

# **2023** ANNUAL HISTORICAL SUMMARY

Managing Today's Change, Protecting Tomorrow's Future





### **Cover/Inside Cover Photo**

- **Cover:** Applied Studies and Technology Lead Chris Jarchow (left) along with Legacy Management Site Managers Ken Kreie (center) and Mary Young (right) interact with a student at the 2023 American Indian Science and Engineering Society Conference in Spokane, Washington, in October.
- **Inside cover:** The Navajo Nation Outreach team presents at the "Diné People Are the Future" STEM event at Leupp Elementary School in Leupp, Arizona, on Feb. 1.

The robotics team from Coconino High School in Flagstaff, Arizona, sponsored the event. About 60 students and their parents attended. LM Support Partners Kayla Bia and Shine Salt demonstrated Newton's laws of motion using the hands-on activity, Newton's Balloons. The experiment uses toy cars and races balloons to demonstrate the interaction between force, mass, acceleration, and gravity.

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# PURPOSE OF THIS DOCUMENT

This document records significant accomplishments achieved by the U.S. Department of Energy Office of Legacy Management during calendar year 2023. Any data reflected by the fiscal year (as opposed to the calendar year) is noted throughout the document. Budget information identified in this document reflects the fiscal year, which began Oct. 1, 2022, and ended Sept. 30, 2023.

Annual historical summaries highlight a selection of the many activities LM performed during calendar years. They also offer information about recent work LM did. Future historians and researchers can use the summaries to place LM's activities into larger contexts, such as the history of DOE.

# **OVERVIEW**

DOE has responsibilities associated with the legacy of contamination from World War II and the Cold War. DOE established LM on Dec. 15, 2003, to fulfill the department's post-closure responsibilities by providing long-term surveillance and maintenance, records management, benefits continuity, property management, and land use planning. At the end of calendar year 2023, LM managed 102 legacy sites in 29 states and Puerto Rico.

In addition to stewardship responsibilities at legacy sites, LM maintains five radiometric calibration facilities and manages the Uranium Leasing Program and the Defense-Related Uranium Mines program. LM also incorporates improvements in scientific understanding and technology applications through the Applied Studies and Technology program and manages the LM Business Center Records Storage Facility, which is a certified National Archives and Records Administration repository.

LM worked with primary support contractor RSI EnTech, LLC during 2023.

# LM MISSION STATEMENT

Fulfill the Department of Energy's post-closure responsibilities and ensure the future protection of human health and the environment.

# **LM VISION**

Our vision is to ensure:

- The Department's legacy workforce, communities, and the environment are well protected and served.
- Consistent and effective long-term surveillance and maintenance protects people and the environment.
- The public has easy access to relevant records and information.
- Because we work together, stakeholders, tribal nations, and state and local governments trust us.
- The Department safeguards former contractor workforce retirement benefits through prudent, timely funding.
- People are treated fairly and have meaningful involvement.

James V. Forrestal Building, Washington, D.C.



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# LM GOALS AND OBJECTIVES

### Goal 1

# Protect Human Health and the Environment



- Comply with environmental laws and regulations related to radioactive and hazardous waste and materials.
- Improve cost effectiveness while reducing postclosure-related health risks.
- Improve the long-term sustainability of environmental remedies.
- Address the environmental legacy of defenserelated uranium mining and milling sites.
- Transition new sites to LM in a safe, timely, and cost-effective manner.

### Goal 2

### Preserve, Protect, and Share Records and Information



- Protect and maintain legacy records and information.
- Make technology solutions more efficient, relevant, and accessible to the LM stakeholder and user communities.
- Preserve the Yucca Mountain Project science and information.

## Goal 3

### Safeguard Former Contractor Workers' Retirement Benefits



- Ensure prudent funding of former contractor workers' retirement benefits.
- Shelter former contractor workers' retirement benefits from risks.

## Goal 4

### Sustainably Manage and Optimize the Use of Land and Assets



- Enhance sustainable environmental performance for facilities and personal property and address severe weather events.
- Optimize the use of federal lands and properties.
- Transfer excess government real and personal property.

# Goal 5

#### Sustain Management Excellence



- Ensure LM sites are safe and secure for federal and contractor personnel, regulators, and the general public.
- Develop and maintain high standards for planning, budgeting, acquisition, and program and project management.
- Sustain a talented, diverse, inclusive, and performance-driven workforce.
- Improve the quality, efficiency, and effectiveness of site management and business support actions.

### Goal 6

### Engage the Public, Governments, and Interested Parties



- Engage the public in our program, project, and site activities.
- Work effectively with local, state, and federal partners; nonprofit organizations; international organizations; and other countries.
- Consult, collaborate, and partner with tribal nations.
- Support development of the Manhattan Project National Historical Park.
- Implement Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, within LM. Review the Executive Order here: www.archives.gov/files/federalregister/executive-orders/pdf/12898.pdf.



# **Goal 1: Protect Human Health and the Environment**

# **Comprehensive Environmental Response, Compensation and Liability Act and Resource Conservation and Recovery Act**

L M currently manages sites where remediation was done in compliance with the Comprehensive Environmental Response, Compensation, and Liability Act and Resource Conservation and Recovery Act regulations. The sites were radiologically or chemically contaminated by federal milling, processing, research, or weapons manufacturing operations. Congress passed CERCLA Dec. 11, 1980, and passed RCRA Oct. 21, 1976.

In September, LM received the signed Record of Decision Amendment for Operable Unit 1 of the **Mound, Ohio, Site** near Dayton, Ohio, from U.S. Environmental Protection Agency Region 5. EPA's signature demonstrates its approval for shifting the groundwater remedy from active pump-and-treat. Review the Record of Decision here: Impublicsearch. Im.doe.gov/LMSites/Amendment%20to%20the%20 Record%20of%20Decision%20for%20Operable%20 Unit%201%20of%20the%20Mound%20Site,%20 Mound,%20Ohio,%20Site.pdf.

On Nov. 7, LM drilled two new extraction wells to replace six existing wells that are nearly 30 years old and have reached their end of life at the Fernald Preserve, Ohio, Site.

#### The Weldon Spring Site, Missouri,

and the **Fernald Preserve, Ohio, Site** had stand downs to strengthen privacy and security protocols for all employees and contractors. The stand downs focused on handling privacy violations and reviewing current security requirements, policies, and procedures.

On Aug. 8, **Energy Secretary Jennifer Granholm** visited the Weldon Spring Site, Missouri. Granholm toured the interpretive center and met with Congresswoman Cori Bush and LM Director Carmelo Melendez.

In August, field staff moved from temporary office space into a **new, on-site modular office building** at the **Fernald Preserve, Ohio, Site**. Relocating off-site staff to on-site offices provides a more efficient and effective workspace that supports the site's ongoing long-term stewardship mission. The project also includes construction of an adjacent garage and lab building. The lab and garage are used by the Environmental Monitoring organization to house its field equipment and provide a location to prepare and store environmental samples.



Energy Secretary Jennifer Granholm (front row, third from the left) visiting the Weldon Spring Site, Missouri.



# Formerly Utilized Sites Remedial Action Program

L M conducts long-term stewardship at sites that participated in the Manhattan Project and early U.S. Atomic Energy Commission nuclear energy projects. Under FUSRAP, the U.S. Army Corps of Engineers completes site cleanup and transfers site management to LM for long-term care.

In April, LM met with USACE, the New York State Department of Environmental Conservation Region 9, and the town of Tonawanda to discuss final **Tonawanda Landfill** transition and long-term stewardship activities. The site is anticipated to transfer from USACE to LM in FY 2024.

In May, LM attended the USACE Buffalo District's public meeting in **Carnegie, Pennsylvania**, about the proposed plan for the **Superior Steel Corporation** property, also known as the Carnegie site. The site is anticipated to transfer to LM in FY 2027.

In July, LM submitted the first long-term periodic review for the Colonie Site to the New York State Department of Environmental Conservation. The soil and groundwater remedies are functioning as planned. Review the long-term stewardship plan here: Impublicsearch.Im.doe.gov/sitedocs /colonie%20pd%20012.pdf.

In July, LM toured five **USACE active FUSRAP sites in the northeast** and met with stakeholders, regulators, and local officials. They visited the W.R. Grace at Curtis Bay Site in Maryland; the DuPont Chambers Works, the Maywood Chemical Superfund Site and the Middlesex Sampling Plant in New Jersey; and the Sylvania Corning Plant and the Staten Island Warehouse in New York.  LM discussed reuse opportunities for the Middlesex Sampling Plant in New Jersey with representatives from the New Jersey Department of Transportation, Bergen County, and the borough of Middlesex. They also spoke about how to proceed with the realignment of New Jersey Route 17, which impacts the FUSRAP Maywood Chemical Superfund Site in New Jersey.

On July 25, LM Director Carmelo Melendez and USACE Chief, Environmental Division, Lara Beasley signed the joint information transfer and transition protocol for FUSRAP. Review the protocol here: www.energy.gov/sites/default/files/2023-08 /S20093\_Joint\_USACE.pdf.

In October, LM accompanied USACE for the five-year site visit reviews of FUSRAP sites in the St. Louis, Missouri, area. The visits gave LM insight about USACE remediation activities and provided valuable information about future stewardship needs for each site once it transfers to LM.

On Oct. 10, the **Covenant Deferral Request** for the Formerly Utilized Sites Remedial Action Program Middlesex Sampling Plant in New Jersey was approved by the EPA Regional Administrator, Region 2.

 The CDR, signed by New Jersey Governor Philip Murphy and EPA Region 2, includes the Finding of Suitability for Early Transfer for the site. The CDR allows an expedited property transfer to the borough of Middlesex for economic reuse consistent with the Public Benefit Conveyance under 40 USC §553.



U.S. Army Corps of Engineers Philadelphia District personnel guide a tour of the DuPont Deepwater Site in New Jersey during a visit to the North Atlantic District in July 2023.

On Oct. 25-26, members of LM and USACE met at the LM Operations Center in Westminster, Colorado, for the eighth annual **Formerly Utilized Sites Remedial Action Program** meeting. The annual meeting gives LM and USACE the chance to discuss interagency working groups, site transfers, opportunities for improvement, and much more. Interagency collaboration is key to FUSRAP's success.



# Uranium Mill Tailings Radiation Control Act

n February, LM installed six aerial-survey qualitycontrol monuments at the **Falls City, Texas, Disposal Site**. The monuments provide a geographically consistent point of reference for maintaining survey control and ensuring the quality of future terrestrial and aerial surveys.

In April, LM partnered with Chris Yazzie, a Ph.D. candidate in chemical engineering at the University of Arizona, to field-test a passive biochemical reactor to treat contaminated groundwater at LM's **Tuba City**, **Arizona, Disposal Site**.

In May, LM visited the **Ray Point, Panna Maria, and Conquista Texas Title II sites** in coordination with the Texas Commission on Environmental Quality. LM, TCEQ, and licensees discussed outstanding regulatory challenges to transition the sites to DOE, final site configurations, and LM's plans for upcoming survey and ecological work at the sites.

In September, LM and the U.S. Army Corps of Engineers, Omaha District, met at the



One of the six aerial-survey quality-control monuments at the Falls City, Texas, Disposal Site.

#### Legacy Management Field Support Center in

Grand Junction, Colorado, to discuss collaboration efforts during a hypothetical emergency response scenario. LM has an agreement with the Rapid Response Technical Center of Expertise to increase and improve LM's response capability and capacity during critical situations, ensuring sites protect human health and the environment.

On Sept. 22, LM renewed its cooperative agreement for the next six years with the Navajo Nation Division of Natural Resources Abandoned Mine Lands Reclamation/Uranium Mill Tailings Remedial Action Department. This cooperative agreement provides funds to the Navajo UMTRA program to support four LM-managed sites located on or near the Navajo Nation.

On Sept. 26, LM met with the U.S. Nuclear Regulatory Commission and U.S. Environmental Protection Agency Region 6 to discuss remediation progress at the Homestake-Grants Site in New Mexico. A major groundwater remediation effort, overseen by NRC, is taking place at the site. EPA also has oversight authority at the site under the Comprehensive Environmental Response, Compensation, and Liability Act. Homestake Mining Company is responsible for site cleanup. The site will transfer to LM for long-term stewardship once remediation is complete.

LM meeting with the U.S. Nuclear Regulatory Commission and U.S. Environmental Protection Agency Region 6 near Grants, New Mexico.



LM upgraded the solar power systems at the Rifle, Colorado, Disposal Site to increase system efficiencies during winter operations.



In October, LM upgraded the solar power systems at the Rifle, Colorado, Disposal Site to increase system efficiencies during winter operations. This critical system maintains regulatory compliance and operates remote telemetry equipment that assesses real-time conditions. The Rifle site is off-grid and relies on solar power to operate its systems.

In October, LM finished burying pore water extraction system pipelines below the frost level at the Rifle site. Pore water is the pressure exerted by groundwater held in rock and soil. This measure prevents damage from freezing conditions and animals. The pipelines transmit pore water from the disposal cell to the on-site evaporation pond and are a critical component to maintain regulatory compliance at the site.

LM presented at the annual **Nuclear Regulatory Commission Agreement State Training** on Nov. 13-14. The presentation included discussions about Bureau of Land Management land withdrawals, challenges with abandoned uranium mine waste disposal, and a Uranium Mill Tailings Radiation Control Act Title II sites transition update.

From Dec. 4 through February 2024, LM made site improvements to the gross decontamination area at the **Grand Junction, Colorado, Disposal Site**. Site improvements include new elevated platforms in the gross decontamination area, two decontamination pumps, and a fill-hose locking mechanism on the building.

# Plowshare/Vela Uniform Program

On Sept. 26-28, LM met with U.S. Army Corps of Engineers Fort Peck Dam and Lake personnel and Montana Fish and Wildlife Services staff before visiting the **Pre-Gondola and Trencher, Montana, Site** located near Fort Peck.

# **Nevada Offsites**

n June, LM and a support team conducted environmental sampling and post-closure monitoring at the **Amchitka, Alaska, Site**. The team's primary objectives for the 18-day trip were collecting water and biota samples to make sure marine foods are safe to eat; determine if contaminant migration from underground nuclear test cavities is occurring; and inspect disposal cell caps that contain drilling mud.

In July, a team from LM traveled to the **Chariot**, **Alaska, Site** and installed four institutional-control markers to prevent drilling or digging in areas where Project Chariot placed test holes. Part of the Plowshare Program, Project Chariot planned to use nuclear devices to excavate a harbor. Ultimately the U.S. Atomic Energy Commission terminated the project and no devices were ever brought to the site. Installing the markers was LM's final task to fulfill remaining closure commitments with the Alaska Department of Environmental Conservation.

On Oct. 23-27, LM and support partners from the state of Mississippi's Forestry Commission and Department of Health collected groundwater and surface water samples for the periodic monitoring program at the **Salmon, Mississippi, Site**. During the sample collection, LM and LMSP met with the U.S. Bureau of Land Management and the Mississippi State Oil and Gas Board to verify that oil and gas activities near the site remain compliant with institutional controls so the site will continue to protect people and the environment.



## **Defense-Related Uranium Mines**

The Defense-Related Uranium Mines program is a partnership between DOE, federal landmanagement agencies, state abandoned mine lands programs, and tribal governments to inventory, sample, and safeguard uranium mines that provided ore for the nation's nuclear weapons complex.

As of Dec. 31, 2023, in collaboration with partner agencies, the DRUM program has facilitated safeguarding 878 hazardous features since beginning safeguarding work in 2020 to protect the health and safety of members of the public who may encounter dangerous mine features.

In January, the DRUM team completed the program's **2,000th mine-specific report**. This was a significant milestone, as it represents reporting on 85% of the abandoned mines on public land.

Since 2017, the DRUM team has completed verification and validation of 2,256 Campaign 1 mines on public lands and 63 Campaign 2 mines on tribal lands. This leaves 73 Campaign 1 mines and 146 Campaign 2 mines for V&V.

- In March, the DRUM program resumed fieldwork on the Navajo Nation.
- In April, teams inventoried mines in Utah's Canyonlands National Park and on U.S. Bureau of Land Management and state lands in Arizona and Nevada.
- In June, three teams inventoried mines in Arizona, Utah, and Wyoming on NPS, BLM, Bureau of Reclamation, and state lands.
- In July, teams inventoried mines in Wyoming, North Dakota, and Montana on BLM, U.S. Forest Service, and state lands.
- In August, teams inventoried mines in Arizona on the Navajo Nation, BLM, and state lands and in Wyoming on BLM and state lands. August marked the start of inventorying mines on the Navajo Nation every other week, as requested by the Navajo Abandoned Mine Lands program.
- In September, teams continued inventorying mines in Arizona, Nevada, Wyoming, and Colorado on BLM, USFS, Navajo Nation, and state lands.
- In October, teams continued the field season by inventorying mines across Utah, Nevada, Wyoming, New Mexico, and Oregon on NPS, USFS, Navajo Nation, and BLM lands.

 In November and December, the DRUM team completed the 2023 field season by inventorying mines in California, New Mexico, Wyoming, Arizona, Nevada, and Colorado on USFS, BLM, Navajo Nation, and mixed-ownership lands.



LMSP DRUM Field Team Lead Zack Schuler records data for a closed (backfilled) adit at the Chester Mud 1 mine in Arizona.



A DRUM field team member crosses a wash during spring runoff near Red Wash mine on the Navajo Nation in New Mexico.

Scan the QR code with a mobile phone or visit www.energy.gov/lm/defenserelated-uranium-mines-program to view a map of DRUM sites.

Click "Program Development and Progress" to see the map.



# Decontamination and Decommissioning

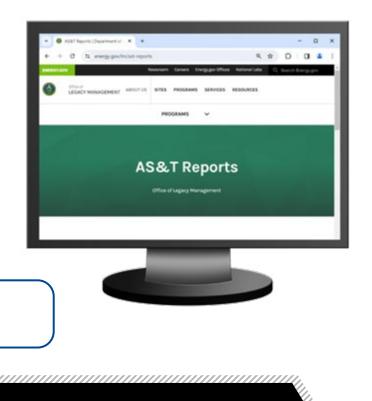
n July, LM completed demolishing the former reactor dome at the **Piqua**, **Ohio**, **Decommissioned Reactor Site**. Crews separated steel and concrete rubble for processing and recycling. Additionally, the state of Ohio accepted Piqua's application for the Ohio Historical Marker program. This is part of fulfilling DOE's obligations under a memorandum of agreement with the State Historic Preservation Office. Out of the 53 applications submitted this year, LM's application was one of 22 accepted, adding to the ways the site will be remembered.

In November, LM finished fieldwork at the Piqua site. The final work included placing an engineered cover; paving over the former site; and adding protective rail barriers, fencing, and landscaping.

# **Applied Studies and Technology**

The AS&T program has a critical role in LM's mission to fulfill DOE's post-closure responsibilities and ensure the future protection of human health and the environment. The goal of AS&T is to incorporate advances in science and technology to enhance stewardship activities.

Review AS&T reports here: www.energy.gov/lm /ast-reports.



Piqua, Ohio, Decommissioned Reactor Site.

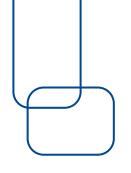
















# **Program Milestone**

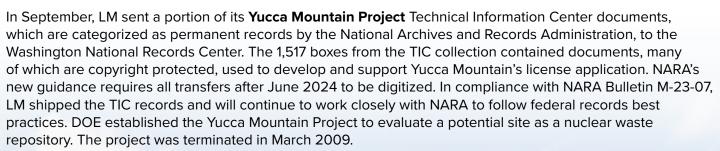
Was established on Dec. 15, 2003, and celebrated its 20th anniversary on Dec. 6 at DOE Headquarters in Washington, D.C. LM Director Carmelo Melendez addressed attendees and thanked current and former workers for contributing two decades of post-closure work toward DOE's cleanup mission. DOE Office of Environmental Management Senior Advisor William "Ike" White and LM Technical Director for Long-Term Stewardship Tania Smith Taylor also spoke during the celebration. DOE Deputy Secretary David Turk congratulated LM in a virtual appearance.

- The celebration was broadcast to all LM field offices.
- Attendees included representatives from the U.S. Army Corps of Engineers, the U.S. Environmental Protection Agency, the U.S. Nuclear Regulatory Commission, and the Energy Communities Alliance.

## **Goal 2: Preserve, Protect, and Share Records and Information**

### **Archives and Information Management**

The Archives and Information Management team continued to ensure LM records are properly maintained and protected.



Legacy Management Business Center in Morgantown, West Virginia.

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### **Goal 3: Safeguard Former Contractor Workers' Retirement Benefits**

# **Benefits**

The Legacy Management Post-Closure Benefits Program includes the development, implementation, and oversight of the Department's policy concerning the continuation of contractor pension and medical benefits after the closure of applicable DOE sites and facilities. This includes oversight of the administration and management of legacy contractor benefits in a fiscally responsible and effective manner. The primary program objective is to ensure a seamless transition of benefits administration after closure. This program is handled by the Office of Business Operations within LM.

As of 2023, there are more than 7,850 participants, including spouses, covered under retiree medical plans.

Mound, Ohio, during the operational era, circa 1974.

## Goal 4: Sustainably Manage and Optimize the Use of Land and Assets

# **New Site**

O n Oct. 24-30, the U.S. Nuclear Regulatory Commission finalized its Environmental Assessment for acceptance of the **Split Rock**, **Wyoming, Disposal Site** (Uranium Mill Tailings Radiation Control Act Title II) Long-Term Surveillance Plan. NRC informed the Wyoming Department of Environmental Quality it completed the review of WDEQ's Completion Review Report proposing the termination of the Wyoming Source Material License held by Western Nuclear Incorporated at the Split Rock site on Oct. 30. On Nov. 13, the Split Rock site became LM's 102nd site and is managed under the Uranium Mill Tailings Radiation Control Act.

Review the Environmental Assessment here: www.nrc.gov/docs/ML2323/ML23236A452.pdf.



Ribbon-cutting ceremony for a newly installed zipline at Las Colonias Park in Grand Junction, Colorado.



# **Beneficial Reuse**

n January, the U.S. General Services Administration transferred property ownership of the FUSRAP **Colonie, New York, Site** to Asian Center Mall, LLC. The new owner purchased the property at auction for \$2.15 million in May 2022.

• LM retains ownership of the groundwatermonitoring well network until the long-term monitoring program ends, which is estimated to be 2035.

On Aug. 15, LM joined city officials and stakeholders from the city of Grand Junction for a ribbon-cutting ceremony for a newly installed zipline at **Las Colonias Park**, previously the site of the Climax Uranium Mill. As part of the Grand Junction, Colorado, Disposal and Processing Site, LM manages the long-term stewardship for Las Colonias Park.

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# **Uranium Leasing Program**

The Uranium Leasing Program facilitates responsible life-cycle mining activities and provides a domestic supply of uranium and vanadium important to U.S. national and energy security. The ULP can be traced back to the U.S. Atomic Energy Commission's Mineral Leasing Program, which was created in 1948 to facilitate a domestic uranium supply.

During 2023, no active mining was performed and no proposals for active mining were received.

In January, program lessees Gold Eagle Mining, Golden Eagle Uranium, and Consolidated Uranium, Inc., submitted their **2023 royalty payments** in full, which were \$30,100, \$74,400, and \$108,600, respectively. LM forwards the annual royalty payments to the Office of the Chief Financial Officer for deposit in the U.S. Treasury General Account.

In November, LM's ULP lessee, Highbury Resources, Inc., completed reclamation activities at several lease tracts in southern Colorado. This included removing scrap metal and debris from permitted mines through the Colorado Division of Reclamation, Mining, and Safety.

On Nov. 30, LM's Uranium Leasing Program completed maintenance on two sediment basins and addressed thirteen emerging safety and environmental hazards, including open shafts, adits, and subsidence issues on legacy lands. These deficiencies were discovered during leasetract inspections and affected areas outside the lessees' responsibilities. Operations stopped on Nov. 30 before wildlife restrictions began Dec. 1.

Scan the QR code with a mobile phone or visit www.energy.gov/lm /uranium-leasing-program to learn more about ULP.













### **Goal 5: Sustain Management Excellence**

Members of LM's DRUM team prepare for a site visit in summer 2022.

Secretary, U.S. Department of Energy
Program Awards and Recognition

n January, the DRUM team was awarded a Secretary of Energy Achievement Award for its outstanding achievements in locating and assessing more than 1,500 mines and working with federal and state partners in safeguarding nearly 400 mines that pose a risk to human health and the environment.

 The Secretary of Energy Achievement Award is given to individuals and teams who make substantial achievements outside their normal duties.

In May, the U.S. Environmental Protection Agency chose the Middlesex South, New Jersey, Site for the sixth annual National Federal Facility Excellence in Site Reuse Award. The site, also known as the Middlesex Sampling Plant, won the award in the Superfund National Priorities List category.

• The award recognizes the accomplishments of federal agencies, states, tribes, local partners, and developers that restore and reuse contaminated land at federal facilities.

LM attended the EPA's sixth annual National Federal Facility Excellence in Site Reuse Awards ceremony in October. LM was part of a team honored for beneficial reuse of the Middlesex Sampling Plant site in New Jersey. Other members of the multiagency team honored at the ceremony included the borough of Middlesex Claremont Development, EPA Region 2, the U.S. Army Corps of Engineers, the New Jersey Department of Environmental Protection, and the U.S. General Services Administration.

Jennifer M. Granholm

The award recognized the outstanding team efforts that supported the reuse and restoration of the federal facility site into a new borough of Middlesex Department of Public Works and Office of Emergency Management.



Middlesex South, New Jersey, Site.

On July 27, LM won an Electronic Product Environmental Assessment Tool Purchaser Award

from the Global Electronics Council for the ninth straight year. This award recognizes an organization's excellence in obtaining sustainable electronic equipment. This year, LM received the EPEAT award for its purchases in two categories: computers and displays and imaging equipment.



On Aug. 9, Beneficial Reuse Asset Manager Diana Kamenel Trettin accepted a **2023 Phoenix Award** from the U.S. Environmental Protection Agency for Las Colonias Park in Grand Junction, Colorado, at the National Brownfields Training Conference in Detroit, Michigan. As part of the Grand Junction, Colorado, Disposal and Processing Site, LM manages the long-term stewardship for Las Colonias Park. The award recognizes extraordinary projects in brownfield redevelopment.

# **Collaborative Efforts**

n February, LM served as presenters, panelists, and exhibitors at the **2023 Waste Management Symposia** in Phoenix, Arizona.

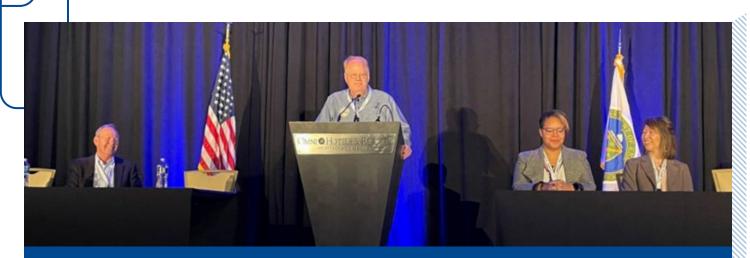
- LM leadership participated in an Energy Community Alliance panel to discuss best practices for transitioning sites to long-term stewardship.
- LM co-sponsored STEM activities that support local elementary schools and university-level conference attendees.



In April, LM attended the Henshaw Wetland groundbreaking ceremony in Butler County, Ohio. The ceremony was for the Henshaw Wetland Project, which was funded in part by the **Fernald Preserve** Natural Resource Trustees Settlement Fund. The fund was established by DOE as part of CERCLA Natural Resource Damage at the Fernald Preserve. The project is part of Paddys Run Conservation Project and will convert 11.2 acres of active farmland and natural areas into a wetland. The project will increase wildlife habitat, reduce stormwater runoff, and help protect the Great Miami Buried Valley Aquifer.

From left standing: STEM with LM Coordinator Shawn Montgomery; LMSP Writer and Editor Kristina Snyder; LM Asset Management Supervisor Bud Sokolovich; and LMSP Beneficial Reuse Lead Vail Nazzaro. Kneeling: LM Beneficial Reuse Asset Manager Diana Kamenel Trettin.





LM Operations Director Jay Glascock (middle) and LM Support Program Manager Stephen Browning (left) welcomed attendees at the opening session of the 37th Emergency Management Issues Special Interest Group Annual Meeting at the Omni Interlocken Hotel in Broomfield, Colorado, April 25.

In April, LM and LMSP co-hosted the **37th DOE Emergency Management Issues Special Interest Group Annual Meeting** in Broomfield, Colorado. DOE established the group in 1986 to include all phases of emergency management mitigation, preparedness, response, and recovery. It provides a collaborative network of experienced emergency management professionals across the DOE enterprise. The meeting was sponsored by the National Nuclear Security Administration and the theme was "Evolving with the Hazards: Climate, Vulnerability, Resiliency, and Sustainability."

In June, LM attended EPA's second **Abandoned Uranium Mine Waste Workshop Update** in Albuquerque, New Mexico. The multi-agency and regulator workshop was at the Southern Pueblos Agency of the Bureau of Indian Affairs with DOD, DOE, EPA, DOI, and USDA in attendance as well as regulators from the four corner states, Navajo Nation, and Pueblo of Laguna. Federal agencies updated participants about their progress to identify potential waste disposal options and invited feedback from state and tribal partners.

In June, LM attended the U.S. Department of Labor's Division of **Coal Mine Workers' Compensation** outreach events in Arizona and New Mexico for current or former coal miners and their survivors. The outreach events featured multiple speakers and uranium and coal mining compensation information booths that helped eligible Navajo Nation members apply for federal benefits.

LM employees supported the **14th annual Feds Feed Families food drive**. Collectively, LM donated more than 5,300 pounds of food.

In November, LM co-presented virtually with the U.S. Environmental Protection Agency at the **Center for the Remediation of Complex Sites 2023 Global Summit on Environmental Remediation**, organized in cooperation with the International Atomic Energy Agency at Pacific Northwest National Laboratory. The biennial summit brought together academic, government, industry, and research institutions. LM presented "Challenges in Transition from Cleanup to Long-Term Stewardship at Sites." They discussed the importance of preplanning and collaborating with cleanup organizations and their stakeholders to facilitate site transitions.



LM leaders gather food collected during the campaign for West Virginia University Cancer Institute and food pantry.

# National Laboratory Network Collaboration

n January, LM received the final *Climate Change Risk and Resilience Assessment Project for the U.S. Department of Energy Office of Legacy Management* report from Lawrence Berkeley National Laboratory. The report confirmed LM sites are expected to experience increased maximum air temperatures and extreme rain frequency and severity through 2099.

#### Review the document here: www.energy.gov /sites/default/files/2023-08/Final%20LM%20 Climate%20Resiliency\_Jan\_17\_2023.pdf.

In April, LM received the final recommendation report from the Network of National Laboratories for Environmental Management and Stewardship team for the **Rifle, Colorado, Disposal and Processing Site**. The team had several short- and long-term recommendations for LM to consider incorporating into the planned site activities.

On Dec. 13, LM visited the Savannah River National Laboratory to discuss future work plans and engagements with other national labs.

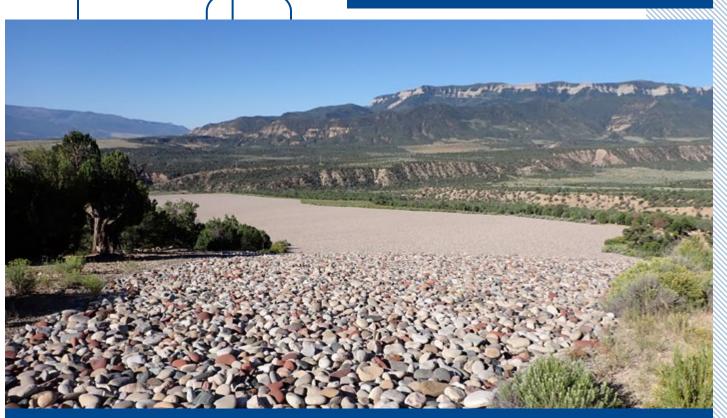
# **International Collaborative Efforts**

n February, LM hosted **Atomic Energy of Canada, Limited, and Canadian Nuclear Laboratories** at LM's Grand Junction, Colorado, sites to discuss mutual long-term stewardship challenges.

 The discussions compared waste-disposal properties near Port Hope with LM's mill tailings management at the Grand Junction, Colorado, Disposal and Processing Site.



LM hosted visitors from Atomic Energy of Canada, Limited, and Canadian Nuclear Laboratories in Grand Junction, Colorado, in February.



Rifle, Colorado, Disposal Site.

In April, LM hosted **Dr. Maria de Lurdes Dinis**, a professor of environmental engineering from Portugal's University of Porto, for part of her sabbatical leave in the United States to continue her study of former uranium processing and disposal sites throughout the world.

In May, the **LM technical director for long-term stewardship** participated in two International Atomic Energy Agency working group meetings in Vienna, Austria. The Regulatory Supervision of Legacy Sites working group is developing a first draft of best practices for long-term post-remediation care.

In May, an LM representative attended the **International Atomic Energy Agency's international symposium** on Uranium Raw Material for the Nuclear Fuel Cycle and presented on the DOE Uranium Leasing Program. The presentation addressed statutory authorities for the program, history, environmental stewardship, U.S. market for domestic uranium status, and challenges faced by ULP lessees.

In May, LM participated in the **International Atomic Energy Agency's** Consultancy Meeting on Drafting the IAEA publication on the **Use of Controls for Radioactively Contaminated Land**. The meeting focused on the international experience of IAEA member states in the practical application of controls at radioactively contaminated sites requiring restricted release for reuse.

 LM presented on its approach to stewardship, supporting beneficial reuse at sites, and understanding liability management postsite transfer.

On July 25, LM visited the disposal mound at Port Granby, Clarington, Ontario, to exchange ideas and share knowledge about post-remediation management of uranium mill tailings and processing sites. Just like many LM sites, the **Port Hope project** has a history of uranium mining and processing that requires uranium mill tailings cleanup.

On Sept. 25-29, LM gave the keynote address about its sustainable approach to long-term stewardship and maintenance at the **WISSYM 2023 International Mining Symposium** (organized in cooperation with the International Atomic Energy Agency) in Dresden, Germany. This year's theme was "Rethinking Rehabilitation Mining — Innovative approaches on the Road to Sustainability." Additionally, LM gave presentations about its Applied Studies and Technology program, Defense-Related Uranium Mines inventory campaigns, and sustainable reuse and development of Las Colonias Park in Grand Junction, Colorado.



LM Technical Director for Long-Term Stewardship Tania Smith Taylor (second from right) participated in two International Atomic Energy Agency working group meetings in Vienna, Austria, in early May. David Shafer (third from left), who recently retired from LM, joined Taylor at one of the meetings.

In October, LM partnered with the DOE Office of Environmental Management to coordinate the Organization for Economic Cooperation and Development's working group called **Stakeholder Involvement in Decommissioning and Legacy Management**. The OECD Nuclear Energy Agency group assists its international members in developing and maintaining environmentally safe and economical use of nuclear energy for peaceful purposes through cooperation.

The group visited the Fernald Preserve, Ohio, Site, a remediated production site now managed by LM, and the Portsmouth Gaseous Diffusion Plant, which is currently undergoing remediation by EM. The countries attending were the United States, Belgium, Canada, Czech Republic, Finland, France, Germany, Italy, Japan, Norway, Romania, Sweden, and Switzerland. On Dec. 12, LM presented at the third **in situ decommissioning workshop** sponsored by the International Atomic Energy Agency in Ottawa, Canada. Attendees included DOE, Atomic Energy of Canada, Canadian Nuclear Laboratories, the UK Nuclear Decommissioning Authority, contractors, and regulatory authorities. LM provided status information on its decommissioned and decontaminated sites, more specifically about the recent Piqua Demolition Project.

# LM DIRECTOR'S TRAVEL

- **February:** Waste Management Symposia, Phoenix, Arizona.
- March: Bluewater, Ambrosia Lake, Rio Algom, and Church Rock Sites near Grants, New Mexico; Pueblo of Acoma, New Mexico; Window Rock, Arizona.
- **April:** Piqua, Mound, and Fernald Preserve, Ohio, Sites.
- **May:** Bannister Federal Complex, Kansas City, and Weldon Spring Site in Missouri; Legacy Management Operations Center in Westminster, Colorado.
- June: Idaho National Laboratory.
- July: Rio Blanco and Rulison, Colorado, Sites; Gunnison and Rifle, Colorado, Disposal and Processing Sites; HECLA-Durita and UMETCO-Uravan Sites in Colorado; St. Louis Downtown Site; and Weldon Spring Site, Missouri.

- August: Various LM sites in New Mexico, Utah, and Arizona; Weldon Spring Site, Missouri; BONUS, Puerto Rico, Decommissioned Reactor Site; El Verde, Puerto Rico, Site, and Culebra Island FUDS Site, Puerto Rico; and the postretirement benefits workshop in Arizona.
- **September:** Homestake-Grants Site, New Mexico; Legacy Management Business Center in Morgantown, West Virginia.
- October: Middlesex Sampling Plant, New Jersey.
- November: State and tribal government working group and intergovernmental meeting in Minneapolis, Minnesota; Fernald Preserve near Cincinnati; Legacy Management Field Support Center in Grand Junction, Colorado; Legacy Management Operations Center in Westminster, Colorado.
- **December:** National Lab Network at the Savannah River Site in South Carolina.

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Philip C. Leahy set up what is now LM's Grand Junction office while working on the Manhattan Project and later served as the site's manager under the U.S. Atomic Energy Commission.



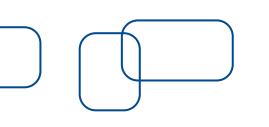
# **Employee Awards and Recognition** Philip C. Leahy Award Winners

n June, LM honored five LM employees with the **Philip C. Leahy Award** and recognized Contract Manager and Procurement Analyst **Obiajulum "Obi" Diei-Anene** as Employee of the Year.

- LM recognized Diel-Anene for "her experience, tenacity, and passion that she brings every day that makes her an outstanding leader and team player who clearly knows how to lead from any chair."
- Additional Philip C. Leahy Award winners were Ken Kreie, Lisa Saurborn, Ian Shafer, and Kathleen Whysner.
- Established in 2017, Leahy Awards recognize LM employees who demonstrate the qualities of outstanding team players.

In February, LM awarded Records and Information Management Specialist **Giancarlo Deguia** a Certificate of Superior Service for coordinating employee donations for the 2022 Combined Federal Campaign.

• Under Deguia's leadership, LM increased donations 153% over last year's campaign, raising more than \$9,500.





LM Director Carmelo Melendez and LM Contract Manager and Procurement Analyst Obi Diei-Anene outside the Idaho National Laboratory in Idaho Falls, Idaho. LM honored Diei-Anene with the 2023 Philip C. Leahy Employee of the Year award.



LM Director Carmelo Melendez awarded Records and Information Management Specialist Giancarlo Deguia a Certificate of Superior Service. In January, DOE **Chief Historian Eric Boyle** received a 2022 Secretary's Honor Award for his contribution to the DOE Office of Environment, Health, Safety, and Security Per- and Polyfluoroalkyl Substances Policy Development Team.

- Boyle researched historical PFAS use at DOE sites across the nation.
- The annual Secretary's Honor Awards are among the highest forms of internal recognition for DOE's federal and contractor employees and recognizes those who go above and beyond in service to the country and making lasting impacts on the Department and the country.





Greg Cummings accepting Federal Member of the Year award.



Cody Dye accepting two awards on behalf of two functional teams.



NPS employee Angel Barker accepting certificate of appreciation from LM Office Manager Paul Kerl.

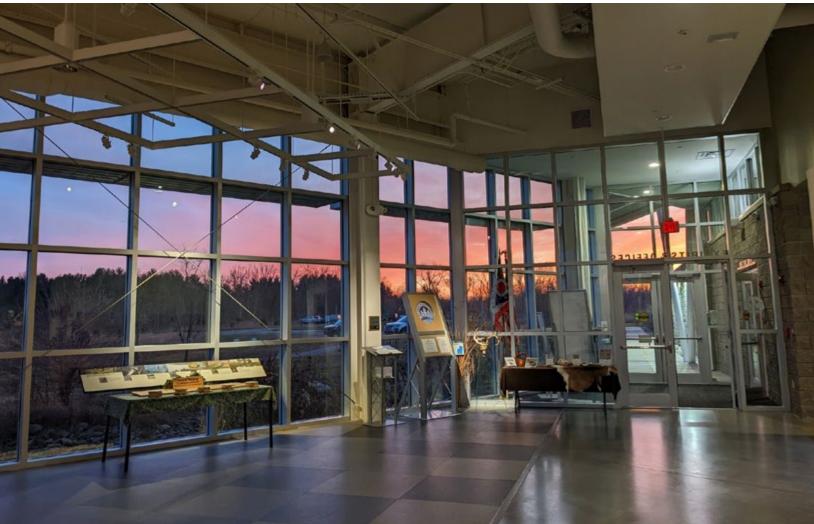
In April, **Greg Cummings** was selected as the **Federal Member of the Year** at the 37th Emergency Management Issues Special Interest Group Annual Meeting. LM coordinated this DOE-wide event with the Western Area Power Administration and the National Renewable Energy Laboratory.

In April, **Cody Dye**, the LMSP Emergency Management program off-site response interface coordinator, **accepted two awards** on behalf of two functional teams in the Subcommittee for Emergency Management Planners during the closing session of the 37th Emergency Management Issues Special Interest Group Annual Meeting.

- Dye was a member of the Emergency Management Resource Working Group developing and promoting the emergency management resource library and database that was selected "Working Group of the Year."
- He also earned "Task Group of the Year" honors with the Comprehensive Emergency Management System's rewrite task group. The group developed a process to obtain contractor feedback for the upcoming DOE Order 151.1D rewrite. The order establishes departmental policy and assigns roles and responsibilities for emergency management.

On Aug. 9, LM Office Manager Paul Kerl awarded a certificate of appreciation to National Park Service employee Angel Barker for her interagency support. Since 2021, Barker has helped LM employees and support staff obtain their personal identity verification cards, enabling them to access LM facilities and computer networks. LM Director Carmelo Melendez created the award that LM presented to Barker. On Sept. 22, DOE Environmental Justice Program Manager Melinda Downing attended the Environmental Justice Braintrust of the Congressional Black Caucus in Washington, D.C. U.S. Rep. James E. Clyburn and other special guests conducted a briefing panel called "Advancing Equity and Nuclear in a Carbon-Free Future." Representative Clyburn awarded Downing a Proclamation of Honor for years of dedicated service to environmental justice.





In April, LM Support Partner Luree Ketcham was one of the winners of the 2023 DOE "Invest in our Planet" Earth Day photo contest. Her submission, "Fernald Preserve Visitors Center at Sunset," won the Energy Efficiency category. The photo shows a view to the west from the atrium of the visitors center, which is the first Leadership in Energy and Environmental Design platinum-certified building in Ohio. On Oct. 18, LM Environmental Compliance, Safety and Health, and Quality Assurance Team Lead **Tracy Ribeiro** and LMSP Environmental Management System Coordinator **Mary Sizemore** received the Lifetime Achievement 2023 Department of Energy Sustainability Award at DOE's Sustainability Summit in Washington, D.C., for their work as sustainability champions.



Members of the DOE Sustainability Performance Office present Tracy Ribeiro (right) with the DOE Sustainability Lifetime Achievement Award.

# **Appointments**

n January, **Tania Smith Taylor was appointed to LM technical services director**. In this position, she focuses on incorporating advances in science

and technology into LM's long-term

surveillance and maintenance efforts



and other activities; improves collaborations with national laboratories, universities, and other agencies; and oversees LM's international programs.

In January, Scott Whiteford was appointed LM deputy director.

Prior to this appointment, Whiteford worked in the DOE Office of Asset Management, where he managed policy oversight and guidance in real estate, facilities, infrastructure, personal property, and sustainability.

In February, LM Program Records Official Edwin "Doc" Parks was promoted to director of the Office of Business Operations. His new responsibilities include managing LM's records and information technology, post-closure and retiree





benefits continuity, real and personal property programs, and financial and contracting programs.

# **New Employees**

**November 2023 as an LM-22** team site manager. She obtained a bachelor's degree in geological engineering from the Colorado School of Mines in 2017.



Previously, she worked as a geotechnical engineer for Tetra Tech in Denver, Colorado, for four years in the dams group. The work included designing new dams and dam rehabilitation projects and planning and implementing drilling and dam construction projects at various sites in Colorado.

Most recently, she was the LMSP site lead for the Rifle, Colorado, Disposal and Processing Sites and the Mexican Hat, Utah, Disposal Site. A Colorado native, Michelle enjoys hiking and cooking.

Andrew R. Kapaldo joined the LM Archives and Information Management team as an IT specialist in July 2023. Kapaldo's experience with the LM team began in 2019 as an information management



specialist, where he worked as an LM Help Desk technician on the Legacy Management Support contract. Kapaldo holds a Bachelor of Science degree in cybersecurity and information assurance from Western Governors University. Outside of work, Kapaldo volunteers with the local wilderness search and rescue team, looking for lost and missing children and adults and performing technical rope rescue.

**Candice Long**'s experience with LM began in 2019, when she started as a technical writer for LM's Defense-Related Uranium Mines program on the LMS contract. In October 2023, she joined the DRUM team (LM-23) as a project manager in



Grand Junction, Colorado. Long holds a Bachelor of Science in geology with a minor in geographic information systems from Colorado Mesa University. Her prior professional experience includes consultant work evaluating coal mine and coal-bed methane resources and designing degasification systems for them. Additionally, she maintained GIS property and utility information for local government agencies. Jennifer O'Brien's experience with the U.S. Department of Energy Office of Legacy Management began in 2019 when she provided National Environmental Policy Act and



site-specific Legacy Management support on the LMS contract. Since then, O'Brien has supported the Burro Mines Complex reclamation project in Colorado, the Shiprock Evaporation Pond Decommissioning Project and Environmental Assessment at the Shiprock, New Mexico, Disposal Site, and the U.S. Bureau of Land Management withdrawal EAs. She also helped finalize the NEPA Handbook.

After 20 years as a NEPA specialist and environmental planner for other federal agencies, O'Brien started a new chapter with LM in February 2023. At this career stage, she brings vast experience integrating project planning and implementing with environmental considerations and regulatory requirements.

**Paige Schwarz** is the Defense-Related Uranium Mines program project manager for LM. In this role, she collaborates and coordinates with stakeholders to close hazardous abandoned-mine



openings, supporting LM's mission to protect human health and the environment. Schwarz also manages DRUM's database, which includes mine site information. Her job includes safeguarding abandoned uranium mines while preserving native habitats for wildlife.

Prior to joining DRUM, Schwarz worked on groundwater and waste disposal monitoring, remediated real property beneficial reuse, and on other LM-mission tenets for DOE's contract with RSI EnTech. She worked as a lead for Uranium Mill Tailings Radiation Control Act Title II sites and was also a DRUM field team lead and ecologist for three years.

**G** wendolyn R. Smalls joined LM as a public affairs specialist in Grand Junction, Colorado, in June 2023. Smalls has traveled around the world and gained a variety of expertise, giving new meaning to



the term jack-of-all-trades. With more than 40 years of federal public service, including nearly 20 years in the U.S. Navy, she has worked as an air-traffic controller,

Navy journalist, equal employment opportunity specialist, and public affairs and community relations specialist and manager. If you hear a burst of laughter on-site at the office, it's most likely Smalls amusing those around her with her comedy.

# LM Interns and Fellows

L M recognizes the importance of interns in the workplace. The four 2023 summer interns were Elyssa Baker, Shawn Cameron, Alexis-Marie Parrish, and Kennalee Rowley.

On Nov. 8, LM staff attended an induction ceremony at Florida International University for 12 fellows -10 from EM and two from LM — into the Science and Technology Workforce Development program. In 1995, DOE formed a cooperative partnership with FIU that led to the creation of an applied research center to support development, testing, and deployment of environmental cleanup technology at DOE sites. This program was designed to create a pipeline of engineers specifically trained and mentored to enter the DOE workforce in areas of technical need. Starting in fiscal year 2020, LM began supporting two DOE fellows each year. This year LM's fellows were Daniel Coelho and Valeria Ocampo. Shawn Cameron won DOE-FIU Fellow of the Year.

# COVID-19

n 2023, LM continued its response to the COVID-19 pandemic and ensured its sites remained protective of human health and environment by updating its COVID-19 Response and Recovery Plan and COVID-19 Office and Field Job Safety Analyses, based on changes in federal, state, and local guidance. LM began returning to the office while coordinating with regulators, stakeholders, and tribal partners under various postures.

On May 11, the COVID-19 Public Health Emergency declaration ended. LM and LMSP staff were invited to work at least half their time in the office.

Alexis-Marie Parrish, MES intern, measures vegetation height on the cover of the Grand Junction, Colorado, Disposal Cell.

### LM Organizational Chart as of Jan. 1, 2023

### LM 1

C. Melendez, Director

#### LM 2

Vacant, Deputy Director M. Downing, Environmental Justice Program Manager P. Poole-Shirriel, Management Analyst A. Finelli, Management and Program Analyst

#### Education, Communication, History, and Outreach Team — LM 3

D. Von Behren, Supervisor K. Holmes, Senior Communications Analyst P. Benson, Program Analyst S. Montgomery, Public Participation Specialist E. Boyle, Historian C. Jost, Program Communications Specialist

#### Office of Business Operations — LM 10

T. Smith Taylor, Deputy Director T. Collins, Business Operations Specialist R. Rogers, Program Analyst O. Diei-Anene, Procedure Analyst

#### Archives and Information Management Team — LM 11 E. Parks, Supervisor

R. Walker, IT Specialist R. King, Correspondence Specialist K. Brown, IT Specialist G. Deguia, Records/Information Management Specialist
B. Coleman, IT Specialist
A. Kenney, IT Specialist
Q. Clyburn, Program Analyst
A. Moore, IT Specialist

J. Austin, Project Controls Analyst A. Sigala, Budget Analyst

D. Hill, Budget Analyst

#### Financial, Audits, and Contracts Services Team – LM 12 I. Colbert, Supervisor

- J. Chinkhota, Financial Analyst L. Paulino, Budget Analyst
- J. Murl, Project Controls Analyst

#### Asset Management Team — LM 13 B. Sokolovich, Supervisor

Steckley, Physical Scientist
Johnson-Freeman, Program
Analyst
Saurborn, General Engineer
Kamenel Trettin, Physical Scientist
Chester, Realty Specialist





#### Office of Site Operations — LM 20

J. Glascock, Deputy Director D. Tan, EPS Site Operations M. Kautsky, Hydrologist

#### UMTRCA/NVOS Team — LM 21 P. Kerl, Supervisor

J. Dayvault, General Engineer A. Denny, General Engineer W. Frazier, General Engineer K. Kreie, Physical Scientist S. Woods, Physical Scientist

C. Boger, Physical Scientist

- M. Hurt, Physical Scientist N. Keller, General Engineer
- J. Tallbull, Physical Scientist
- S. Pitton, General Engineer
- N. Olin, Physical Scientist
- M. Young, Physical Scientist

#### RCRA/CERCLA/FUSRAP Team — LM 22 C. Carpenter, Supervisor

- D. Castillo, General Engineer
- M Lutz, Physical Scientist
- A. Keim, Physical Scientist
- T. Drake, General Engineer
- B. Zimmerman, Physical Scientist
- A. Kuhlman, General Engineer S. Eichelberger, Physical Scientist
- K. Whysner, General Engineer
- R. Roberts, Physical Scientist

#### Uranium Mine Team — LM 23 G. Clark, Supervisor

C. Denton, Physical Scientist I. Shafer, Physical Scientist W. Burns, Physical Scientist P. Schwarz, Physical Scientist

### ESHQ Group — LM 24

#### T. Ribeiro, Supervisor J. Damiano, Quality Assurance J. Chavez, E

J. Chavez, Environmental Protection Specialist J. O'Brien, Physical Scientist

B. Stewart, Industrial Hygienist

Specialist

### LM Organizational Chart as of Dec. 26, 2023

### **LM 1**

C. Melendez, Director

#### LM 2

S. Whiteford, Deputy Director M. Downing, Environmental Justice Program Manager T. Smith Taylor, Technical Director A. Finelli, Chief of Staff

#### **Education, Communication, History,** and Outreach Team — LM 3

#### D. Von Behren, Supervisor

K. Holmes, Sr Communications Analyst C. Jost, Public Participation Specialist E. Boyle, Historian P. Benson, Program Analyst S. Montgomery, Program Analyst

G. Smalls, Public Affairs Specialist

#### **Office of Business Operations – LM 10**

E. Parks, Director R. Rogers, Operations Manager T. Collins, Business Operations Coordinator O. Diei-Anene. Contract Administrator

#### Archives and Information Management Team — LM 11 **B. Walker, Supervisor**

- A. Kenney, IT Specialist
- B. Coleman, IT Specialist
- K. Brown, IT Specialist
- A. Moore, IT Specialist
- G. Dequia. Records/Information Specialist R. King, Correspondence Specialist A. Kapaldo, IT Specialist

#### Financial, Audits, and Contracts Services Team — LM 12 I. Colbert, Supervisor

- J. Chinkhota, Financial Analyst
- J. Murl, Project Controls Analyst
- L. Paulino, Budget Analyst
- D. Hill, Budget Analyst
- J. Austin, Project Controls Analyst A. Sigala, Budget Analyst

#### Asset Management Team — LM 13 **B. Sokolovich, Supervisor**

D. Kamenel Trettin, Physical Scientist

K. Chester, Realty Specialist

G. Cummings, Facility and

E. Holland, Property Management Specialist

**Emergency Manager** 

- B. Akers, Industrial Prop Manager D. Steckley, Physical Scientist
  - C. Johnson, Program Analyst

P. Robinson, Realty Specialist

- L. Saurborn, General Engineer



#### Office of Site Operations — LM 20

J. Glascock, Director D. Tan, Operations Manager M. Kautsky, Physical Scientist

#### UMTRCA/NVOS Team — LM 21 P. Kerl, Supervisory General Engineer

- J. Dayvault, General Engineer B. Frazier, General Engineer
- C. Boger, Physical Scientist N. Keller, General Engineer
- K. Kreie, Physical Scientist N. Olin, Physical Scientist M. Hurt, Physical Scientist
- A. Denny, General Engineer J. Tallbull, Physical Scientist
- S. Woods, Physical Scientist
- S. Pitton, General Engineer
- M. Young, Physical Scientist

#### CERCLA/RCRA/FUSRAP/D&D Team — LM 22 C. Carpenter, Supervisory General Engineer

- A. Kuhlman, Physical Scientist
- D. Castillo, General Engineer
- A. Keim, Physical Scientist T. Drake, General Engineer
- M Lutz, Physical Scientist R. Roberts, Physical Scientist
- B. Zimmerman, Physical Scientist
  - K. Whysner, General Engineer

#### Uranium Mining and Special Projects Team - LM 23 G. Clark, Supervisory General Engineer

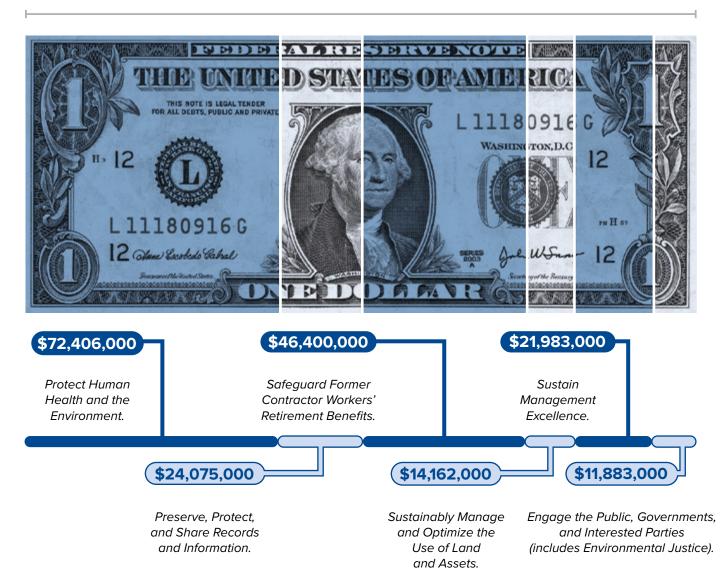
- W. Burns, Physical Scientist/ Technical Lead
- I. Shafer, Physical Scientist C. Long, Physical Scientist
- P. Schwarz, Physical Scientist
- ESHQ Team LM 24

#### T. Ribeiro, Supervisory Env Protection Spec

- B. Stewart, Industrial Hygienist J. Damiano, Quality Assurance Specialist
- J. Chavez, Environmental **Protection Specialist** J. O'Brien, Physical Scientist

### 2023 Program Budget

# Total Legacy Management Budget: \$190,909,000



### Fiscal Year 2024 LM Budget Request

n March, LM rolled out its fiscal year 2024 budget request of about \$196 million, about the same as its FY 2023 request and about \$5 million more than the enacted FY 2023 budget. The request included more than \$72 million for long-term surveillance and maintenance activities and more than \$7 million for environmental justice activities.

The request also calls for more than \$46 million for legacy benefits, more than \$24 million for archives and information management, more than \$21 million for program direction, more than \$14 million for asset management, and more than \$4 million for communications, education, and outreach.

# Goal 6: Engage the Public, Governments, and Interested Parties

### **Departmental Programs**

L M is responsible for three key Departmental programs: the DOE History Program, the Environmental Justice program, and the Manhattan Project National Historical Park, known as MAPR.

#### **DOE History Program**

As the source of the Department's institutional memory, the History Program provides historical information and services, supports the DOE Federal Preservation Officer, and offers subject matter expertise for DOE's historical records and reference material.

The History Program provided continued support to program elements outside LM, including more than **85 requests for historical services from more than 30 DOE programs and offices.** 

DOE's chief historian provided support and review of historic preservation issues in response to more than **55 requests** from **DOE offices and laboratories, the Ewa Community in Hawaii, Rhode Island Historical Preservation and Heritage Commission**, and the **Advisory Council on Historic Preservation**.

DOE's chief historian provided historical services in response to more than **75 requests** from **consulting firms**, **science organizations**, **academia**, **authors**, **filmmakers**, **utility managers**, **museums**, **archaeological programs**, **historic preservation partners**, **students**, and **members of the public**.

DOE's chief historian delivered presentations on the history of DOE for a variety of audiences in 2023, including LM's new employee orientation series, the EMI-SIG annual meeting, the CFO's financial management training, the Office of Science's webinar series FY Science, the Beryllium Health and Safety Committee Meeting, the Building Technologies Office Meeting, and the Former Worker Medical Screening Program biannual meeting.

DOE's chief historian served as membership coordinator for the Society for History in the Federal Government and attended monthly executive council meetings.

In June, DOE's chief historian attended the Society for History in the Federal Government annual meeting and delivered a presentation titled, **"On a Mission to Uncover Secrets from the Past: The Story Behind the Curious Origins of Forever Chemicals."**  In June, DOE's chief historian established a DOE-wide **History Programs Community of Practice** and organized and led five meetings throughout the rest of 2023. The chief his along with staff who provide historical se discussed the direction of key historical se



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throughout the rest of 2023. The chief historian, along with staff who provide historical services, discussed the direction of key historical functions and best practices in the areas of historic preservation, oral histories, and collection.

In October, the chief historian compiled the final draft of the 160-plus page triennial **EO 13287 Preserve America Section 3 report**. Section 3 of EO 13287 establishes an accountability system to gauge agency implementation of the mandates of the National Historic Preservation Act and the Executive Order.

On Dec. 15, in honor of its 20th anniversary, the Office of Legacy Management debuted its **first podcast**. The first episode features **DOE Chief Historian Eric Boyle**, who transferred to LM in 2020. In the podcast, Boyle explains why LM was created and highlighted events that led to its inception.

During 2023, DOE's chief historian also completed a detail with the Office of Environment, Health, Safety and Security, where he supported the effort to evaluate DOE's history, historic preservation, and cultural resources management programs.

LM Historian on a Mission to

Uncover Secrets from the Past

#### **Environmental Justice**

On March 7-9, members from the Environmental Justice program took part in the **2023 National** Environmental Justice Conference and Training Program in Washington, D.C.

On July 12-14, the DOE Environmental Justice program co-sponsored **Teaching Radiation, Energy, and Technology Workshops** for teachers and community leaders from Barnwell, South Carolina. Participants learned about the Savannah River site's history and missions and viewed "Radiation 101," "Environmental Monitoring: Wildlife Surveillance Program," and "Emergency Preparedness" presentations. The workshops included representatives from DOE, the Savannah River Site, EPA, the South Carolina Department of Health and Environmental Control, and the Georgia Department of Natural Resources.

The **Mentorship for Environmental Scholars** program introduced nearly 400 students to Pre-College University and U.S. Department of Energy programs. One intern from the 2022 MES program accepted a summer employment offer in 2023 from the DOE Office of Environmental Management's primary cleanup contractor in Oak Ridge, Tennessee. To date, three post-MES program interns have found jobs with environmental work contractors. These placements help the MES program accomplish its goal by introducing underrepresented students from minority-serving institutions to DOE and its mission.

On Sept. 22, LM awarded **environmental justice grants** to five minority-serving institutions to support and carry out EJ activities benefiting disadvantaged communities near LM sites. All five minority-serving institutions — Central Wyoming College in Wyoming; San Juan College and Navajo Technical University in New Mexico; Diné College in Arizona; and Fort Lewis College in Colorado — are less than 200 miles from multiple LM sites.

 LM awarded each minority-serving institution \$1.2 million for fiscal year 2024 for EJ activities. The grants establish new EJ partnerships with the schools, increase foundational EJ program activities, and help LM reach more communities.



Teaching Radiation, Energy, and Technology Workshop at the Savannah River Site in Georgia.

### Manhattan Project National Historical Park

As a collaborative partnership between DOE and the National Park Service, the Manhattan Project National Historical Park, or MAPR, preserves, interprets,



and facilitates access to key historical resources associated with the Manhattan Project. The park includes three of the most significant Manhattan Project sites: Oak Ridge, Tennessee; Los Alamos, New Mexico; and Hanford, Washington. Several different organizations manage the various interpretive centers and facilities associated with the park.

As the Department's principal representative for this network of historical sites, LM is responsible for coordinating with NPS and DOE program offices spread across the three main locations.

On March 1, the DOE principal representative for the park attended the 2023 Waste Management Symposia and participated in a roundtable discussion about the Manhattan Project National Historical Park with the National Park Service MAPR superintendent, the DOE Los Alamos MAPR site representative, and the Los Alamos National Laboratory MAPR program manager. The annual Waste Management Symposia is an international conference for radioactive material management and related topics.

On Aug. 16-17, the DOE principal representative and Joint Park Management Team members participated in an Energy Communities Alliance meeting in Los Alamos, New Mexico. The ECA is a nonprofit membership organization of local governments close to or directly impacted by DOE activities. The meeting focused on the Manhattan Project National Historical Park and included ECA members from Oak Ridge, Tennessee; Tri-Cities, Washington; and Los Alamos, New Mexico.

LM provided funds towards preservation work on the interior of the Slotin Building in Technical Area 18.

• The Slotin Building was the location of the criticality accident that led to Manhattan Project scientist Louis Slotin's death, which significantly influenced future criticality safety programs.

# **Selected Engagement and Outreach**

n January, an LM site manager addressed Grand Junction's atomic legacy at the Grand Junction Area Chamber of Commerce second annual Energy Summit at Colorado Mesa University.

 The site manager shared the history of uranium mining and milling at the former Climax Uranium Mill, which was remediated for beneficial reuse and returned to the community as Las Colonias Park.

In February, LM delivered a guest lecture to the **Institute of Nuclear Materials Management** for its Pacific Northwest Chapter virtual meeting. The LM director of site operations spoke to engineers, scientists, technicians, policymakers, educators, and students about LM's mission, its relationship with cleanup organizations, and its role in the nuclear fuel cycle.



*Climax Uranium Company in Grand Junction. This complex mill, the first in the country designed specifically to recover uranium, operated from 1951 to 1970.* 



LM Support Partner George Squibb (far right) talks about surface water monitoring systems with Mile High Youth Corps members at the Rocky Flats Site, Colorado.

In March, LM and representatives from the Colorado Department of Public Health and Environment, the U.S. Environmental Protection Agency, and the U.S. Fish and Wildlife Service took members of the **Mile High Youth Corps Energy and Water Conservation Program** on a tour of solar-powered monitoring and treatment systems at the Rocky Flats Site near Denver.

 Mile High Youth Corps is a nonprofit organization established in 1992 to give young adults ages 17 to 24 a chance to earn an income and learn hands-on job skills while providing water and energy efficiency measures to income-qualifying households and nonprofit facilities during a three-month to two-year program.

In June, **Ohio Congressman Warren Davidson** toured the Fernald Preserve near Cincinnati, which is in his district. The congressman learned about the site's history and met with community stakeholders, EPA, and Ohio Environmental Protection Agency regulators.

On Oct. 23, LM addressed the attendees of the **National Workshop of the Forum on Stakeholder Confidence** in Cincinnati at the U.S. Department of Energy Office of Environmental Management

Consolidated Business Center. The forum brings together international partners to collaborate on best practices and lessons learned for engagement with communities and tribal nations.

 On Oct. 25, four Fernald community members addressed attendees at a workshop as part of the Forum on Stakeholder Confidence at the Fernald Preserve, Ohio, Site.

In October, LM Office of Site Operations Director Jay Glascock spoke at the American Society for Engineering Management 2023 International Annual Conference in Denver. ASEM is a global professional society dedicated to the promotion and advancement of the engineering and technical management profession.

In October, U.S. Department of Energy and Medical University of South Carolina staff attended the Alaska Tribal Unity Gathering at the Egan Center in Anchorage, Alaska. The group sponsored a one-day listening session for residents of the greater Aleutian region to voice issues, concerns, and suggestions that provide information for developing a new DOE **Environmental Justice** program in Alaska. LM participated in the listening session and also set up a STEM with LM booth that had lots of visitors. On Nov. 14-16, LM and other DOE offices attended the Annual Intergovernmental Meeting to discuss nuclear weapons waste cleanup. The annual meeting is a forum for state, local, tribal, and federal officials to discuss priorities and strategies for managing and storing defense nuclear waste and remediation of production sites.

On Dec. 13, DOE Deputy Secretary David Turk

joined LM Deputy Director Scott Whiteford, LM site managers, and Office of Environmental Management leaders and staff for a tour of the Atomic Legacy Cabin and Las Colonias Park in Grand Junction, Colorado. Turk learned more about the remediation and redevelopment of Las Colonias Park, which LM manages. Turk also visited EM's Atlas-Moab Mill and Crescent Junction Disposal Cell in Utah.

### **Selected Tribal Engagement**

n January, LM representatives attended the science, technology, engineering and math **STEM Fest 2023** at the Chota Conference Center in Tahlequah, Oklahoma, on the **Cherokee Nation**.

In February, the Navajo Nation Outreach team presented at the **"Diné People Are the Future" STEM** event at Leupp Elementary School in Leupp, Arizona.

In March, LM Deputy Director Scott Whiteford toured LM's Navajo Nation Community Outreach Network Office in Window Rock, Arizona, and visited the Church Rock, New Mexico, Disposal Site, which is scheduled to transfer to LM for long-term stewardship in 2030.

In March, Director Melendez and Deputy Director Whiteford met with the **Pueblo of Acoma Tribal Council** to update them on the Bluewater, New Mexico, Disposal Site. Melendez presented a plaque of appreciation to Pueblo of Acoma Governor Randall Vicente. The U.S. Nuclear Regulatory Commission and New Mexico Environment Department also participated at the request of the pueblo.

In April, LM co-sponsored a **STEM-sation event** with Miss Navajo Nation Valentina Clitso, Navajo Transitional Energy Company, Diné College Land Grant Office, Navajo Abandoned Mine Lands Reclamation Department, Arizona Public Service, and BHP at **Monument Valley High School in Kayenta, Arizona**.

In April, LM and the Navajo Nation Public Affairs team participated in the **Diné College Land Grant Office STEM Fest** in **Tsaile, Arizona**. In May, LM met with **Hopi Tribe Department of Natural Resources** representatives for a tour of the Moab and Green River Disposal Sites in Utah and the Atomic Legacy Cabin, Grand Junction Disposal and Processing Site, and Los Colonias Park in Colorado.

In May, LM's Navajo Nation Public Affairs team participated in a **Navajo Community Outreach Network Uranium 101 community workshop** delivered in English and Navajo in Kayenta, Arizona. The Community Outreach Network includes federal agencies and Navajo Nation departments and programs that educate and inform Navajo communities about the risks uranium mines pose and how to protect people from exposure.

In September, LM gave a presentation to **Pueblo** of Acoma leadership during the **Pueblo of Acoma Tribal Council** fall meeting. LM reported on its Bluewater, New Mexico, Disposal Site and proposed future projects with the pueblo.



LM and the LM Navajo Nation Public Affairs team participated in the Diné College Land Grant Office STEM Fest in Tsaile, Arizona, on April 18. Pictured left to right are Dawnlei Ben and Damian Hunter, students from Dził Ditł'ooí School of Empowerment, Action, and Perseverance in New Mexico.

On Oct. 5, LM Defense-Related Uranium Mines team members engaged with the community at the **Northern Navajo Fair** in Shiprock, New Mexico.

On Oct. 26, LM attended the second annual **"Diné People Are the Future" STEAM fair** at Leupp Elementary School in Leupp, Arizona.

On Nov. 7-8, the Hopi Tribe hosted the joint **Navajo-Hopi-DOE triannual meeting** in Sedona, Arizona. The parties discussed the history, background, environmental remedies, institutional controls, and current updates from the four disposal and processing sites on the Navajo Nation.

On Dec. 5-7, LM met with members from the Hopi Tribe, the Navajo Nation, and the Bureau of Indian Affairs Western Regional Office to discuss the Tuba City, Arizona, Disposal Site tour.



n February, LM provided guest lecturers and information about summer internship opportunities to students at Colorado Mesa University in Grand Junction, Colorado.

- Geology students learned about groundwater modeling at the Bluewater, New Mexico, Disposal Site.
- Engineering students toured the Atomic Legacy Cabin.

On Feb. 23, LM attended **Central High School's career fair** in Grand Junction, Colorado, to speak with students about career opportunities in STEM fields.

In April, **STEM with LM** staff provided 60 solarpowered car kits to **Mesa County Valley School District 51** Mathematics, Engineering, and Science Achievement club members who built and raced the **solar-powered cars** in a competition at Mount Garfield Middle School in Clifton, Colorado.

• LM judged the solar-powered cars based on creativity, engineering, speed, and using a 3D-printed part.



(Back row) LM Site Manager Meghann Hurt, Todd Hunt, LM Public Participation Specialist Shawn Montgomery, and LM Site Manager Ken Kreie. (Front row) Afton Hunt, Andrea Lanzl, and Mesa County Valley School District 51 STEM Coordinator Jessica McDivitt.



Legacy Management Site Manager Ken Kreie; LM Support Partner Hydrogeologist Mike Morse; LMSP Site Lead Zoe Aldous; LMSP Navajo Nation Outreach Coordinator Kayla Bia; AS&T Lead Chris Jarchow (back); LMSP Navajo Nation Public Affairs Specialist Lillie Lane; and LM Site Manager Joni Tallbull.

In April, LM participated in a **STEAM Expo** hosted by **Utah State University in Blanding, Utah**, with more than 500 junior high and high school students from Monticello, Navajo Mountain, and Monument Valley in Utah and Dove Creek in Colorado.

In May, LM worked with groups of fifth graders at the **Western Colorado Children's Water Festival** in **Grand Junction**. The event is billed as the largest water festival in Colorado and is geared toward science, technology, engineering, and mathematics education. About 1,500 western Colorado fifth graders learned about the science of water.

On June 3, STEM with LM participated in **Naturita Days 2023** with a STEM booth. LM talked with visitors about how LM protects human health and the environment.

On July 8, STEM with LM ran a booth at the 16th annual **Los Alamos ScienceFest's Discovery Day** in Los Alamos, New Mexico. The festival celebrates the community's scientific heritage and science, technology, engineering, art, and mathematics education. The LM booth inspired visitors to make connections between ecology, geology, and human impact on the environment.

In October, representatives from LM and LMSP attended the **75th Annual Navajo Nation Fair** in Window Rock, Arizona — the largest American Indian fair in the southwest United States. More than 100 people stopped by the booth to learn more about uranium mine safety, ongoing site projects, and LM's Defense-Related Uranium Mines program. In October, LM offered a rocket building activity to gifted and talented program students at Tope Elementary School in Grand Junction, Colorado, to celebrate **Nuclear Science Week**. LM provided basic instructions and materials to make 200 rockets.

On Nov. 7, **STEM with LM** partnered with the Kings County Office of Education for a day of hands-on learning at LM's **Burris Park, California, Site**, near Fresno. About 160 fourth-grade students from two area schools learned about geology, birds, fire ecology, soil science, and more. The U.S. Atomic Energy Commission conducted research experiments at the former Burris Park Field Station. Today, the Burris Park site is part of a 57-acre county park owned and maintained by Kings County Parks and Grounds department.

On Nov. 9, LM participated in a **Navajo Nation STEM-sation event** at Tuba City High School in Tuba City, Arizona. More than 300 students participated in the event. LM and LM Support Partner staff showed students the importance of studying groundwater as it relates to LM's work at four former uranium processing sites on the Navajo Nation.

On Nov. 16, LM visited Haak'u Community Academy in Pueblo of Acoma, New Mexico, for STEM with LM activities.

#### Selected Conferences LM Attended

- Feb. 26-March 2: Waste Management Symposia in Phoenix, Arizona.
- Feb. 6-10: Alaska Forum on the Environment at the Dena'ina Center in Anchorage, Alaska.
- March 7-9: National Environmental Justice Conference and Training Program in Washington, D.C.
- June 6-8: RadWaste Summit 2.0 in Las Vegas, Nevada.
- July 13-14: Culturally Sensitive Care National Conference in Mount Pleasant, South Carolina.
- Aug. 8-11: National Brownfields Training
   Conference in Detroit, Michigan.
- Oct. 18-21: Annual American Indian Science and Engineering Society National Conference in Spokane, Washington.
- Oct. 19-21: Alaska Federation of Natives
   Annual Convention in Anchorage, Alaska.
- Oct. 25-28: American Society for Engineering Management 2023 International Annual Conference in Denver, Colorado.
- Nov. 6-10: International Atomic Energy Agency Conference in Vienna, Austria.

### **Interpretive Centers**

#### Fernald Preserve Visitors Center

n March, 35 juniors and seniors from **Hughes STEM High School**, a nationally accredited and



STEM-certified school in Cincinnati visited Fernald Preserve. The students learned about the site's history — uranium production, environmental contamination, and the subsequent remediation and related career fields.

In April, more than 150 students, staff, and conservationists participated in **Cincinnati State's Earth Jam** at the Fernald Preserve site. Participants learned about the three main habitats at Fernald's 1,050 acres during a scavenger hunt.

In June, the LM site manager hosted an **Ohio Energy Project** teacher workshop at the **Fernald Preserve**. Twenty-eight educators from across Ohio joined Fernald staff to learn about remediation, environmental monitoring, and LM's STEM resources. On Oct. 18, LM held the **19th Fernald Preserve Annual Community Meeting** at the visitors center. The meeting focused on the site's 2022 Site Environmental Report and other topics, including environmental and ecological monitoring, groundwater remedy status, on-site disposal facility monitoring, and other site activities.



Fernald Preserve in Ohio hosted its Annual Community Meeting on Oct. 18.

#### Weldon Spring Site Interpretive Center

n April, the site manager and an interpretive specialist attended **Lincoln Middle School's career fair** in



WELDON SPRING SITE A Legacy of Service

Edwardsville, Illinois. More than 100 fifth- to eighth-grade students learned about environmental, soil, and water contamination; soil and groundwater sampling; and federal careers in STEM.

In May, LM took 14 **St. Charles County, Missouri, state legislators** on an interpretive center tour to introduce them to the site and answer questions. Rep. Wendy Hausman, District 65, requested the tour.

In May, the interpretive center had an open house to debut the **Weldon Worker Exhibit**. The exhibit commemorates workers of the Weldon Spring Uranium Feed Materials Plant, the Weldon Spring Site Remedial Action Project, and the creation of the Energy Employees Occupational Illness Compensation Program Act.



More than 160 guests attend the May 28 unveiling of a workers exhibit at the Weldon Spring Site Interpretive Center in Missouri.

In June, the **TNT reunion group** had its annual meeting at the Weldon Spring Site Interpretive Center.

The group represents families of the residents of the three towns that were displaced as part of the government's acquisition to establish the Weldon Spring Ordnance Works in the 1940s.

On Sept. 16, more than 1,000 guests attended **Monarch Madness** at the Weldon Spring Site. Missouri conservationists, Monarch Madness committee members, and LM organized the family-friendly festival, raising awareness about the rapidly declining monarch butterfly population.

On Sept. 25, LM's Weldon Spring Site Interpretive Center put on the **St. Charles County Mayors' and Administrators' Luncheon**, welcoming 25 top officials from nearby cities and St. Charles County to the site. The site manager gave a short presentation explaining the site's history and LM's mission.

On Dec. 2, LM's Weldon Spring Site Interpretive Center held **Super Science Saturday.** More than 30 visitors participated in a hands-on STEM activity with investigations and exciting scientific explorations to learn about the properties of solids, liquids, and gases. They followed the activity with a hike to the disposal cell. On Dec. 15, staff at the Weldon Spring Site Interpretive Center partnered with the **Missouri Department of Conservation** to hold a live animal encounter at the site. The event drew more than 120 visitors to the interpretive center to meet local amphibians and reptiles.

#### **Atomic Legacy Cabin**

n April, LM Atomic Legacy Cabin personnel staffed an "Ecology and Geology Explorer" table at the **Southwest Arbor Fest in** 



**Grand Junction**, Colorado, on Earth Day. More than 400 people visited the table at the event.

On June 24, the staff at Grand Junction's Atomic Legacy Cabin welcomed about 45 former employees and members of the public to an open house celebrating **80 years of legacy**.

On July 29, Atomic Legacy Cabin staff ran a booth at the **Rocky Mountain PBS Kids Fest** in Grand Junction, Colorado.



LM Site Manager Nicole Keller blows up a balloon for a child visiting the Atomic Legacy Cabin's booth at the Rocky Mountain PBS Kids Fest.

### **Cultural Resources Management**

Section 106 of the National Historic Preservation Act requires federal agencies to consider the effects of their work on historic properties. Agencies must grant a reasonable opportunity for the Advisory Council on Historic Preservation to comment. If the responsible federal agency determines its work could potentially affect historic properties, it must consult with the appropriate state historic preservation officer or tribal historic preservation officer.

In April, LM and the **Navajo Historic Preservation Department** established a programmatic agreement that formalized and streamlined the Section 106 review and consultation process for routine maintenance and operations activity. The agreement primarily affects four locations on the Navajo Nation: the Mexican Hat, Utah, Disposal Site; the Monument Valley, Arizona, Processing Site; the Tuba City, Arizona, Disposal Site; and the Shiprock, New Mexico, Disposal Site.

LM contracted Zia Engineering and Environmental Consultants LLC to conduct a cultural resources survey of 237 acres at the Bluewater, New Mexico, Disposal Site, located in Cibola County, in May 2023. In accordance with a memorandum of agreement with the Ohio State Historic Preservation Office, LM completed further mitigation measures for the demolition at the **Piqua**, **Ohio**, **Decommissioned Reactor Site**.

- LM provided a diorama exhibit and salvaged site architecture for display at the local public library.
- LM provided an interpretive sign to the city for display near the site.
- The Ohio History Connection notified LM that the Piqua site was accepted into the Ohio Historical Marker program.
- A previously completed Historic American Engineering Record is posted on the Library of Congress website at www.loc.gov/pictures /collection/hh/item/oh2068/.

In 2023, LM initiated Section 106 consultation on 15 undertakings and 14 were completed.

LM Site or Location	Consulted Historic Preservation Officers and Tribes	# of Section 106 Consultations Initiated	# of Section 106 Consultations Completed
L-Bar, New Mexico	New Mexico SHPO	2	2
Bluewater, New Mexico	New Mexico SHPO Apache Tribe of Oklahoma THPO Navajo Nation THPO Pueblo of Acoma THPO Pueblo of Laguna THPO Zuni Tribe of the Zuni Reservation THPO	2	2
Shiprock, New Mexico	Navajo THPO	4	4
Tuba City, Arizona	Navajo THPO	1	1
Grand Junction, Colorado	Colorado SHPO	1	1
Gas Hills North, Wyoming	Wyoming SHPO	1	1
Mexican Hat, Utah	Navajo THPO	1	1
Slick Rock, Colorado	Colorado SHPO	1	1
Shirley Basin South, Wyoming	Wyoming SHPO	1	1
Rocky Flats, Colorado	Colorado SHPO	1	0

### **Traditional Media**

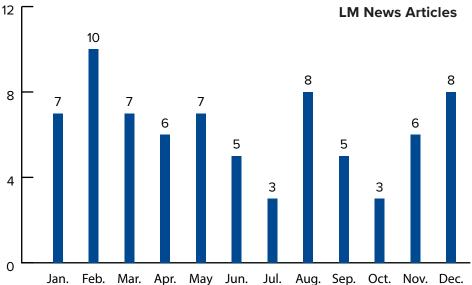
Monitored traditional media through a media monitoring service and tracked external media activity, including coverage related to:

- Navajo Nation.
- Defense-Related Uranium Mines program.
- Formerly Utilized Sites Remedial Action Program sites.
- Uranium Leasing Program or other uraniumrelated content.
- Clean energy and waste cleanup.
- Sites in Utah, Nevada, New Mexico, and Arizona.
- Manhattan Project National Historical Park sites.

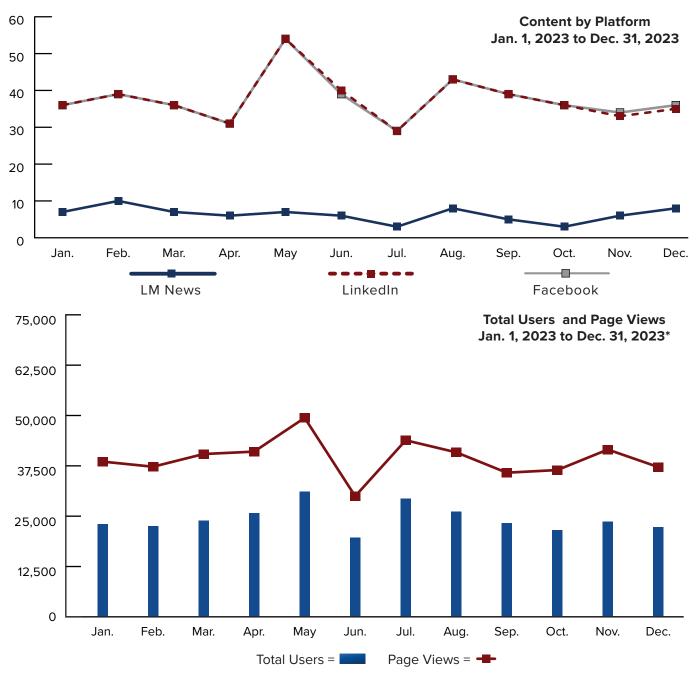
### **Digital Media**

L Mused a variety of communication methods and strategies designed for internal and external audience engagement. Throughout the year, LM and LMSP produced 76 articles about the agency, its sites, and programs — all featured on LM's website. Some of the platforms, tools, and strategies LM and LMSP used included:

- LM website.
- Facebook.
- LinkedIn.
- *Elements* (monthly e-newsletter).
- Weekly Media Digest (weekly update on external media coverage).
- GovDelivery (email-distribution 4 tool used to communicate with a variety of LM audiences).
- LM Program Update (quarterly magazine).



Page Rank	Page Visits	Webpage Name	
1	29,553	Manhattan Project Background Information and Preservation Work www.energy.gov/lm/manhattan-project-background-information-and-preservation-work	
2	28,630	Trinity Site - World's First Nuclear Explosion www.energy.gov/lm/trinity-site-worlds-first-nuclear-explosion	
3	22,380	What Is Environmental Justice? - www.energy.gov/Im/what-environmental-justice	
4	17,369	DOE History - www.energy.gov/lm/doe-history	
5	13,557	Timeline of Events: 2001 - www.energy.gov/Im/timeline-events-2001	
6	11,449	Environmental Justice History - www.energy.gov/lm/environmental-justice-history	
7	9,334	A Brief History of the Department of Energy www.energy.gov/Im/brief-history-department-energy	
8	8,812	Weldon Spring Site Interpretive Center www.energy.gov/Im/weldon-spring-site-interpretive-center	
9	7,279	Timeline of Events: 1991 to 2000 - www.energy.gov/lm/timeline-events-1991-2000	
10	7,156	Manhattan Project Historical Resources www.energy.gov/lm/manhattan-project-historical-resources	



\*Data was gathered differently this year resulting from the update from Google Analytics to Google Analytics 4.

LM's social media presence includes LinkedIn, Facebook, and DOE's YouTube channel. At the end of 2023, LM had **2,268 LinkedIn followers**, **779 Facebook followers**, and **166 videos on DOE's YouTube channel**.

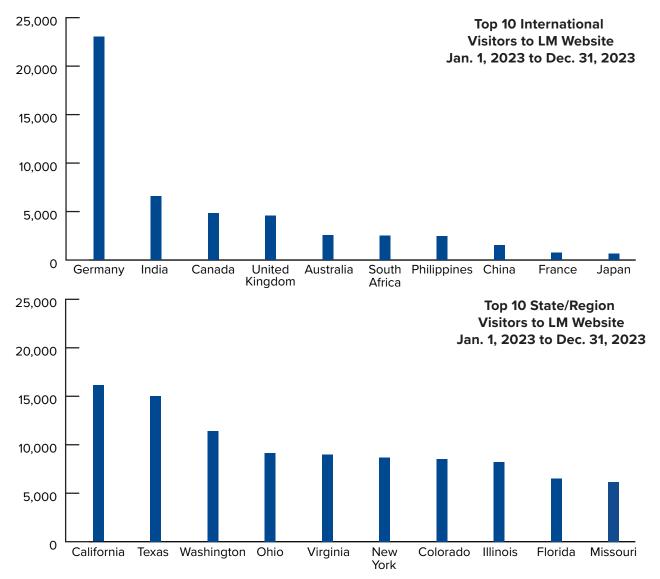
www.linkedin.com/showcase/office-of-legacy-management

www.facebook.com/OfficeofLegacyManagement

www.youtube.com/playlist?list=PLgU0cHea5t3q-p54D72xklU604d4l7YBH

Videos about all LM sites are available on LM's Facebook page and DOE's YouTube channel playlist. To date, these videos have **5,279 Facebook views** and **104,456 YouTube views**. As of Dec. 31, 2023, **9,642 people subscribed to the** *Elements* **newsletter**, with an average **39% open rate** and **3.2% click rate**.

- Open rate is the percentage of email subscribers who received this bulletin and opened it at least once.
- Click rate is the percentage of recipients who clicked at least one link in the bulletin.



#### Most Downloaded Documents from LM Website — Jan. 1, 2023 to Dec. 31, 2023\*

Document Rank	Downloads	Content	
1	663	Program Update: 1st Quarter 2023 - www.energy.gov/lm/articles/program-update-1st-quarter-2023	
2	510	2022 Annual Historical Summary - www.energy.gov/lm/articles/2022-annual-historical-summary	
3	510	Presentations from DOE's Legacy Management 2018 Long-Term Stewardship Conference www.energy.gov/Im/presentations-does-legacy-management-2018-long-term-stewardship-conference	
4	408	The Establishment of the Department of Energy www.energy.gov/sites/prod/files/2017/09/f36/DOE%201977-1994%20A%20Summary%20History_0.pdf	
5	306	March 2022 Site Management Guide - www.energy.gov/sites/default/files/2022-04/LM%20SMG%20 March%202022%20Update%2027%20Final.pdf	
6	306	Program Update: 2nd Quarter 2023 - www.energy.gov/lm/articles/program-update-2nd-quarter-2023	
7	255	Atomic Legacy Cabin Field Trips and Outreach Programs www.energy.gov/sites/default/files/2022-11/Atomic%20Legacy%20Cabin_WEB2.pdf	
8	255	Defense-Related Uranium Mines Program Fact Sheet www.energy.gov/Im/articles/defense-related-uranium-mines-program-fact-sheet	
9	204	FY 2021-FY 2025 High Performing Organization Plan www.energy.gov/sites/default/files/2020/10/f79/DOE LM FY 2021-2025 HPO Plan FINAL.pdf	
10	204	Rickover and the Nuclear Navy - www.energy.gov/lm/articles/duncan-rickover-and-nuclear-navy	

\*These numbers don't include metrics from the LM public search file repository. Visit the repository here: Impublicsearch.Im.doe.gov/SitePages/default.aspx.

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### **Program Update Articles by Issue**

#### Quarter 1 — www.energy.gov/lm/articles/programupdate-1st-quarter-2023

PR®GRAM

 LM's Strong Relationships Support Underserved Communities.



- DOE Environmental Justice Workshop Part of 2023 Alaska Forum on the Environment.
- Many Devils Wash Cleanup Project in New Mexico Completed.
- Multiple Partnerships Make 2022 DRUM Field Season Successful Across Tribal, Public Lands.
- LM Uranium Mine Projects Keep People and Wildlife Safe.
- DOE Office of Legacy Management Director Awarded Highest Honor for Career Civil Servants.
- LM DRUM Program Team Members Win Secretarial Honor Award.
- Legacy Management Operations Center Receives ENERGY STAR Award.
- DOE's Partnership With University Prepares Students for Careers in Science and Engineering.
- LM Implements New Digital Data Collection Methods.
- FUSRAP Site in Upstate New York Sold at Auction.
- Peter O'Konski Retires After 35 Years of Exceptional Service.
- Navy Veteran Spends Her Career Pursuing the Unexpected.
- New Legacy Management Deputy Director Scott Whiteford Reflects on a Long and Storied Career.
- LM Historian on a Mission to Uncover Secrets From the Past.

#### Quarter 2 — www.energy.gov/lm/articles/programupdate-2nd-quarter-2023

- DRUM Spring Field Season Kicked Off on Navajo Nation.
- LM Flying High With Rapid Technological Advancements at Disposal Sites.
- LM Conservation Projects Protect, Restore, Enhance LM Sites Nationwide.



- Site Manager Graduates from DOE Leadership Development Program.
- LM's Site Monitoring Work is a Key Element in Protecting Human Health, Environment.
- Newly Retired Partner Honored for Decades-Long Service to Hopi People and Supporting LM Projects.
- Digitizing History One Record at a Time at Legacy Management Business Center.
- LM Contractor Janice Maruniak Reflects On Her Female Role Models.
- LM Site Manager Reflects On Her Unexpected Career Path.
- LM Installs Quality-Control Monuments at Falls City, Texas, Disposal Site.
- Giancarlo Deguia Receives Award for Superior Service.
- Records Official Sworn in as LM Business Operations Deputy Director.
- LM Partners With Federal and State Agencies To Host Youth Corpsmembers at Colorado Site.
- LM Attends, Co-Sponsors STEM-Sation at Arizona High School Featuring Miss Navajo Nation 2022-2023.
- LM Makes a Splash at 28th Annual Western Colorado Children's Water Festival.
- LM, EMI-SIG Tackle Emergency Management Planning at Annual Meeting.
- NEJC Encourages Capacity Building, Technical Assistance for Communities.

### **Program Update Articles by Issue**

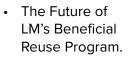
#### Quarter 3 — www.energy.gov/lm/articles/programupdate-3rd-quarter-2023

PR®GRAM

UPDATE

BENEFICIAL

 LM Returns Sites to Useful Life, Creating Environmental, Social, and Economic Benefits.



- LM Participates in 2023 National Brownfields Training Conference in Detroit.
- LM Receives 2023 Phoenix Award for Las Colonias Park at National Brownfields Training Conference.
- LM Site in New Jersey Chosen for EPA Reuse Award.
- Stewardship Council Board Members Tour Rocky Flats Site.
- Colorado's Historic Grand Junction is an International Model for Remediation.
- Virtual Display Offers Interactive FUSRAP History.
- Teamwork, Safety, and Dedication Drove Success During Amchitka Trip.
- From Air-Traffic Control to Journalism, Public Affairs to Stand-Up Comedy, Gwen Smalls Has Lived an Adventure.
- LM Contract Manager Obi Diei-Anene Receives Employee of the Year Award.
- Kayenta Township Hosts Uranium 101 Workshop in Arizona with Tribal and Federal Partners.
- New Weldon Spring Site Interpretive Center Exhibit Commemorates Former Workers.
- Keeping Up with Change, One Digital Record at a Time.
- Medical University of South Carolina Conducts National Conference on "Addressing Healthcare Needs of the Underserved."
- Pre-College University Continues to Impact Energy Department Programs.
- Teachers and Community Leaders Radiate Enthusiasm for TREAT Workshop.
- DOE Mentors Encourage Student Interest in Environmental Justice.

#### Quarter 4 — www.energy.gov/lm/articles/programupdate-4th-quarter-2023

- LM Upgrades Solar Panel Systems at Two Sites.
- VARPs are Vital to the LM Mission.
- LM Takes Steps to Meet Federal Clean Energy Goals.
- LM, LMSP Employees Win DOE 2023 Sustainability Awards for Lifetime Achievement.



- LM Maintenance at Several Western Sites Supports Beneficial Reuse.
- LM Applied Studies and Technology Program Scientists Training Next Generation.
- LM Attends Annual AISES Conference in Spokane, Washington.
- LM, USACE Tour North Atlantic Division FUSRAP Sites with the Focus on Future.
- The Reign of the Monarch Returns to Weldon Spring Site.
- Unanga<sup>°</sup> Region Community Leaders Institute Listening Session on Environmental Justice.
- Federal Agency Perspectives on Advancing Environmental Justice in the 21st Century.
- 52nd Annual Legislative Congressional Black Caucus Environmental Justice Braintrust "Advancing Equity and Nuclear in a Carbon-Free Future."
- Joint U.S. Department of Energy Federal and Contractor Environmental Attorney's Training.



### **Additional Resources**

### LM Site Management Guide

The Site Management Guide is updated annually and provides this information:

- Site name and location (state).
- Pre-LM name.
- Transferring organization.
- Actual transfer date (FY).
- Planned transfer date (FY).
- Regulatory drivers and programmatic framework.
- Site category.

Review the most recent version of the *Site Management Guide*: www.energy.gov/lm/downloads/site-management-guide.

#### Annual Site Sustainability Plan

Site Sustainability Plans fulfill the requirements of DOE Order 436.1, *Departmental Sustainability*. They summarize LM's accomplishments during the reporting period, as well as plans to advance site sustainability and enhance climate mitigation efforts. Review the documents here: www.energy.gov/lm/ems-goalsprogressplansreports.

### **Annual Site Environmental Reports**

In September, LM released the Annual Site Environmental Report, which provides another valuable overview of LM activity from the previous year. LM submits ASER, which documents site environmental conditions and reporting requirements, to the DOE Office of Environmental Protection and Environment, Safety, and Health. Review the document here: www.energy.gov/sites/default/files/2023-09/S14598-2022\_ASER.pdf.

### Site-Specific Information and Annual Reports

Review site-specific webpages and reports, including CERCLA five-year reviews: www.energy.gov/lm/sites/lm-sites.

#### **DRUM** and Abandoned Uranium Mines Working Group

Review the latest annual reports for the DRUM program and AUMWG: www.energy.gov/lm/defense-related-uranium-mines-program.

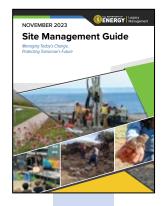
#### National Environmental Policy Act Documents

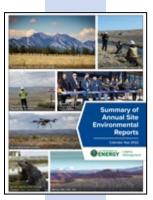
Review NEPA documents for DOE, which includes LM, on the DOE Office of NEPA Policy and Compliance website: www.energy.gov/nepa/nepa-documents.

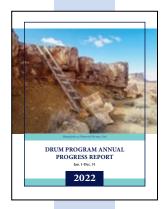
#### **DOE History Timeline**

The timeline is an online resource that provides the public with easy access to accurate information about the history of DOE and its predecessor agencies. The timeline includes links to reports, speeches, press releases, and other documentation: www.energy.gov/lm/doe-history/doe-history-timeline.



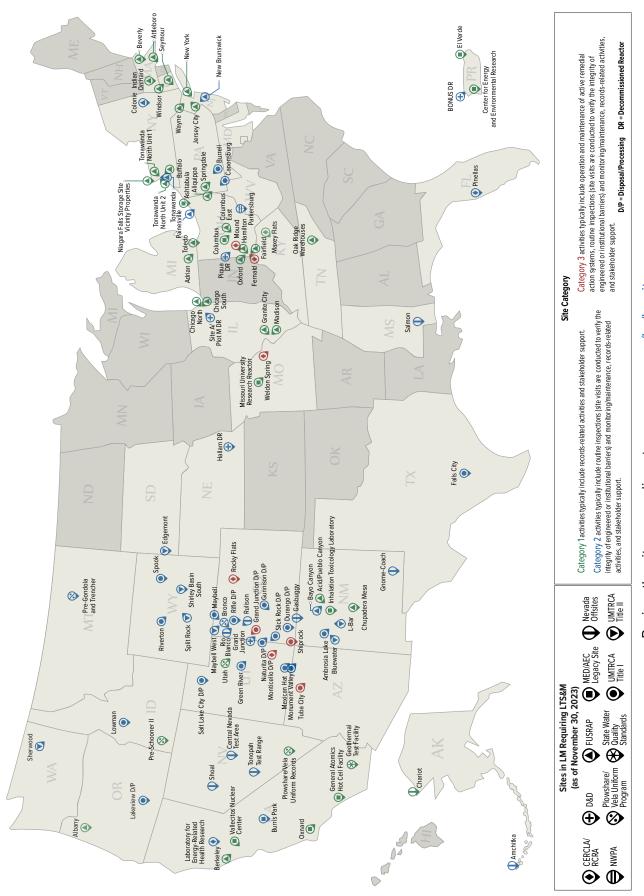








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**2023 SITE MAP** 

Review the site map online at www.energy.gov/lm/lm-sites.

# LM BY THE NUMBERS (12/31/2023)



# 18,237

acres of land with LTS&M (does not include ULP property)

# 102

LM sites in **30 states** and the **territory of Puerto Rico**, creating a national program with a wide set of responsibilities

# 50

LM properties available for beneficial reuse — **98%** of them are currently in reuse

# 4,945

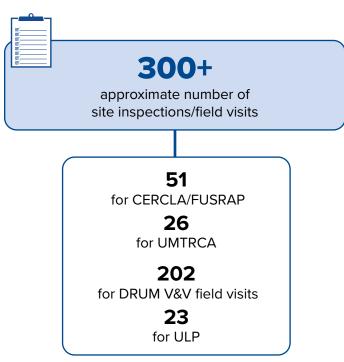
approximate number of groundwater samples

# 3,340

approximate number of surface water samples

# 680, 811

approximate number of miles traveled for post-closure responsibilities





Legacy Management Business Center in Morgantown, West Virginia.

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# LM BY THE NUMBERS (12/31/2023)



# 50,485

Grand total of 2023 Interpretive Services, Navajo Nation, and STEM contacts

(Includes interpretive centers, Navajo Nation outreach, and STEM with LM federal staff-led activities)

# 37,969

#### **Interpretive Services contacts**

(Interpretive services contacts include on- and off-site programming, meeting room use, daily tours, etc. Data does not include trail or vehicle data)



# 7,231

Atomic Legacy Cabin Grand Junction, Colorado



**13,535** Fernald Preserve Visitors Center Hamilton County, Ohio



**17,203** Weldon Spring Site Interpretive Center St. Charles, Missouri

# 9,587 STEM with LM contacts

5,059 STEM with LM federal staff-led contacts

### 4,528

#### Hybrid – STEM and interpretive center contacts

(Hybrid – STEM and interpretive center contacts are not included in the grand total because the hybrid contacts are included in the interpretive center totals)

# 7,457

Navajo Nation outreach and STEM event contacts



Atomic Legacy Cabin in Grand Junction, Colorado.



Fernald Preserve Visitors Center in Hamilton County, Ohio.



Weldon Spring Site Interpretive Center in St. Charles, Missouri.



STEM Fest 2023 at the Chota Conference Center in Tahlequah, Oklahoma.



LM at Navajo Nation Fair in Window Rock, Arizona.

