

*U.S. Department of Energy (DOE)  
Office of Legacy Management (LM)*

## **Our Future Mission: What Will the Program Look Like in 10 Years?**



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Waste Management 2014 • March 4, 2014



U.S. DEPARTMENT OF  
**ENERGY**

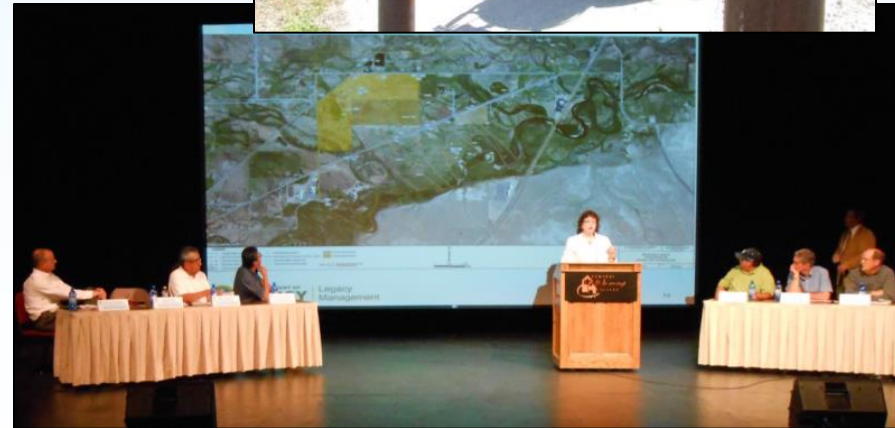
Legacy  
Management

# LM's Current Mission

- Responsible for ensuring protection of human health and the environment at sites contaminated by WWII and Cold War defense-related activities
  - Performing inspections
  - Monitoring site conditions
  - Implementing and maintaining institutional controls
  - Working with stakeholders
  - Conducting operation and maintenance activities



Sherwood, Washington,  
Disposal Site



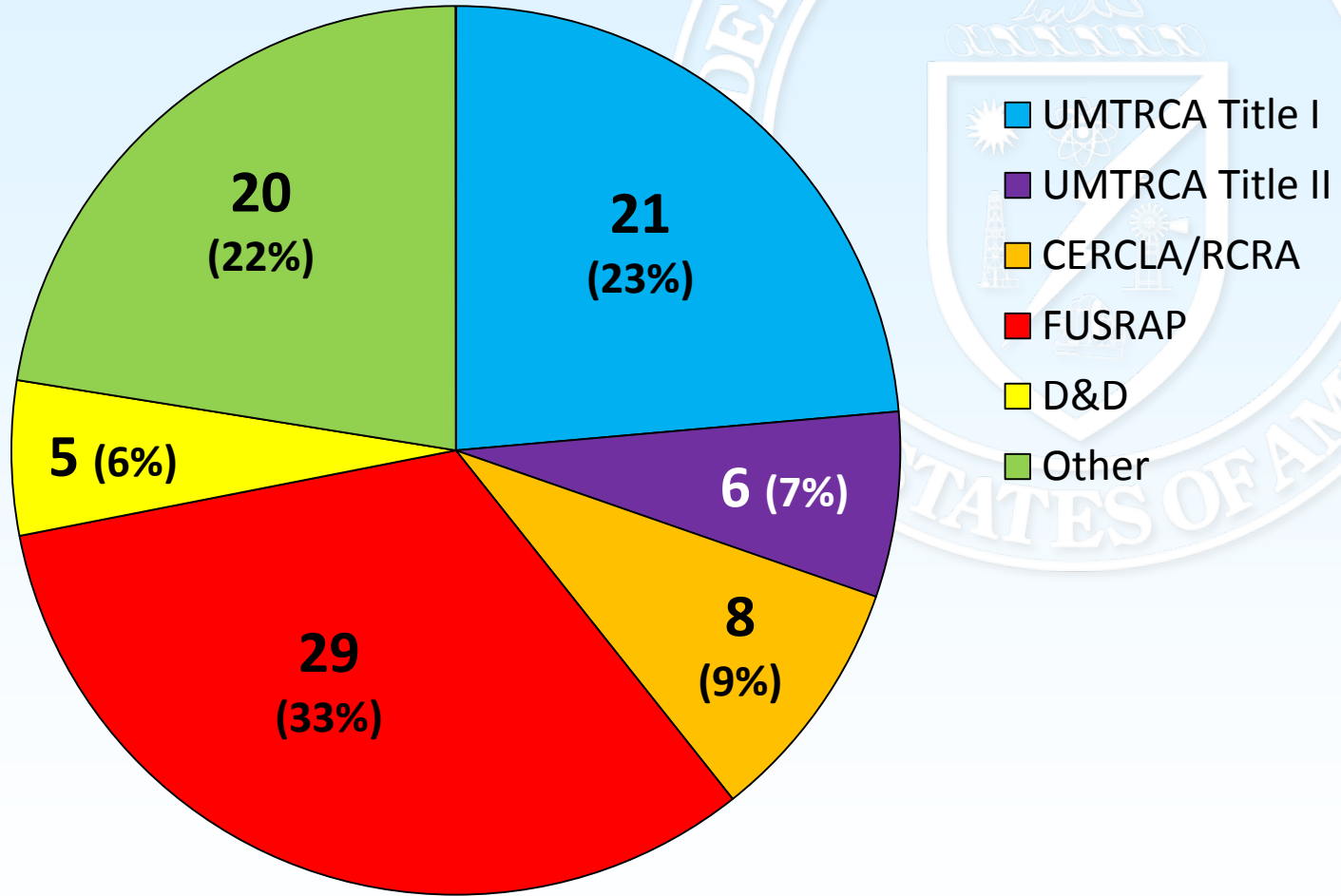
Community meeting at Riverton, Wyoming

# Types of Sites Managed by LM

- **UMTRCA Title I** – Uranium Mill Tailing Radiation Control Act (1978): inactive uranium ore processing sites
- **UMTRCA Title II** – Uranium Mill Tailing Radiation Control Act; sites that were actively processing uranium ore in 1978
- **CERCLA/RCRA** – Comprehensive Environmental Response, Compensation, and Liability Act/Resource Conservation and Recovery Act
- **FUSRAP** – Formerly Utilized Sites Remedial Action Program
- **D&D** – Decontamination and Decommissioning
- **Other** – Mostly Nevada Offsites or records-only sites



# Types of Sites Currently Managed by LM



# LM's Future

- 34 new sites are expected to transition to LM through fiscal year 2023
  - UMTRCA Title II sites – 16
  - FUSRAP sites – 17
  - DOE Office of Environmental Management (EM) site – 1

Panna Maria, Texas, Disposal Site



Bluewater, New Mexico, Disposal Site



Split Rock, Wyoming, Site



# LM's Future: Scope Will Increase

- An increased scope comes with additional responsibilities and requirements
  - Additional evaluation of sites with groundwater contamination
  - Final resolution for several groundwater remedies
  - Learn from the past:
    - Reduce likelihood of future problems by raising due diligence level during site transition for UMTRCA Title II sites

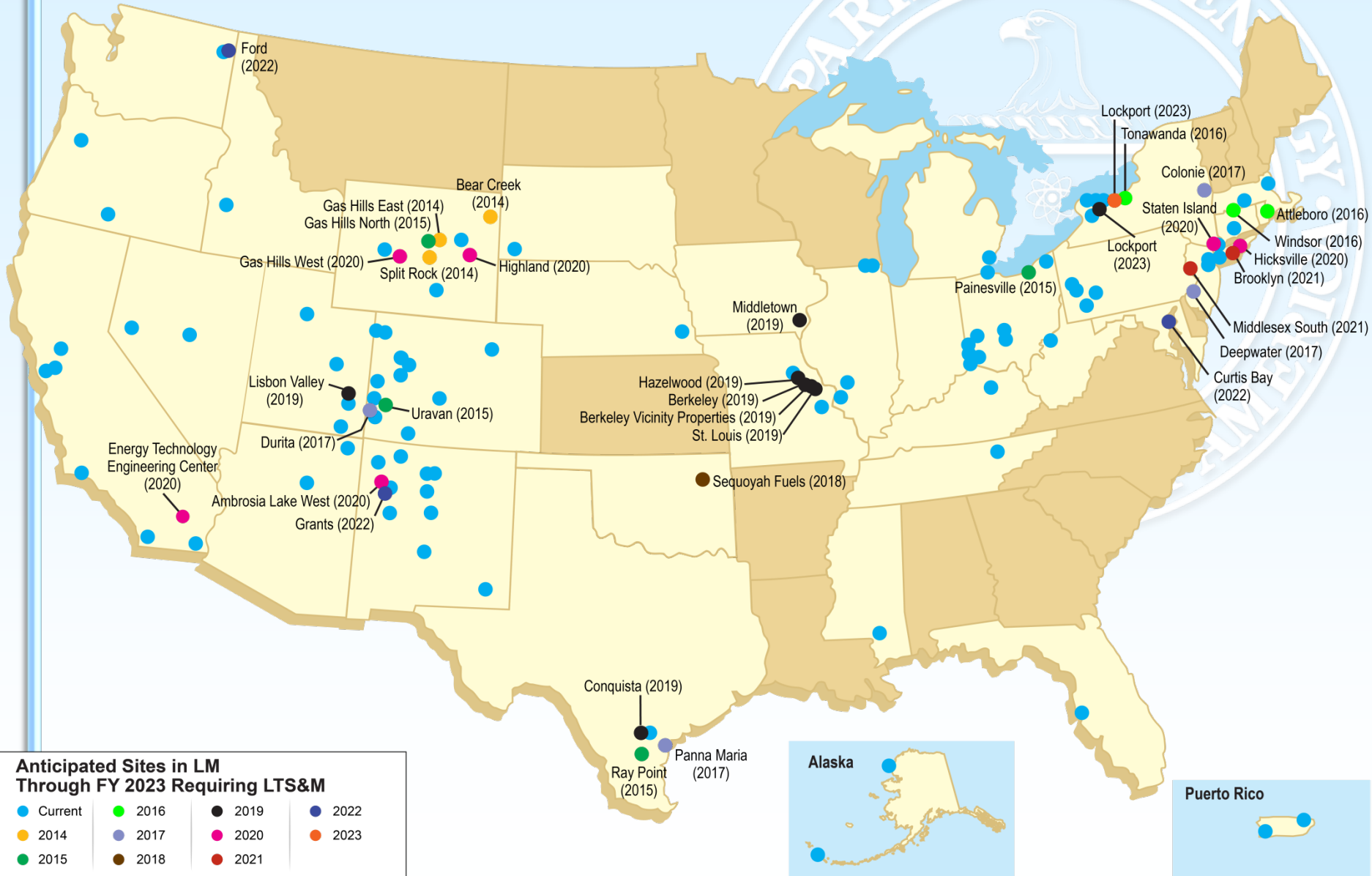


Pinellas County,  
Florida, Site



Rocky Flats, Colorado, Site

# Anticipated Legacy Management Sites Through FY 2023



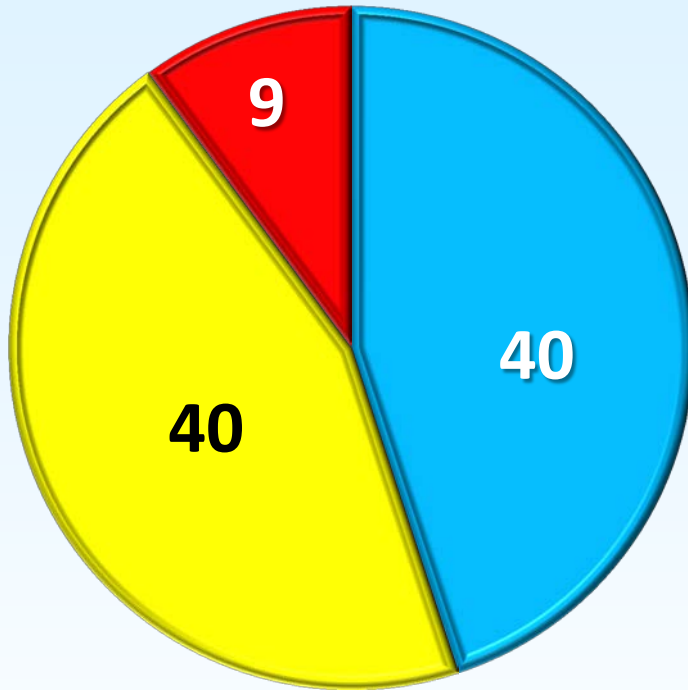
# LM Site Categories

- All LM sites fall under one of three categories:
  - Category 1
    - Records-related activities
    - Stakeholder support
  - Category 2
    - Routine inspection\*
    - Monitoring/maintenance
    - Records-related activities
    - Stakeholder support
  - Category 3
    - Operation and maintenance of active remedial action systems
    - Routine inspection\*
    - Monitoring/maintenance
    - Records-related activities
    - Stakeholder support

\*any site visit needed to verify the integrity of engineered or institutional barriers

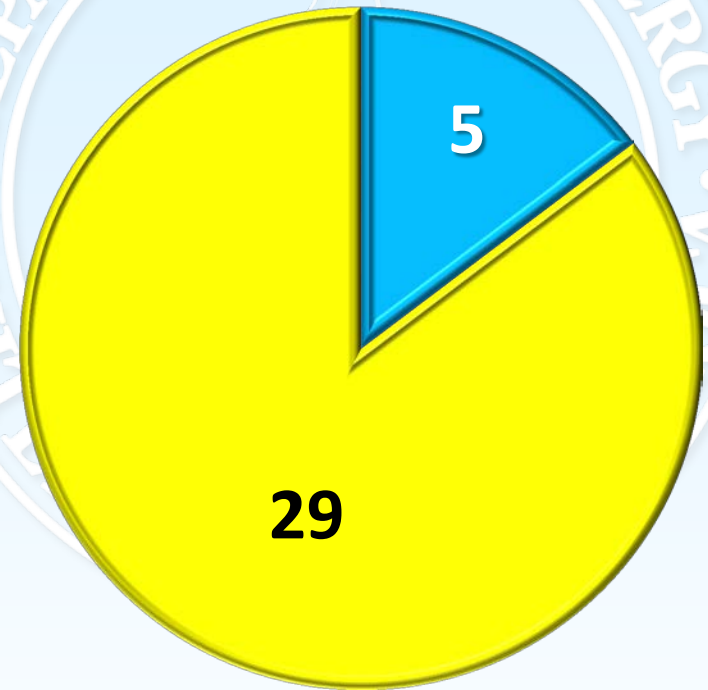


# LM's Responsibilities Will Continue to Grow



Current sites  
by category

- Category 1
- Category 2
- Category 3



New sites by category  
in next 10 years

# Future Responsibilities

- New UMTRCA Title II sites require
  - Inspections, maintenance, and monitoring
  - Records-related activities
  - Many have contaminated groundwater
  - Stakeholder concerns
- FUSRAP sites will also require
  - Monitoring
  - Institutional controls
  - Inspections
  - Records-related activities
  - Stakeholder support
- The EM site will only require
  - Records-related activities
  - Stakeholder support



Maybell West, Colorado,  
Disposal Site inspection



Riverton, Wyoming, Disposal Site  
institutional control

# Typical UMTRCA Title II Sites: Bluewater, New Mexico, Disposal Site



# Typical UMTRCA Title II Sites: L-Bar, New Mexico, Disposal Site



Late 1970s



2013



# Typical UMTRCA Title II Sites: Sherwood, Washington, Disposal Site



# Typical FUSRAP Sites

Wayne, New Jersey, Site



Bayo Canyon, New Mexico, Site



Staten Island, New York, Site



# Ongoing Mission Sites

- Potential for addition of sites with ongoing monitoring and maintenance requirements



Hanford, Washington, Site



Savannah River, South Carolina, Site



# New Developments

- Emerging opportunities
  - Work at ongoing mission sites
  - Coordinate with EM on future sites
  - Collaborate with other organizations on science and technology
  - Continue to streamline operation and maintenance activities
  - Workforce succession planning is critical
    - Internship program
    - Career-ladder federal positions
    - Challenging careers with considerable responsibility and decision-making authority



Amchitka, Alaska, Site



Lakeview, Oregon, Site



# Geospatial Information System

- LM is developing a Next Generation Geospatial Information System (NextGen) that will eventually replace its current Geospatial Environmental Mapping System (GEMS)
  - Better access to data
  - More evaluation tools
  - Improved interface with stakeholders



# GEMS 2.0

The screenshot displays the GEMS 2.0 web application interface. At the top, the browser address bar shows the URL <http://gems2.lm.doe.gov/gems/index.html>. The page header includes the U.S. Department of Energy logo and the text "Legacy Management". A navigation bar contains "Please select a site" and "Basic" / "Advanced" filters. The main content area features a map of the United States with various site locations marked. A legend on the left lists the following layers:

- LM Sites ▲
  - CERCLA/RCRA (6)
  - D&D (5)
  - FUSRAP (1)
  - UMRCA Title I (31)
  - UMRCA Title II (6)
  - Other (9)
- Site Boundaries
- LM Site Labels
- Sample Locations ▲
  - Well
  - Abandoned Well
  - Oil, Gas Well
  - Abandoned Oil, Gas Well
  - Surface
  - Surface/Sediment
  - Sediment
  - Precipitation Gauge
  - Abandoned Precipitation Gauge

The map includes a scale of 1:36978595 and a coordinate display of -90.859, 59.933. The interface also includes a "Please provide feedback" link and an "About" link.



# LM's Records Responsibilities

- National Archives and Records Administration certified records storage system
  - State of the art facility in Morgantown, West Virginia
  - Provide support for compensation requests
    - Energy Employees Occupational Injury Compensation Program
    - Radiation Exposure Compensation Program
  - 70 years of records are maintained by LM
- LM preserved Yucca Mountain Project (YMP) records
  - Records Information System
  - Licensing Support Network



- First truckload of YMP records arrives at the Legacy Management Business Center
- Yucca Mountain
- Reviewing YMP records



# Institutional Knowledge

- LM will:
  - Continue to protect and preserve institutional knowledge
  - Build on documented knowledge from previous site transitions
  - Expand a tracking system for institutional controls
  - Continue to document site knowledge and potential issues
  - Develop site history documents for staff transitions
  - Plan for long-term responsibilities
    - Succession planning
    - Work with local universities
    - Continue to maintain records for our sites, decisions, and compliance



Interns sampling soils at the Monument Valley, Arizona, Processing Site



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