



DOE Uranium Leasing Program Annual Status and Activities Report for Calendar Year 2024

March 2025



**U.S. DEPARTMENT OF
ENERGY**

Legacy
Management

Cover Photo: *An overview photograph of the Lease Tract C-JD-8 waste rock pile and trailer in the foreground and the Lease Tract C-JD-7 waste rock pile and pit in the background, taken from above Deer Flats Road on Monogram Mesa, ULP Lease Tracts C-JD-7 and C-JD-8 permit area, Montrose County, Colorado*

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Abbreviations

AUM	Abandoned Uranium Mines
BLM	U.S. Bureau of Land Management
CFR	<i>Code of Federal Regulations</i>
CUR	Consolidated Uranium Inc.
DOE	U.S. Department of Energy
DRMS	Division of Reclamation, Mining, and Safety
DRRP	Dolores River Restoration Partnership
DRUM	Defense-Related Uranium Mines
EFI	Energy Fuels Inc.
EPA	U.S. Environmental Protection Agency
GEMI	Gold Eagle Mining Inc.
GEU	Golden Eagle Uranium LLC
IAA	interagency agreement
LM	Office of Legacy Management
LMS	Legacy Management Support
MAP	Mitigation Action Plan
MOU	memorandum of understanding
MT	metric tons
NdPr	neodymium-praseodymium
NEPA	National Environmental Policy Act
PA	Programmatic Agreement
PEIS	Programmatic Environmental Impact Statement
REE	rare earth element
RILOR	reclamation in lieu of royalties
UFO	Uncompahgre Field Office
ULP	Uranium Leasing Program
U ₃ O ₈	triuranium octoxide

Executive Summary

This report provides a detailed summary of the U.S. Department of Energy (DOE) Office of Legacy Management (LM) Uranium Leasing Program's (ULP's) activities from January 1 through December 31, 2024.

The ULP administers 31 lease tracts, 29 of which were actively held under lease with four different entities, and as of July 2024 two entities now control all active leases:

- Consolidated Uranium Inc. (CUR) controls eight lease tracts: C-SR-12, C-SR-16A, C-AM-19, C-AM-19A, C-AM-20, C-CM-24, C-G-26, and C-G-27. In 2023, CUR announced that the leases it held would be spun off to its subsidiary Premier American Uranium Inc. This assignment was approved by LM in October 2024.
- Gold Eagle Mining Inc. (GEMI) controlled three lease tracts until July 2024: Lease Tracts C-JD-5, C-SR-13, and C-SR-15. During 2024, GEMI maintained its permitted operations that are in reclamation status at Lease Tracts C-JD-5 and C-SR-13 and conducted noxious weed treatments. GEMI does not have any permitted operations on Lease Tract C-SR-15. In January 2024, GEMI entered into an asset transfer agreement with Highbury Resources Inc. (Highbury), a subsidiary of Anfield Energy Inc., for the purchase of the GEMI lease tracts. This agreement was executed in July 2024. GEMI remains responsible for reclamation on its permitted locations on Lease Tracts C-JD-5 and C-SR-13.
- Golden Eagle Uranium LLC (GEU) controlled nine lease tracts until July 2024: Lease Tracts C-JD-5A, C-SR-10, C-SR-11A, C-SR-15A, C-SR-16, C-WM-17, C-LP-22, C-LP-22A, and C-LP-23. During 2024, GEU conducted noxious weed treatments on its lease tracts. There are currently no active mining operations on GEU's lease tracts. In January 2024, GEU entered into an asset transfer agreement with Highbury for the purchase of the GEU lease tracts. This agreement was executed in July 2024.
- Highbury Resources Inc. (Highbury), a subsidiary of Anfield Energy Inc., controls 21 lease tracts as of July 2024: Lease Tracts C-JD-5, C-JD-5A, C-JD-6, C-JD-7, C-JD-8, C-JD-9, C-SR-10, C-SR-11, C-SR-11A, C-SR-13, C-SR-13A, C-SR-15, C-SR-15A, C-SR-16, C-WM-17, C-SM-18, C-LP-21, C-LP-22, C-LP-22A, C-LP-23, and C-CM-25. During 2024, Highbury maintained its permitted operations on Lease Tracts C-JD-6, C-JD-7, C-JD-8, C-JD-9, C-SR-11, and C-SM-18 in reclamation status and continues to perform routine maintenance activities on these lease tracts, as necessary. Highbury does not have any permitted operations on its other 15 lease tracts. GEMI still holds permits on Lease Tracts C-JD-5 and C-SR-13. In January 2024, Highbury entered into an asset transfer agreement with GEMI and GEU to purchase their lease tracts and now controls 21 of the 29 lease tracts. These agreements were executed in July 2024.

Lease Tracts C-JD-8A and C-SR-14 are inactive and will remain so indefinitely.

On October 2 and 3, 2024, ULP personnel performed formal inspections of the existing permitted mining operations, which included Highbury's mines on Lease Tracts C-JD-6, C-JD-7, C-JD-8, C-JD-9, C-SM-18, and C-SR-11 and GEMI's mines on Lease Tracts C-JD-5 and C-SR-13. At one or more of the locations, personnel noted some minor issues, including the presence of noxious weeds, minor erosion, and repeated vandalism. Throughout the 2024 field season, ULP personnel conducted cursory inspections on DOE lease tracts to identify and mitigate physical safety hazards and monitor reclamation sites, noxious weeds, and emergent hazards.

1.0 Overview

The U.S. Department of Energy (DOE) Office of Legacy Management (LM) Uranium Leasing Program (ULP) administers 31 lease tracts (Table 1 and Figure 1), 29 of which are actively held under lease by two lessees. Of the 29 lease tracts, only eight have mining operations permitted with the Colorado Division of Reclamation, Mining, and Safety (DRMS). All eight of the permitted mining operations are in reclamation status. Two of the 31 lease tracts are not leased and are considered inactive. This report provides a detailed summary of ULP activities from January 1 through December 31, 2024.

Table 1. DOE Uranium Lease Tracts and Lessees

Lease Tract	Lessee
C-JD-5 ^a	Highbury Resources Inc.
C-JD-5A ^b	Highbury Resources Inc.
C-JD-6	Highbury Resources Inc.
C-JD-7	Highbury Resources Inc.
C-JD-8	Highbury Resources Inc.
C-JD-8A	Inactive, not leased
C-JD-9	Highbury Resources Inc.
C-SR-10 ^b	Highbury Resources Inc.
C-SR-11	Highbury Resources Inc.
C-SR-11A ^b	Highbury Resources Inc.
C-SR-12	Consolidated Uranium Inc.
C-SR-13 ^a	Highbury Resources Inc.
C-SR-13A	Highbury Resources Inc.
C-SR-14	Inactive, not leased
C-SR-15 ^a	Highbury Resources Inc.
C-SR-15A ^b	Highbury Resources Inc.
C-SR-16 ^b	Highbury Resources Inc.
C-SR-16A	Consolidated Uranium Inc.
C-WM-17 ^b	Highbury Resources Inc.
C-SM-18	Highbury Resources Inc.
C-AM-19	Consolidated Uranium Inc.
C-AM-19A	Consolidated Uranium Inc.
C-AM-20	Consolidated Uranium Inc.
C-LP-21	Highbury Resources Inc.
C-LP-22 ^b	Highbury Resources Inc.
C-LP-22A ^b	Highbury Resources Inc.
C-LP-23 ^b	Highbury Resources Inc.
C-CM-24	Consolidated Uranium Inc.
C-CM-25	Highbury Resources Inc.
C-G-26	Consolidated Uranium Inc.
C-G-27	Consolidated Uranium Inc.

Notes:

^a Previously a Gold Eagle Mining Inc. lease tract.

^b Previously a Golden Eagle Uranium LLC lease tract.

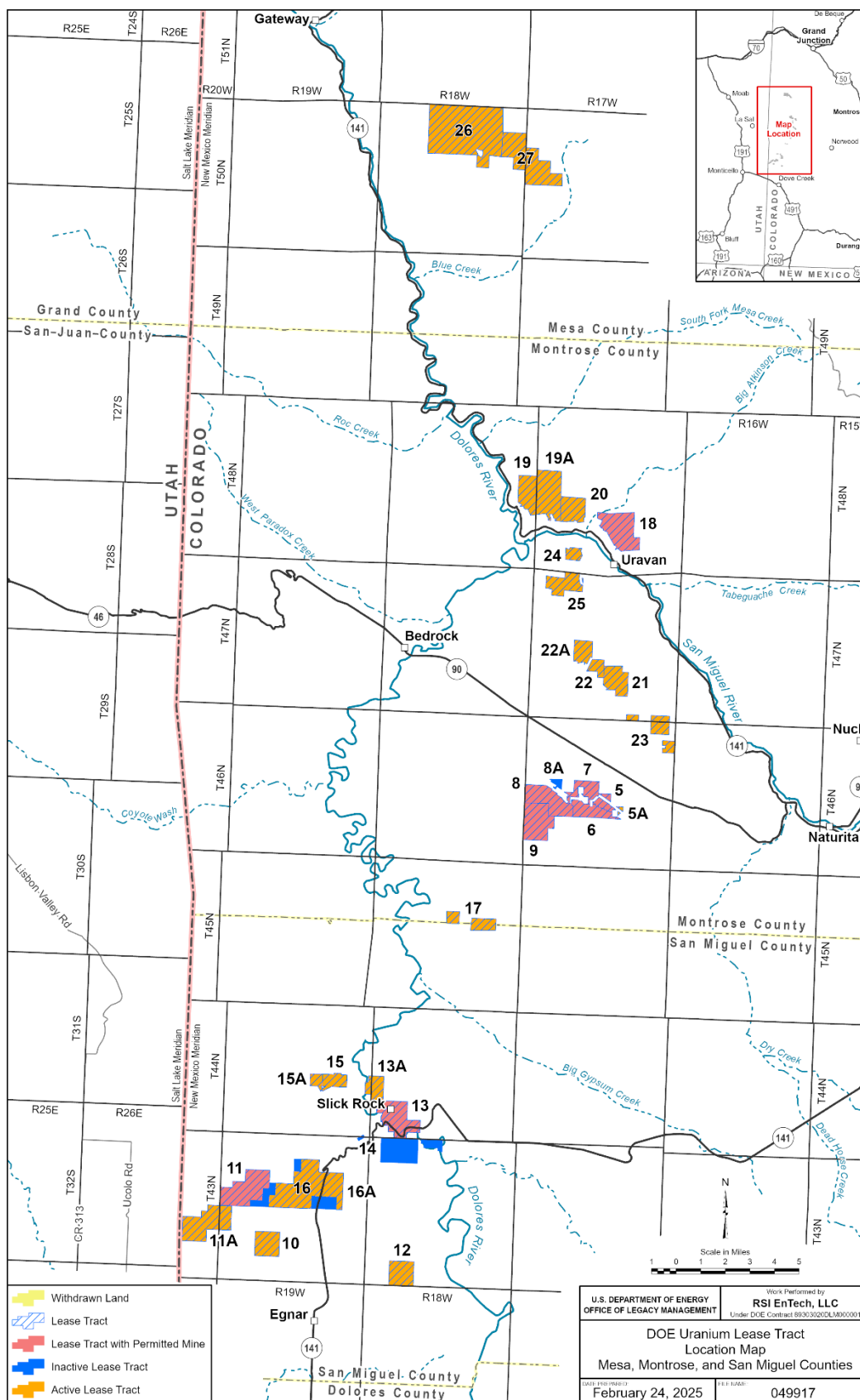


Figure 1. Location of ULP Lease Tracts in Southwestern Colorado

2.0 Administrative Operations

The following subsections summarize ULP's primary administrative activities during 2024.

2.1 Maintenance and Sustainment Projects

In November 2023, the ULP conducted maintenance and sustainment projects across five lease tracts: C-SR-10, C-SR-13, C-SR-16, C-LP-21, and C-LP-22A. These projects included mitigating 13 hazardous abandoned mine features and removing sediment from two sediment retention basins.¹ All disturbed work areas were reseeded with a DOE and U.S. Bureau of Land Management (BLM)-approved seed mix.

Monitoring of these project areas occurred throughout 2024 during cursory inspections to assess revegetation and rehabilitation success. Photo monitoring and ecological surveys were conducted to measure the success of the reseeded and safeguarding in the disturbed areas. No maintenance and sustainment projects were conducted during the 2024 field season. Planned 2025 activities include projects across seven lease tracts: C-AM-20, C-LP-21, C-LP-22, C-LP-22A, C-SR-13, C-SR-10, and C-SR-11. These projects include mitigating several hazardous abandoned mine features, releasing biocontrol agents for Russian knapweed suppression, and removing sediment from eight sediment retention basins.

2.2 Programmatic Agreement (PA) Review

In 2014, LM and other parties entered into a *Programmatic Agreement Among the U.S. Department of Energy-Office of Legacy Management, the U.S. Department of the Interior-Bureau of Land Management-Colorado State Office, the Colorado State Historic Preservation Office, and the Pueblo of Zuni Regarding the Uranium Leasing Program Within Mesa, Montrose, and San Miguel Counties, Colorado* (DOE 2014b) (PA) to comply with Section 106 of the National Historic Preservation Act (Title 54 *United States Code* Section 300101 et seq. [54 USC 300101 et seq.]) and filed with the Advisory Council on Historic Preservation. The PA outlines actions LM and consulting parties will take to evaluate the potential impacts of activities on historic or cultural properties. The PA requires LM to:

- Conduct briefings annually (at a minimum) with consulting parties to:
 - Communicate proposed activities.
 - Summarize prior activities (when warranted).
 - Receive input from the parties.
- Review and amend (if needed) the PA every 24 months (biennially).

The 2014 PA was active for 10 years and had a scheduled expiration date of April 15, 2024, with the option to renew for an additional 2 years upon the approval of all PA signatories. LM requested from the PA signatories a 2-year extension to renew the PA in December 2023. A response from the signatories was due by January 31, 2024, but not all signatories responded. The PA expired on April 15, 2024.

¹ Due to heavy precipitation in 2024 and subsequent sediment accumulation among the sediment retention basins in Lease Tract C-SR-13, an additional sediment removal project is planned in 2025.

The following is a summary of 2024 PA communications:

- A PA expiration letter for the signatories was sent on April 23, 2024
- An annual briefing and termination letter was sent on July 15, 2024

2.3 Mitigation Action Plan (MAP)

In accordance with the MAP (DOE 2014c), LM is required to submit an annual summary report of mitigation activities completed by ULP lessees. On January 19, 2025, the MAP activity summary report for 2024 was transmitted to the DOE Headquarters Office of National Environmental Policy Act (NEPA) Policy and Compliance. The document recorded that no activity had occurred during 2024.

A total of eight reclamation plans were submitted by two ULP lessees. None have been approved yet as review of the plans is ongoing. The actions proposed are for final reclamation and will involve ground disturbances; these proposed activities will require that mitigation measures be applied. With plan approval pending upon review, no mitigation activity work was performed in 2024.

2.4 Other Administrative Activities

2.4.1 Dolores River National Conservation Area and Special Management Area Act

The Dolores River National Conservation Area and Special Management Area Act is a bill that proposes designating portions of the Dolores River corridor that flows through the canyons of southwestern Colorado, parts of which include the ULP lease tracts, as the Dolores River National Conservation Area and the Dolores River Special Management Area. If passed, nothing in the bill would affect valid leases or lease tracts existing on the date of enactment.

The bill was introduced into the U.S. Senate on March 2, 2023, by Senator Michael Bennet of Colorado. It was then referred to the Committee on Energy and Natural Resources Subcommittee on Public Lands, Forests, and Mining and ordered to be significantly amended on December 12, 2023. An identical bill was introduced into the U.S. House of Representatives on March 10, 2023, by Representative Lauren Boebert of Colorado. This bill was referred to the U.S. House of Representatives Committee on Natural Resources Subcommittee on Federal Lands on April 14, 2023. There are no other updates to report regarding this bill through the year 2024.

2.4.2 Mining Regulatory Clarity Act

This bill sets forth a process to allow mine operations to use, occupy, and conduct operations (e.g., construction of roads and other mining infrastructure activity) on public land regardless of whether a mineral deposit has been discovered on the land. The bill was introduced into the U.S. Senate on April 25, 2023. It was then referred to the Committee on Energy and Natural Resources Subcommittee on Public Lands, Forests, and Mining on December 12, 2023. There are no other updates to report regarding this bill through the year 2024.

2.4.3 Clean Energy Minerals Reform Act

The Clean Energy Minerals Reform Act is intended to create a more sustainable mining future that protects special places, respects tribal consultation, and safeguards public health as the United States strengthens domestic supply chains for clean energy technologies. The bill proposes to modernize and reform the General Mining Law of 1872 (also called the hardrock mining law), which has remained virtually unchanged since its enactment. The bill was introduced into the U.S. Senate on May 18, 2023. It was then referred to the Committee on Energy and Natural Resources Subcommittee on Public Lands, Forests, and Mining on December 12, 2023. There are no other updates to report regarding this bill through the year 2024.

2.4.4 National Defense Authorization Act

On December 22, 2023, the U.S. Congress passed the National Defense Authorization Act, which included the Nuclear Fuel Security Act of 2023. The Nuclear Fuel Security Act of 2023 establishes several programs related to nuclear fuel security in the United States. It calls for the secretary of energy to establish a Nuclear Fuel Security Program to support domestic uranium production, as well as to expand the American Assured Fuel Supply Program and establish a new High-Assay Low-Enriched Uranium for Advanced Nuclear Reactor Demonstration Projects Program. It provides requirements for these programs regarding quantities of uranium, timelines, partnerships with allied countries, and limitations. It also addresses sourcing considerations and establishes a revolving fund for revenues from uranium sales. There are no other updates to report regarding this bill through the year 2024.

2.4.5 Mining Schools Act

The Mining Schools Act is a bill requiring DOE to establish a grant program to support domestic mining education. The bill aims to boost mining schools' ability to train, recruit, support studies, and fund research projects, authorizing \$10 million in technology grants to help strengthen domestic mining. Under the program, DOE must award up to 10 grants each year to mining schools for recruiting and educating mining engineers and other qualified professionals to meet future energy and mineral needs. The legislation was introduced by Senator John Barrasso of Wyoming on March 22, 2023, passed the Senate on July 10, 2024, and is currently waiting in the U.S. House of Representatives.

2.4.6 Good Samaritan Remediation of Abandoned Hardrock Mines Act

This bill promotes the remediation of abandoned hardrock mine sites by “good Samaritans.” A good Samaritan means a person that is (1) not a past or current owner or operator of the abandoned site; (2) had no role in the creation of the historic mine residue; and (3) is not potentially liable under any law for the remediation, treatment, or control of the historic mine residue (CRS 2025). The bill requires the U.S. Environmental Protection Agency (EPA) to establish a good Samaritan pilot program, where EPA may issue certain permits to allow good Samaritans to remediate historic mine residue at abandoned hardrock mine sites to protect human health and the environment without being subject to enforcement or liability under specified environmental laws for past, present, or future releases, threats of releases, or discharges of hazardous substances or other contaminants at or from the abandoned mine site (CRS 2025). The bill was introduced by Senator Martin Heinrich of New Mexico on

September 13, 2023, was passed through the U.S. Senate and the U.S. House of Representatives and was signed into law in December 2024.

2.4.7 Energy Permitting Reform Act

The Energy Permitting Reform Act is bipartisan legislation that is meant to strengthen American energy security by accelerating the permitting process for critical energy and minerals projects in the United States without bypassing important protections for the environment and impacted communities. The bill was introduced into the U.S. Senate on July 23, 2024, by Senators Joe Manchin of West Virginia and John Barrasso of Wyoming and was then referred to the Committee on Energy and Natural Resources and ordered to be significantly amended. On December 19, 2024, the bill was placed on the U.S. Senate Legislative Calendar under General Orders. Calendar No. 756.

2.4.8 Legacy Mine Cleanup Act

The Legacy Mine Cleanup Act is bipartisan legislation intended to hold the federal government accountable for improving the cleanup of abandoned hardrock mines that endanger the health and safety of wildlife, communities, and tribal nations. The bill was introduced by Senator Mark Kelly of Arizona on February 29, 2024, was passed in the U.S. Senate on April 15, 2024, and is currently waiting in the U.S. House of Representatives. If passed into law, the bill will accelerate the cleanup of abandoned mines, including Abandoned Uranium Mines (AUM), and broaden the ability for collaboration between federal agencies, industry, nonprofits, and others to protect people and the environment.

2.4.9 Strategic Uranium Reserve

The U.S. Congress allowed for \$75 million to be set aside in 2020 for the creation of a uranium reserve. In March 2022, the DOE National Nuclear Security Administration issued a solicitation to uranium producers to purchase up to 1 million pounds of domestically produced triuranium octoxide (U_3O_8). Two contracts were awarded in December 2022 to Energy Fuels Inc. (EFI) and Peninsula Energy Limited, a subsidiary Strata Energy Inc. (Strata). Production at EFI's three currently operating mines is planned to increase to 1.1–1.4 million pounds of U_3O_8 by late 2024, according to the company. Strata resumed production at its Wyoming in situ recovery operations in December 2024.

2.4.10 Program Outreach

Major highlights of ULP outreach activities in 2024 (by month) are outlined below:

- **February:** LM and Legacy Management Support (LMS) contractor personnel attended the Society for Mining, Metallurgy, and Exploration conference in Phoenix, Arizona.
- **June:** LM and the LMS contractor, supporting BLM, reviewed the preliminary draft for archaeological site assessment of the Burro Mines Complex on Lease Tract C-SR-13, for the purpose of designating the mine a historical site.

- **September:** In March 2024, ULP proposed revegetating two disturbed areas on private property in Lease Tract C-SR-13. After some correspondence, the landowners made the decision to not revegetate the proposed areas, and in September 2024, confirmation refusal letters were sent to the landowners.
- **October:** LM and LMS personnel participated in the 45th Annual Conference of the National Association of Abandoned Mine Land Programs in Canaan Valley, West Virginia.

2.4.11 Program Coordination with BLM

In January, LM and BLM were in communication related to their interagency agreement (IAA), the *Memorandum of Understanding Between the U.S. Bureau of Land Management and the U.S. Department of Energy* (BLM and DOE 2015), and upcoming activities for both agencies, setting a goal of updating the memorandum of understanding (MOU) by July 24, 2024. The MOU between BLM and DOE was fully updated, and the IAA was submitted in August 2024.

Also in January, LM and the LMS contractor continued to participate with BLM as a cooperating agency in the preliminary review of the *Uncompahgre Field Office Resource Management Plan Amendment*. Cooperation through meetings and reviews continued through July 2024, and by the beginning of August, the participating agency review was completed, and a ULP exclusion letter was sent to the BLM Uncompahgre Field Office (UFO) on August 8, 2024.

In June, there were continued BLM, LM, and LMS planning and communications concerning BLM's historical interpretive actions that intersect the ULP lease tracts. Included were discussions of the planned nomination of the Burro Mines Complex for the National Register of Historic Places and the Yellowcake Trail Uravan Mineral Interpretation Loop near the Radium Hill #10 mine on Lease Tract C-WM-17.

In early July, with continued cooperation, a Notice of Availability for the Gunnison sage-grouse Resource Management Plan amendment and Environmental Impact Statement was published and issued in the *Federal Register* (Volume 89 *Federal Register* pages 55655–55657 [89 FR 55655–55657]).

In October, BLM representatives from the Tres Rios Field Office and UFO participated in annual lease tract inspections.

2.4.12 Program Coordination with DRMS

In January, LM and LMS personnel met with DRMS to discuss various topics related to the ULP and to strengthen partner relationships between LM and DRMS. Some of those topics included: the status of lessee reclamation obligations, revegetation plans and requirements, lease tract and mine feature reclamation planning, and the Burro Tunnel water level monitoring of the Burro Mines Complex on Lease Tract C-SR-13.

In October, ULP personnel joined DRMS, BLM, and Gold Eagle Mining Inc. (GEMI) representatives during the annual field inspections of GEMI's permitted mining operations in both Montrose and San Miguel Counties. Members of the inspection team focused on GEMI's shifted reclamation deadline. It was anticipated that GEMI would submit technical revisions to DRMS before finalizing the site-specific reclamation plans to reflect current conditions.

In October, ULP personnel joined DRMS, BLM, and Highbury Resources Inc. (Highbury) representatives during the annual field inspections of Highbury's permitted mining operations in both Montrose and San Miguel Counties. Members of the inspection team focused on Highbury's ongoing reclamation activities.

2.4.13 Program Coordination with the Defense-Related Uranium Mines (DRUM) Program

In 2024, DRUM Program field teams were active on the ULP lease tracts. The DRUM Program's verification and validation efforts on the lease tracts resumed in 2024 with the start of Campaign 3 work on private property and the completion of its Campaign 1 project on the public land around the lease tracts. The ULP worked in coordination with DRUM Program personnel on several lease tracts.

DRUM Program closure work in 2024 focused on localities around the ULP lease tracts with two closure projects completed within the Lease Tracts C-WM-17 (Tract 2) and C-G-26.

In summer 2023, ULP located a subsidence during a cursory inspection on Lease Tract C-WM-17, and on August 23, 2024, through cooperation with the DRUM Program and DRMS, the Radium Hill 10 mine subsidence on Lease Tract C-WM-17 was closed. In November 2024, ULP personnel reseeded the disturbance with an approved seed mixture.

By November 2024, with cooperation between the DRUM Program and DRMS, 49 mine features were closed on 11 mine locations on Lease Tract C-G-26 using various methods.

2.4.14 Lease Agreement Execution

As the current 10-year lease agreements were executed in 2020, no additional leases were executed during 2024. LM has begun preparing updates to the lease agreements to be issued in the future.

2.5 Market Prices

The fair market value of lease tract ores per dry ton with average grades of 0.20% uranium and 1.20% vanadium, as calculated for production royalty purposes, began 2024 at \$471 per ton. The value rose to \$529 per ton in mid-January before steadily decreasing to \$401 per ton by late August. From September on, the price decreased slowly, finishing the year at \$375 per ton (Figure 2 and Figure 3).

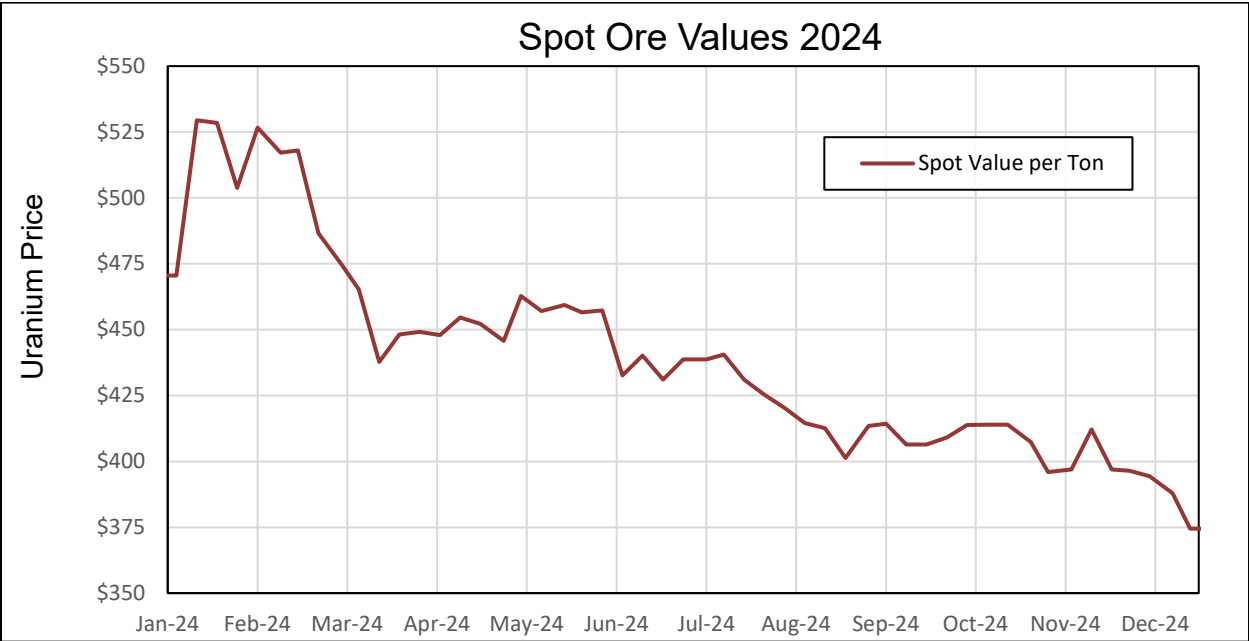


Figure 2. Spot Uranium Ore Values in 2024

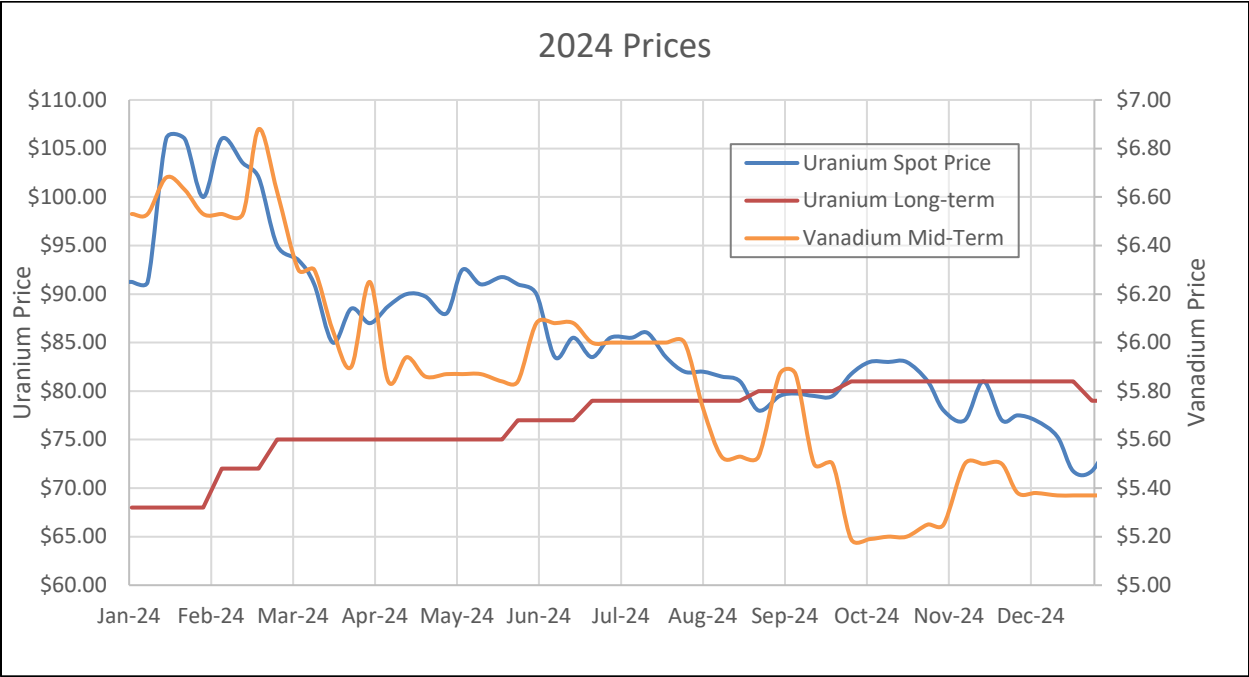


Figure 3. Uranium and Vanadium Prices in 2024

2.6 Programmatic Environmental Impact Statement (PEIS) Supplemental Analysis

In late 2023, LM initiated an effort to review the assumptions used to develop the preferred alternative (Alternative 4) from the 2014 *Final Uranium Leasing Program Programmatic Environmental Impact Statement* (DOE 2014a) (2014 PEIS). This review, completed in September 2024, was conducted to identify potential changes as required in accordance with: (1) DOE NEPA regulations (Title 10 *Code of Federal Regulations* Section 1021 [10 CFR 1021]), which state that DOE must evaluate site-specific NEPA documents at least every 5 years by means of a supplemental analysis (10 CFR 1021.330) and (2) the Council on Environmental Quality regulations on programmatic NEPA documentation and reevaluation, which state that an agency may rely on the analysis in a programmatic environmental document after 5 years so long as the agency reevaluates the analysis to ensure reliance on that analysis remains valid (40 CFR 1501.11[c][2]).

The original assumptions were evaluated in detail to identify changes to the current scope as defined for Alternative 4 in the 2014 PEIS (the preferred alternative), specifically in the areas of exploration drilling, employment, general costs, and mill capacity. Other assumptions from the 2014 PEIS were determined to still be valid and require no changes. The resource areas evaluated in the Argonne National Laboratory 2019 review of the 2014 PEIS (ANL 2019) were also reviewed for any regulatory updates that could affect the information within the 2014 PEIS.

The analysis found that no significant changes have occurred since preparation of the 2014 PEIS and that the assumptions used in the analysis for Alternative 4 remain valid. Impacts from exploration, mining, and reclamation operations would be addressed in project-specific NEPA reviews or reclamation plans for specific leases, as appropriate.

3.0 Field Operations

3.1 ULP Operations

ULP personnel conducted cursory inspections at least monthly as weather permitted access to the lease tracts. New subsidences typically develop during the winter or early spring on the lease tracts, primarily on legacy mine sites. Through the cursory inspections and annual formal inspections, hazardous features are identified within the lease tracts and temporarily mitigated by installing safety fencing around them to prevent the entrapment of humans, livestock, and wildlife. Three significant hazards were mitigated in 2023 through the program's maintenance and sustainment projects, while four remaining minor hazards were added to the hazard list that the ULP maintains and will be monitored, mitigated, and reclaimed in the future. In 2024, ULP personnel monitored previously recorded hazardous features and identified 10 new hazardous features on DOE lease tracts. Three of these features were temporarily mitigated with safety fencing and added to the ULP's maintenance and sustainment projects; the remaining seven were added to the hazard monitoring list. The annual formal inspection of permitted mining operations was conducted on October 2 and 3, 2024.

In the 2024 field season, ULP personnel continued the Burro Tunnel water level monitoring of the Burro Mines Complex on Lease Tract C-SR-13. Monitoring efforts and methods included

manual measurements using a 500-foot Skinny Dipper flat tape water level meter and the installation of two water level pressure transducers along with a barometer. The first transducer installation was at the Vent Shaft No.1 Burro Tunnel mine vent on January 17, 2024, and the second installation was at the Vent Shaft No.5 Burro Tunnel mine vent on April 24, 2024.

ULP staff have visited the mines, perform manual measurements, and download the data onto a field computer every 3 months. These devices increase the quantity and quality of the data for water level monitoring and provide insight into the mechanics of the groundwater system of the area.

In summer 2023, ULP personnel discovered a new subsidence on Lease Tract C-WM-17 Tract 2 at the Radium Hill 10 mine. The subsidence was a result of erosion from the previous winter season on a 2010 backfill of the inclined shaft. The ULP temporarily fenced the subsidence before permanent mitigations were completed.

Since the Radium Hill 10 mine produced uranium ore for the U.S. Atomic Energy Commission, the closure of the subsidence was eligible to be funded through the LM DRUM Program. Under the DRUM Program, funds are allocated to state agencies, in this case DRMS, to perform the design, bid, and oversight of the work. On August 23, 2024, DRMS and its contractor closed the subsidence, and an aluminum closure monument was installed at the subsidence with closure information. In November 2024, the ULP reseeded the disturbance with an approved seed mixture. ULP annual site visits will be conducted in the future to monitor revegetation and closure integrity.

3.2 Lessee Operations

As part of LM's mission of environmental stewardship, the ULP conducts oversight of lessee activities to stay apprised of current site conditions. Annual inspections were conducted in October 2024, while cursory inspections occurred throughout 2024 on all DOE lease tracts.

3.2.1 Highbury

In January 2024, Highbury, a subsidiary of Anfield Energy Inc. (Anfield), purchased Gold Eagle Mining Inc.'s (GEMI's) and Golden Eagle Uranium LLC's (GEU's) lease tracts assets. With the acquisition, Highbury currently controls 21 lease tracts: C-JD-5, C-JD-5A, C-JD-6, C-JD-7, C-JD-8, C-JD-9, C-SR-10, C-SR-11, C-SR-11A, C-SR-13, C-SR-13A, C-SR-15, C-SR-15A, C-SR-16, C-WM-17, C-SM-18, C-LP-21, C-LP-22, C-LP-22A, C-LP-23, and C-CM-25. During 2024, Highbury personnel performed routine maintenance activities at various mining operations to protect the company's financial investments and keep the sites secured in a physically safe and environmentally sound condition. These routine activities included inspecting site features and facilities (e.g., mine portals, ventilation systems, buildings, stormwater control structures) to determine if maintenance actions were required. In June 2024, a subsidence in the C-JD-7 mine adit about 15 feet behind the portal was noted; repairs are expected to be completed in early 2025.

In February 2020, Cotter Corporation (which novated its lease assignments and permitted mines to Highbury in July 2020) advised DRMS that it was voluntarily placing its permitted mines into reclamation status. On October 19, 2021, DRMS requested that Highbury submit a schedule for final reclamation. Highbury responded to this request with a schedule on November 3, 2021, outlining reclamation activities that would begin in spring 2022 and would be completed by

fall 2024. In spring 2024, Highbury, through its contractor BRS Engineering Inc., submitted *Uranium Leasing Program Lessee Environmental Checklist* forms (LM-Form-4-20-22.0) (checklists) for final reclamation of its permitted mines associated with the lease tracts. LM and the LMS contractor worked with BRS Engineering to achieve finished checklists throughout the year and submitted the draft checklists for agency review in December 2024.

In May 2024, Highbury requested a hearing before the Colorado Mined Land Reclamation Board for an extension of its reclamation responsibilities. In August 2024, the Colorado Mined Land Reclamation Board extended its reclamation deadline to March 1, 2030.

In July 2024, DOE, Highbury, and BRS Engineering held a meeting to discuss the need to update Highbury's reclamation bonds. The bond values were set in 2014 and have not been updated since. Based on input from BRS Engineering, DOE elected to change its approach from revising the 2014 bond estimate to a simpler inflationary adjustment of the 2014 estimates. DOE requested that Highbury adjust its bonding accordingly and submit proof by early 2025.

In September 2024, Anfield began drilling for its Slick Rock uranium and vanadium project in San Miguel County, Colorado, after approval of its 20-hole, 20,000-foot rotary drill program with Tri-Park Corporation, a local drilling contractor. These drilling activities occurred outside of the ULP lease tracts.

3.2.2 GEMI

In January 2024, GEMI entered into an asset transfer agreement with Highbury for the purchase of the GEMI lease tracts. The assignment of the lease agreements was approved by LM on July 3, 2024. GEMI controlled three lease tracts (C-JD-5, C-SR-13, and C-SR-15) until July 2024, when GEMI's agreement with Highbury was executed. According to the agreement, GEMI still retains responsibility for the reclamation obligations on its previously controlled lease tracts until the reclamation plans are completed. During 2024, GEMI personnel conducted noxious weed control treatments throughout the lease tracts.

On June 1, 2020, LM issued a letter in response to GEMI's previously submitted reclamation plans. During a joint field inspection with LM, the LMS contractor, and DRMS in July 2020, it was determined that GEMI's reclamation plans were deficient and would need revision to better reflect current ground conditions.

In a letter dated June 29, 2021, DRMS determined that the reclamation on GEMI's lease tracts is to be completed by March 18, 2024. On March 22, 2022, GEMI submitted reclamation plans to DOE for review and approval. On May 11, 2022, LM relayed that the reclamation plans submitted by GEMI were incomplete and required additional revision as well as a completed checklist for the reclamation work proposed at each permitted mine site.

On August 22, 2023, LM sent a letter requesting an update on the status and details of the reclamation to be performed in accordance with the Colorado DRMS letter and the response to LM's letter dated May 11, 2022, regarding LM's comments on the reclamation plans submitted by GEMI. On December 14, 2023, LM issued a Notice of Potential Lease Cancellation letter stating that LM had not received revised reclamation plans or any indication of intentions to submit them and that, if the required reclamation work is not completed by the due date and the Colorado Mined Land Reclamation Board finds GEMI in violation of the Colorado Mined Land

Reclamation Act (*Colorado Revised Statutes* 34-32-101 et seq. [CRS 34-32-101 et seq.]), pertinent regulations, or the approved permit, then LM would assess whether to take further action in accordance with ULP lease Article XXII, “Cancellation of Lease.”

On December 27, 2023, GEMI submitted revised reclamation plans for its three mines permitted by Colorado DRMS. GEMI also submitted the checklist for the reclamation work proposed at each permitted mine site in early 2024. LM and the LMS contractor worked with GEMI and its consultants on these checklists throughout 2024 and submitted the draft checklists for agency review in September 2024. GEMI is continuing to work through technical constraints as of the end of 2024.

In July 2024, GEMI requested a hearing before the Colorado Mined Land Reclamation Board for an extension of its reclamation plans, which was granted in August 2024, extending the deadline for reclamation to October 1, 2025.

3.2.3 GEU

GEU controlled nine lease tracts (C-JD-5A, C-LP-22, C-LP-22A, C-LP-23, C-SR-10, C-SR-11A, C-SR-15A, C-SR-16, and C-WM-17) until July 2024, when the agreement with Highbury was executed. GEU has not maintained active operations on any of these lease tracts. In January 2024, GEU entered into an asset transfer agreement with Highbury for the purchase of the GEU lease tracts. This assignment of the lease agreement was approved by LM on July 3, 2024.

3.2.4 CUR

CUR controls eight lease tracts: C-AM-19, C-AM-19A, C-AM-20, C-CM-24, C-G-26, C-G-27, C-SR-12, and C-SR-16A. CUR does not maintain active operations on any of its lease tracts. On November 27, 2023, CUR announced that it completed a spin-out of its assets to its subsidiary, Premier American Uranium Inc. The assignment of the lease agreements was approved by LM on October 25, 2024.

3.3 Milling Operations

3.3.1 White Mesa

During 2024, the White Mesa Mill, owned and operated by EFI, announced commercial production of the separated neodymium-praseodymium (NdPr)-producing rare earth elements (REEs), stockpiling of vanadium pentoxide (V_2O_5) and U_3O_8 from alternate feed material and newly mined ore. In December 2023, EFI began production at three of its permitted uranium mines in Arizona and Utah and is preparing two more mines in Colorado and Wyoming for production. Material produced from the three permitted mines is currently being stockpiled at White Mesa Mill until such time that sufficient material is accumulated to justify a mill campaign. Processing is expected to occur in 2025.

The mill also processes monazite, which contains both uranium and REEs. During 2024, EFI also made progress in the development of various projects in Brazil, Madagascar, and Australia which could provide sources of monazite sand for the recovery of REE oxides along with the contained uranium.

In 2023, EFI began planning for modifying and enhancing the mill's existing solvent extraction circuits to be able to produce separated REE oxides. By late March 2024, Phase 1 modifications and enhancements were completed so that the mill was set to produce roughly 800 to 1000 metric tons (MT) of recoverable separated NdPr oxide per year and to increase the amount up to 4000 to 6000 MT per year by 2027, with Phase 2.

EFI reported in November 2024 that it would continue advance permitting and other predevelopment activities on its large-scale Roca Honda, Sheep Mountain, and Bullfrog uranium projects in 2024, including preparing its Nichols Ranch in situ recovery project in Wyoming and the Whirlwind mine in Colorado, all of which could expand the company's uranium production to a run rate of up to 5 million pounds of U₃O₈ per year in the coming years.

White Mesa Mill is the only current fully licensed and operating conventional uranium mill in the United States.

3.3.2 Shootaring Canyon

In 2023, following the completion of the reactivation proposal, Anfield widened its engagement of Precision Systems Engineering to incorporate an updated plan for increasing the Shootaring Canyon Mill's throughput to 1000 tons per day from 750 tons per day and expanding the mill's licensed uranium production capacity to 3 million pounds per year from its current 1 million pounds per year plan.

In 2024, Anfield reported that it had submitted its production reactivation plan for the Shootaring Canyon Mill to the State of Utah's Department of Environmental Quality, updating the mill's radioactive materials license from standby to operational.

In May 2024, Anfield submitted a plan of operation to the State of Utah for the Velvet-Wood mine to position itself for production ahead of the restart of the Shootaring Canyon Mill. Anfield also announced in July that it had received an affirmative completeness review of the restart application, and following the approval of the mill refurbishment, the company will be well positioned to restart uranium production and begin vanadium production in 2026. In September 2024, Anfield began a 20-hole, 20,000-foot rotary drill program at its Slick Rock uranium and vanadium project in San Miguel County, Colorado. Anfield plans to align the development timelines of both the Slick Rock and Velvet-Wood mines to be ready for production before the restart of the Shootaring Canyon Mill, with initial feed ready for transport once the mill is ready.

The Shootaring Canyon Mill is one of three licensed, permitted, and constructed conventional uranium mills in the United States.

3.4 Physical Safety Hazards and Environmental Issues

3.4.1 Hazards

Over the last several years, ULP personnel have identified multiple physical safety hazards on several lease tracts. A list of action items has been compiled and will continue to be updated as needed. The hazards will likely be addressed by the ULP or the DRUM Program or by the respective ULP lessees through reclamation in lieu of royalties (RILOR) in the future.

Throughout 2024, the ULP continued monitoring the 2023 ULP maintenance and sustainment projects, which involved the closure of seven hazardous abandoned mine features and six additional small subsidences. In the 2024 field season, ULP personnel identified three new abandoned mines features and seven small subsidences on DOE lease tracts. The three notable features include:

- A shaft subsidence approximately 20 feet in diameter and 40 feet deep.
 - The ULP is conducting initial site surveys in anticipation of a punctual closure.
- An adit closure failure approximately 15 feet in diameter and 15 feet deep.
 - This feature will be included in an upcoming DRUM Program closure project.
- A subsidence 3 feet by 5 feet and about 20 feet deep.
 - This feature will be included in an upcoming DRUM Program closure project.

All hazardous features are added to the ULP maintenance and sustainment projects system for mitigation planning. Several of the features found in 2024 had temporary fences installed to exclude human and wildlife ingress. Through cooperative efforts between LM, the LMS contractor, the DRUM Program, and DRMS, hazardous feature closures and planning will continue on the lease tracts in 2025.

The seven small subsidences were documented and will continue to be monitored into 2025. Other hazards identified in previous years were monitored and exhibited little change in size or condition. ULP personnel will continue temporarily mitigating the features by installing safety fencing as necessary.

3.4.2 Noxious Weeds

ULP lessees are responsible for controlling noxious weeds on their lease tracts in accordance with state law. GEU and GEMI conducted treatments in 2023 and completed pesticide application forms to document their herbicide use. In 2024, only GEMI and GEU conducted herbicide treatments to control noxious weeds on the lease tracts under their control.

Since 2011, LM has coordinated with the Dolores River Restoration Partnership (DRRP), a group of public and private entities whose main purpose is to treat and remove tamarisk and other noxious weeds along the Dolores River riparian corridor and restore the area with native species. LM has been a signing partner of the DRRP MOU since 2015 and, on January 16, 2021, renewed its partnership by signing an updated MOU with 19 other partners (DOE 2021).

Approximately 4 miles of the Dolores River flow through Lease Tracts C-SR-13 and C-SR-14. ULP ecologists have overseen and monitored the success of these weed control and restoration efforts on the lease tracts annually for the last 11 years. Success criteria for revegetation along the Dolores River riparian corridor were achieved in 2022 (DOE 2023), and the scope of monitoring changed from a quantitative approach to a qualitative approach. Weed control efforts have shifted from a maintenance-level approach to a monitoring-level approach. In 2023, the ecology team suggested splitting the Dolores River riparian corridor in the lease tract area into three distinct parts, one to be treated annually and each to be sprayed every 3 years. However, in 2024, with the change in monitoring methods, ecologists now recommend continuing photo

monitoring, collecting species lists, and performing biocontrol assessments annually, ensuring that success criteria will continue to be met and that any issues are identified early (DOE 2025).

4.0 References

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