

## As-Needed Environmental Compliance Services

### Statewide, New Mexico

#### Client

**New Mexico Energy, Minerals and Natural Resources Department, Mining and Minerals Division**

#### Highlights

- ◆ Prepared monitoring plan with new performance standards and metrics for ephemeral stream reclamation site with a few short intermittent reaches
- ◆ Conducted annual transect and photographic monitoring at two reclamation sites, including wetland complex

DBS&A is supporting the New Mexico Energy, Minerals and Natural Resources Department (EMNRD), Mining and Minerals Division Abandoned Mine Land (AML) Program by preparing National Environmental Policy Act (NEPA) documentation; overseeing Endangered Species Act (ESA) Section 7 consultation; conducting natural and cultural resource inventories and annual on-site monitoring; developing new performance standards and metrics for monitoring; analyzing trends in vegetation cover and other metrics; and completing other tasks as assigned by the 100% federally-funded AML Program.

DBS&A's natural resources and cultural resources team has completed or is currently working on tasks for two historical mining sites requiring extensive reclamation: Vermejo Park Ranch Coal Mining Sites, Dillon Canyon, Colfax County, New Mexico, and Boston Hill Mining District Safeguard Project, Silver City, Grant County, New Mexico.

#### Vermejo Park Ranch Coal Mining Sites, Dillon Canyon, Colfax County, New Mexico

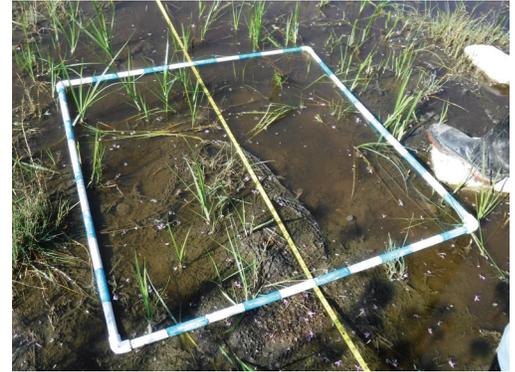
DBS&A is assisting with inter-agency coordination for the Swastika and Dutchman Reclamation Projects, in addition to providing the following services:

#### ◆ **Categorical Exclusion, Tin Pan Canyon**

DBS&A prepared a Categorical Exclusion (CE) for the reclamation of two gob piles that are impinging and eroding into the adjacent Tin Pan waterway. The CE was prepared in strict adherence to Office of Surface Mining Reclamation and Enforcement NEPA requirements.

#### ◆ **Annual Monitoring at the Dutchman Site**

DBS&A used fixed plots along established transects to assess whether performance standards were met at the Dutchman wetland complex reclamation site. To help meet water quality standards as part of the overall Dillon Canyon reclamation, the Dutchman mine site, adjacent to a tributary of Dillon Canyon, was targeted as a wetland expansion project. The wetland site contained two small ponded areas created from three mine adits and wetland vegetation had formed around the ponds. The site was expanded through a construction



DBS&A used fixed plots along established transects to assess whether performance standards were met at the Dutchman wetland complex reclamation site.



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project that contained more of the water through berms and wetland vegetation plantings. As part of ongoing requirements by the U.S. Army Corps of Engineers (USACE) for the reclamation project, DBS&A conducted annual vegetation and photographic monitoring along established transects and conducted wetland delineation at the mitigation site. DBS&A gathered important data at fixed plots along the transects to track hydrologic flow and hydrophytic vegetation cover through time and to determine whether the site can be released from the Nationwide Permit 27 (NWP-27) issued by USACE. Results from the monitoring concluded that although some of the performance standards were not met, the wetland had stabilized and was functioning as designed.

**◆ Annual Monitoring at the Swastika Reclamation Site**

The site has undergone some reclamation and as part of continuing efforts to meet standards set by the USACE, DBS&A is conducting annual monitoring and a general evaluation of the canyon noting any significant changes in vegetation, erosional features and noxious weeds.

**◆ Pre-Construction Notice for Nationwide Permit 27 Application and Monitoring and Adaptive Management Plan, Dillon Canyon**

The Swastika Mine site located within Dillon Canyon on the Vermejo Park Ranch has undergone reclamation designed to stabilize and prevent further erosion of gob piles into the adjacent Dillon Creek. Measures taken in some reaches of the site have not met performance standards previously established under the original NWP-27 issued by the USACE. DBS&A assisted the AML Program with an application for a new NWP-27. DBS&A prepared a Pre-Construction Notice (PCN) and a Monitoring and Adaptive Management Plan with new site-specific physical, hydrological, and biological metrics and performance parameters designed to track the success of the proposed reclamation measures. Upon USACE approval of the performance standards developed by DBS&A, we prepared the final PCN package for the AML Program.

**◆ Categorical Exclusion**

DBS&A completed a CE for the reclamation of gob piles that are impinging and eroding into the adjacent Dillon Canyon waterway. The CE was completed in strict adherence to Office of Surface Mining Reclamation and Enforcement NEPA requirements.

**◆ Biological Assessment/Evaluation**

In support of the ESA Section 7 consultation process, DBS&A conducted biological surveys and prepared a Biological Assessment/Evaluation (BA/BE) for the Swastika Mine Site in Dillon Canyon for the proposed additional reclamation measures. DBS&A documented all sensitive habitat including wetlands, the Ordinary High Water Mark (OHWM), geologic features, and water quality parameters such as pH, turbidity, dissolved oxygen and specific conductivity. The potential for threatened and endangered species to occur in the project area was also evaluated. The BE/BA concluded that the proposed action “may affect, is not likely to adversely affect” the southwestern willow flycatcher (*empidonax traillii extimus*). As part of the Section 7 consultation process, DBS&A prepared a letter requesting written concurrence from the U.S. Fish and Wildlife Service (USFWS) regarding that effect determination. The USFWS concurred with the findings and determination of the BE/BA and the BA/BE and concurrence letter were appended to the CE.



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Silver City, New Mexico****◆ Cultural Resources Inventory**

DBS&A is managing the cultural resources inventory work of a subcontractor for the AML Program in the second site assigned to DBS&A. Team members are conducting a full cultural resource inventory of the Area of Potential Effects (APE), which encompasses 606 acres of private, municipal, county, and federal lands. The federally-funded safeguard project is subject to compliance with Section 106 of the National Historic Preservation Act of 1966 and implementing regulations. Because the Project includes municipal lands, it must also comply with the applicable sections of the New Mexico Cultural Properties Protection Act, the New Mexico Cultural Properties Act and the Prehistoric and Historic Sites Preservation Act. All cultural resource investigations completed during this project are in compliance with the above rules and regulations, as well as any applicable agency-specific guidelines. More than 2,700 historic features have been documented by our team. A report intended for the general public will describe the history of Boston Hill Mining District with the help of historical maps and photographs, as well as the results of the inventory.



DBS&A prepared a monitoring plan with a new set of site-specific geomorphological and biological performance standards and metrics for an ephemeral stream with a few short intermittent reaches at the Swastika reclamation site.

**◆ Biological Assessment/Evaluation**

DBS&A completed biological surveys and is currently preparing a BA/BE analyzing the potential impacts of the proposed project on species listed as Endangered or Threatened under the ESA, as well as other special-status species.

**◆ Environmental Assessment and Public Involvement**

DBS&A will prepare an Environmental Assessment (EA) and conduct public scoping and public involvement meetings to satisfy all NEPA requirements related to the proposed project, which is intended to protect the public from the extreme danger associated with some of the abandoned mine features of the Boston Hill Mining District. The EA will address alternatives for safeguarding the Boston Hill Mining District. Stakeholders in the planning process will include Town residents and landowners, local biking and hiking clubs, the local native plant society, cultural preservation groups, merchant associations, Western New Mexico University, the Town of Silver City, Grant County, the Bureau of Land Management (BLM), Albuquerque Area Office of Surface Mining Reclamation and Enforcement, State Historic Preservation Division, mineral owners or lessees, and the public. The EA is being prepared according to Office of Surface Mining Reclamation and Enforcement NEPA requirements.

