



# Department of Environmental Quality

## Abandoned Mine Land Division

### AML History and Background

Joint Minerals, Business and Economic Development Committee

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# AML History and Background

- ◆ Surface Mining Control and Reclamation Act (SMCRA)
  - Public Law 95-87 Adopted by Congress in 1977
  - Created Title V to address permitting, enforcement and reclamation for surface coal mines
  - Created Title IV to address reclamation of coal mines abandoned before 1977 for which no responsible party exists.
    - Established an AML Reclamation Fee to be collected on every ton of coal produced
    - Different fees for surface coal, underground and lignite with surface coal being the highest at 28 cents per ton of coal mined.
    - AML Reclamation Fee paid by industry to Department of Interior each fiscal year
    - Established priorities and eligibility criteria for AML reclamation

# AML History and Background

- ◆ Wyoming Reclamation Plan Approved by Interior 1983 and Wyoming AML Program Established
  - AML identified projects to include on the abandoned mine land inventory
  - Project priority in the inventory is established using criteria established by the Office of Surface Mining and Reclamation Enforcement (OSMRE)
  - SMCRA provides that 50% of the AML Reclamation Fee collected on coal production in Wyoming is returned to WY AML for reclamation

# AML History and Background

- ◆ Wyoming was approved as a certified program May 25, 1984
  - Certification provided greater flexibility for use of WY AML funds
    - Allowed funding of non-coal reclamation
    - Allowed funding of public facilities under certain circumstances

# AML History and Background

- ◆ WY AML Inventory
  - Many projects have been identified and added to inventory since inception
  - After two years of field inventory investigations about \$125 million was added to the inventory in December 2019
  - Dramatic advancements in technology improve investigation
  - Public use of public lands has increased significantly – sites are discovered and reported to AML
  - Age and weather
    - Heavy rain or other weather conditions can result in subsidence
    - Over time, underground mines have a tendency to collapse. With time, the collapse can reach the surface resulting in subsidence or collapse.

# AML History and Background

- ◆ 2006 Amendments to SMCRA
  - Made payments to AML states mandatory
    - Subject to Congressional appropriation prior to 2006
  - Added new funding category – Prior Balance
    - Prior to 2006 Amendments Congress had not paid the full 50% share to states
    - Funds not paid were held in the AML Trust Fund
    - 2006 Amendments required unappropriated balance to be repaid to programs in seven (7) equal payments (Prior Balance Payments)
    - WY as certified state had flexibility in use of those prior balance funds
      - ◆ SMCRA 411(h) (1)(D) – funds can be used “for the purposes established by the State legislature or tribal council of the Indian tribe, with priority given for addressing the impacts of mineral development
    - Wyoming has received all of the prior balance funding

# AML History and Background

- ◆ 2006 Amendments to SMCRA (cont.)
  - WY AML now receives funding equal to the 50% AML
  - Reclamation funds from Treasury in-lieu of the 50% share from the AML Trust Fund
  - WY AML in-lieu funding received must be:
    - For the purposes established under SMCRA,
    - In conformance with AML Federal Regulations, and
    - In accordance with the conditions of Interior's 1984 approval of certification for Wyoming

# AML History and Background

- ◆ Expenditures of moneys for lands, waters, and facilities shall reflect the following objectives and priorities in the order listed:
  - *(1) The protection of public health, safety, general welfare, and property from extreme danger of adverse effects of mineral mining and processing practices.*
  - *(2) The protection of public health, safety, and general welfare from adverse effects of mineral mining and processing practices.*
  - *(3) The restoration of land and water resources and the environment previously degraded by the adverse effects of mineral mining and processing practices.*



# AML History and Background

- ◆ 2006 Amendments to SMCRA
  - First priority is still to address high priority coal reclamation prior to doing non- coal
  - General rule is that non-coal reclamation can be done for projects of equal or higher priority than remaining coal reclamation

# AML History and Background

- ◆ Sequestration – AML payments to all states and Tribes subject to Congressional sequester since 2013
- ◆ Annual sequestration around 7% per year
- ◆ Total funds sequestered to date - \$24.2 million

# Current Status

- ◆ All prior balance funds have been returned to Wyoming.
- ◆ WY AML will continue field inventory work to update the inventory
- ◆ Advancements in technology increase ability to identify sites
- ◆ Results of the investigation will be updated and added to the inventory at the end of each field season
- ◆ When all coal and non-coal AML reclamation sites have been funded, AML funding can be applied to specific public facilities projects in coal impacted communities.

# Public Facilities Process

- ◆ Public facilities can be considered only after all known coal and non-coal AML work has been **funded**
- ◆ Eligible communities submit project proposals to WY AML
- ◆ AML reviews projects for eligibility and to determine priority of all projects proposed
- ◆ AML makes recommendations to Governor based on funds available.
- ◆ Governor reviews and makes recommendations to the State Land and Investment Board
- ◆ SLIB provides recommendation to Governor for consideration

# AML History and Background

- ◆ Certified programs were allowed to fund public facility projects prior to 2006 under certain conditions. Prior to 2006 approximately \$94 million in public facilities projects were funded
- ◆ After the 2006 Amendments public facilities could only be considered after funding all known coal and non-coal reclamation

# AML History and Background

- ◆ Funding available under the 2019 grant distribution announced in February was sufficient to fund all known reclamation at the time
- ◆ \$20.6 million was then available for public facilities
- ◆ Funding availability was announced and 84 project proposals were received
- ◆ Ten projects were approved by the Governor based on the recommendations of SLIB

# AML History and Background

## Public Facilities Projects Selected for Grants in 2019

Entity Name	Project Name	Funding Amount
Memorial Hospital of Converse County	Power Upgrade at Memorial Hospital of Converse County	\$2.0M
Town of Baggs	Sewage Lagoon Improvements	\$2.1M
Town of Dayton	Dayton Wastewater Treatment Plant Improvements	\$2.4M
Town of Hanna	Old Town Water System Rehabilitation Project	\$2.0M
City of Sundance	Sundance Kid Tanks & Waterline Replacement Project	\$1.4M
Campbell County	Southern Campbell County Arterial Road Reconstruction	\$1.8M
City of Lander	City of Lander Tanks & Pump Station Project	\$3.6M
Town of Wright	Sagebluff Drive Reconstruction	\$1.2M
City of Rock Springs	Bitter Creek Restoration - Phase 1	\$3.8M
Popo Agie Conservation District	Popo Agie Flood Control and River Restoration	\$0.3M

# AML History and Background

- ◆ Since inception AML has:
  - Reclaimed 25,255 acres
  - Reduced 619,000 feet of dangerous highwalls
  - Closed 2,473 dangerous shafts and mine openings
  - Reclaimed 127 miles of impaired streams
  - Funded 50 public facilities projects (40 prior to 2006, 10 in 2019)



# AML History and Background

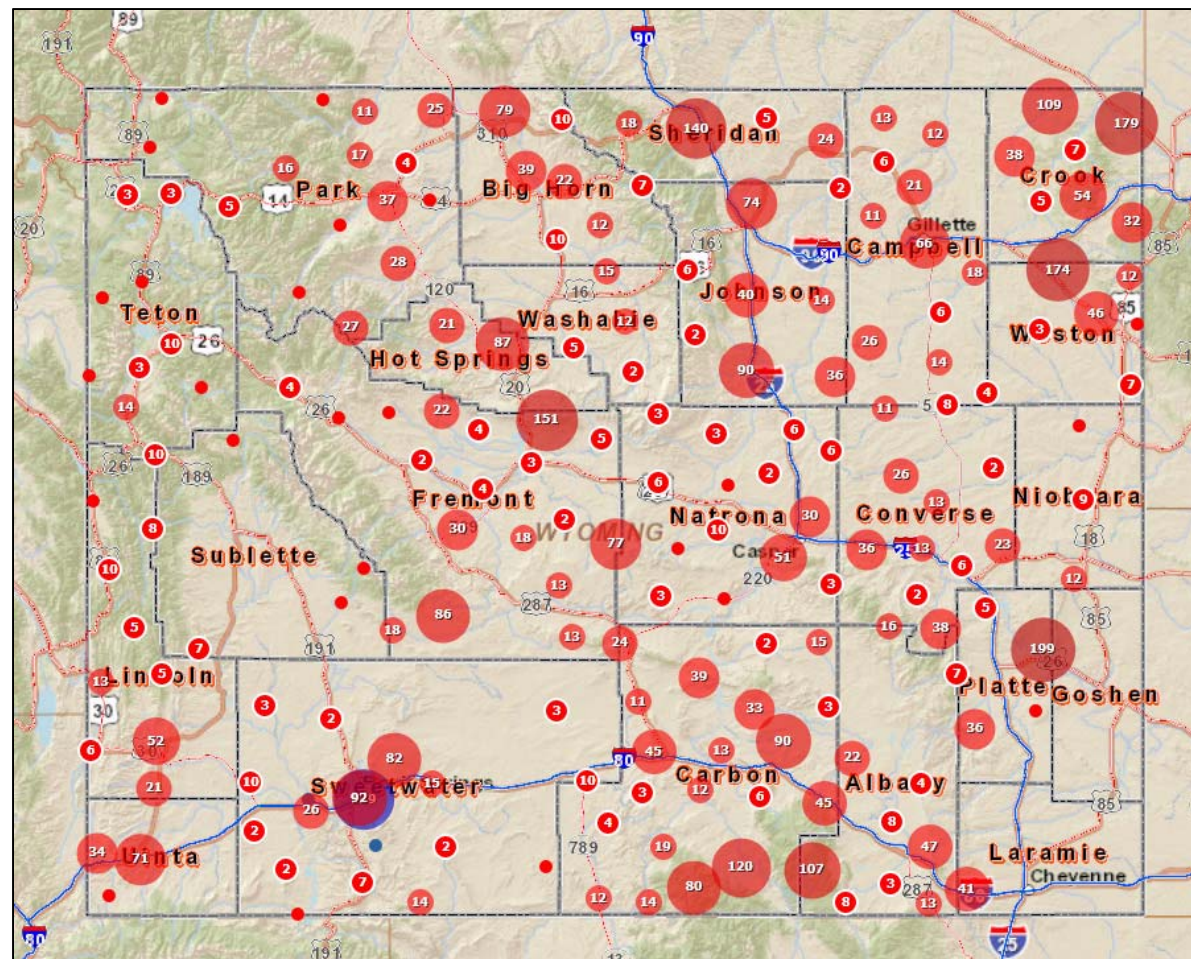
## ◆ In 2019

- 86 construction contracts for \$41.7M
- 30 consulting contracts for \$14.0M
- AML reclamation provided 577 direct jobs
- Many indirect jobs and expenditures for material, fuel, etc.
- One project in the Gas Hills in 2019 used 248,000 gallons of diesel fuel

# AML History and Background

- ◆ For 2020
  - Wyoming AML has small staff – 12
  - AML Administration – 4.5% of grant amount including project oversight and management
  - Emphasis is to maximize funding for Wyoming contractors and consultants

# Map of WY Abandoned Mines





# Schreibeis Mine subsidence sinkhole in access road





# Subsidence at doorstep in Elmo



# Acid Spoils and Heap Leach Erosion in Coyote Springs

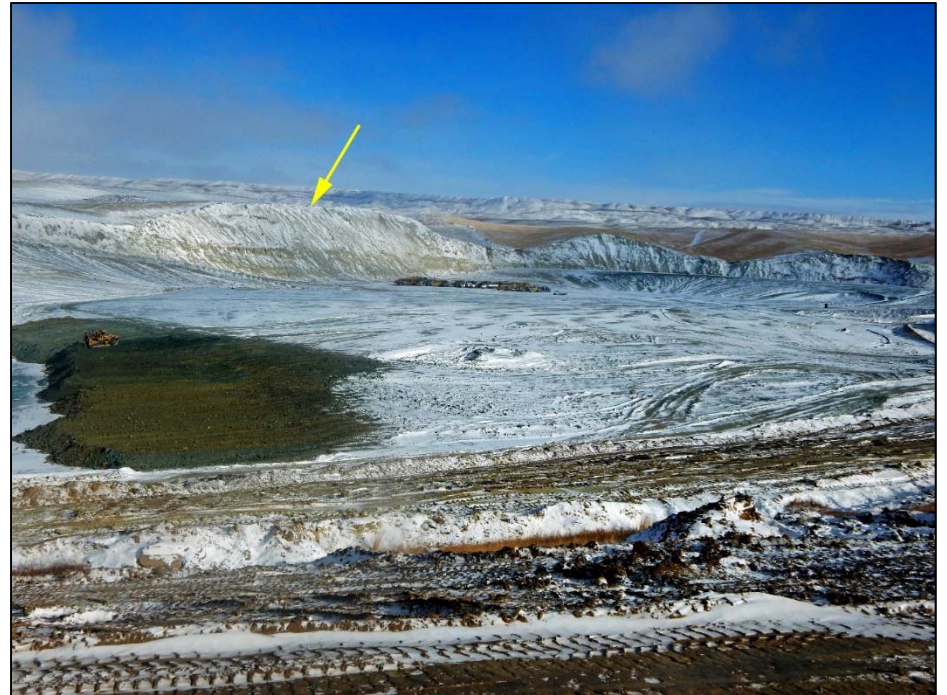




# Bullrush Pit and Spoils Acid Forming Mine Waste



# Day Loma Pit





# Flames in Grass Creek mine vent shaft surface breakthrough



# Grass Creek fire shaft collapse and surface scorching





# Grass Creek fire reclamation area





# Lionkol hidden shaft collapse under dozer





# Dozer just backed off collapsed shaft area

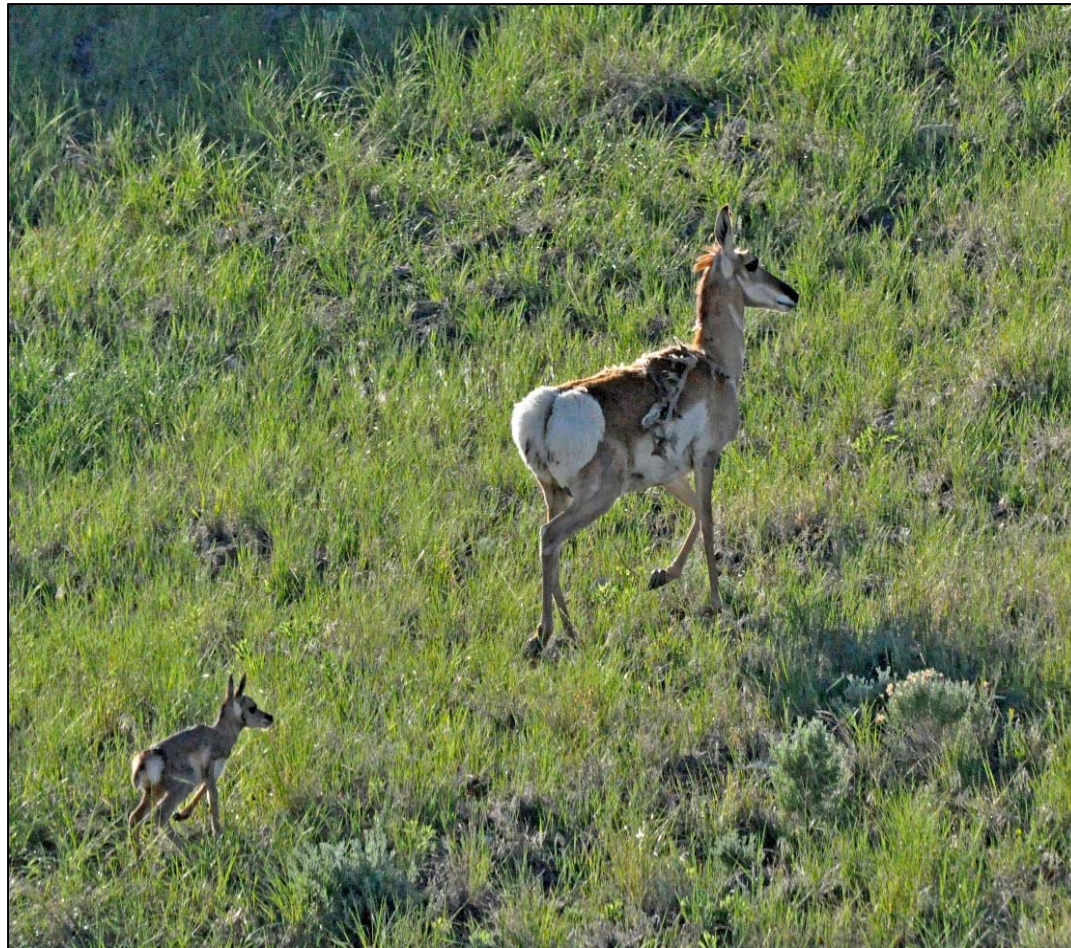


# Blairtown Park, Rock Springs subsidence





# Pronghorn with fawn on reclaimed land



# Sage Grouse on reclaimed land

