

## As-Needed Environmental Compliance Services

### Statewide, New Mexico

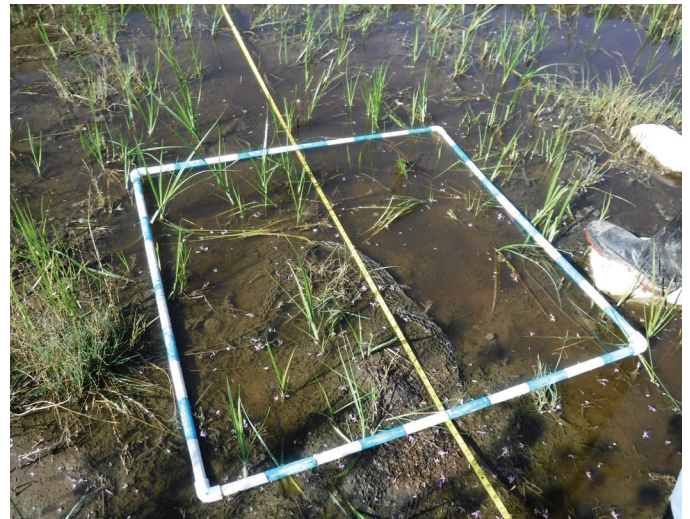
#### CLIENT

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

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 has been assisting with inter-agency coordination and regulatory compliance for the Dillon Canyon, Dutchman, and Tin Pan Canyon Reclamation Projects per the following tasks.

- **Tin Pan Canyon Reclamation:** DBS&A prepared a Categorical Exclusion (CE) in strict adherence to Office of Surface Mining Reclamation and Enforcement (OSMRE) NEPA requirements for the reclamation of two gob piles that are impinging and eroding into the adjacent Tin Pan waterway.
- **Dutchman Site Monitoring and Regulatory Compliance:** 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

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vegetation had formed around the ponds. The site was expanded through a construction project that contained more of the water through berms and wetland vegetation plantings. As part of 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 could 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. The USACE concurred with the determination and the site was released from the permit.

- **Monitoring and Regulatory Compliance at the Swastika Reclamation Site:** The site has undergone previous reclamation and as part of continuing efforts to meet standards set by the USACE, DBS&A conducted annual monitoring and a general evaluation of the canyon noting any significant changes in vegetation, erosional features, and noxious weeds. It had been determined that the site was not meeting the conditions of the NWP and further reclamation was determined necessary in a reach of Dillon Canyon.
- **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 had 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 had not met performance standards previously established under the original NWP-27 issued by the USACE. DBS&A assisted the AMLP with an application for a new NWP-27 as part of additional reclamation proposed for a reach of Dillon Canyon. 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. The PCN and plan were approved by the USACE and DBS&A prepared the final PCN package for the AMLP.
- **Categorical Exclusion, Swastika/Dillon Canyon:** DBS&A completed a CE for the additional proposed reclamation of gob piles that are impinging and eroding into the Dillon Canyon waterway. The CE was completed in strict adherence to Office of Surface Mining Reclamation and Enforcement NEPA requirements.
- **Fish Salvage and Environmental Construction Monitoring, Swastika/Dillon Canyon:** DBS&A conducted a fish salvage along the creek in Dillon Canyon pre-construction of a reclamation project that would scour out all existing fish habitat. DBS&A scouted out one location with perennial water that could support a large population of minnows occupying the creek. A fish barrier dam was constructed and several hundred fish were relocated to the impoundment pond. As part of the task, periodic monitoring visits were made to the reach during the reclamation construction site to determine the status of the relocated fish and to determine general environmental conditions. The relocated fish, while the population appeared to drop over time, survived in the pond, and a final visit was made to the site, post construction to dismantle the barrier dam and determine whether fish would need to be relocated back into the reconstructed stream. Recent storm events had overtopped the impoundment pond making fish release unnecessary.



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.

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- **Biological Assessment/Evaluation, Swastika/Dillon**

**Canyon:** 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 project. 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 to establish baseline water quality data. 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.



Agency meeting and field visit at Legal Tender Mine with EMNRD AML Program and Bureau of Land Management staff to discuss project and stakeholder needs.

### **Boston Hill Mine Safeguard Project, Silver City, New Mexico**

- **Cultural Resources Inventory:** DBS&A is managing the cultural resources inventory work of teaming partner, Okun Consulting Solutions (Okun) for the AML Program. Okun conducted a full cultural resource inventory of the Area of Potential Effects (APE), which encompasses 606 acres of private, municipal, county, and federal lands that comprise the Boston Hill District. 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 were in compliance with the above rules and regulations, as well as any applicable agency-specific guidelines. More than 2,700 historic features were documented by Okun. The cultural resources report has been submitted and is waiting concurrence from the SHPO. Once concurrence is received, the cultural resources determination will be included in an Environmental Assessment. A brochure intended for the general public has been prepared to describe the history of Boston Hill Mining District.
- **Biological Assessment/Evaluation:** DBS&A completed a biological survey and prepared a BA/BE analyzing the potential impacts of the Boston Hill Mine Safeguarding Project (proposed project) on species listed as Endangered or Threatened under the Endangered Species Act, as well as other special-status species. The BA/BE included an evaluation of Bureau of Land Management (BLM) listed sensitive species as determined by the Las Cruces District Office. The BA/BE will be included in the EA.
- **Environmental Assessment and Public Involvement, Boston Hill Mine Safeguard Project:** DBS&A is preparing an Environmental Assessment (EA) and has conducted one of two 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 (District). The EA addresses alternatives for safeguarding the District that include fencing and various mine enclosures. The District is an important asset to the Town of Silver City, and the Town owns a majority of the District for recreation purposes. The BLM and a private landowner also own a portion of the District. The project therefore is high profile and of great interest and public

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involvement and agency coordination are very important. Stakeholders contacted in the planning and public involvement process include the BLM, private landowner, the Town of Silver City, including the Trails and Open Space Committee, Grant County, Town residents, businesses, non-profit organizations, and local biking and hiking interests. A stakeholder's meeting was conducted at the beginning of the EA process with the BLM that included a site visit to the District with the agency to explain the project. One (virtual) public meeting was conducted to introduce all interested parties to the project. DBS&A coordinated, prepared and conducted the meeting with participation from the AMLP. DBS&A has prepared the public meeting summary that documents the meeting and comments received from the public for inclusion to the EA. The EA is being prepared according to Office of Surface Mining Reclamation and Enforcement and the BLM NEPA requirements.

#### **Harding Mine, Taos County**

DBS&A has conducted a biological survey and prepared a biological memo for additional safeguarding measures at the Harding Mine in Taos County. The historic mine is owned by the University of New Mexico and is open to guided tours for educational purposes. Some safeguarding measures have been implemented, but additional work is needed. DBS&A has also prepared a Categorical Exclusion per the OSMRE requirements. The CE is pending following review of cultural resources being done by others.

#### **Abo Mine, Torrance County**

DBS&A has conducted a biological survey and prepared a biological memo for additional safeguarding measures at the Abo Mine in Torrance County. The mine is on privately owned property and public lands managed by the BLM. Some safeguarding measures have been taken but additional measures are needed. The memo included an evaluation of BLM-listed sensitive species.