

Beneficial Reuse Program

Program Overview

The U.S. Department of Energy (DOE) Office of Legacy Management (LM) mission is to fulfill DOE's post-closure responsibilities and ensure the future protection of human health and the environment. Sustainably managing and optimizing the use of land and assets by putting legacy sites into beneficial reuse supports LM's mission. LM considers multiple environmentally sound land uses for properties under its custody, and where possible, makes properties available for government, public, and private use.

The Beneficial Reuse Program promotes the productive use of LM-managed sites and assets that no longer serve a DOE mission after remediation, while being protective of human health and the environment. In 2017, LM developed a *Beneficial Reuse Management Plan* that outlines types of reuse, goals, and objectives of the program, criteria, metrics and planning of reuse activities. LM reviews land holdings periodically, and upon transition into its program, assesses and identifies beneficial reuse opportunities. LM also continually looks for opportunities to partner with other groups or agencies to identify and support potential reuse opportunities.

Types of Reuse

LM has identified seven categories of beneficial reuse that may be considered for LM sites. LM will consider, evaluate, and potentially implement multiple reuses at its sites. LM's preferred option is to transfer the land to another party to reduce its overall land inventory and minimize long-term surveillance and maintenance (LTS&M) costs. However, many

LM sites are not suitable for transfer because of the nature of the contaminants and regulatory- or statutory-imposed restrictions regarding land use. For those sites, LM evaluates other types of reuse opportunities that might enhance a site's value and performance consistent with the LTS&M plan. Not all LM sites are suitable for beneficial reuse at the time of closure, but as communities change and technologies advance, new options for beneficial reuse may become available.

LM works with federal, state, and local community leaders, nonprofit organizations, city planners, and other members of the public to identify appropriate uses of land that will be compatible with current site conditions and with LM's LTS&M obligations and responsibilities.

The categories evaluated are as follows:

Disposal

Disposal is the permanent transfer of DOE real property assets to a third party who then has rights to control, use, or relinquish the property. Either a portion of a site or an entire site can be disposed.

Energy-related

Some LM sites are used for on-site or off-site energy-related activities, including solar photovoltaic, wind, biomass, landfill gas, waste-to-energy, and geothermal.

Conservation

LM's conservation reuse includes activities supporting natural resource protection, habitat development and enhancement, and wildlife management options at LM sites. Conservation reuse includes areas where a proactive measure has been



People enjoy water features created at the River Park at Las Colonias, location of the former Grand Junction, Colorado, Processing Site.



When the East Trenches Plume Treatment System was turned on in 2016, it was the only known solar powered commercial air stripper in use in the United States at the Rocky Flats Site in Colorado.

implemented to create, restore, protect, or enhance a habitat. Currently, LM manages a number of sites that have various conservation reuses such as protection of endangered or listed species (e.g., the Gunnison sage grouse). For these types of reuse, LM might partner with other federal, state, or private agencies.

Commercial and industrial

Redevelopment or adaptive reuses of LM sites means repurposing LM facilities or land for industrial use; redeveloping sites for commercial purposes such as a cell tower site, warehouse, or office space; or supporting redevelopment of a parcel of land through an agreement or partnership.

Community reuse

Community reuse refers to the development of open space or recreational areas, or using sites for educational purposes or community-driven activities.

Agricultural reuse

Agricultural reuse includes the use of LM sites for activities such as livestock grazing, hay production, and livestock improvements.

Cultural resources

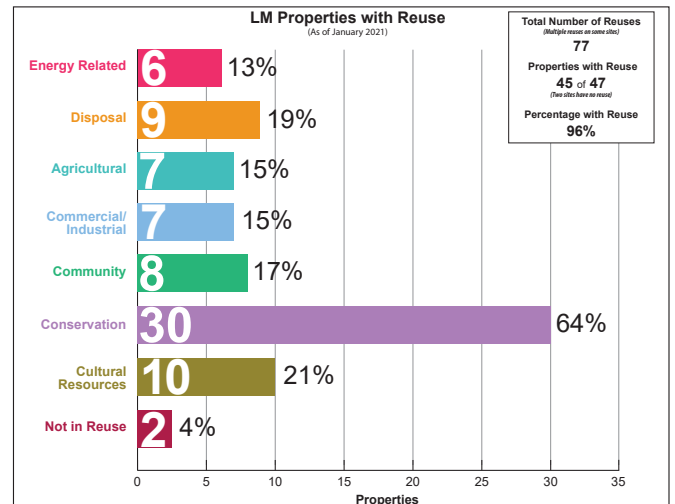
LM communicates the significant histories of its sites, by means of signage, interpretive centers, listings on historic registers, and other informational devices.

Awards and Achievements

LM has been recognized for its accomplishments in environmental restoration, remediation, conservation, and overall beneficial reuse. LM received a U.S. Environmental Protection Agency National Federal Facility Excellence in Site Reuse Award in 2019 for the Fernald Preserve, Ohio, Site, in 2020 for the Weldon Spring Site, Missouri and again in 2021 for both the Rocky Flats Site, Colorado, and the Grand Junction, Colorado, Processing Site/Riverfront at Las Colonias Park. The awards recognize noteworthy restoration and reuse of federal facility sites through innovative thinking and cooperation among federal agencies, states, tribes, local partners, and developers.

LM's interpretive centers, such as those located at the Fernald Preserve, and Weldon Spring Site, are regularly open to the public for recreational and educational purposes. Renewable energy, such as geothermal or solar power, is utilized at the centers when available. The centers house interactive exhibits that showcase the history and legacy of the sites, the ecology of the surrounding areas, and highlight the extensive conservation work at the sites, which supports habitat for many pollinator species, threatened and endangered species. LM uses the interpretive centers to support its efforts in STEM education by hosting events and using activities and programming created by world-class educators to bring to life the incredible advancements of the nuclear age, cleanup, and ecological transformations of LM sites. The interpretive centers are incredible testaments of beneficial reuse.

LM sites without interpretive centers also provide many examples of exemplary reuse efforts. For example, at the Rocky Flats, Colorado, Site, DOE successfully transformed a contaminated former nuclear weapon production plant into a conservation resource that enhances and protects critical habitat for a federally listed threatened species and several other rare plant and wildlife species. At the Grand Junction, Colorado, Processing Site a former uranium processing facility has been transformed into the beautiful, city-owned, mixed-use park, Riverfront at Las Colonias.



CONTACT INFORMATION

IN CASE OF AN EMERGENCY AT THE SITES, CONTACT 911.

Information about **Beneficial Reuse** is available at www.energy.gov/lm/services/property-management/beneficial-reuse

Contact: **Legacy Management Reuse Asset Manager**
 Phone: **(720) 377-3820**
 Email: joyce.chavez@lm.doe.gov

For more information about LM activities, contact:
U.S. Department of Energy
Office of Legacy Management
2597 Legacy Way
Grand Junction, CO 81503

Email: public.affairs@lm.doe.gov

DOE Office of Legacy Management
(970) 248-6070 (monitored continuously)
(877) 695-5322 (toll-free)

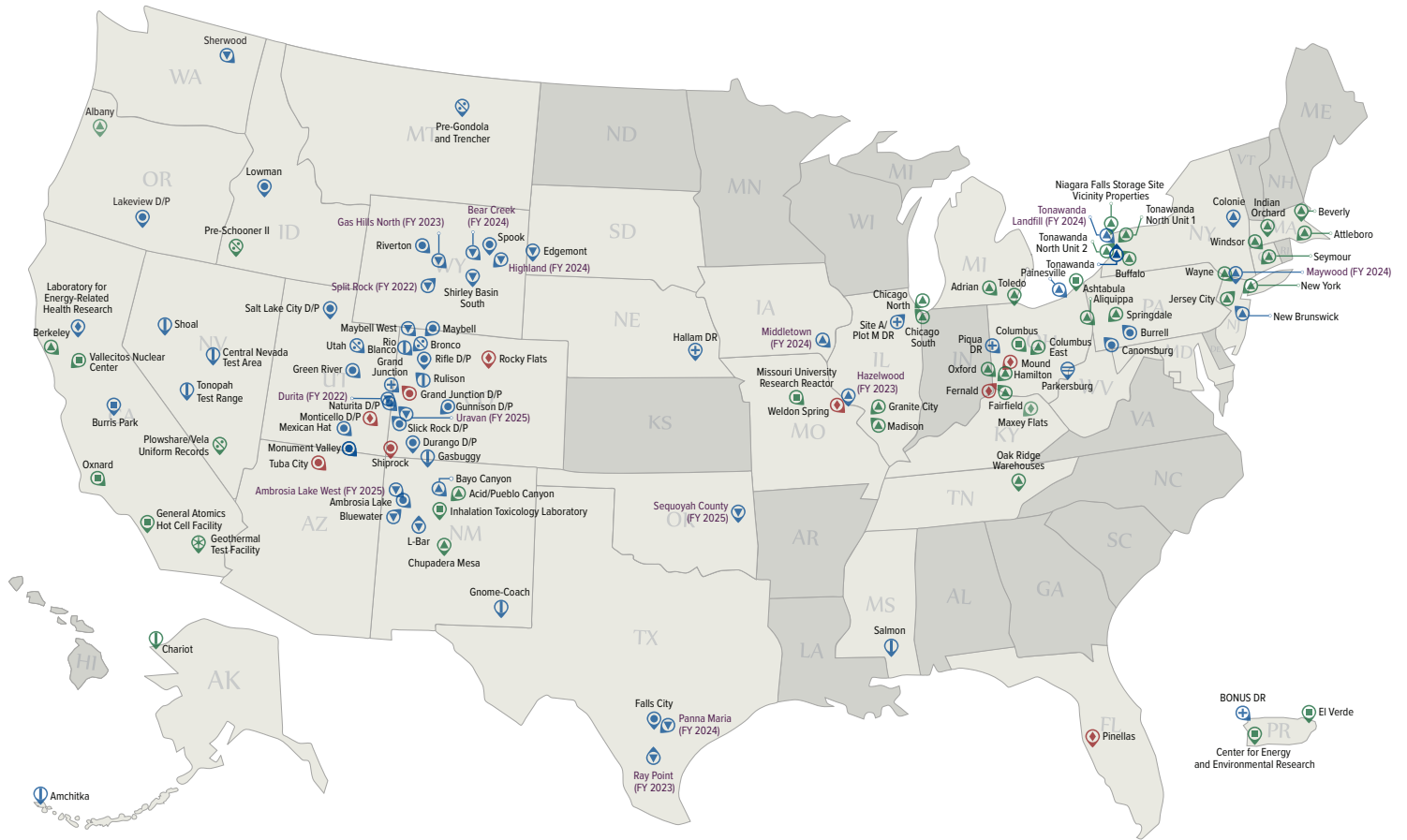
 www.energy.gov/lm

 www.facebook.com/OfficeofLegacyManagement

 www.linkedin.com/company/legacy-management

Future Opportunity

As of January 2021, LM manages 101 sites in 29 states and Puerto Rico. It is anticipated that additional sites will be transitioned to LM. Approximately two years before the anticipated transition date, LM begins assessing the site for beneficial reuse opportunities. LM thoroughly reviews multiple aspects of the site, including physical site characteristics, community development plans, the surrounding landscape, and site boundaries to determine if there are opportunities for beneficial reuse. LM also regularly works with third parties to identify opportunities for partnerships or disposal reuse.



Anticipated Sites in LM Through FY 2025 Requiring LTS&M						Site Category	
CERCLA/RCRA	D&D	FUSRAP	MED/AEC Legacy Site	Nevada Offsites	Category 1	Category 3 activities typically include operation and maintenance of active remedial action systems, routine inspection (any site visit needed to verify the integrity of engineered or institutional barriers) and monitoring/maintenance, records-related activities, and stakeholder support	
NWPA	Plowshare/Vela Uniform Program	State Water Quality Standards	UMTRCA Title I	UMTRCA Title II	Category 2	Category 2 activities typically include routine inspection (any site visit needed to verify the integrity of engineered or institutional barriers) and monitoring/maintenance, records-related activities, and stakeholder support	
						D/P = Disposal/Processing DR = Decommissioned Reactor	

PROPERTIES PROJECTED TO TRANSFER OVER THE NEXT FIVE YEARS

2021	2022	2023	2024	2025
	Durita, Colorado	Gas Hills North, Wyoming	Bear Creek, Wyoming	Ambrosia Lake West, New Mexico
	Split Rock, Wyoming	Hazelwood, Missouri	Highland, Wyoming	Sequoyah County, Oklahoma
		Ray Point, Texas	Maywood, New Jersey	Uravan, Colorado
			Middletown, Iowa	
			Panna Maria, Texas	
			Tonawanda Landfill, New York	