

Powder River Basin Restoration

A Cooperative Approach to Restoring Sage-Grouse Habitat within the Powder River Basin

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Powder River Basin

Powder River Basin Restoration

Goal: Restoration of greater sage-grouse habitats through the coordinated efforts of interested and participating individuals and entities.

Objectives include but are not limited to:

- **Coordinate partnership efforts** to restore large landscape or watershed areas starting with small scale restoration.
- Integrate habitat improvement programs and projects implemented by landowners, industry, and agency partners and to **leverage funding** to enhance sage-grouse habitat restoration.
- Facilitate the sharing of **data/data collection** methods, **monitoring** data/methods, and **Best Management Practices** with cooperators.



Powder River Basin Restoration Position



Coordinator

- Coordination and communication of restoration efforts and projects.
- Seek partnership opportunities.
- Requests BLM appropriated funds and grant funding.
- Assists interagency partners in communicating to USFWS in one collective voice.
- Compiles annual report to share with partners.

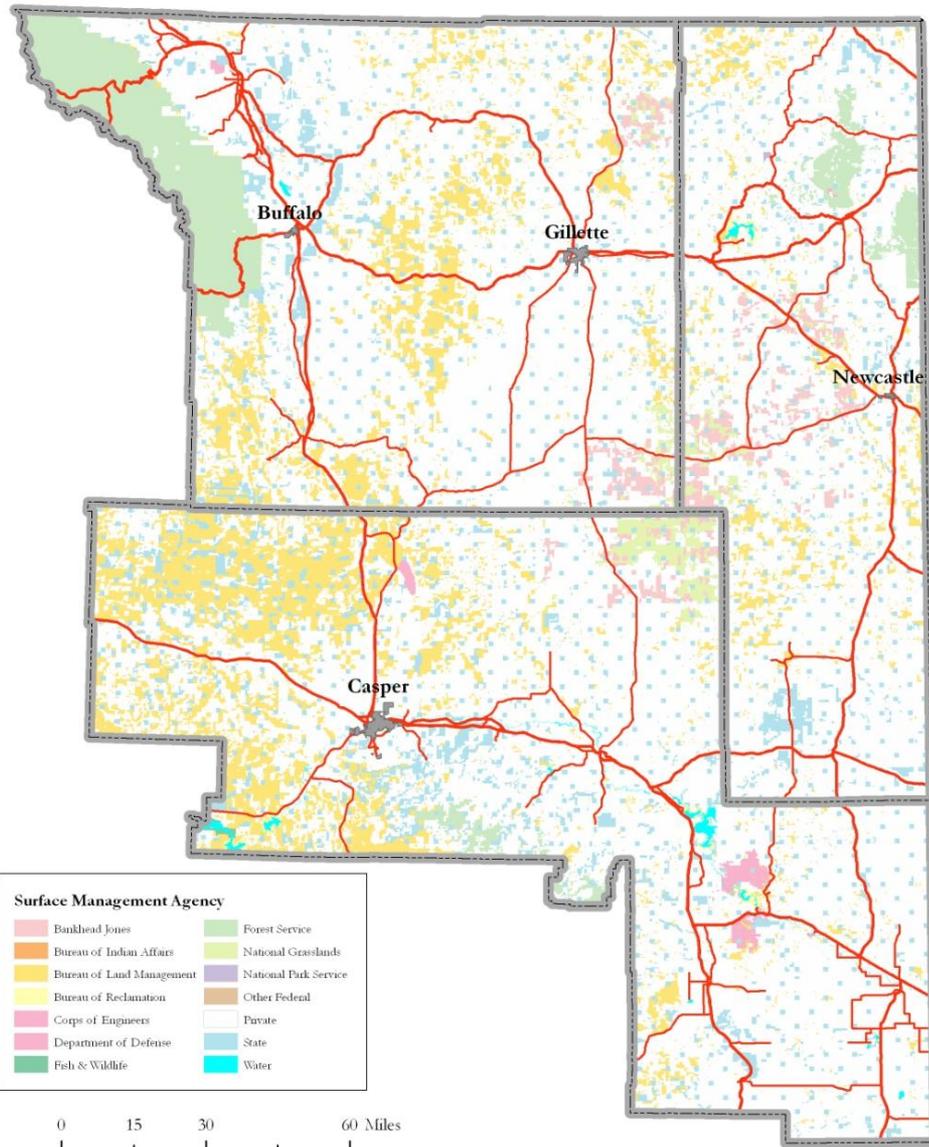


Powder River Basin Restoration

Management Challenges and
Demands on the Landscape



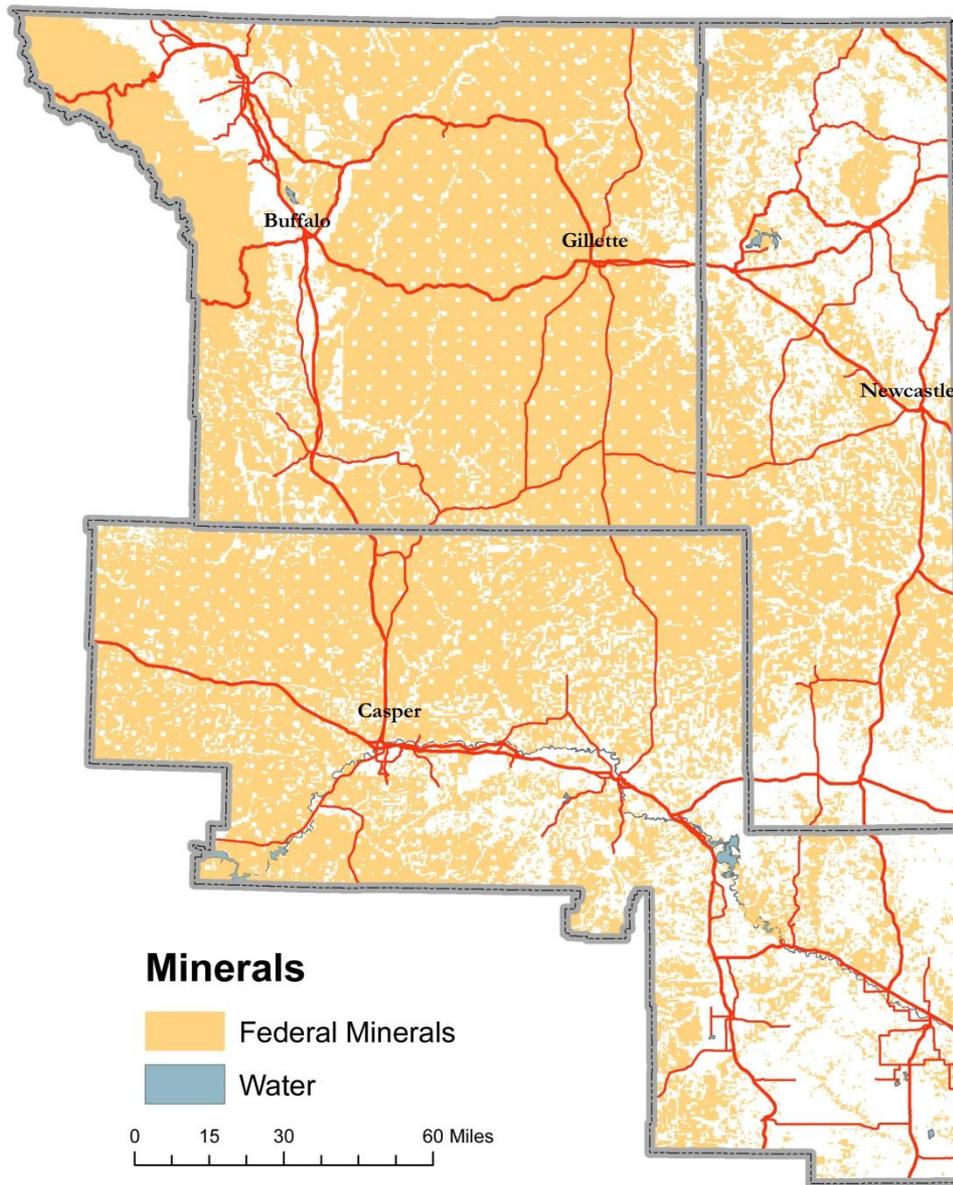
High Plains District



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High Plains District



Minerals

-  Federal Minerals
-  Water

0 15 30 60 Miles



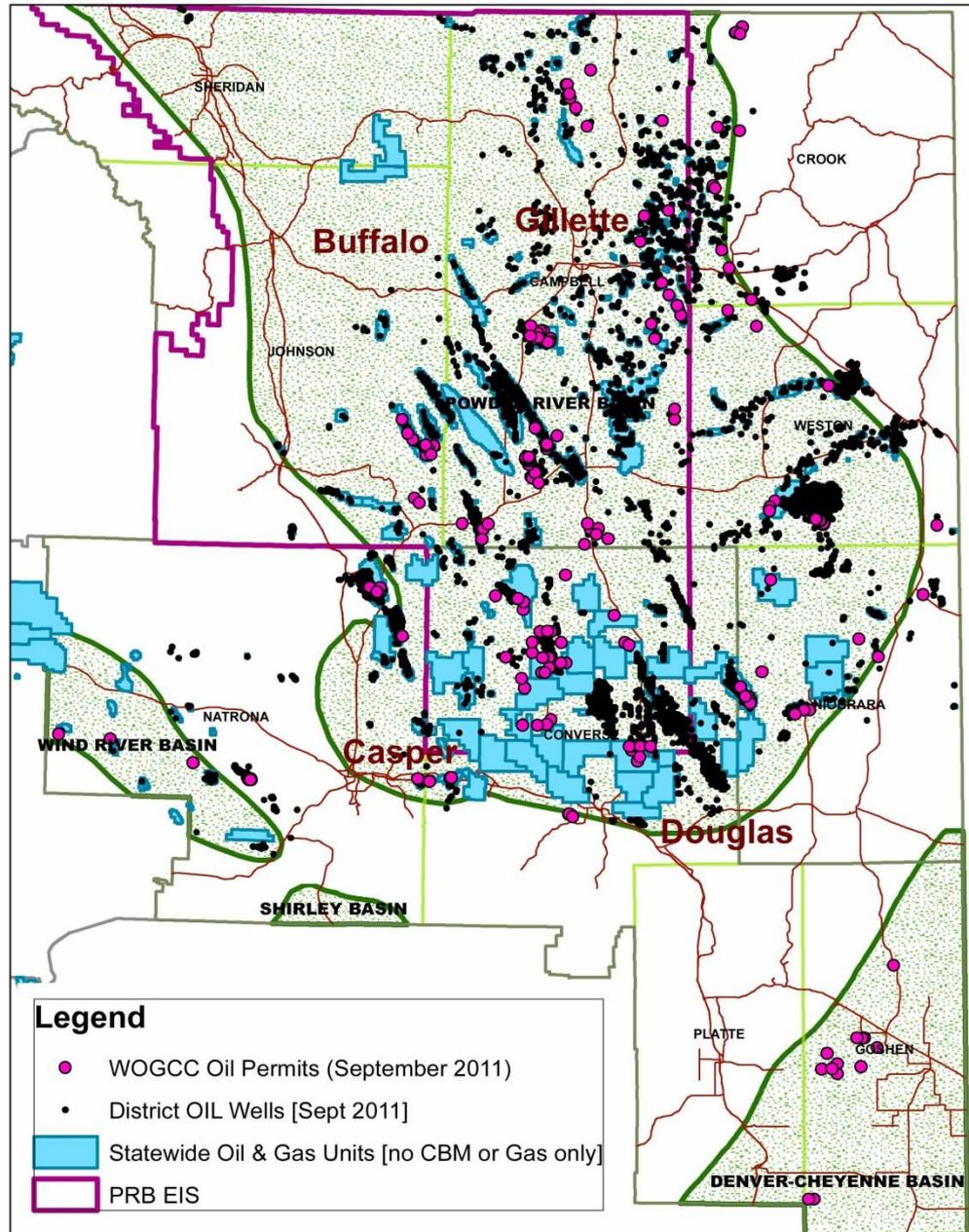
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CBNG

- The Powder River Basin contains the largest coalbed natural gas (CBNG) play in Wyoming -about 45,000 CBNG wells.
- United States Geological Survey estimated there is over 14 trillion cubic feet of undiscovered recoverable gas resource.
- This is nearly 1/3 of the Rocky Mountain Region's CBNG resource.
- 2011 – 819 wells drilled and BFO processed 2100 APDs

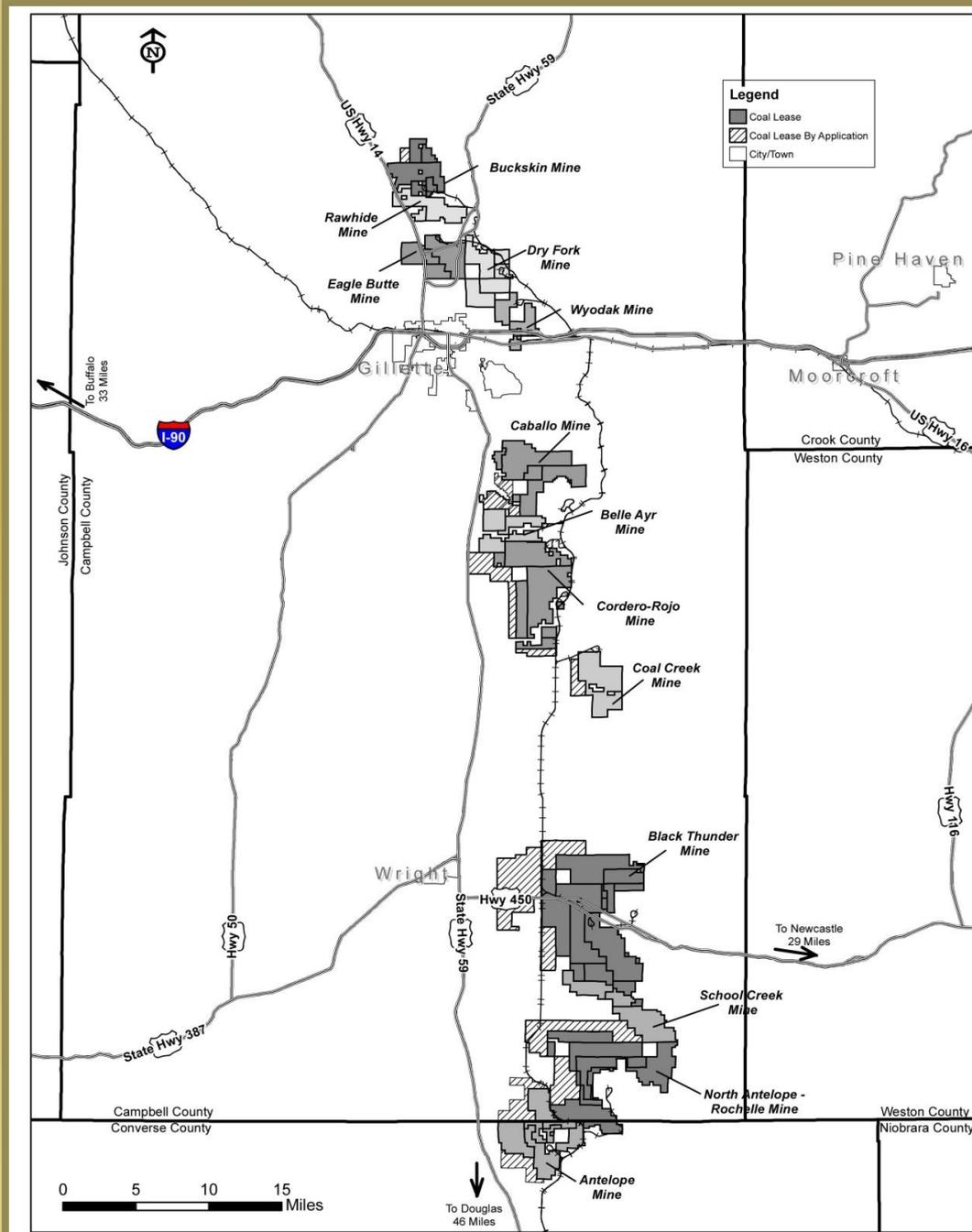
High Plains Powder Deep Oil Play and Oil Activities



Coal

- Largest coal-producing region in the Nation
- Produces 40 percent of all coal mined in U.S.
- More than 38 States receive this coal
- In 2011:
 - coal lease sales bonus bids total over \$1 billion
 - coal royalties total over \$631 million

These are collected and shared equally with the State of Wyoming

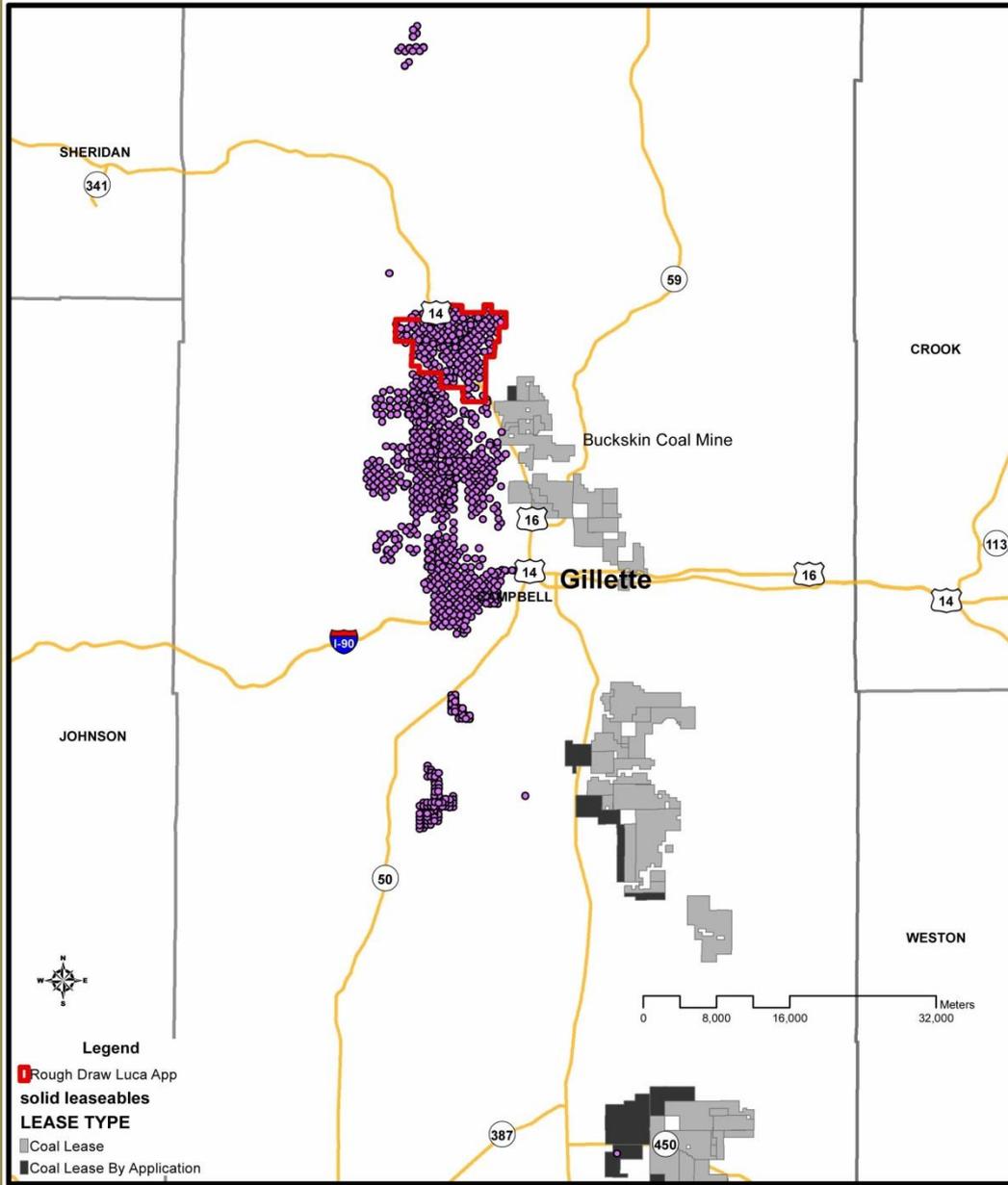


Methane Farming

- Pilot project proposal to use federal coal to create methane through “methanogenesis.”
- Process enhances biological conversion of the coal to methane.
- Also known as biogenic methane enhancement
- Possibly keeping wells in production vs. reclamation and restoration of habitats.



Patriot Wells and Rough Draw Pilot Project in Relation of Coal Mines



Uranium

Cameco Smith/Highland

- In situ recovery (ISR) uranium mine in the **Casper Field Office**, 26 miles northwest of Douglas.
- Largest uranium mine in United States with 35,000 acres of split estate.

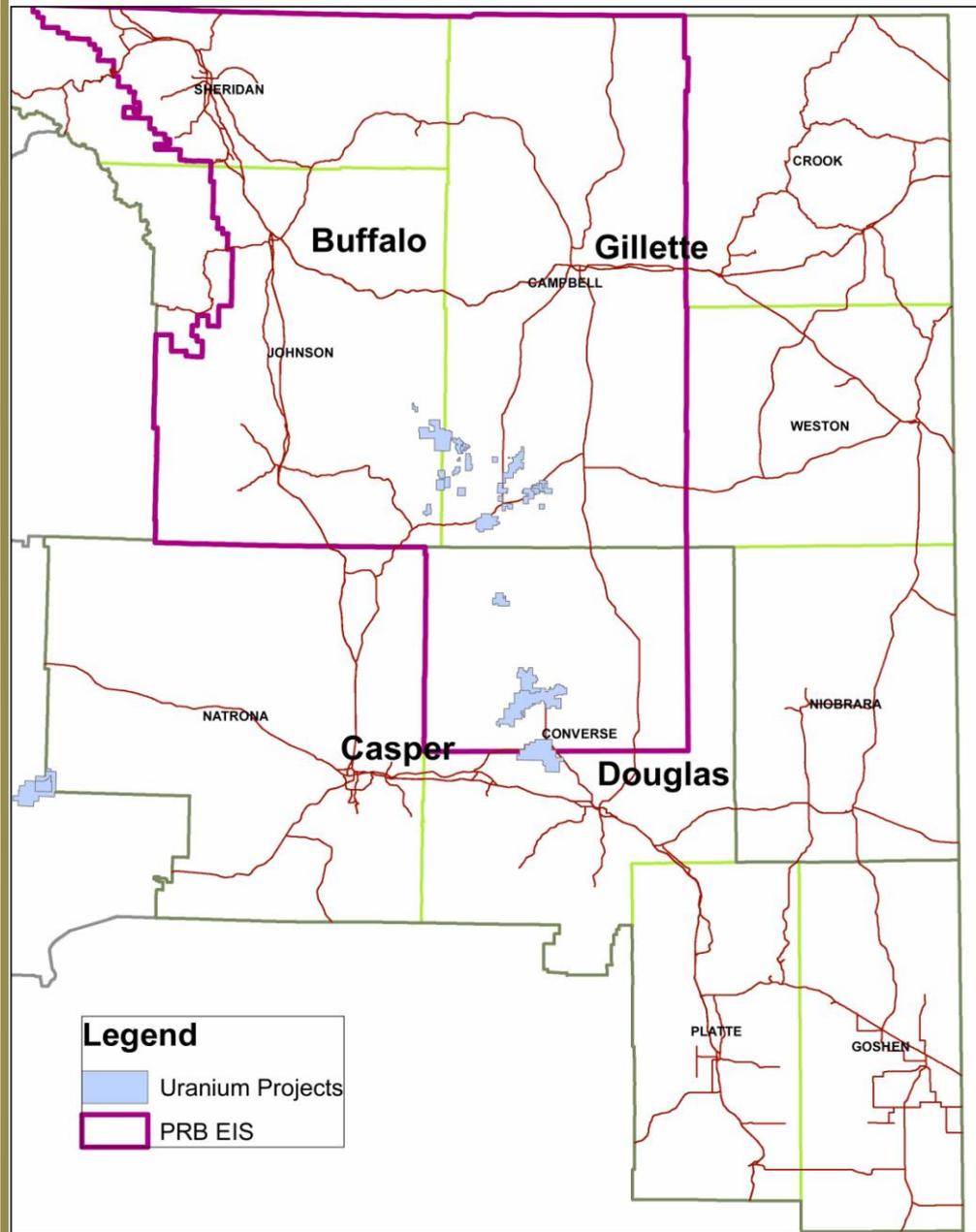
Ross

- Proposed ISR uranium EIS (Environmental Impact Statement) Project underway in the **Newcastle Field Office**, located at Oshoto.
- Proposed boundary encompasses approximately 1,700 acres— including approximately 300 acres are federal surface/mineral estate.

Nichols Ranch/ Hank Unit

- Proposed ISR uranium project in **Buffalo Field Office**, 46 miles southwest of Gillette in Campbell and Johnson counties.
- 3,371 acres. including approximately 280 acres of federal surface/mineral estate.

High Plains Uranium Activities



PRB Restoration involves Landscape Efforts to Restore/Enhance Greater Sage-grouse Habitats

- Large scale development has compromised sage-grouse habitat in the PRB.
- PVA
- Working Collaboratively on sage-grouse habitat restoration to assist in increasing bird populations.
- These efforts protect traditional and future multiple uses of the land and the mineral estate.



What we have accomplished:

- BLM Restoration Staff Member
- NRCS Restoration Staff Member
- Completed first year of Seeds of Success
- Conducted outreach to industry, agencies, and landowners
- Treatment of cheatgrass on wildfire (2011/2012) located in core area
- On-going communication to promote removal of energy-development related power lines
- Distribution of bird ramps
- Partnered on “Reclamation Tools for Restoring Healthy Sagebrush Ecosystems” brochure

Projects and Partners

Cato Wildfire – working with NRCS, Lake DeSmet Conservation Service, Johnson County Weed & Pest, The Nature Conservancy, Johnson County Emergency Management Coordinator, BLM, and seven landowners on the reclamation and restoration of 28,000 acres of which about 20,000 is high priority sage grouse habitat.

Coordinated with mineral industry, Johnson and Campbell County Weed & Pest, NRCS from both counties, Lake DeSmet Conservation District, Johnson County Emergency Services Coordinator, on a larvae control project to reduce the opportunity and spread of West Nile virus to the greater sage-grouse.

In partnership with Anadarko Petroleum Company, will treat about 4,000 acres of cheatgrass to benefit both sage grouse and one of few remaining prairie elk herds

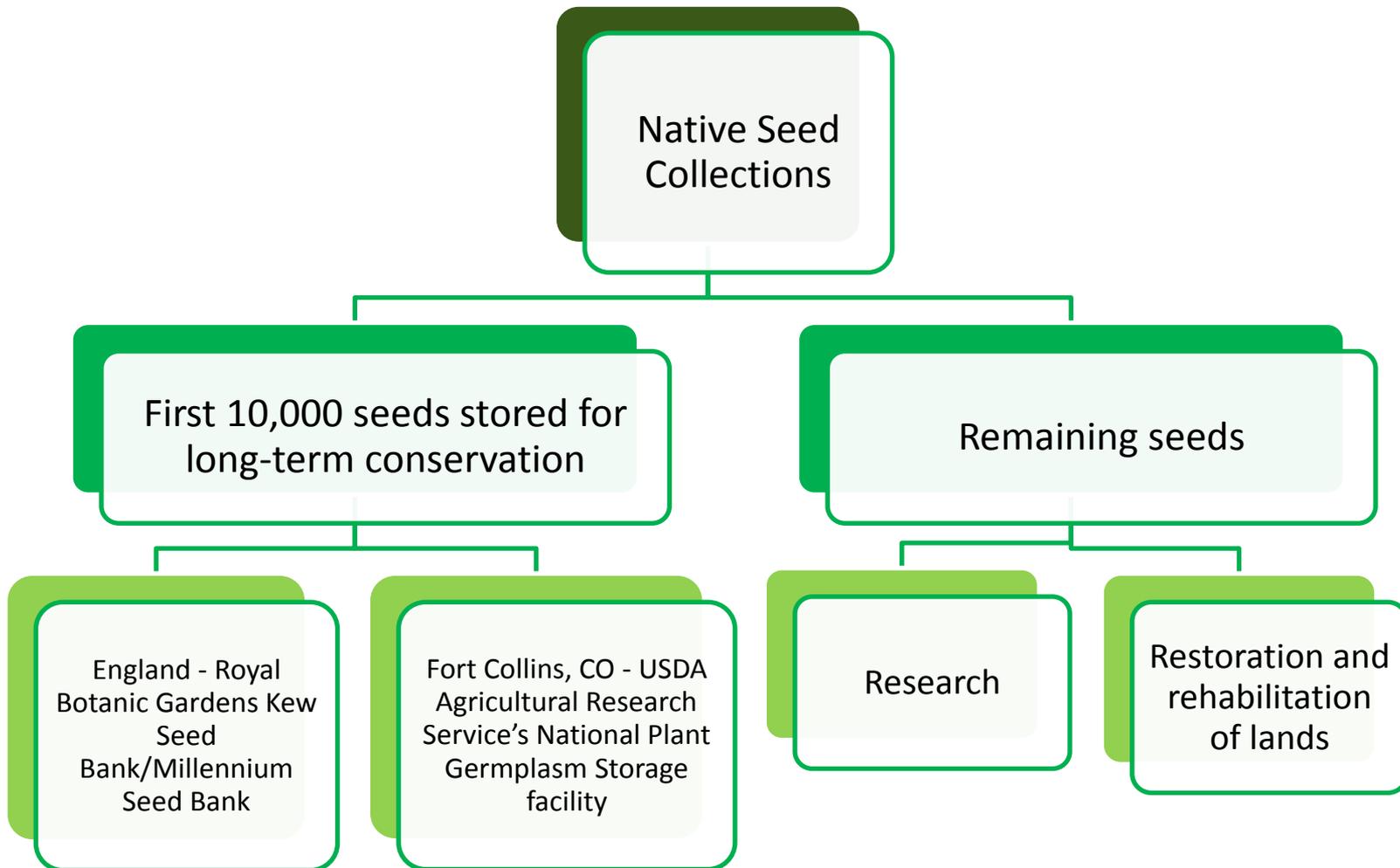


Next Steps:

- Continued communication and increased understanding of sage-grouse habitat restoration efforts occurring within the PRB.
- Partner on restoration projects and monitoring.
- Project funding - agency, grants, partnerships
- Dialogue with industry and agencies to provide incentives to landowners - replacing electric power with solar power for livestock water and reservoir impoundments with stock tanks/roads/reservoirs.
- Expand treatment of invasives/annual bromes.
- Expand Native Plant Materials Development.
- Continue/expand treatments for WNV



Seeds of Success



Youth Crews

Wyoming Conservation Corp



Wind River Indian Reservation



BLM Employees

- Cindy Allen
- Nick Carter
- Gary Skillman
- Jerry Sleep



Where do we go from here?

- **Communication**
- **Coordination**
- **Participation**



Questions



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