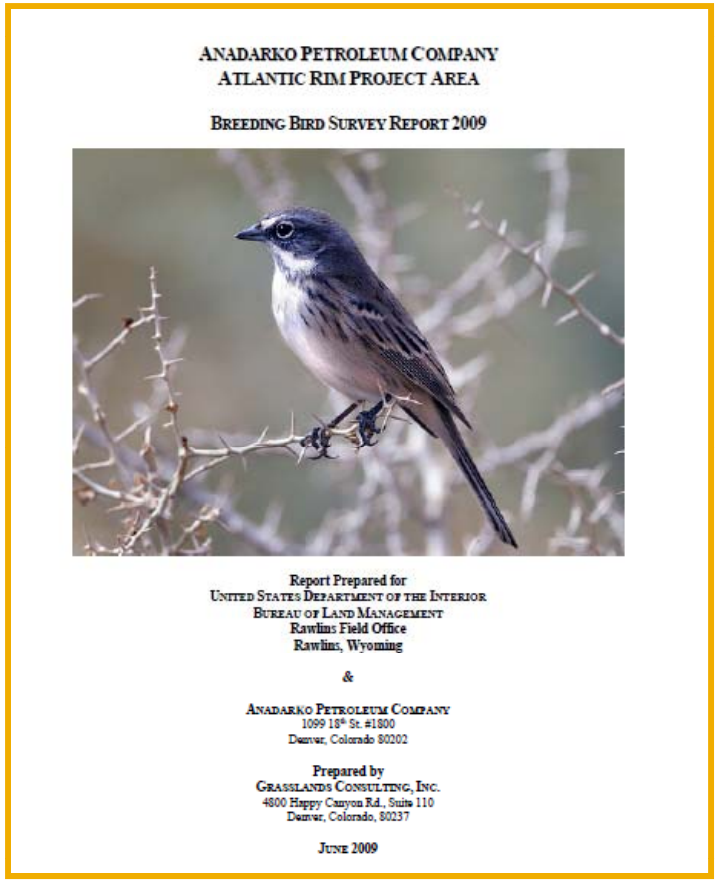
Shrub-Dependent Song Birds

- BLM Lead – Frank Blomquist (Wildlife Biologist)

- Assure Occupied Habitat for Shrub Dependent Song Birds is Well Distributed Throughout the Project Area

Shrub-Dependent Song Birds

- Monitoring Efforts
  - Breeding Bird Surveys
    - 2008 and 2009Data Reports Complete
    - Baseline Information
  - Rocky Mountain Bird Observatory (RMBO) Grid Point Survey Method
    - Vegetation Component
    - Consistency and Use of Data
    - Decision Deadline Feb. 15, 2010



ANADARKO PETROLEUM COMPANY
ATLANTIC RIM PROJECT AREA

BREEDING BIRD SURVEY REPORT 2009

Report Prepared for
UNITED STATES DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
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Rawlins, Wyoming

&

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JUNE 2009

Shrub-Dependent Song Birds

- What's Next
  - Meeting with RMBO to Discuss Benefits of Grid Monitoring and Need for Additional Monitoring
  - Triggers/Thresholds
    - Using Regional Grid Monitoring vs. Atlantic Rim
  - BLM has $20,000 for bird monitoring

Common Themes for Working Groups

- Need for Funding
  - Continuation of Ongoing Projects or Funding New Projects
  - Process and Tracking
- Thresholds/Triggers
  - Wildlife Management Requires More Conservative Triggers
  - Adaptive Management and Additional BMP's

Common Themes for Working Groups

- Time Requirements
  - Determination of Populations Level impacts Takes Time (Delayed Impacts)
  - Analysis of Data Collected Outside Working Group
  - Late Start on Adaptive Management Process but Monitoring Efforts Ongoing
- Balance of Monitoring with Drilling Schedule
  - Data Collection is Still Required to Determine Impacts to Wildlife from Drilling that has Already Occurred
  - Adaptive Management Process Should Determine Frequency/Intensity of Future Monitoring.

Questions/Discussion

- " *If Protective Management of These Species Cannot be Based on Informed Professional Judgment, Many Native Stocks Will Disappear Before Science Can Vouch for Their Unique Value*."

Robert J. Behnke