

June 2017

OVERVIEW

The U.S. Department of Energy (DOE) Office of Legacy Management (LM) is committed to managing its responsibilities associated with the legacy of World War II and the Cold War. This legacy includes radioactive and chemical waste, environmental contamination, and hazardous materials at over 100 sites across the United States and the territory of Puerto Rico.

DOE established LM on December 15, 2003. Since its inception, LM has taken major steps toward fulfilling its post-closure responsibilities and ensuring the future protection of human health and the environment. Communicating LM's progress is vital to upholding LM's responsibilities to Congress and the American people.

LM communicates with stakeholders in the following ways:

Briefings

- LM website
- Conferences
- News releases

Email

- Public meetings
- Informational materials

This report details communication metrics and narrative analyses of select sites during the evaluation period of May 1, 2016, through April 30, 2017. Assessment tools include statistical software that tracks internet usage, LM's National Stakeholder Database, an overview of stakeholder activities at LM's larger sites, and a list of LM communication products.

RESOURCES

LM used the following resources for this analysis:

- 123LogAnalyzer and Google Analytics statistical software packages
- The LM National Stakeholder Database
- Analysis of site use at the following locations:
 - Fernald Preserve, Ohio, Site
 - Mound, Ohio, Site
 - Rocky Flats, Colorado, Site
 - Weldon Spring, Missouri, Site
 - Navajo Nation sites







123LogAnalyzer and Google Analytics Statistical Software

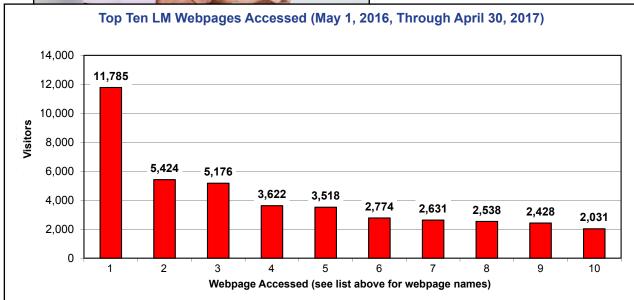
123LogAnalyzer and Google Analytics are statistical software packages that track information on visitor access to the LM internet website. Statistical information regarding the number of hits, visits, unique IP addresses, page views, and downloads is available in the 123LogAnalyzer Report. Information is broken down by day and time increments, the number of pages viewed per day, and the length of time a visitor stays at the website. Resources accessed throughout the year fluctuate with issues, concerns, and media attention associated with the various sites and programs.

During the evaluation period, there were 895,691 visits to the LM website. The numbers show an increase of more than 18,700, compared with the 2016 report. The average number of visitors per day was 2,454, the average time spent was 8 minutes and 12 seconds, and the average number of page views per visit was 6.12. The following were the 10 most popular webpages accessed during the evaluation period:

- 1 LM Sites
- 2 Bobcats at the Fernald Preserve
- 3 Environmental Justice History
- 4 Fernald Closure Project
- 5 Weldon Spring, Missouri, Site
- 6 Rocky Flats, Colorado, Site
- 7 Fernald Preserve, Ohio
- 8 Weldon Spring Site Interpretive Center Online Tour
- 9 Mission
- 10 Programmatic Framework

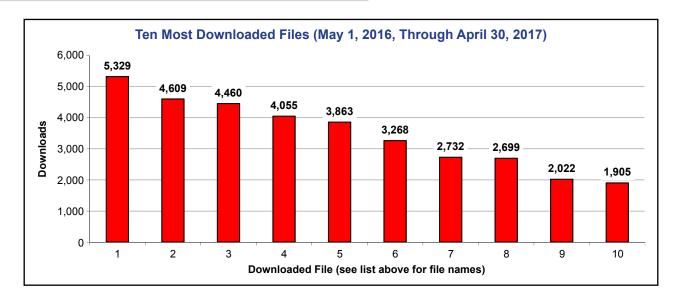


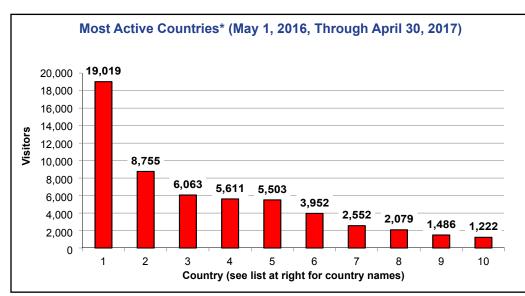




The 10 most downloaded files from the LM website were:

- 1 Canonsburg, Pennsylvania, Disposal Site Fact Sheet
- 2 *Fernald Preserve 2010 Site Environmental Report*: Units (Abbreviations) and Conversion Table
- 3 Fernald Preserve, Fernald, Ohio Comprehensive Legacy Management and Institutional Controls Plan, Volumes I and II, January 2016
- 4 Pinellas Environmental Restoration Project Dewatering Evaluation Report for Road Construction and Water Line Replacement Along Bryan Dairy and Belcher Roads, Appendix D: Dewatering Cost Estimate, June 2008
- 5 Site Plan for the Maryland Disposal Site, April 1989
- 6 Rocky Flats History
- 7 Fernald Preserve Trails Map
- 8 Rocky Flats, Colorado, Site Fact Sheet
- 9 Grand Junction, Colorado, Site Fact Sheet
- 10 Solidification and Stabilization of Wastes Using Portland Cement





Visitors from several countries accessed the LM website. However, not surprisingly, the United States topped the list at 741,521 out of 895,691 visits.

- 1 Germany
- 2 Italy
- 3 Australia
- 4 France
- 5 United Kingdom
- 6 Canada
- 7 Russian Federation
- 8 China
- 9 Japan
- 10 Netherlands

*Data excludes the United States

Narrative Analyses of LM's Interaction with Stakeholders at Fernald, Mound, Rocky Flats, Weldon Spring, and Navajo Nation Sites

Fernald Preserve, Ohio, Site

Interpreting site-related natural and cultural history and creating community connections are key components of the Fernald Preserve's ongoing stakeholder interactions. The 1,050-acre site was a materials production center, instrumental in the nation's nuclear weapons complex during the Cold War. After nearly four decades of producing high purity uranium metals, the government designated the site as a Superfund project and cleanup of legacy contamination ensued.

Fernald Preserve staff members use a variety of communication tools that include:

- Visitors Center
- Meeting rooms
- Museum
- LM-hosted public meetings and events
- Mail and email notification lists with over 2,100 contacts
- Site-specific printed and digital literature
- Website

Organizational Interest

Various stakeholder groups have helped shape the Fernald Preserve into what it is today. These long-standing groups include:

- Fernald Citizens Advisory Board
- Fernald Community Alliance (FCA)
- Fernald Community Resource Organization
- · Fernald Residents for Environmental Safety and Health

These groups helped develop successful resolution at the site, which led to an "undeveloped park with an emphasis on wildlife."

Once the site transitioned to LM, the FCA emerged. Some of the projects the group sponsors are an annual road cleanup at the site and a Cold War Garden. Guests can choose to honor someone with a commemorative brick that will be placed in the garden. The FCA meets every six weeks at the Visitors Center to keep current on site developments.

Community Interest

The greater Fernald community supports the site by participating in its many events. Nearly 92,000 people



High school students hike from one natural resource testing location to another during the Envirothon at the Fernald Preserve in April 2017.

attended events at the Visitors Center, listened to nature and history programming, and engaged in many other services since its opening in 2008. Some of the interest groups that have connected with site staff include:

- Scouting community
- · Local schools
- Regional college environmental science programs
- Adult community organizations
- Regional environment-focused green community initiative groups

Nearly 12,000 participants used the site and its services during the evaluation period. Many more used the 7 miles of walking trails and observed the wildlife. Bird watchers and wildlife photographers comprise the largest group of independent site visitors.

Major Outreach Events

In October 2016, staff hosted "Weapons to Wetlands: A Decade of Difference" for 400 attendees. The event recognized the site's 10-year anniversary cleanup. The event received substantial community and media interest.

Lisa Crawford, a former Fernald Citizens Advisory Board member, said, "The Fernald Preserve is an amazing place. I see how the site has grown, changed, and healed itself, and we did it all together. It has taken us back to our roots and has become a huge community asset that carries on the legacy of Fernald."

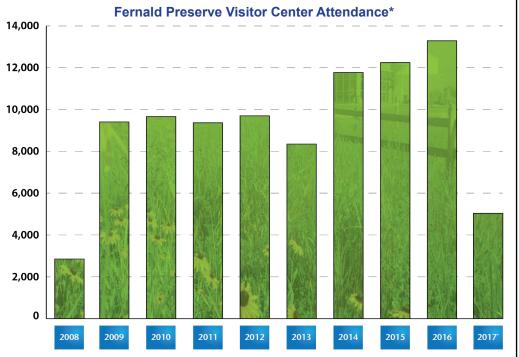
Continued from page 4 Fernald Preserve, Ohio, Site

In April 2017, the site hosted Envirothon, a regional natural resources competition, involving over 570 high school students and coaches. The event tests high school students' knowledge of Ohio's natural resources and promotes science and involvement in environmental issues in the region. The event sponsors were the Ohio Federation of Soil and Water Conservation Districts and the Ohio Department of Agriculture, Division of Soil and Water Resources.



High school students take a break from hiking and enjoy nature during the Envirothon event.

> Annual attendance is determined by combining Visitors Center walk-ins, organized program group numbers, meeting room users, and community outreach participants. Applications for facility reservations or special program requests can be obtained through the LM website at https://www.lm.doe.gov/ Fernald/Visitors_Center/ Visitors_Center.pdf.



*Full year for 2017 not represented.

Mound, Ohio, Site

The Mound site is a former research and weapons laboratory in Miamisburg, Ohio. The site is 15 miles south of Dayton, Ohio. DOE Office of Environmental Management (EM) cleaned up the site under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). LM merged the Mound site office with the Fernald Preserve site office, 50 miles southwest of Mound. LM continues to monitor the site post-closure.

Mound Development Corporation

The City of Miamisburg formed the Mound Development Corporation (MDC) to operate the site. MDC is redeveloping the site into a business park.

EM transferred ownership of approximately 60 percent of the 305-acre site to MDC, and retained ownership and leased the remaining 121 acres to MDC until April 30, 2017. The city agreed to own various sections of MDC property until MDC could subdivide and sell the acreage for redevelopment. The city promotes the site's redevelopment and seeks support from Ohio and U.S. congressional staffs.

LM, EM, MDC, the U.S. Environmental Protection Agency (EPA), Ohio EPA, the city, and the Ohio Department of Health, meet every other month to discuss site activities. LM meets annually with all the landowners, including the city, to review the land-use controls and encourage open communication.

Mound Science and Energy Museum

The site hosts an active Mound Science and Energy Museum (MSEM). This resource has a CERCLA Reading Room, site artifacts, and displays of items invented and produced at Mound. MSEM holds monthly educational programs relating to science topics and Mound operational history, hosts school and other group tours, and interfaces with local universities and historical groups. LM provides quarterly updates at each monthly education program and supports tours given during annual open houses.



Sue Smiley, LM site manager, gives a presentation on MSEM in October 2016.

Assistance for Former Employees

Former employees continue to request information they need to submit Energy Employees Occupational Illness Compensation Program Act (EEOICPA) requests. To increase understanding of the claim process, information is available on the LM website.

Two organizations help former workers with EEOICPA and other available benefits. The Energy Employees Claimant Assistance Project helps former employees prepare their EEOICPA claims. Worker Health Protection Program members inform former workers of available services.

Former employees, retirees, and their families have annual gatherings and monthly dinners that are open to all former employees.

Rocky Flats, Colorado, Site

Rocky Flats site stakeholder participation consists primarily of representatives from communities in close proximity to the Rocky Flats site and focuses on water quality issues. Stakeholders are joined by Rocky Flats Stewardship Council board and staff members, officials and technical staff members from neighboring cities, and a small group of citizens in the community.

During the evaluation period, stakeholder interest and involvement focused on U.S. Fish and Wildlife Service's projected Rocky Flats National Wildlife Refuge (Refuge) opening in spring 2018. LM has no active role in the Refuge and only supports this action by providing historical and factual information on Rocky Flats site cleanup and long-term care. LM continues to connect with a stakeholder working group to discuss nonremedyrelated monitoring under the Adaptive Management Plan, developed during the National Environmental Policy Act Environmental Assessment and prepared to assess the environmental impacts of proposed dam breaches. The group meets at least once each year at the request of working group participants to discuss site-related activities. LM provides quarterly and annual reports on long-term surveillance and maintenance activities at the site and presents overviews of these reports at quarterly Stewardship Council board meetings, which are open to the public. LM also conducts periodic technical discussion meetings upon stakeholder request and provides quarterly and annual status reports on the Adaptive Management Plan monitoring results. In addition, LM conducts site tours for new Stewardship Council board members, government officials, and institutions of higher education.

LM updates the Rocky Flats website routinely with new documents and provides an effective forum for communicating with stakeholders. Involved stakeholders provided LM with email addresses where they can receive community notifications of new documents and other matters of public interest. LM distributes notifications to local media as needed.

Interested parties are able to search the CERCLA Administrative Record online. The addition of these indexes to the LM website significantly improved access to the documents they are looking for.

Rocky Flats Stewardship Council members listen as site staff provide details on the modification that combines two groundwater collection systems to feed one groundwater treatment system during a June 2016 site tour.



Rocky Flats site staff describe drainage modifications made to better control runoff that is impacting cover stability at the Original Landfill.

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Weldon Spring, Missouri, Site

The Weldon Spring site is located in St. Charles County, Missouri, approximately 30 miles west of St. Louis. The site consists of a former Chemical Plant area (main site) and a Quarry that were placed on the National Priorities List by EPA on July 22, 1987, and March 13, 1989, respectively. Stakeholders were actively involved with DOE in the decision-making process that would ultimately determine how the site would be cleaned up and what its beneficial reuse would be after the remediation.

Today, site stakeholders include government groups including EPA; the Missouri Departments of Natural Resources, Conservation, and Transportation; and the U.S. Army Reserve.

Community-based organizations, such as garden clubs, naturalist groups, and other nonprofit groups, attend interpretive programs and use meeting rooms at the Interpretive Center. Area school groups regularly participate in interpretive field trip programs that fulfill Missouri State science curriculum requirements, and cover topics relating to the site's remediation and long-term surveillance and maintenance.

Community response to the Weldon Spring site remains positive. The site served 23,293 community members during the evaluation period. Stakeholders were involved through Interpretive Center tours, interpretive programs, outreach programs, special events, and meeting room use.

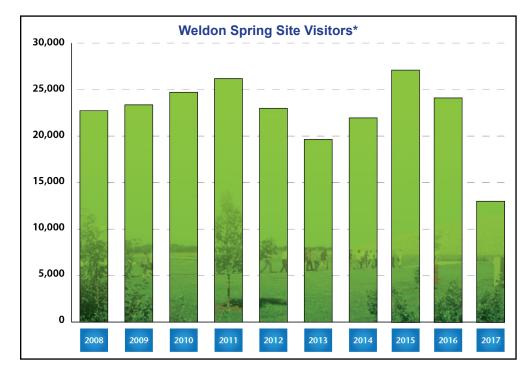


The timeline exhibit in the Weldon Spring site Interpretive Center includes more than 100 years of site history.

Additionally, vehicle and trail counters monitor community use of the site outdoor areas. Attendance in these outdoor areas during the evaluation period included 31,683 vehicles, 12,698 disposal cell hikers, and 13,692 Hamburg Trail users.

LM encourages stakeholder participation with site activities and Interpretive Center operations by various means, including notifying interested parties when documents become available, eliciting public comment on

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*The decrease in visitors in 2013 can be attributed to closure of the Interpretive Center June 1–14, 2013, as a result of storm damage and the government shutdown that occurred October 1–17, 2013.

Full year for 2017 not represented.

U.S. Department of Energy Office of Legacy Management

Analysis of LM Stakeholder Interaction and External Communications



Continued from page 8 Weldon Spring, Missouri, Site

propsed activities, and hosting interpretive programs. Additionally, information relating to the site's cleanup and its annual report are available on the LM website and at libraries in the St. Charles County area.

A student injects dye into a groundwater model as part of an educational program at the Weldon Spring site Interpretive Center.

Navajo Nation Sites

Four LM sites exist within the Navajo Nation: Tuba City, Arizona; Monument Valley, Arizona; Shiprock, New Mexico; and Mexican Hat, Utah. Outreach is an integral part of LM's communication strategy at these sites.

LM participated in more than 20 meetings and outreach events within the Navajo Nation. Some of these events included:



Richard Bush, LM site manager, provides technical information on the evaporation pond at the Tuba City site to leaders and members of the Navajo Nation and Hopi Tribe in March 2017.

- Meetings between the LM director and the Navajo Nation Office of the President and Vice President
- Meetings between the LM director and the Hopi Tribe and Moenkopi Village Council
- Navajo Nation Governance Conference
- Open house and site tour of the Shiprock disposal site
- Open house and site tour of the Tuba City site (former Rare Metals uranium mill site)
- Navajo Nation fairs in Tuba City; Window Rock, Arizona; and Shiprock

The feedback LM received from Navajo and Hopi community members and leaders has created:

- Increased understanding of tribal community concerns and issues
- Increased knowledge of LM site activities and past uranium mining and milling activities
- · Improved relationship building with tribal leadership

At many of these events, LM collaborates with the Navajo Nation Abandoned Mine Lands Reclamation/Uranium Mill Tailings Remedial Action (AML/UMTRA) Department. Participation with AML/UMTRA and other tribal programs has resulted in increased information sharing and community feedback, site open houses and tour events, and communication coordination among federal agencies working to address uranium issues within tribal lands, including the Hopi Tribe.

Collaboration between LM and tribal communities has increased understanding of tribal community concerns and issues, information on site activities, past uranium mining and milling activities, and relationship building with tribal leadership.

Continued from page 9 Navajo Nation Sites

Five-Year Plan

DOE actively supports and participates in the congressionally mandated Five-Year Plan. The plan establishes objectives to assess the cleanup of structures, contamination of water, and provision of alternative water sources; support community outreach; and to protect human health and the environment.



Mark Kautsky, LM site manager, shares Shiprock site information with Navajo Shonto Preparatory School students in March 2017.

Six federal agencies participate in developing and implementing each Five-Year Plan:

- DOE
- EPA
- Bureau of Indian Affairs
- U.S. Nuclear Regulatory Commission
- Indian Health Service
- Agency for Toxic Substances and Disease Registry

The plan includes the creation of a Community Outreach Network. The network office is located in Window Rock and is staffed by a community outreach liaison and a public affairs specialist. The purpose of the network is to coordinate community outreach events, support information sharing, and to support the development of community education opportunities.

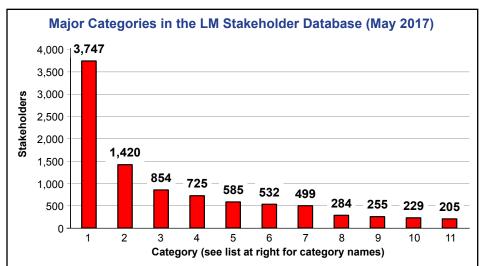


The LM National Stakeholder Database

The national stakeholder database contains contact information for stakeholders to stav informed about LM activities. These contacts have an interest in an LM project or site for various reasons; they may be an elected official who represents a site, they may live near a site, or they may be a federal or state regulator. In June 2017, there were 13.487 contacts in the stakeholder database.

Most stakeholders live in Washington, DC; Colorado; and Ohio. While Colorado and Ohio have the most LM sites, Washington, DC, has no sites. The numbers below reflect all interested groups including federal, state, and local officials.

The entries in the national stakeholder database are broken down into 28 categories. The 11 categories in the stakeholder database with more than 100 contacts are:



Elected Official State and Staffers 1

- 2 Stakeholder
- 3 Government Official Federal
- 4 **Business Interest Group**
- 5 Local Official
- 6 Elected Official Federal and Staffers
- 7 Academia
- 8 Minority
- 9 Government Official State (Non-Elected)
- Community/Grassroots 10 Organization
- Media Print, Radio, and TV 11

Major and minor roles categorize various interest groups within the database and include:

- Business interest groups
 - Contractors
 - Citizens' commissions
 - Community reuse organizations
 - Technical interest groups
- Minorities Native American tribal
 - chairpersons, representatives, and leaders
 - Hispanics

- Resource groups (documents provided for public use)
 - State libraries
 - Local libraries
 - University libraries



Top Five States* with Highest Number of LM Stakeholders (by State and Congressional District)

Shown below are the five states* where LM has the greatest number of stakeholders, broken down by congressional district. U.S. senators and U.S. representatives are also listed by state and district.

State	Senators	District	Representatives	Total
Ohio	Sherrod Brown Rob Portman			1,146
		1	Steve Chabot	428
		2	Brad Wenstrup	145
		3	Joyce Beatty	122
		4	Jim Jordan	1
		5	Robert E. Latta	2
		8	Warren Davidson	352
		9	Marcy Kaptur	4
		10	Michael Turner	50
		11	Marcia L. Fudge	3
		12	Pat Tiberi	5
		13	Tim Ryan	1
		14	David Joyce	29
		15	Steve Stivers	5
District of C	Columbia		1,118	
		At Large	Eleanor Holmes Norton	1,118
Colorado	Michael F. Benn Cory Gardner	et		735
		1	Diana DeGette	176
		2	Jared Polis	65
		3	Scott Tipton	403
		4	Ken Buck	4
		5	Doug Lamborn	13
		6	Mike Coffman	13
		7	Ed Perlmutter	61
New York	Charles E. Schumer Kirsten E. Gillibrand			428
		1	Lee Zeldin	9
		2	Pete King	2
		3	Thomas Suozzi	1
		4	Kathleen Rice	1

State	Senators	District	Representatives	Total	
New York (New York (continued)				
		5	Gregory W. Meeks	1	
		7	Nydia M. Velázquez	2	
		8	Hakeem Jeffries	2	
		9	Yvette D. Clarke	3	
		10	Jerrold Nadler	19	
		11	Daniel Donovan	2	
		12	Carolyn Maloney	4	
		13	Adriano Espaillat	3	
		14	Joseph Crowley	1	
		15	José Serrano	1	
		17	Nita Lowey	4	
		18	Sean Patrick Maloney	1	
		19	John Faso	7	
		20	Paul D. Tonko	224	
		21	Elise Stefanik	8	
		22	Claudia Tenney	8	
		23	Tom Reed	19	
		24	John Katko	4	
		25	Louise Slaughter	2	
		26	Brian Higgins	70	
		27	Chris Collins	30	
New Mexico	Martin Heinrich Tom Udall			410	

New Mexico	Tom Udall			410
		1	Michelle Lujan Grisham	108
		2	Steven Pearce	92
		3	Ben R. Luján	210

*For the purposes of this report the District of Columbia is considered a state.

LM Stakeholder Distribution by State* and Congressional District

Shown below are the states* where LM has the highest number of stakeholders, broken down by congressional district. U.S. senators and U.S. representatives are also listed by state and district.

State	Senators	District	Representatives	Count
Alaska	Lisa Murkowski Daniel Sullivan			
		At Large	Don Young	204
Arizona	Jeff Flake John McCain			
		1	Tom O'Halleran	97
Colorado	Michael F. Bennet Cory Gardner			
		1	Diana DeGette	176
		2	Jared Polis	65
		3	Scott Tipton	403
Connecticut	Richard Blumenth Christopher Murph			
		3	Rosa L. DeLauro	185
District of Co	lumbia			
		At Large	Eleanor Holmes Norton	1,118
Illinois	Tammy Duckworth Richard J. Durbin	ı		
		13	Rodney Davis	176
Indiana	Joe Donnelly Todd Young			
		6	Luke Messer	111
Kentucky	Mitch McConnell Rand Paul			
		6	Andy Barr	148
Michigan	Gary C. Peters Debbie Stabenow			
		8	Mike Bishop	150
Mississippi	Thad Cochran Roger F. Wicker			
		4	Steven Palazzo	189
Missouri	Roy Blunt Claire McCaskill			
		3	Blaine Luetkemeyer	231

State	Senators	District	Representatives	Count
New Mexico	Martin Heinrich Tom Udall			
		1	Michelle Lujan Grisham	108
		2	Steve Pearce	92
		3	Ben R. Luján	210
New York	Kristen E. Gillibrar Charles Schumer	nd		
		20	Paul D. Tonko	224
		26	Brian Higgins	70
Ohio	Sherrod Brown Rob Portman			
		1	Steve Chabot	428
		2	Brad Wenstrup	145
		3	Joyce Beatty	122
		8	Warren Davidson	352
Oregon	Jeff Merkley Ron Wyden			
		5	Kurt Schrader	97
Tennessee	Lamar Alexander Bob Corker			
		5	Jim Cooper	144
Utah	Orrin G. Hatch Mike Lee			
		3	Jason Chaffetz	62
Washington	Maria Cantwell Patty Murray			
		4	Dan Newhouse	73
		10	Denny Heck	151
Wyoming	John Barrasso Michael B. Enzi			
		At Large	Liz Cheney	238

*For the purposes of this report the District of Columbia is considered a state.

LM Stakeholder Communication Products

Product	Frequency	Availability
2016–2021 LM Strategic Plan	Report	Available
2016–2021 LM Strategic Plan Brochure	Brochure	Available
Environmental Justice Annual Progress Report	Report	Varies
Environmental Justice Five-Year Implementation Plan	Report	Available
Environmental Justice Strategy	Report	Available
Fernald Preserve Educational Outreach Programs	Educational Outreach, Visitors Center, Site Information	Reviewed Annually
Formerly Utilized Sites Remedial Action Program (FUSRAP)	Fact Sheet	Available
FUSRAP Stakeholder Report	Report	Available
FUSRAP Brochure	Brochure	Available
FUSRAP Program Information	Brochure	Available
LM Program Overview	Brochure	Available
LM Program Update	Newsletter	Quarterly
LM Website	Electronic Information	Ongoing
National Environmental Justice Conference and Training Program	Conference	Annually
National Stakeholder Database	Electronic Database	Ongoing
Nevada Offsites Program	Fact Sheet	Available
News Releases	Various	Ongoing
Site-Specific Information	Fact Sheets	Reviewed Annually
Site Management Guide	Reference Report	Annually
Site-Specific Information, i.e., Site Inspections, Surveillance and Maintenance, Environmental Assessments	Reports	As Requested
Site Transition Documents	Reports	As Requested
The First Five Years: FY 2004–2008	Historical Information Report	Available
Title I Annual Site Inspection and Monitoring Report	Report	Annually
Title II Annual Site Inspection and Monitoring Report	Report	Annually
UMTRCA Title I and II Programs	Fact Sheets	Available
Weldon Spring Historical Information and Educational Programs	Brochures and Booklets	Reviewed Annually