PUTTING SITES TO WORK

How Superfund Redevelopment in Region 6 Is Making a Difference in Communities

2022 DATA

REGION 6 ECONOMIC PROFILE

EPA

Cover page photos:

Fruit Avenue Plume (New Mexico), Star Lake Canal (Texas), Highway 71/72 Refinery (Louisiana), Vertac Inc (Arkansas), McGaffey and Main Groundwater Plume (New Mexico), Chevron Questa Mine (New Mexico).

Figure 1. An apartment complex at the Big Tex Grain Co. site (Texas).

TABLE OF CONTENTS

This page is intentionally blank.

PREFACE

EPA's Superfund Program is a cornerstone of the work that the Agency performs for citizens and communities across the country. The revitalization of places affected by contaminated lands is a key part of Superfund's mission, meeting community needs for thriving economies and improved environmental and public health outcomes. Through EPA's Superfund Redevelopment Program, the Agency contributes to these communities' economic vitality by supporting the return of sites to productive use.

EPA is focused on accelerating work and progress at all Superfund sites across the country, and supporting redevelopment and community revitalization. Using resources from the 2022 Bipartisan Infrastructure Law, EPA is providing necessary funding to enable delayed cleanup efforts at 49 Superfund sites to move forward. More than 60% of these sites are in historically underserved communities. EPA is leading the way to support the return of these and other once-contaminated sites to productive use.

These regional profiles highlight community-led efforts as EPA expedites cleanup and remediation and engages with partners and stakeholders to support redevelopment and community revitalization.

This page is intentionally blank.

INTRODUCTION

EPA's Region 6 office serves Arkansas, Louisiana, New Mexico, Oklahoma, Texas and 66 tribes. This part of the country includes some of the nation's fastest-growing cities as well as small towns, farmland, ranches and public lands. Urban and rural communities alike across the Region are focusing on the cleanup and revitalization of old industrial sites, including Superfund sites, recognizing that these areas offer substantial opportunities for new development and innovation. Today, states and communities are working diligently to find new uses for these sites. The Superfund program in EPA Region 6 is proud to play a role in these efforts.

The cleanup and reuse of Superfund sites often restores value to site properties and amenities to surrounding communities that have been negatively affected by contamination. Site redevelopment can revitalize a local economy with jobs, new businesses, tax revenues and local spending.

Through efforts such as the Superfund Redevelopment Program, EPA Region 6 helps communities reclaim cleaned-up Superfund sites. Factoring the reasonably anticipated future use of Superfund sites into the cleanup process promotes their safe redevelopment. In addition, EPA Region 6 works closely with state and local officials to remove barriers that have kept many Superfund sites vacant or underused. EPA Region 6 works to ensure that businesses on properties being cleaned up under Superfund can continue operating in a way that protects human health and the environment during site investigations and cleanup work. This continuity enables these businesses to remain open and serve as a source of jobs and income for local communities.

Region 6 Sites in Reuse and Continued Use: Business and Job Highlights

Businesses:	*267*
Total Annual Sales:	*$787 million*
Number of People Employed:	*4,615*
Total Annual Employee Income:	*$240 million*

Figure 2. A local utility maintenance yard sits at the foot of an old grain silo at the City of Perryton Well No. 2 site (Texas).

Superfund sites across Region 6 are home to commercial and industrial parks, retail centers, condominiums and single family homes. Many sites continue to host industrial operations, including large-scale manufacturing facilities. Some sites now support alternative energy projects. Others have been transformed into ecological preserves, parks and recreation complexes. On-site businesses and organizations at current and former Region 6 Superfund sites provide an estimated 4,615 jobs and contribute an estimated $240 million in annual employment income. Sites in reuse and continued use in Region 6 generate $9.9 million in annual property tax revenues for local governments.[1]

1 Business and property value tax figures represent only a subset of the beneficial effects of sites in reuse or continued use in Region 6. There are 51 Superfund sites in reuse or continued use in Region 6 for which EPA does not have business data, including five federal facilities on the Superfund National Priorities List (NPL). Not all sites in reuse involve an on-site business or other land use that would employ people. Several sites without businesses have beneficial effects that are not easily quantified, such as properties providing ecological or recreational benefits (e.g., parks, wetlands, ecological habitat and open space). In addition, there are 53 sites in reuse or continued use in Region 6 for which EPA does not have property value or tax data, including five NPL federal facilities.

This profile looks at how redevelopment activities at Superfund sites make a difference in communities across Region 6. In particular, it describes some of the beneficial effects of redevelopment and continued use of current and former Superfund sites. The profile also describes the land values and property taxes associated with Superfund sites returned to use and sites that have remained in use throughout the cleanup process. EPA updates these profiles periodically. The beneficial effects may increase or decrease over time due to changes in:

- The number of sites in reuse or continued use.
- The number of on-site businesses.
- Data availability.
- Changes in business and property value data.

Figures presented represent only a subset of all Superfund sites in reuse or continued use in Region 6.

Figure 3. Left: An offroad motorsports business at the Sol Lynn site (Texas); Right: A drive-through recycling center at the Vertac, Inc. site (Arkansas).

SUPPORT FOR SUPERFUND REDEVELOPMENT

EPA Region 6 is committed to improving the health and livelihood of Americans by cleaning up and returning land to productive use. In addition to protecting human health and the environment through the Superfund program, Region 6 partners with stakeholders to encourage redevelopment opportunities at Superfund sites. Region 6 helps communities and cleanup managers consider redevelopment during cleanup planning and evaluate remedies already in place to ensure appropriate redevelopment. In addition, EPA participates in partnerships with communities and encourages opportunities to support Superfund redevelopment projects that emphasize environmental and economic sustainability.

Specific redevelopment support efforts in EPA Region 6 include:

- Identifying and evaluating local land use priorities to align with site cleanup plans through the redevelopment planning process.
- Facilitating cleanup and redevelopment discussions to help resolve key issues between parties interested in site redevelopment.
- Supporting targeted projects intended to help Region 6 communities and EPA find the right tools to move site redevelopment forward.
- Making efforts to help address communities' and developers' liability, safety and reuse concerns through development of educational materials, comfort letters, developer agreements and environmental status reports – known as Ready for Reuse Determinations – that provide information about the appropriate use of sites.
- Supporting partnerships with groups such as the U.S. Fish and Wildlife Service that are committed to putting Superfund sites back into use.
- Developing reuse fact sheets, websites, webinars and reuse case studies to share opportunities and lessons associated with Superfund Redevelopment.


SOLAR REUSE ASSESSMENT AND FEASIBILITY STUDY REPORT

Agriculture Street Landfill Site
New Orleans, LA

FINAL
JULY 2021

INTRODUCTION

EPA's Superfund Redevelopment and RE-Powering America's Land programs supported a renewable energy reuse assessment and solar feasibility study for the city of New Orleans (the City) to help advance recommendations from an Urban Resilience Report for this former municipal disposal area. The focus of the project is the 95-acre Agriculture Street Landfill Superfund site (Site), which includes an undeveloped 45-acre landfill and residential properties. A Microgrid Opportunities Report funded by the U.S. Department of Energy highlighted the Site's capacity to host a solar renewable energy project that could help power an adjacent water and drainage infrastructure pumping station. Following up on this finding, EPA's consulting team, Skeo Solutions, Inc. and National Renewable Energy Laboratory (NREL), provided technical assistance to evaluate suitable areas for locating a solar photovoltaic (solar PV, or PV) system at the Site.

Overview

The project started in November 2020 as EPA, City stakeholders and the consulting team initiated a phased solar suitability evaluation. The project finished in July 2021 with the solar feasibility study, which refines the potential PV system capacity and evaluates financial feasibility. This report summarizes the consulting team's analysis and key considerations to support the City in further determining options to advance site reuse and resilience efforts.

SITE BACKGROUND

Site Location: The Site is located in the Desire neighborhood on the City's east side. It is bounded on the north by Higgins Boulevard, on the northwest by Almonaster Boulevard, and on the south and west by the Southern Railroad rights-of-way.

Community Context: The Site is located in a historically African American community that faces the compound impacts of low lying area flood damage and the fact that many homes and neighborhood amenities were built in an area later designated as a federal Superfund site. The City's interest in a solar development at the Site meets several goals, including improving

Contents

Stakeholders Involved

The stakeholders listed below participated in reuse discussions via teleconference in 2020 and 2021.

- City of New Orleans Environmental Affairs
- City of New Orleans Office of Resilience and Sustainability
- Sewer and Water Board of New Orleans
- City of New Orleans Department of Property Management, Real Estate Division
- National Renewable Energy Laboratory
- RE-Powering America's Land Program, EPA
- Superfund Redevelopment Program, EPA
- EPA Region 6

1

Figure 4. A solar reuse assessment and feasibility report for the Agriculture Street Landfill site (Louisiana).

These efforts have helped build expertise across Region 6, making it easier to both consider future use of Superfund sites prior to cleanup and to identify opportunities for removing reuse barriers. These efforts also help tribes, state agencies, local governments, communities, potentially responsible parties, site owners, developers, and other partners and stakeholders to better understand potential future uses for Superfund sites. This helps stakeholders engage early in the cleanup process, ensuring that Superfund sites are restored as productive assets for communities. Most importantly, these efforts lead to significant returns for communities, including jobs, annual income and tax revenues.

SUPERFUND REDEVELOPMENT: THE BIG PICTURE

EPA can take and oversee immediate action at contaminated sites through short-term cleanup actions, also called removal actions.[2] EPA refers sites warranting long-term cleanup to its remedial program or to state programs. EPA's National Priorities List (NPL) is a list of sites the Agency is targeting for further investigation and possible remediation through the Superfund program. Once EPA places a site on the NPL, the Agency studies the contamination, identifies technologies that could address the material and evaluates alternative cleanup approaches. EPA then proposes a cleanup plan and, after collecting public input, issues a final cleanup plan. The Agency then cleans up the site or oversees cleanup activities. EPA has placed 147 sites in Region 6 on the NPL.

Whenever possible, EPA seeks to integrate redevelopment priorities into site cleanup plans. In Region 6, 83 NPL sites and nine non-NPL Superfund sites are in use. These sites have either new uses in place or uses that remain in place from before cleanup. Many of these sites have been redeveloped for commercial, industrial and residential purposes. Others have been redeveloped for recreational, ecological and agricultural uses. Businesses and other organizations also use some site areas for memorials and parking areas. Many redeveloped sites support multiple uses and have the capacity to support additional uses and further redevelopment. The following sections take a closer look at the beneficial effects of businesses operating on current and former Superfund sites in Region 6.

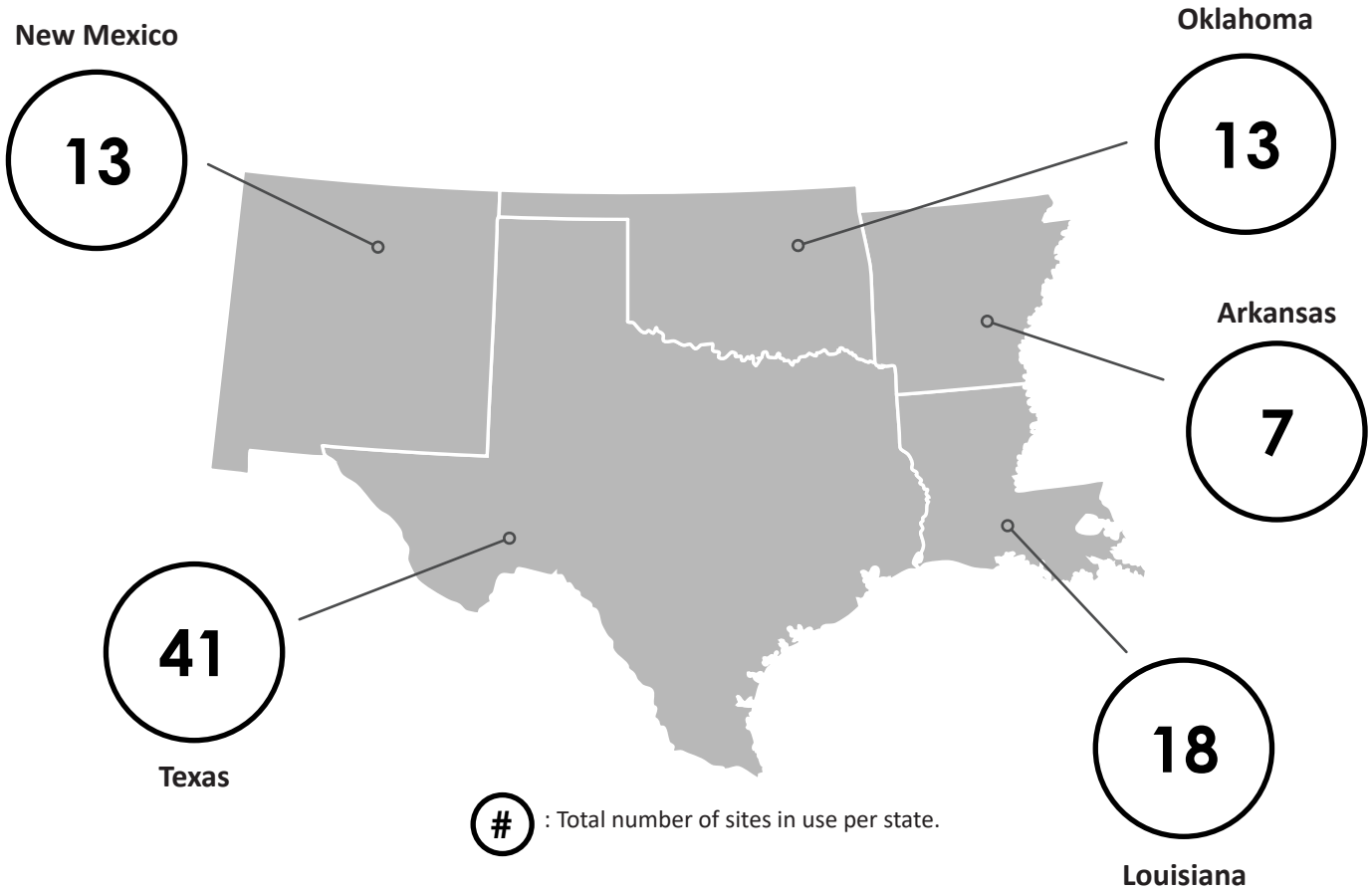


Figure 5. Sites in reuse and continued use in Region 6.

2 Removal actions may be taken at sites on the NPL and sites not on the NPL.

Figure 6. Left: A women's health center at the RSR Corporation site (Texas); Right: A crane totem in the parking lot of a marine repair facility at the Palmer Barge Line site (Texas).

Sites in Reuse and Continued Use: A Closer Look

Reuse Type	Description	Region 6 Example
In Reuse	*Part or all of a site is being used in a new, different manner than before Superfund involvement. Or, the property was vacant and cleanup was designed to support a new, specific land use.*	*Big Tex Grain Co. (Texas) — a mixed-use development that includes apartments, townhomes, restaurants and retail spaces sits atop a former industrial processing area.*
In Continued Use	*Historical uses at a site remain active, and/or the site is still used in the same general manner as when the Superfund process started at the site.*	*Frit Industries (Arkansas) — a fertilizer additive manufacturing company has been on site since the 1950s.*
In Reuse and Continued Use	*Part of a site is in continued use and part of the site is in reuse.*	*Highway 71/72 Refinery (Louisiana) — a hotel complex featuring restaurants and shops was built on site after cleanup; long-time residential, commercial and public service areas remain active on site.*

= 92 SITES IN USE

= 41 SITES WITH BUSINESSES

BENEFICIAL EFFECTS OF SUPERFUND SITE REDEVELOPMENT IN REGION 6

Businesses and Jobs

EPA has collected economic data for 267 businesses, government agencies and civic organizations operating on 37 NPL sites and four non-NPL sites in reuse and continued use in Region 6. (See the State Redevelopment Profiles for each state's reuse details.) Businesses and organizations at these sites are part of several different sectors, including lodging, professional trade, industrial trade and health care services.

Businesses and organizations at Region 6 Superfund sites include hotels, schools, grocery stores, restaurants, civic and social organizations, freight transportation facilities, health care centers and manufacturing facilities.

Figure 7. A hotel operates at the Highway 71/72 Refinery site (Louisiana).

The businesses and organizations at these sites generate about $787 million in estimated annual sales and employ about 4,615 people, earning an estimated $240 million in annual employment income. This income injects money into local economies and generates revenue through personal state income taxes. These businesses also help local economies through direct purchases of local supplies and services. On-site businesses that produce retail sales and services also generate tax revenues through the collection of sales taxes, which support state and local governments. Table 1 provides more detailed information.

Table 1. Site and Business Information for Region 6 Sites in Reuse and Continued Use (2022)

	Sites[a]	Sites with Businesses	Businesses[b]	Total Annual Sales	Total Employees	Total Annual Employee Income
In Reuse	*38*	*16*	*37*	*$132 million*	*689*	*$44 million*
In Continued Use	*25*	*3*	*4*	*$14 million*	*64*	*$5 million*
In Reuse and in Continued Use	*29*	*22*	*226*	*$641 million*	*3,862*	*$191 million*
Totals	***92***	***41***	***267***	***$787 million***	***4,615***	***$240 million***

[a] Five sites are federal facilities. Federal facility sites are excluded from all other detailed site and business data presented above.

[b] Also includes other organizations such as government agencies, nonprofit organizations and civic institutions. Business information is not available for all businesses on all Superfund sites in reuse or continued use. Throughout this report, sales and annual employee income may not sum exactly to the totals presented due to rounding.

Property Values and Property Tax Revenues

Properties cleaned up under the Superfund program and returned to use have the potential to increase in value significantly. This increased value can boost property tax revenues, which help pay for local government operations, schools, transit systems and other public services. Site properties at the Conroe Creosoting site in Texas are now valued at over $53 million.

Identifying increases in property values and property taxes following cleanup and reuse is challenging. This is due to several factors, including limited data on past property values and the frequency and timing of local property value assessments. Likewise, many factors affect property values, including external economic and neighborhood factors not related to a site's contamination or Superfund status. It is also difficult to isolate the effects of Superfund cleanup and redevelopment using current property values. However, these values do provide insight into the current value of Superfund properties and the potential loss in economic value if the properties were not cleaned up and made available for reuse or continued use.

Region 6 Sites in Reuse and Continued Use: Property Value and Tax Highlights

Total Property Value: ***$969 million***

Total Annual Property Taxes: ***$9.9 million***

Figure 8. Store front and sign at the Sol Lynn site (Texas).

EPA has collected property value and tax data for 39 Superfund sites in reuse and continued use in Region 6.[3] These sites span 3,193 property parcels and 5,239 acres. They have a total property value of $969 million. The average total property value per acre is $185,000.

Land and improvement property value information is available for 38 sites. These properties have a total land value of $293 million and a total improvement value of $643 million.[4]

Property tax information is available for all 39 sites. The properties generate a combined $9.9 million in local property taxes annually.

Table 2. Property Value and Tax Information for Sites in Reuse and Continued Use in Region 6[a]

Total Land Value (37 sites)[b]	Total Improvement Value (37 sites)	Total Property Value (39 sites)	Total Property Value per Acre (39 sites)[c]	Total Annual Property Taxes (39 sites)
$274 million	$577 million	$969 million	$185,000	$9.9 million

[a] Results are based on an EPA Superfund Redevelopment Program effort to collect on-site property values and property taxes for a subset of Superfund sites. The property value and tax amounts reflect the latest property value year and tax data year available in county assessor datasets, which varied from 2021 to 2023. Throughout this report, property and tax values may not sum exactly to the totals presented due to rounding.

[b] Land and improvement value for four of the sites is listed as $0.

[c] Based on total property value amount of $969 million divided by total acreage of 5,239.

3 There are 53 additional sites in reuse or continued use in Region 6 for which EPA does not have property value or tax data, including five NPL federal facilities.

4 Property values consist of land value and the value of any improvements (buildings and infrastructure) placed on a property. When sites are redeveloped, some or all of these improvements may be new or already in place. In some cases, the breakdown showing the land value and improvement value is not always available; only the total property value may be available.

BENEFICIAL EFFECTS FROM ENHANCED RECREATIONAL AND ECOLOGICAL AMENITIES

In addition to hosting commercial developments, retail centers and industrial facilities, many Region 6 sites in reuse and continued use provide recreational and ecological benefits. Green space and habitat reuses help attract visitors and residents and indirectly contribute to local economies.

Figure 9. A field with wildflowers at the Bayou Verdine site (Louisiana).

Careful planning can enable the integration of green spaces and habitat into site cleanup plans, resulting in the transformation of contaminated properties into valuable community and wildlife assets. Green spaces are integral components of sustainable communities – they help protect the environment and human health while providing other social and economic benefits. Parks, community gardens and other public green spaces create opportunities for people to gather, exercise and connect with nature. The creation of green spaces and habitat at once-contaminated properties serves to re-introduce ecosystems and biodiversity into urban and suburban landscapes by providing corridors for migrating species and preserving habitat. They can also mitigate stormwater runoff problems by slowly absorbing and naturally filtering stormwater, resulting in improved water quality due to decreased runoff and erosion.

Parks, natural areas and scenic landscapes also have great economic value – supporting regional economies through tourism, agriculture and other activities. Economic impacts of recreation activities can include outdoor recreation spending and reduced public costs related to healthcare and infrastructure. In 2021, outdoor recreation contributed $862 billion to the U.S. economy, supporting 4.5 million jobs and 1.9% of the total gross domestic product (GDP). Outdoor recreation's contribution to the GDP grew 18.9% compared to the overall economy that grew 5.9% in 2021.[5] Protected green space can also increase the property values of nearby homes by providing amenities that draw people to live and work in the community. Many sites in Region 6 provide recreational and ecological benefits.

5 State of the Outdoor Market, Fall 2022. Outdoor Industry Association. Available at https://outdoorindustry.org/wp-content/uploads/2022/12/OIA-State-of-the-Outdoor-Market-Report-Fall-2022.pdf

TEX-TIN
Salt Marsh Restoration Provides Vital Habitat

From the 1940s to 1991, a copper and tin smelter operated at the 170-acre Tex-Tin Corp. Superfund site in Texas City, Texas. A waste oil recovery facility was also on site in the early 1980s. EPA added the site to the Superfund program's NPL in 1998. Cleanup focused on soil, sediment and groundwater at the site, as well as affected homes and the nearby Swan Lake Salt Marsh Area.

Figure 10. Restored wetlands at Swan Lake are now part of a larger intertidal marsh preserve complex at the Tex-Tin Superfund site (Texas).

In 2001, Natural Resource Trustees for the State of Texas, including the Texas Commission on Environmental Quality, the General Land Office, the Texas Parks and Wildlife Department, the National Oceanic and Atmospheric Administration, and the U.S. Fish and Wildlife Service on behalf of the Department of the Interior (the Trustees), led an environmental assessment of contaminated marsh sediment and created a restoration plan. The Trustees used Natural Resource Damage settlement funds together with other funding sources to restore more than 70 acres of marsh in Swan Lake in 2007 and more than 70 acres of marsh in nearby Pierce Marsh in 2016.

Swan Lake also plays a vital role in local non-profit Scenic Galveston's work to create a high-visibility marsh preserve along the highway to access Galveston Island. Part of a roughly 2,400-acre preserve complex, the John M. O'Quinn I-45 Estuarial Corridor is an important stopover for migrating shorebirds. It also provides wintering habitat for several threatened and endangered species, high-priority waterfowl and grassland birds. EPA is providing guidance and support to Scenic Galveston as they explore expanding the preserve further onto the site. It is working to incorporate these habitats into the broader preserve complex through extensive habitat restoration and enhancement, as well as to restore connectivity to maintain a permanent habitat corridor between Galveston Bay and West Galveston Bay.

BAYOU BONFOUCA
From Industry to Outdoor Recreation

The 54-acre Bayou Bonfouca site is in the city of Slidell in St. Tammany Parish, Louisiana. More than 100 years of wood-treating operations contaminated the area and the surrounding bayou. EPA added the site to the NPL in 1983. EPA and the Louisiana Department of Environmental Quality (LDEQ) worked together on a cleanup and restoration plan. Cleanup resulted in the restoration of over a mile of Bayou Bonfouca's waterway. Other parts of the site, including the bayou, are devoted to aquatic life conservation and recreation and public uses. During cleanup, EPA put in a boat ramp to access the bayou. Later, site owners donated this prime waterfront property to the city of Slidell (the City). The boat ramp is available for public use and provides boat access to Bayou Bonfouca. The City also coordinated with EPA and LDEQ to develop community green space and a city park, known as Heritage Park. The park includes playgrounds, picnic areas, walking/jogging paths, restrooms and a gazebo for performances and community gatherings. The city hosts concerts, festivals and events at Heritage Park throughout the year, including annual Fourth of July festivities, with firework spectators viewing the show from the park and the bayou.

Figure 11. The Slidell Municipal Marina consists of a floating dock, located behind the Heritage Park amphitheater, with nine finger-pier slips, plus 18 slips for side-tie docking at the Bayou Bonfouca Superfund site (Louisiana).

In 2012, the City received a $1.5 million grant to promote boating access along Bayou Bonfouca, near the site. Coordination among the City, LDEQ and EPA paved the way for Slidell Municipal Marina, which opened to the public in summer 2018. The project includes floating docks, piers, trails and other amenities to encourage recreational boating on the bayou. The marina provides boaters with access to Heritage Park and downtown Slidell from Lake Pontchartrain. In May 2018, EPA Region 6 recognized the City's efforts to support beneficial site reuse with its Excellence in Site Reuse award. Region 6 established the award to celebrate people and organizations that have supported the reuse of Superfund sites through outstanding efforts that go above and beyond required cleanup.

Why Are Wetlands Economically Important?

Superfund site reuse can support wetland habitat, as seen at several sites in Region 6. Cleanup of the Bailey Waste Disposal site in Bridge City, Texas, helped protect sensitive wetlands and made them safe for wildlife and recreation activities. At the Star Lake Canal site in Jefferson County, Texas, wetlands provide habitat for state-designated threatened species such as the green heron and reddish egret.

Figure 12. A tidal marsh near the Neches River at the Bailey Waste Disposal site provides wildlife habitat (Texas).

Wetlands provide a variety of benefits. The combination of shallow water, high levels of nutrients and primary productivity is ideal for organisms that form the base of the food web and feed many species of fish, amphibians, shellfish and insects. Wetlands are extremely effective in removing pollutants from water and acting as filters for future drinking water. Wetlands play a role in reducing the frequency and intensity of floods. They can store large amounts of carbon. They also provide recreational amenities.

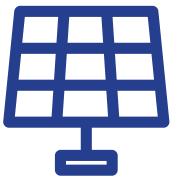
These benefits also have economic value. Replacing wetlands' water treatment services with manmade facilities, for example, would be expensive. Worldwide, wetlands provide an estimated $47.2 trillion in ecosystem services. To learn more, see:

- EPA's *Economic Benefits of Wetlands*: epa.gov/sites/default/files/2021-01/documents/economic_benefits_of_wetlands.pdf
- EPA's *Ecosystem Services at Superfund Sites: Reuse and the Benefit to Community:* semspub.epa.gov/src/document/HQ/100003256
- EPA's *Why Are Wetlands Important?*: epa.gov/wetlands/why-are-wetlands-important
- EPA's *Functions and Values of Wetlands*: epa.gov/sites/default/files/2021-01/documents/functions_values_of_wetlands.pdf

BENEFICIAL EFFECTS FROM ALTERNATIVE ENERGY PROJECTS

Alternative energy projects provide a range of beneficial effects. They support construction and operations jobs, spur local investment for manufacturing and materials, create benefits for landowners in the form of land lease and right-of-way payments, lower energy costs, and reduce greenhouse gas emissions. They also help hedge against energy price and supply volatility, support local business competitiveness and technology supply chain development, provide outreach and public relations opportunities for site owners and communities, and contribute to broader economic development planning. Alternative energy projects at Superfund sites and other contaminated lands help support White House priorities to strengthen resilience to climate change and increase access to clean energy sources. These projects also can help communities reclaim and return contaminated lands to productive uses, while supporting EPA's mission to protect human health and the environment.

As of September 2022, EPA is tracking two alternative energy projects at two Superfund sites in Region 6. These projects have an installed capacity of about 12.5 megawatts.



1
Solar Project

1
Wind Project

Alternative energy projects tracked in **Region 6** generate an estimated **48,668 megawatt hours** each year.[6] This is equivalent to...

34,490 metric tons of carbon dioxide

4,347 homes' energy use for one year

7,675 gas-powered vehicles driven for one year

6 Equivalencies were calculated using power production. Production values were not available for one project in Region 6. Estimated power production for solar projects was calculated using facility capacity (megawatts) with the National Renewable Energy Laboratory's PVWatts Calculator pvwatts.nrel.gov. To learn more about equivalencies, visit www.epa.gov/energy/greenhouse-gas-equivalencies-calculator.

ENVIRONMENTAL JUSTICE AND ECONOMIC REVITALIZATION

Communities with environmental justice concerns are disproportionately affected by environmental pollution and hazards and typically include marginalized, underserved, low-income groups and people of color, including tribal and indigenous people. Superfund cleanups and redevelopment are opportunities to evaluate how to reduce impacts on these communities and, through meaningful community involvement efforts, engage communities in productive dialogue to increase local benefits through reuse opportunities that meet community needs.

In 2021, President Biden issued two executive orders – Executive Order 13985 (Advancing Racial Equity and Support for Underserved Communities Through the Federal Government) and Executive Order 14008 (Tackling the Climate Crisis at Home and Abroad). The executive orders directed federal agencies to develop and implement policies and strategies that strengthen compliance and enforcement, incorporate environmental justice considerations in their work, increase community engagement, and ensure that at least 40% of the benefits from federal investments in climate and clean energy flow to underserved communities.

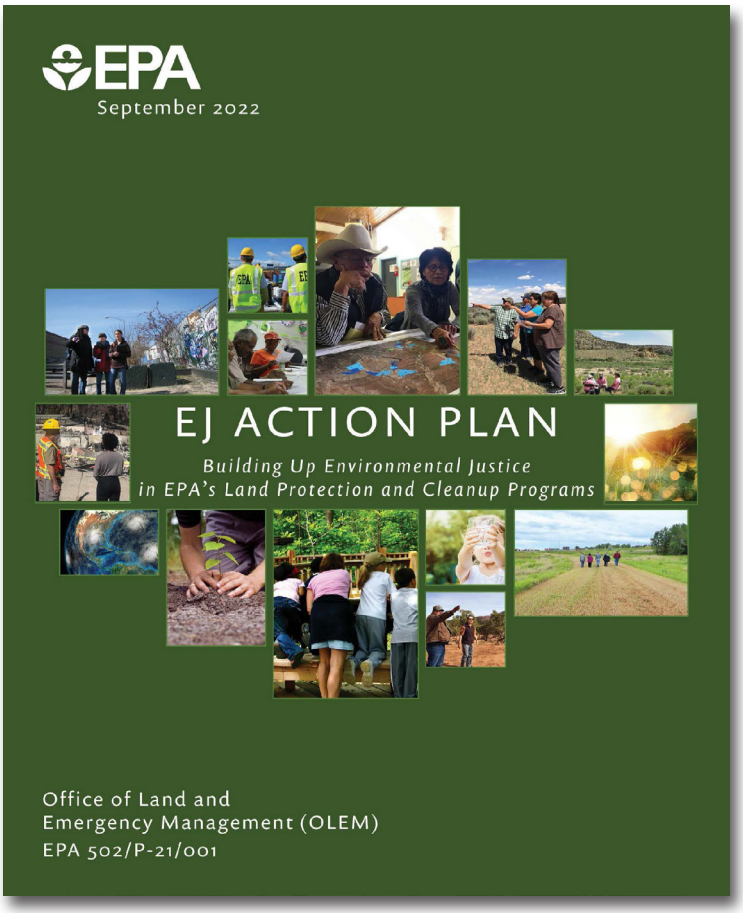


Figure 13. EPA's EJ Action Plan aims to address cleanup issues in overburdened communities across the country.

EPA has taken this charge to heart and, in September 2022, issued the *EJ Action Plan: Building Up Environmental Justice in EPA's Land Protection and Cleanup Programs (EJ Action Plan)*, intended to address land cleanup issues in overburdened communities across the country. The plan includes strategies to enhance nearly two dozen projects while addressing the need for stronger compliance, increased environmental justice considerations in EPA regulations, and improved community engagement. The plan also complements the recommendations for integrating environmental justice into the cleanup and redevelopment of Superfund and other contaminated sites highlighted in the May 2021 National Environmental Justice Advisory Council (NEJAC) report, *Superfund Remediation and Redevelopment for Environmental Justice Communities*.

In addition, EPA is using a $1 billion investment from the Bipartisan Infrastructure Law to fund new cleanup projects at 49 Superfund sites across the country. Many of these sites have been part of a backlog of Superfund sites awaiting funding for cleanup, some of which have been waiting for over four years. This historic investment will finance cleanup at four sites in Region 6.

CLIMATE ADAPTATION AT SUPERFUND SITES

Remedies at contaminated sites may be vulnerable to the impacts of climate change and extreme weather events. EPA's Superfund program has developed an approach that raises awareness of these vulnerabilities and applies climate change and weather science as a standard operating practice in cleanup projects. The approach involves periodic screening of Superfund remedy vulnerabilities, prioritizing the Superfund program's steps to adapt to a changing climate, and identifying measures to assure the climate resilience of Superfund sites. EPA is working to ensure that its programs, policies, rulemaking processes, enforcement and compliance assurance activities, and operations consider the current and future impacts of climate change and how those impacts may disproportionately affect overburdened and underserved communities.

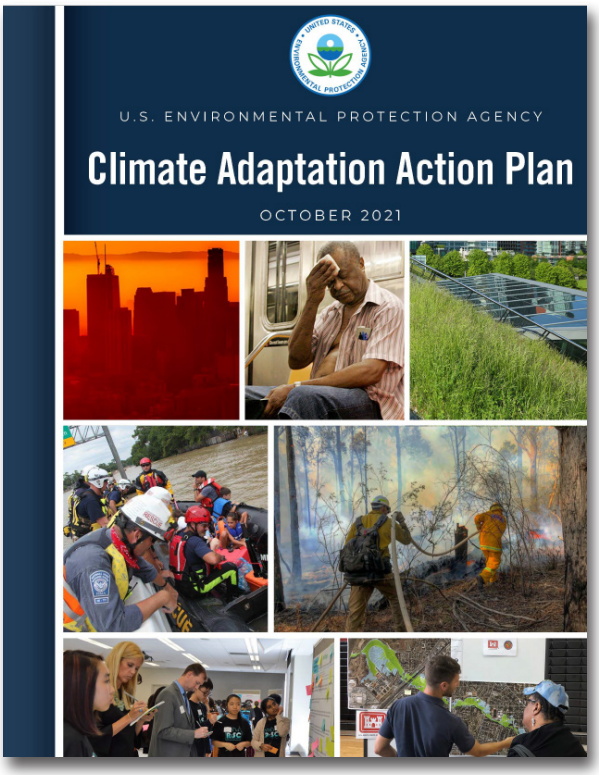


Figure 14. In January 2021, President Biden signed Executive Order 14008, requiring federal agencies to develop climate action plans that describe their climate vulnerabilities and steps to increase resilience to the impacts of climate change. In October 2021, EPA released its updated Climate Adaptation Action Plan, which includes five climate adaptation priority actions that the Agency is taking to increase human and ecosystem resilience as disruptive impacts associated with climate change increase.

EPA's Superfund program has done studies to identify potential vulnerabilities of cleanup actions and evaluate strategies to mitigate these vulnerabilities. In 2012, EPA did a preliminary vulnerability assessment of all NPL sites. EPA found that a significant number of the sites were susceptible to flooding associated with sea-level risk or floodplain proximity. A 2018 EPA study assessed the status of remedies in place at 251 Superfund sites in EPA Regions 2, 4 and 6 that were exposed to tropical-force winds or flooding associated with three major hurricane events the previous year. It found that climate resiliencies built into the remedies implemented at these sites were critical to successfully maintaining long-term protectiveness. These studies have helped inform climate adaptation planning for the Superfund program.

Strategies for mitigating vulnerabilities and increasing remedy resilience in light of climate change may apply to existing or planned remediation systems. The strategies also may be applied to cleanups conducted under other regulatory programs or through voluntary efforts to increase remedy resilience to the potential effects of climate change.

Examples of climate adaptation measures that increase resiliency include:

- Vegetating landfill cap covers with native plants provides a ground cover that is tolerant of local seasonal temperature and precipitation extremes and minimizes the need for maintenance, such as mowing and watering.
- Designing and constructing capping systems to withstand significant storm and flood events.
- Raising the elevation of critical electrical instrumentation for remedial components and using water-tight materials to construct and protect remedial components.
- Restoring wetlands to reduce wave action in floodplain and intertidal zones to minimize erosion from storm events.
- Integrating specifications regarding tolerance of extreme weather and other natural hazards into building and remedial infrastructure designs.
- Routinely reassessing site vulnerability to wildfires and implementing resilience measures as recommended by firefighting agencies.

OPPORTUNITY ZONE TAX INCENTIVES AS SUPERFUND REDEVELOPMENT TOOLS

Opportunity Zones are a powerful tool to encourage economic revitalization in distressed communities by incentivizing long-term, sustainable investment in redevelopment and stimulating economic growth. State governors have designated 8,764 Opportunity Zones across the country in geographic areas that suffer double the national poverty rate. Socio-economic metrics show that Opportunity Zones are among the highest-need communities in the nation. The U.S. Department of the Treasury estimates that Opportunity Zones may attract up to $100 billion in investments, which strengthens the financial viability of redevelopment projects at Superfund sites located in Opportunity Zones.

Redevelopment of current or former Superfund sites may qualify for Opportunity Zone tax benefits. Nationally, there are 343 NPL sites located entirely or partially in Opportunity Zones. Estimates indicate there are thousands of Superfund removal sites in Opportunity Zones across the nation. In Region 6, there are 38 NPL sites located entirely or partially in an Opportunity Zone. Redevelopment investments that meet appropriate qualifying criteria may be eligible for Opportunity Zone tax benefits. EPA and the U.S. Department of Housing and Urban Development (HUD) have tools and resources to help local leaders achieve equitable outcomes in Opportunity Zone development projects.

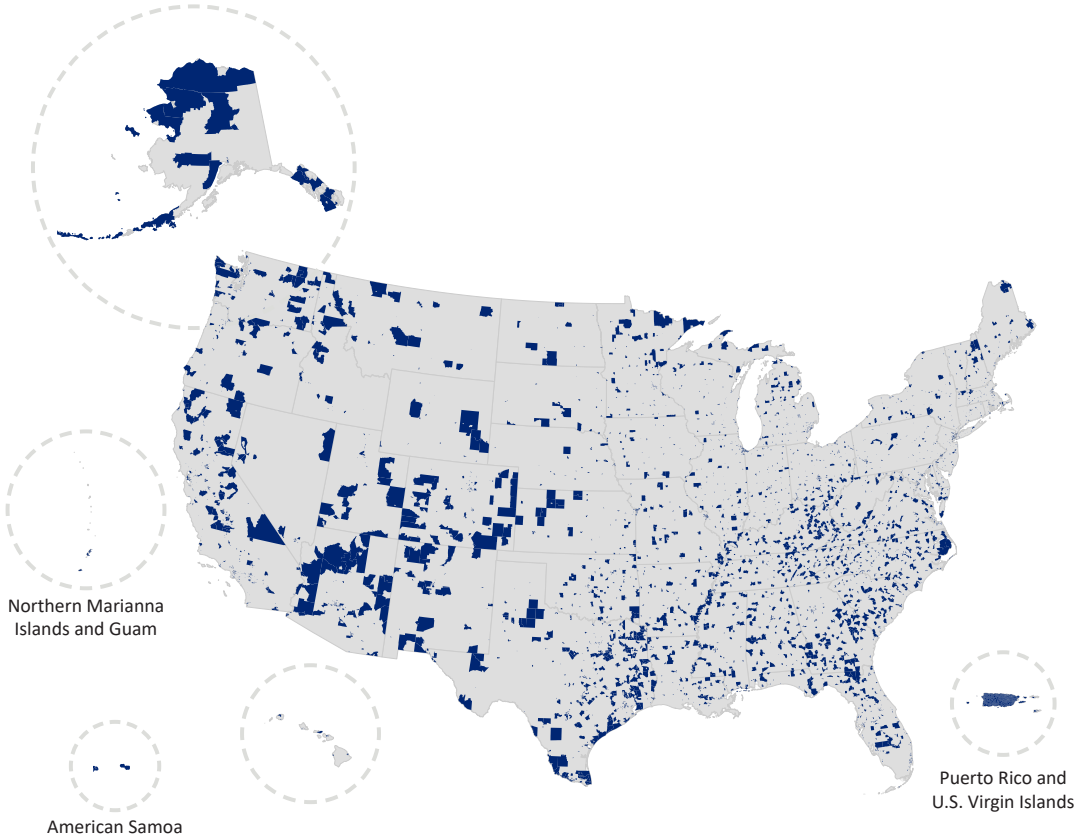


Figure 15. About 8,764 Opportunity Zones were established in all 50 states, the District of Columbia, and the five U.S. territories.

AMERICAN CREOSOTE WORKS, INC. (WINNFIELD PLANT)

Fire District Training Facility Enhances Public Safety

The 34-acre American Creosote Works, Inc. (Winnfield Plant) Superfund site is in Winnfield, Louisiana. From 1901 to 1979, companies treated wood on site. In 1981, Stallworth Timber Company bought the site and continued wood treatment. These operations contaminated soil, groundwater and storage areas. Inspections by the Louisiana Department of Environmental Quality from 1982 to 1986 found chemical spills, abandoned pits and containers, and off-site contamination. EPA added the site to the NPL in 1992.

As part of a 1993 cleanup plan, EPA determined that the residential uses were the reasonably anticipated future land use for the site. In 2016, EPA selected a new cleanup plan for remaining source contamination and re-evaluated future land use. Given the history of the site, current land uses near the site, and the city of Winnfield and Winn Parish Police Jury's future development plans, EPA updated its reasonably anticipated future land use for the site to commercial and industrial uses.

The updated cleanup plan will leave waste in place beneath a cap. Institutional controls will protect the integrity of capped source material and limit site uses to commercial and industrial uses. EPA worked with the city of Winnfield to support the site's reuse. In 2017, the Winn Parish Police Jury entered into a lease agreement with the Winn Parish Fire District No. 3 for use of the site's south parcel as a training center for the Winn Parish Fire District. Enhancements to the fire training facility are planned. About 3,500 people live within 3 miles of the site.

EPA has completed the design of the site's updated remedy, which includes excavation and off-site disposal of contaminated soil as well as in-place treatment of soil and groundwater contaminated with creosote. EPA issued the contract for these cleanup activities in August 2022. The cleanup is designed to reduce contamination entering the creek. The in-place treatment system has effectively eliminated discharges to Creosote Branch Creek, allowing the stream to recover to natural conditions. The cleanup is funded by the Bipartisan Infrastructure Law.

Figure 16. New developments at the Winn Parrish Fire District No. 3 training facility are planned at the American Creosote Works, Inc. (Winnfield Plant) Superfund site (Louisiana).

CONROE CREOSOTING
Home Improvement Distribution Center Sparks Local Economy and Infrastructure Projects

The 147-acre Conroe Creosoting Superfund site is in Conroe, Texas, about 40 miles north of Houston. From 1946 to 1997, a wood-treating facility processed lumber, railroad crossties, poles and fence posts on site. These operations and waste management practices contaminated soil, sediment and groundwater with phenols, naphthalene, polycyclic aromatic hydrocarbons (PAHs) and pentachlorophenol (PCP). EPA added the site to the NPL in 2003.

To protect public health and the environment, EPA removed contaminated soil and sediment and placed the material in a special containment vault. Land use restrictions prohibit residential land use. EPA also put in monitoring wells and continues to monitor the naturally attenuating groundwater contamination plume. In 2008, EPA issued a Ready for Reuse Determination indicating that the site is ready to support commercial and industrial land uses.

East Davis Development acquired the site property in 2011 and made infrastructure improvements to prepare the area for use as an industrial park. In 2020, EPA and Conroe Logistics Center, LLC entered into a Bona Fide Prospective Purchaser Doing Work Agreement for the company's purchase of 42 acres of the site from East Davis Development. In 2021, Home Depot opened its new $51 million distribution center on site providing jobs, income, tax revenue and services for the surrounding community. About 43,600 people live within 3 miles of the site.

Conroe Logistics Center, LLC also added rail spurs to maximize the site's accessibility. With the increase in traffic to the area, the city of Conroe was able to prioritize funding for a long-anticipated road extension project. The redevelopment sparked the city-led connection of FM 1314 (Porter Road) with Airport Road via a through-road across the site. EPA successfully partnered with the Texas Commission on Environmental Quality (TCEQ) to collaborate with site purchasers, local government and stakeholders to support the reuse project and bring benefits to the community.

Figure 17. Roadside sign for the Home Depot distribution center at the Conroe Creosoting Superfund site (Texas).

RSR CORPORATION

Community Leadership Informs Cleanup, Fosters Equitable Development and Catalyzes Revitalization

The RSR Corporation Superfund site is part of a residential and commercial area in West Dallas, Texas. It includes a former lead smelter, several landfills and a 13.6-square-mile area investigated for lead contamination. The smelter was active from 1934 to 1984. Smelter operations and waste disposal practices contaminated surface soil, sediment, sludge and groundwater. Airborne emissions from the smelter also carried lead-contaminated smog into the surrounding community. In the early 1990s, EPA and the Dallas Housing Authority (DHA) cleaned up over 400 properties by removing lead-contaminated soil and buildings from a DHA public housing area northeast of the smelter and other homes around the former smelter area. Excavated areas were filled with clean soil and new vegetation. Follow-up studies found that cleanup resulted in lowered blood-lead levels for children and residents in West Dallas. EPA added the site to the NPL in 1995. Cleanup at the former smelter and waste disposal areas is now complete.

Neighborhoods near the site lacked access to public health and community services. Community members hoped that cleanup could provide new opportunities for attracting jobs to the area. About 39,000 people live within the site's initial Superfund Investigation Area. An estimated 91% of the people living on and near the site in West Dallas are people of color. Fifty-two percent of the community is classified as low income. Since the start of cleanup, EPA has supported community efforts advocating for equitable, protective redevelopment at the site through reuse planning activities. Effective and inclusive engagement early in the cleanup process supported several successful reuse outcomes at the site.

Today, the RSR Corporation Superfund site supports a wide range of new uses that meet community needs and reflect community priorities, including affordable and safe housing, and expanded access to high-quality education opportunities, state-of-the-art recreation amenities, health care, social services and job training. Many site businesses and organizations are changing lives every day, by helping to close gaps in education, skills and services, and by proactively reducing long-standing disparities in area communities. Cleanup has also enabled continued use of homes and businesses, as well as set the stage for new commercial and public service uses.

Goodwill Industries of West Dallas operates a 275,000-square-foot facility on site that includes offices, meeting space and a retail store. The company focuses on hiring and training disadvantaged workers, benefiting the local workforce. The cleanup also provided opportunities for other facilities to move into the area, including commercial businesses, several public and private schools and health-care facilities. These health-care facilities include Lakewest Rehabilitation and Skilled Care, Thrive Women's Clinic and Lake West Women's Health Center. In 2022, Dallas Lite & Barricade, a traffic management products and services company, opened its new headquarters on a once-vacant part of the Site. The company regraded a buried slag area to allow for more vehicle parking areas. EPA provided oversight of the activities to ensure the remedy's protectiveness. EPA continues to work with area communities and key stakeholders to support new, equitable site uses that will meet community needs and ensure the continued protection of human health and the environment. Looking forward, there are new opportunities on the horizon to reuse vacant site properties and expand existing uses, including construction of more affordable housing.

Figure 18. A traffic management products and services company built its corporate headquarters at the RSR Corporation Superfund site (Texas).

SOUTH VALLEY
Former Jet Engine Plant Supports Essential Infrastructure and Businesses

The South Valley site covers about a square mile of land in an industrial area in Albuquerque, New Mexico. Univar USA has operated an industrial chemical distribution facility on part of the site since 1965. A U.S. Air Force plant made jet engine components on the other part of the site beginning in the 1950s. General Electric Aviation (GEA) manufactured jet engine component plant in 1985 and demolished it in 2011. When GEA demolished the plant, the company committed to recycling or reusing all usable building materials. This "green demolition" kept nearly 15,000 tons of building and related materials out of local landfills and reduced demolition costs.

In 2019, EPA and the New Mexico Environment Department determined that three of the six site areas, known as operable units, had achieved construction completion status. EPA deleted the three operable units off the NPL in 2019. EPA also issued two comfort letters to prospective developers planning to turn the former GEA plant area into a disinfectant manufacturing facility and a heavy equipment repair business. Bernalillo County built a connector road across the site connecting Interstate 25 and Albuquerque International Airport, an area known for high vehicle traffic. With about 51,000 people living within 3 miles of the site, the county anticipates that the infrastructure project will ease traffic congestion by spreading out vehicle movements and reduce concentrated vehicular emissions, while also attracting new businesses to the area.

In 2022, Bernalillo County put out a call for outdoor public art proposals to install along the new Sunport Boulevard extension. In January 2023, the county selected a prominent Albuquerque artist for the project. A 20-foot sculpture captures the area's unique history, traditions and culture. The artist collaborated with area schools to incorporate meaningful symbols into the sculpture. The Sunport Boulevard extension officially opened on June 2, 2023.

Figure 19. The new Sunport Boulevard extension closes a gap in the area's transportation network, and address other transportation and access needs on and around the South Valley Superfund site (New Mexico).

REDEVELOPMENT ON THE HORIZON IN REGION 6

AGRICULTURE STREET LANDFILL
Cleanup Enables Mixed Uses and Sustainable Future for Former Landfill

From 1909 to 1957, a 45-acre municipal landfill was active at what would become the Agriculture Street Landfill Superfund site in New Orleans, Louisiana. From the 1970s through the late 1980s, the area surrounding the landfill was developed into a vibrant African American community that included single-family homes, multi-family units, retail stores, an elementary school, a community center and a recreation center. However, there were numerous concerns that this community was built on a former landfill and EPA added the site to the National Priorities List (NPL) in 1994. From 1997 to 2001, EPA excavated nearly 70,000 tons of material and took it off site for disposal. EPA replaced this material with a permeable layer below ground, clean fill and sod. Cleanup took several years.

In 2005, Hurricane Katrina and Hurricane Rita destroyed many structures in the neighborhood. Since then, many residents have remained in single-family homes in Gordon Plaza and apartments in Gordon Plaza Apartments. A few small businesses remain open. However, many properties in the neighborhood are now vacant, including the former Moton Elementary School. Many Gordon Plaza homes and amenities were built on the former landfill later designated as the Superfund site. In 2023, the city of New Orleans initiated a voluntary buyout of the Gordon Plaza neighborhood, which has 68 single family homes. Over 12,000 people live within 1 mile of the site. About 93% of community residents are people of color, 63% live below the poverty line and 17% are unemployed.

The city's Plan for the site envisions municipal uses, open space and community recreational uses. The city also expressed interest in redeveloping site areas for clean energy initiatives that increase local resilience and reduce greenhouse gases. In January 2022, Mayor LaToya Cantrell announced the city's intention to work in partnership with EPA to pursue sustainable long-term reuse opportunities for the site.

A Microgrid Opportunities Report funded by the U.S. Department of Energy highlighted the site's capacity to host a solar renewable energy project that could help power water and drainage infrastructure pumping stations across New Orleans. To explore city initiatives that could help meet this goal, EPA's Superfund Redevelopment Program and Region 6 sponsored a reuse assessment for the site to help inform the city's planning for city-owned properties, properties the city is acquiring, and other vacant properties at the site. The assessment identified a 40-acre area that could support a solar facility. Work with the local government to finalize solar footprints and municipal energy demands is ongoing. For remaining publicly owned property at the site, the city is considering a broader range of opportunities to support municipal facilities, provide quality-of-life amenities for the city's east side, and restore and enhance ecosystems.

Figure 20. Residents of the Gordon Plaza neighborhood took EPA Administrator Michael S. Regan on a walking tour of neighborhoods at the Agriculture Street Landfill Superfund site (Louisiana).

NORTH RAILROAD AREA PLUME
Community Leverages Cleanup Momentum to Revitalize Historic Town Center

The 58-acre North Railroad Avenue Plume Superfund site is in Española, New Mexico. The Norge Town laundromat and dry-cleaning operation contaminated groundwater. EPA added the site to the NPL in 1999. Cleanup of the source area and hotspot soil with enhanced in-place bioremediation is complete. Long-term cleanup of shallow and deep groundwater is ongoing. Land uses above the plume include Española's Town Center as well as a mix of commercial, institutional and residential buildings. About 16,000 people live within 3 miles of the site.

Española's Town Center is above the deep contaminated groundwater plume. The city is focused on revitalizing the city-owned, three-block area encompassing the Española Plaza and an adjacent brownfield site (Hunter Ford property). The city has invested in several planning initiatives to revitalize the three-block Town Center, including a Master Plan in 2007, a Comprehensive Plan update in 2017, and a concept plan for the Hunter Arts and Agricultural Complex in 2017. To act on these plans, the city intends to pursue technical assistance from the New Mexico Mainstreet Program to develop an investment strategy and refined plaza plan that focuses on the history of the tri-cultures of the valley (Pueblo, Spanish and Anglo).

EPA's Superfund Redevelopment Program and Region 6 facilitated a reuse planning process that brought together local, regional, state and federal partners to share potential resources and strategies to support the city of Española's revitalization initiatives. This action plan documents the city's revitalization goals of leveraging proximity to regional tourism destinations (natural and cultural) to boost the local economy, revitalizing the downtown main street area as a thriving commercial and cultural center, and addressing a housing shortage through infill and vacant lot development. The New Mexico Department of Transportation is planning intersection improvements in 2023 that will greatly improve visibility, traffic flow and pedestrian safety in the area.

Figure 21. Murals celebrate local culture in the area around Española's town center at the North Railroad Area Plume Superfund site (New Mexico).

CONCLUSION

EPA works closely with its partners at Superfund sites across Region 6 to make sure sites can safely be reused or remain in continued use during and following cleanup. EPA also works with businesses and organizations at Superfund sites throughout the cleanup process to make sure they can remain open.

The businesses and organizations at these sites provide jobs and income for communities and generate local and state taxes. Cleanup and redevelopment also helps stabilize and boost property values. There are 83 NPL sites and nine non-NPL Superfund sites in Region 6 that have either new uses in place or uses that have remained in place since before cleanup. Future uses are planned for many more Superfund sites in Region 6. EPA remains committed to working with all stakeholders to support Superfund redevelopment opportunities in Region 6.

Figure 22. Star Lake Canal Superfund site (Texas).

The redevelopment of Superfund sites takes time and is often a learning process for project partners. Ongoing coordination among EPA, tribes, state agencies, local governments, communities, potentially responsible parties, site owners, developers, and nearby residents and business owners is essential. EPA tools, including reuse assessments and plans, comfort letters and partial deletions of sites from the NPL, often serve as the foundation for moving forward. At some sites, parties may need to take additional actions to ensure reuses are compatible with site remedies.

Across Region 6, Superfund sites are now home to major commercial and industrial facilities, mid-size developments and small businesses providing services to surrounding communities. EPA is committed to working with all stakeholders to support the restoration and renewal of these sites as long-term assets.

EPA Superfund Redevelopment Resources

EPA Region 6 Superfund Redevelopment Coordinator
Casey Luckett | (214) 665-7393 | luckett.casey@epa.gov

Superfund Sites in Reuse: find more information about Superfund sites in reuse
www.epa.gov/superfund-redevelopment/find-sites-reuse

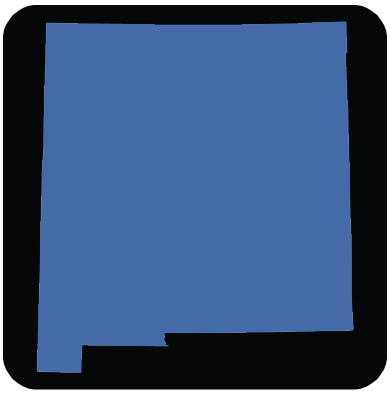
EPA Superfund Redevelopment Program Website: tools, resources and more information about Superfund site reuse
www.epa.gov/superfund-redevelopment

EPA Office of Site Remediation Enforcement Website: tools that address landowner liability concerns
www.epa.gov/enforcement/landowner-liability-protections

This page is intentionally blank.

STATE REDEVELOPMENT PROFILES





ARKANSAS REDEVELOPMENT PROFILE

EPA partners with the Arkansas Department of Environmental Quality to oversee the investigation and cleanup of Superfund sites in Arkansas. Arkansas has seven Superfund sites with either new uses in place or uses that have remained in place since before cleanup. The sections below present economic data, property values and tax data for sites in reuse or continued use in Arkansas.

Businesses and Jobs

EPA has collected economic data for seven businesses and organizations operating on four sites in reuse or continued use in Arkansas.

Table 3. Detailed Site and Business Information for Sites in Reuse and Continued Use in Arkansas (2022)

	Sites	Sites with Businesses	Businesses	Total Annual Sales[a]	Total Employees	Total Annual Employee Income
In Reuse	*4*	*2*	*5*	*$3 million*	*122*	*$8 million*
In Continued Use	*1*	*1*	*1*	*$12 million*	*20*	*$1 million*
In Reuse and in Continued Use	*2*	*1*	*1*	*-*	*-*	*-*
Totals	***7***	***4***	***7***	***$15 million***	***142***	***$9 million***

[a] While sales values typically exceed estimated totals of annual income, sales can sometimes be lower than estimated income. This could be attributed to a number of business conditions and/or data reporting. In addition, annual sales figures are not available (or applicable) for every organization that makes jobs data available.

Property Values and Property Tax Revenues

EPA has collected property value data for three Superfund sites in reuse or continued use in Arkansas. These sites span 19 property parcels and 371 acres.

Table 4. Property Value and Tax Information for Sites in Reuse and Continued Use in Arkansas[a]

Total Land Value (3 sites)	Total Improvement Value (3 sites)	Total Property Value (3 sites)	Total Annual Property Taxes (3 sites)
$1 million	*$2 million*	*$3 million*	*$7,000*

[a] The property value and tax amounts reflect the latest property value year and tax data year available in county assessor datasets, which varied from 2021 to 2022 for all data collected.

Figure 23. Vertac, Inc. (Arkansas).

Did You Know?

Reuse planning efforts for the Vertac, Inc. site in Jacksonville, Arkansas, led to remarkable reuse outcomes that support various Jacksonville public services. Today, site uses include a fire department training facility, police department shooting range, a drive-through recycling center, office space and storage for the city's Street Department and a public safety building.

LOUISIANA REDEVELOPMENT PROFILE

EPA partners with the Louisiana Department of Environmental Quality to oversee the investigation and cleanup of Superfund sites in Louisiana. Louisiana has 18 Superfund sites with either new uses in place or uses that have remained in place since before cleanup. The sections below present economic data, property values and tax data for sites in reuse or continued use in Louisiana.

Businesses and Jobs

EPA has collected economic data for 54 businesses and organizations operating on seven sites in reuse in Louisiana.

Table 5. Detailed Site and Business Information for Sites in Reuse and Continued Use in Louisiana (2022)

	Sites	Sites with Businesses	Businesses	Total Annual Sales	Total Employees	Total Annual Employee Income
In Reuse	*8*	*3*	*4*	*$5 million*	*19*	*$830,000*
In Continued Use	*4*	*0*	*-*	*-*	*-*	*-*
In Reuse and in Continued Use	*6*	*4*	*50*	*$30 million*	*594*	*$21 million*
Totals	***18***	***7***	***54***	***$35 million***	***613***	***$22 million***

Property Values and Property Tax Revenues

EPA has collected property value data for eight Superfund sites in reuse or continued use in Louisiana. These sites span 673 property parcels and 512 acres.

Table 6. Property Value and Tax Information for Sites in Reuse and Continued Use in Louisiana[a]

Total Land Value (7 sites)	Total Improvement Value (7 sites)	Total Property Value (8 sites)	Total Annual Property Taxes (8 sites)
$717,000	*$1 million*	*$94 million*	*$2 million*

[a] The property value and tax amounts reflect the latest property value year and tax data year available in county assessor datasets, which varied from 2021 to 2023.

Figure 24. Delatte Metals (Louisiana).

Did You Know?

During the 1960s, two battery recycling and smelting operations were active at the Delatte Metals site in Ponchatoula, Louisiana. After cleanup, EPA took the site off the Superfund program's NPL in 2005. A metal recycling facility and a boat and diesel service business are now active on site.

NEW MEXICO REDEVELOPMENT PROFILE

EPA partners with the New Mexico Environment Department to oversee the investigation and cleanup of Superfund sites in New Mexico. New Mexico has 13 Superfund sites with either new uses in place or uses that have remained in place since before cleanup. The sections below present economic data, property values and tax data for sites in reuse or continued use in New Mexico.

Businesses and Jobs

EPA has collected economic data for 16 businesses and organizations operating on six sites in reuse or continued use in New Mexico.

Table 7. Detailed Site and Business Information for Sites in Reuse and Continued Use in New Mexico (2022)

	Sites[a]	Sites with Businesses	Businesses	Total Annual Sales[b]	Total Employees	Total Annual Employee Income
In Reuse	*5*	*1*	*1*	*$626,000*	*5*	*$224,000*
In Continued Use	*4*	*1*	*2*	*$36,000*	*36*	*$2 million*
In Reuse and in Continued Use	*4*	*4*	*13*	*$13 million*	*59*	*$3 million*
Totals	***13***	***6***	***16***	***$14 million***	***100***	***$5 million***

[a] Two sites are federal facilities. Federal facility sites are excluded from all other detailed site and business data presented above.
[b] While sales values typically exceed estimated totals of annual income, sales can sometimes be lower than estimated income. This could be attributed to a number of business conditions and/or data reporting. In addition, annual sales figures are not available (or applicable) for every organization that makes jobs data available.

Property Values and Property Tax Revenues

EPA has collected property value data for five Superfund sites in reuse or continued use in New Mexico. These sites span 31 property parcels and 269 acres.

Table 8. Property Value and Tax Information for Sites in Reuse and Continued Use in New Mexico[a]

Total Land Value (5 sites)	Total Improvement Value (5 sites)	Total Property Value (5 sites)	Total Annual Property Taxes (5 sites)
$4 million	*$3 million*	*$7 million*	*$90,000*

[a] The property value and tax amounts reflect the latest property value year and tax data year available in county assessor datasets, which was 2022 for all data collected.

Figure 25. McGaffey and Main Groundwater Plume (New Mexico).

Did You Know?

The Regional Housing Authority of Region 6, New Mexico is located on the McGaffey and Main Groundwater Plume site in Roswell, New Mexico. The Housing Authority helps build partnerships with a range of stakeholders to develop more affordable housing. The Housing Authority provides nearly $500,000 in estimated employee income.

OKLAHOMA REDEVELOPMENT PROFILE

EPA partners with the Oklahoma Department of Environmental Quality to oversee the investigation and cleanup of Superfund sites in Oklahoma. Oklahoma has 13 Superfund sites with either new uses in place or uses that have remained in place since before cleanup. The sections below present economic data, property values and tax data for sites in reuse or continued use in Oklahoma.

Businesses and Jobs

EPA has collected economic data for 102 businesses and organizations operating on five sites in reuse or continued use in Oklahoma.

Table 9. Detailed Site and Business Information for Sites in Reuse and Continued Use in Oklahoma (2022)

	Sites[a]	Sites with Businesses	Businesses	Total Annual Sales	Total Employees	Total Annual Employee Income
In Reuse	*5*	*3*	*6*	*$19 million*	*100*	*$6 million*
In Continued Use	*5*	*0*	*-*	*-*	*-*	*-*
In Reuse and in Continued Use	*3*	*2*	*96*	*$408 million*	*1,465*	*$81 million*
Total	***13***	***5***	***102***	***$427 million***	***1,565***	***$87 million***

[a] One site is a federal facility. Federal facility sites are excluded from all other detailed site and business data presented above.

Property Values and Property Tax Revenues

EPA has collected property value data for three Superfund sites in reuse or continued use in Oklahoma. These sites span 68 property parcels and 381 acres.

Table 10. Property Value and Tax Information for Sites in Reuse and Continued Use in Oklahoma[a]

Total Land Value (2 sites)	Total Improvement Value (2 sites)	Total Property Value (3 sites)	Total Annual Property Taxes (3 sites)
$508,000	*$2 million*	*$28 million*	*$304,000*

[a] The property value and tax amounts reflect the latest property value year and tax data year available in county assessor datasets, which varied from 2022 to 2023. In some cases the breakdown showing the land value and improvement value is not always available; only the total property value may be available.

Figure 26. Tar Creek (Ottawa County) (Oklahoma).

Did You Know?

The Tar Creek (Ottawa County) site in northeast Oklahoma consists of areas affected by historical mining operations. Cleanup across this large site has enabled agricultural, commercial, public service and residential uses to continue and facilitated new development. Today, site businesses employ over 1,100 people. They contribute more than $53 million in estimated annual employment income.

TEXAS REDEVELOPMENT PROFILE

EPA partners with the Texas Commission on Environmental Quality to oversee the investigation and cleanup of Superfund sites in Texas. Texas has 41 Superfund sites with either new uses in place or uses that have remained in place since before cleanup. The sections below present economic data, property values and tax data for sites in reuse or continued use in Texas.

Businesses and Jobs

EPA has collected economic data for 88 businesses and organizations operating on 19 sites in reuse or continued use in Texas.

Table 11. Detailed Site and Business Information for Sites in Reuse and Continued Use in Texas (2022)

	Sites[a]	Sites with Businesses	Businesses	Total Annual Sales	Total Employees	Total Annual Employee Income
In Reuse	*16*	*7*	*21*	*$104 million*	*443*	*$29 million*
In Continued Use	*11*	*1*	*1*	*$2 million*	*8*	*$820,000*
In Reuse and in Continued Use	*14*	*11*	*66*	*$190 million*	*1,744*	*$86 million*
Total	***41***	***19***	***88***	***$296 million***	***2,195***	***$116 million***

[a] Two sites are federal facilities. Federal facility sites are excluded from all other detailed site and business data presented above.

Property Values and Property Tax Revenues

EPA has collected property value data for 20 Superfund sites in reuse or continued use in Texas. These sites span 2,402 property parcels and 3,706 acres.

Table 12. Property Value and Tax Information for Sites in Reuse and Continued Use in Texas[a]

Total Land Value (20 sites)	Total Improvement Value (20 sites)	Total Property Value (20 sites)	Total Annual Property Taxes (20 sites)
$268 million	*$569 million*	*$837 million*	*$8 million*

[a] The property value and tax amounts reflect the latest property value year and tax data year available in county assessor datasets, which varied from 2022 to 2023.

Figure 27. South Cavalcade Street (Texas).

Did You Know?

EPA placed the South Cavalcade Street site in Houston, Texas, on the NPL in 1986. Commercial and industrial businesses, including a trucking company, a car auction and a pallet supplier, are now on site. These businesses employ over 200 people. They provide over $14 million in estimated annual income and generate over $65 million in estimated annual sales.

REUSE INFORMATION SOURCES

Write-ups of sites in reuse or continued use included in this profile are based on available EPA resources, including Superfund Redevelopment Program case studies as well as other resources. Links to EPA's Superfund Redevelopment Program case studies and other resources are included below.

EPA Resources

Agriculture Street Landfill. EPA Site Profile. www.epa.gov/superfund/agriculture-street-landfill

Agriculture Street Landfill. 2022. Reuse Assessment. semspub.epa.gov/src/document/HQ/100003050

American Creosote Works, Inc. (Winnfield Plant). EPA Site Profile. www.epa.gov/superfund/american-creosote-works-winnfield

American Creosote Works, Inc. (Winnfield Plant). 2020. Fifth Five-Year Review Report. semspub.epa.gov/src/document/06/100020161

American Creosote Works, Inc. (Winnfield Plant). 2022. Site Redevelopment Profile. semspub.epa.gov/src/document/HQ/100003137

Bayou Bonfouca. EPA Site Profile. www.epa.gov/superfund/bayou-bonfouca

Bayou Bonfouca. 2018. Site Redevelopment Profile. semspub.epa.gov/src/document/HQ/403525

Bayou Bonfouca. 2021. Sixth Five-Year Review Report. semspub.epa.gov/src/document/06/100024998

Conroe Creosoting. EPA Site Profile. www.epa.gov/superfund/conroe-creosoting

Conroe Creosoting. 2022. Site Redevelopment Profile. semspub.epa.gov/src/document/HQ/100003139

Conroe Creosoting. 2018. Third Five-Year Review Report. semspub.epa.gov/src/document/06/100010626

North Railroad Avenue Plume. EPA Site Profile. www.epa.gov/superfund/north-railroad-avenue-plume

North Railroad Avenue Plume. 2022. Action Plan for Revitalization. semspub.epa.gov/src/document/HQ/100003120

RSR Corporation. EPA Site Profile. www.epa.gov/superfund/rsr-corporation

RSR Corporation. 2015. Beneficial Effects Economic Case Study. semspub.epa.gov/src/document/06/500018640

RSR Corporation. 2019. Site Redevelopment Profile. semspub.epa.gov/src/document/HQ/100002106

RSR Corporation. 2020. Fourth Five-Year Review Report. semspub.epa.gov/src/document/06/100022101

South Valley. EPA Site Profile. www.epa.gov/superfund/south-valley

South Valley. 2020. Sixth Five-Year Review Report. semspub.epa.gov/src/document/06/100020260

Star Lake Canal. 2013. Record of Decision. semspub.epa.gov/src/document/06/693085

Tex-Tin Corp. EPA Site Profile. www.epa.gov/superfund/tex-tin

Tex-Tin Corp. 2018. Supplemental Fourth Five-Year Review Report. semspub.epa.gov/src/document/06/100012032

Other Resources

Bayou Bonfouca. 2023. Slidell Municipal Marina. myslidell.com/departments/public-operations/slidell-municipal-marina/

South Valley. 2021. Sunport Boulevard Extension & Interchange Project. www.bernco.gov/public-works/blog/2021/04/16/sunport-boulevard-extension-interchange-project/

South Valley. 2023. Prominent ABQ Artist Picked for Sunport Blvd Extension Project. www.kob.com/new-mexico/prominent-abq-artist-picked-for-sunport-blvd-extension-project/

Tex-Tin. 2005. Scenic Galveston Preserve Complex. www.gcbo.org/wp-content/partner-network/galveston.pdf

Tex-Tin. 2019. Texas Land Trust Council: Scenic Galveston. texaslandtrustcouncil.org/project/scenicgalveston/

BUSINESS, JOBS, SALES AND INCOME INFORMATION

Information on the number of employees and sales volume for on-site businesses comes from the Hoovers/Dun & Bradstreet (D&B) (https://www.dnb.com) database. EPA also gathers information on businesses and corporations from D&B. D&B maintains a database of over 330 million businesses worldwide.

When Hoovers/D&B research was unable to identify employment and sales volume for on-site businesses, EPA used the ReferenceSolutions database (https://thereferencegroup.com). In cases where ReferenceUSA did not include employment and sales volume for on-site businesses, EPA used the Manta database (https://www.manta.com). The databases include data reported by businesses. Accordingly, some reported values might be underestimates or overestimates. In some instances, business and employment information came from local newspaper articles and discussions with local officials and business representatives. While sales values typically exceed estimated totals of annual income, sales can sometimes be lower than estimated income. This can be attributed to a number of business conditions and/or data reporting.

EPA obtained wage and income information from the U.S. Bureau of Labor Statistics (BLS). Part of the U.S. Department of Labor, the BLS is the principal federal agency responsible for measuring labor market activity, working conditions and price changes in the economy. All BLS data meet high standards of accuracy, statistical quality and impartiality.

EPA used the BLS Quarterly Census of Employment and Wages database to obtain average weekly wage data for site businesses. Average weekly wage data were identified by matching the North American Industry Classification System (NAICS) codes for each type of business with weekly wage data for corresponding businesses in site counties. If weekly wage data were not available at the county level, EPA sought wage data by state or national level, respectively. In cases where wage data were not available for the six-digit NAICS code, EPA used higher-level (less-detailed) NAICS codes to obtain the wage data.

To estimate the annual income earned from jobs at site businesses, EPA multiplied the average weekly wage figure by the number of weeks in a year (52) and by the number of jobs (employees) for each business.

Business and employment data used for this profile were collected in 2022. Estimated annual employment income was calculated using 2022 jobs data and BLS average weekly wage data for those jobs from 2021 (the latest available wage data at the time of this profile). Federal facility sites are included in calculations of total sites in reuse or continued use only. Federal facility sites are excluded from all other calculations (i.e., number of sites with businesses, number of businesses, total jobs, total income and total annual sales). All sales and income figures presented have been rounded for the convenience of the reader. Throughout this report, sales and annual employee income may not sum exactly to the totals presented due to rounding.

PROPERTY VALUE AND TAX INFORMATION

EPA collected on-site property values and property taxes included in this profile for a subset of Superfund sites by comparing available site boundary information with available parcel boundary information and gathering information for selected parcels from county assessor datasets. The property value and tax amounts reflect the latest property value year and tax data year available in county assessor datasets, which varied from 2021 to 2023 where date information was provided. Throughout this report, property and tax values may not sum exactly to the totals presented due to rounding.

Back cover photos: Vertac Inc. (Arkansas), Fruit Avenue Plume (New Mexico), Pantex Plant (USDOE) (Texas), Eagle-Picher Henryetta (Oklahoma), Star Lake Canal (Texas).

Any mention of trade names, manufacturers or products in this document and its appendices does not constitute an endorsement by the United States Government or the U.S. Environmental Protection Agency. EPA and its employees do not endorse any commercial products, services or entities.

EPA

United States Environmental Protection Agency

Region 6
1210 Elm Street, Suite 500
Dallas, Texas 75270

October 2023
www.epa.gov/aboutepa/epa-region-6-south-central