BROWNFIELDS: PROPERTIES WITH NEW PURPOSE

Improving Local Economies in Communities with Brownfield Sites

JUNE 2019
EPA’s Brownfields Program provides grants and technical assistance to communities, states, tribes and nonprofit organizations to assess, safely clean up and sustainably reuse contaminated properties.

A brownfield is a property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. It is estimated that there are more than 450,000 brownfields in the U.S.

Cleaning up and reinvesting in these properties increases local tax bases; facilitates job growth; utilizes existing infrastructure; takes development pressures off undeveloped, open land; and both improves and protects the environment.

Since its inception in 1995, EPA’s Brownfields Program has grown into a proven, results-oriented program that has changed the way contaminated property is perceived.

Types of Brownfields Grant Funding

EPA’s Brownfields Program provides direct funding for brownfields assessment, cleanup, revolving loans, environmental job training, technical assistance, training and research. To facilitate the leveraging of public resources, EPA’s Brownfields Program collaborates with other EPA programs, other federal partners and state agencies to identify and make available resources that can be used for brownfield activities.

- **Assessment Grants** provide funding for brownfield inventories, planning, environmental assessments, and community outreach.
- **Revolving Loan Fund (RLF) Grants** provide funding to capitalize loans that are used to clean up brownfield sites.
- **Cleanup Grants** provide funding to carry out cleanup activities at brownfield sites owned by the applicant.
- **Multipurpose (MP) Grants** provide funding to conduct a range of eligible assessment and cleanup activities at one or more brownfield sites in a target area.
- **Environmental Workforce Development and Job Training (EWDJT) Grants** provide environmental training for residents impacted by brownfield sites in their communities.
- **Technical Assistance, Training, and Research Grants** provide funding to organizations to conduct research and to provide training and technical assistance to communities to help address their brownfields challenges.
• **State and Tribal Response Program Grants** provide non-competitive funding to states, tribes and territories to establish or enhance environmental response programs, which oversee cleanup of brownfield sites.

Environmental and Economic Benefits of Brownfields Grants

EPA’s Brownfields Program empowers states, tribes, communities and other stakeholders to work together to prevent, assess, safely clean up, and sustainably reuse brownfields. Revitalizing brownfield sites creates benefits throughout the community.

Since 1995, EPA’s Brownfields Program has cleaned up 1,816 properties; attracted 144,800 jobs, and made 80,952 acres ready for anticipated reuse.

Through fiscal year 2018, on average, $16.86 was leveraged for each EPA brownfields dollar and 8.6 jobs leveraged per $100,000 of EPA brownfields funds expended on assessment, cleanup, and revolving loan fund cooperative agreements.

Brownfield sites tend to have greater location efficiency than alternative development scenarios. Results of five pilot studies show a 32% to 57% reduction in vehicle miles traveled when development occurred at a brownfield site rather than a previously undeveloped site. Fewer vehicle miles traveled means a reduction in pollution emissions, including greenhouse gases. These same site comparisons show an estimated 47% to 62% reduction of stormwater runoff for brownfield site development.

A 2017 study concluded that cleaning up brownfield properties led to residential property value increases of 5% to 15.2% within 1.29 miles of the sites. Analyzing data near 48 of those brownfield sites, another study found an estimated $29 to $97 million in additional tax revenue for local governments in a single year after cleanup—2 to 7 times more than the $12.4 million EPA contributed to the cleanup of those brownfield sites. Initial anecdotal surveys indicate a reduction in crime in recently revitalized brownfields areas.
Successful Brownfields Revitalization Projects Across the Country

EPA Brownfield Grants provide essential funding to communities for assessment, cleanup, and planning activities. Brownfield Grants can provide necessary seed funding to spur the environmental cleanup of brownfield sites and initiate community revitalization. To facilitate the leveraging of public resources, EPA collaborates with its federal partners and state agencies to identify and make available resources that can be used for brownfield activities.

EPA’s land revitalization efforts emphasize the need to consider the anticipated property reuse prior to and during assessment and cleanup. Integrating property reuse alternatives into assessment and cleanup decisions ensures that the environmental cleanup for all types of contaminated land, from abandoned industrial facilities to waste disposal sites and former gas stations, promotes solutions that support community revitalization goals.

Below are a select group of project examples that highlight the accomplishments of EPA Brownfield Grant recipients across the country. These accomplishments include transforming brownfield sites to positively impact local economies and improve the quality of life for neighboring communities.

REGION 1

Farnum Center - Manchester, New Hampshire

This 3.5 acre site was formerly the Queen City Inn, which operated as a motel and was surrounded by gasoline stations and other petroleum facilities. In 2012, the site was identified in Manchester’s downtown revitalization plan and targeted for redevelopment. Using a Community-Wide Assessment Grant from EPA awarded in 2010, the City of Manchester conducted a Phase I and II environmental site assessments where they found contamination associated with coal tar. Because of the assessment, the site was able to be sold for redevelopment, and a local developer helped cleanup and transform the property into the Farnum Treatment Center. The cleanup involved removal of hazardous building materials such as asbestos and lead to re-use the existing building. The construction generated 96 construction jobs. The project resulted in the opening of the state’s first non-hospital based medical detoxification unit that specifically works with patients addicted to opioids. The state-of-the-art treatment facility is located within 2 miles of the new Elliot Hospital and now employs more than 100 people. Farnum’s inpatient programs have the capacity to serve 113 adults who have primary substance use disorder.

The Farnum Center in Manchester, New Hampshire.
Union Station - Springfield, Massachusetts

Union Station in Springfield, Massachusetts was a major transportation hub constructed in 1926. It was fondly remembered as an area bustling with travelers and train passengers, especially when it served to welcome and send off soldiers serving in World War II. The station was closed in 1973, and the vacant property was taken by eminent domain by the Springfield Redevelopment Authority in 1989. The Springfield Redevelopment Authority sought to redevelop the Union Station Property and the Hotel Charles property across the street. These properties would consolidate the Pioneer Valley Transportation Authority, commuter rail, Amtrak and inter-city bus operations into one hub. The City of Springfield and the Springfield Redevelopment Authority received three EPA Brownfield Grants in 2011 and 2014 for the projects totaling $600,000. Today, the new station is now a transportation hub for western Massachusetts. According to the City of Springfield, Union Station has the potential to leverage 500-1000 permanent jobs. This site is located in a census tract designated as a federal Opportunity Zone, where new investments, under certain conditions, may be eligible for preferential tax treatment.

REGION 2

Camden Labs - Camden, New Jersey

With the site abandoned for over a decade, the property used for illegal dumping, and buildings having lost their structural integrity, the Camden Labs brownfield site in Camden, New Jersey, was a 3.8-acre refuse with a mangled, graffitied exterior and caved-in roofs. Today, it is being demolished, cleaned, and will transform into an open space park for community use. Camden Labs is a priority site for brownfield reuse, catalyzed after the City of Camden received a $13.2 million Housing and Urban Development Choice Neighborhood Implementation Grant. In 2015, the Camden Redevelopment Agency received two EPA Brownfields Grants for area-wide planning and assessment of Camden Labs totaling $550,000. In 2018, the City of Camden received $200,000 from EPA's Brownfields Cleanup Grant and over $1 million in New Jersey Department of Environmental Protection's Hazardous Discharge and Site Remediation Program. This site is located in a census tract designated as a federal Opportunity Zone, where new investments, under certain conditions, may be eligible for preferential tax treatment.
**Berry Lane Park - Jersey City, New Jersey**

Before it was a safe, colorful playground visited by hundreds of Jersey City children every day, Berry Lane Park was once made up of 11 former industrial sites totaling 14 acres. The site, which is located in an Opportunity Zone, contained toxic contaminants such as hexavalent chromium, PCBs and lead. With a vision for site reuse and funding from EPA’s brownfields grants, the Jersey City Redevelopment Agency assessed and cleaned up the properties that would ultimately become the 17-acre park. Berry Lane Park was designed with direct input from residents and local officials working through a series of planning sessions with the project’s architects and planners. In addition to providing recreational opportunities, the park, which officially opened in 2016, contains stormwater management controls. Since 1997, the EPA has awarded Jersey City $3.4 million in brownfields funding, specifically for the Berry Lane Park project. Overall, there has been $38 million in financing from over 40 different sources, including over $1 million in New Jersey Department of Environmental Protection’s Hazardous Discharge Site Remediation Funding. This site is located in a census tract designated as a federal Opportunity Zone, where new investments, under certain conditions, may be eligible for preferential tax treatment.

**REGION 3**

**Roxian Theater - McKees Rocks, Pennsylvania**

The historic Roxian Theatre in McKees Rocks, Pennsylvania celebrated a grand reopening in May 2019, 90 years after it first debuted as a vaudeville theater in 1929. In 2012, the North Side Industrial Development Company utilized $11,000 from its EPA Brownfields Assessment Grant awarded in 2011 to conduct a Phase I environmental site assessment and asbestos inspection to assist the site owner’s, McKees Rocks Community Development Corporation (MRCDC), launch of the redevelopment of the theater. The $9 million renovation was funded by a variety of local partners, including the MRCDC and the Heinz Endowments and the Hillman Foundation. The theater recently sold to a local entrepreneur and several partners. Vacant since 2003, the Roxian Theater’s reopening is anticipated to usher in a new era of vibrancy to the downtown business district of this environmental justice community, in conjunction with a recent $1.9 million PennDOT first phase streetscape grant. The Roxian Theater will offer local musicians and touring acts a venue within the 800 to 1,500 seat range, which is difficult to find in the greater Pittsburgh area. This site is located in a census tract designated as a federal Opportunity Zone, where new investments, under certain conditions, may be eligible for preferential tax treatment.
Three Springs Business Park - Weirton, West Virginia

With a $153,000 Brownfields Assessment grant, the Business Development Corporation of the North Panhandle of West Virginia has continued to build out the Three Springs Business Park in Weirton, West Virginia. The site was formerly mine-scarred land owned by Weirton Steel that lay fallow and wasted on the outskirts of downtown Weirton. EPA awarded three Brownfield Assessment Grants to the Brooke-Hancock Regional Planning and Development Council (2004, 2005 and 2009) and one to the Business Development Corporation of the Northern Panhandle (2016). These funds were used to assess portions of the mine site to assist the redevelopment organizations work with four companies, clearing hurdles in their quest to make the Three Springs Business Park their new home. The business park continues to grow and expand and has leveraged $4.4 million in other public investments (additional grants and loans), $21 million in private investments for manufacturing, and $10 million in commercial and hospitality. The current industrial complex tenants include: Pietro Fiorentini manufacturing (expansion will have a grand opening in July 2019), Barney's Bakery, North American Industrial Services, Rue21, Park Drive Development, Walmart, Bob Evans Restaurant, Comfort Inn, and Fairfield Inn & Suites. Three Springs Business Park has created 195 and preserved 141 jobs, while 651 new jobs are projected. Future investment in the greater Three Springs park area is another $46 million of planned buildout including of a 10-acre entertainment district and convention center expected to bring another $21 million in new investment and 250 more jobs.

REGION 4

Creative Village - Orlando, Florida

One key aspect of Orlando's revitalization is the Creative Village project, a public-private partnership between the City of Orlando and Creative Village Development, LLC. This ambitious project envisions a “live, work, play” center in downtown Orlando constructed at the site of the former home of the Orlando Magic, the Amway Center, which was demolished in 2012. Creative Village will eventually consist of a mixed-use, transit-oriented development consisting of 1,200,000 square feet of office/creative space; 750,000 square feet of higher education space; 1,500 residential units; 1,500 student housing beds; 150,000 square feet of retail/commercial space; and 225 hotel rooms.

EPA grant funding was used at several parcels for assessment (over $100,000 in assessment funding from the 2012 Assessment Grant). Additionally, the 2013 Cleanup Grant ($200,000) funded cleanup activity at three parcels that represent approximately 26 acres out of the 68 acres under the Creative Village umbrella. The entire Creative Village project is enrolled in Florida Department of Environmental Protection’s brownfields program, which oversees voluntary cleanups while providing financial and regulatory incentives to enrollees.
**Encore Project - Tampa, Florida**

The mixed-use Encore Project is a success story in the City of Tampa’s Community Redevelopment Area between downtown Tampa and historic Ybor City. The City of Tampa conducted assessments and planning activities and cleanup at the project site by leveraging a total of $800,000 from a 2009 assessment grant and 2012 multipurpose grant, each in the amount of $400,000. Historical uses of the properties included automotive repair and junk yard storage. Currently, the sites are the location of a walkable, livable community. This unique redevelopment salutes the black music roots of the Central Avenue area; the 1950s song, The Twist, got its start here. The Encore includes a solar powered park and the Ella, a mixed-income complex with 160 apartments for seniors. Petroleum grant funds from the city’s multi-purpose brownfields grant were used to remove the tanks and conduct soil cleanup. This site is located in a census tract designated as a federal Opportunity Zone, where new investments, under certain conditions, may be eligible for preferential tax treatment.

**REGION 5**

**New Center District - Detroit, Michigan**

What was once a blighted neighborhood in Detroit’s New Center district is now home to a $28 million medical supply facility. The Cardinal Health Distribution Center employs 140 workers on a site that until very recently was 18 acres of vacant lots mixed with burned-out homes. The Detroit-Wayne County Port Authority invested $915,000 in EPA brownfield grant funds awarded in 2015 to help clean up contaminated soils, remove 11 underground storage tanks, and eliminate vapor intrusion in the new building. Tax credits and other incentives from the state, city and county provided the additional funding needed to improve the site with new construction and infrastructure improvements. This site is located in a census tract designated as a federal Opportunity Zone, where new investments, under certain conditions, may be eligible for preferential tax treatment. These investments, as well as future incentives made available by being designated an Opportunity Zone, will continue to encourage transformation of the New Center District for generations to come.

**Wade McCree Estates - Ecorse, Michigan**

Constructed in the late 1950’s, the apartment buildings in Wade McCree Estates had become obsolete when the Ecorse Housing Commission undertook cleanup and redevelopment of the 21-acre property. Disposal of contaminated soils, removal of underground storage tanks, and abatement of asbestos...
was completed with $1.3 million of EPA Brownfield Grants awarded in 2017 and an additional $1 million provided by the state of Michigan. Once the property was remediated so it could be safely used by residents, the housing commission built 200 new homes. Besides bringing new life to the site, the project provided employment to 230 construction workers and will increase the city’s property tax base for years to come.

**REGION 6**

**Hooghan Hòzho - Gallup, New Mexico**

Hooghan Hòzho, a 44-unit development with 30 units set aside for Native American families, now welcomes residents and visitors alike at the gateway of downtown Gallup, New Mexico. Originally the site of Hotel Liberty and most recently Carl’s TV, through the brownfields funding awarded in 2009, this location was converted into affordable housing units that provide ready access to jobs, transportation, retail, city services, and civic amenities to the residents it serves. Environmental site assessments were funded by Region 6 Brownfields Targeted Brownfields Assessment Program and New Mexico Council of Governments’ Brownfields Assessment Grant, and cleanup planning was provided by New Mexico Environment Department (NMED), all totaling $55,000. NMED also provided cleanup funding through a subgrant of $74,000 from their Revolving Loan Fund to remediate the site by cleaning up asbestos and installing a vapor barrier. The $10.7 million revitalization was made possible through a partnership with CARE 66 and many other state and federal partners.

**Texas Musicians Museum and Neon Armadillo Restaurant - Irving, Texas**

Located on a site that featured former automotive sales/service shop and a neon sign manufacturing business, the Texas Musicians Museum and Neon Armadillo Restaurant underwent an extensive revitalization to become a reality. Region 6 Targeted Brownfields Assessment Program worked with the City of Irving and their Brownfields Assessment Grant awarded in 2012 to provide $47,000 in environmental site assessment work on the property. The redevelopment leveraged $2.4 million in city funds to revitalize the site. The repurposed 8,000 square foot facility, just a short walk from city transit, includes the museum, an outdoor music garden, and an on-site restaurant.
**Bee Branch Creek Greenway - Dubuque, Iowa**

In Dubuque, Iowa, the Bee Branch Creek Greenway was made possible in part by EPA's $400,000 Assessment Grant awarded to the City of Dubuque in 2013. The greenway is part of the city's Bee Branch Watershed Flood Mitigation Project intended to mitigate flooding, improve water quality, stimulate investment, and enhance quality of life within the Bee Branch Watershed. To allow flash floods to move safely through the area, the decision was made to daylight the Bee Branch Creek by replacing nearly a mile of underground storm sewer with an open creek and floodplain.

Today, what was once a waterway completely buried underground is now a community greenway aligned with multi-use sidewalks, landscaping, fun spaces for children to play, a limestone waterfall, scenic overlooks, a community amphitheater, newly-introduced fishing habitat, and a community orchard and garden. Through dedication, a steadfast community vision, and the support of local, state, and federal partnerships, the city of Dubuque transformed part of an opportunity zone in an area prone to dangerous flash flooding into a beautiful centerpiece in their community.

To date, Dubuque has received $162 million in state and federal grants and local donations to help fund the $219 million project, including support from EPA's Clean Water State Revolving Fund and Brownfields Program. And EPA's support for the project continues. EPA Cleanup Grants totaling $600,000, awarded in 2016, 2017 and 2018, are supporting the redevelopment of a former scrapyard and adjacent properties into a bike trail, pavilion, playground, and public bathroom to serve the Lower Bee Branch Creek. This site is located in a census tract designated as a federal Opportunity Zone, where new investments, under certain conditions, may be eligible for preferential tax treatment.

**West Haymarket - Lincoln, Nebraska**

Cleanup recently completed at two properties in the city of Lincoln are just the latest in the booming redevelopment of West Haymarket, a 402-acre district in town that consisted of heavy industrial, commercial, and mixed residential areas that were considered blighted and largely obsolete. Two EPA cleanup grants awarded in 2013 provided $200,000 each and leveraged more than $4 million from other sources for the needed remediation.

The former BNSF Railway Roundhouse Area within the BNSF Railway Company Lincoln Main Yard and the former scrap metal recycling facility, Alter Scrap Company, had been used for more than 100 years as rail yards. Soil and groundwater at the sites were contaminated with heavy metals and other hazardous substances. Also cleaned up was the former Jaylynn Manufactured Gas Plant, where environmental concerns included heavy metals, semi-volatile organic compounds, and polynuclear aromatic hydrocarbons.
Already, the N Street Bikeway, Nebraska’s first protected bicycle facility, was constructed on N street between the two cleanup sites, leveraging $3.2 million in redevelopment. More than $50 million in redevelopment is planned for these properties within this Opportunity Zone. Development proposals incorporate new mixed-use buildings, new residential units, a public plaza, green space, and public parking. The city reports that people are excited for the green space, described as an "art-inspired landscape with a public plaza, walking trails, water features and an outdoor amphitheater."

Early redevelopment at West Haymarket was made possible through a series of targeted brownfield assessments by Nebraska Department of Environmental Quality using EPA’s CERCLA 128(a) State Response funding. Today, West Haymarket accommodates residential, recreational, cultural, and entertainment-oriented uses including its cornerstone, a 470,000-square-foot arena projected to draw 700,000 visitors each year. This site is located in a census tract designated as a federal Opportunity Zone, where new investments, under certain conditions, may be eligible for preferential tax treatment.

REGION 8

Oak Park Theatre - Minot, North Dakota

The Oak Park Theatre in Minot, North Dakota, was once a thriving entertainment center that operated from the 1960s until the Souris River flood in 2011. The damage from the flood, along with subsequent years of neglect and unknown contamination, left the property vacant and in a state of disrepair. The City of Minot and its community members recognized the potential of the theatre and the overall Oak Park Shopping Center and designated the property as a catalyst site in its EPA Brownfields Area-wide Plan, which was completed in 2016. The city also used its Brownfields Grant awarded in 2013 to conduct Phase I and II environmental assessment activities to demystify the environmental conditions at the center. The assessment results confirmed the Oak Park Shopping Center did not have elevated levels of contamination, providing a green light to a local developer to proceed with reconstruction of the theatre and other new businesses in the shopping center. As reported in the Minot Daily News, business is thriving in the Oak Park Shopping Center, and the theater is again the place to be in Minot.

Town of Dubois - Dubois, Wyoming

The Town of Dubois, population 995, successfully used EPA Brownfields funds to complete the cleanup of a 52-acre sawmill that had been vacant since 1980. In 2012, EPA awarded a $200,000 Brownfields Cleanup Grant to the town to address petroleum contaminated soils from the sawmill operations. The soils remediation was the final stage of a years-long cleanup that began with assessment and cleanup work by the Wyoming Department of Environmental Quality and the town. Removing the last contamination from the sawmill allowed the town to redevelop the property with the Warm Valley Lodge Assisted Living Center and the Clarence Allison Memorial Rodeo Arena. The town also completed new recreational trails that now provide scenic access to the Wind River.
REGION 9

Pueblo Viejo Fields Project - Phoenix, Arizona

The Pueblo Viejo Fields Project is Phoenix, Arizona’s first “Brownfields to Healthfields” project completed through funding awarded in 2017 from the EPA Brownfields program. With EPA assistance, lead and arsenic contamination were identified at the property. Subsequently, the property was cleaned and developed into the Pueblo Viejo Fields Project, which includes a demonstration farm, farm stand, and agricultural training facility for veterans and developmentally disabled adults. The project provides locally grown and freshly harvested food to the south Phoenix community, a USDA-designated food desert. This site is located in a census tract designated as a federal Opportunity Zone, where new investments, under certain conditions, may be eligible for preferential tax treatment.

William N. Pennington Life Center - Fallon, Nevada

The rural town of Fallon, Nevada, (population 8,500) recently opened a new senior center with EPA Brownfields assistance from a grant awarded in 2016. The William N. Pennington Life Center is a 16,000-square-foot, $5 million senior center, built on four parcels historically used as a gas station. The new senior center serves meals for up to 100 seniors a day in the facility and another 190 seniors in their homes through the Meals on Wheels delivery program. A library, meeting rooms, and social areas complete the center.

REGION 10

Public Safety Center - Beaverton, Oregon

Allen Boulevard Corridor is one of Beaverton’s most distressed areas; as a result, it was targeted for revitalization. The main environmental challenge was to address existing petroleum contamination that imposed health risks to groundwater and local streams. The site was designated to be the future location of a Public Safety Center (PSC), an earthquake resistant police and emergency management building. In support of this change, Beaverton residents passed a $35 million bond in 2016 to fund this new center. The PSC will be a community asset that will spur additional development in the surrounding blighted area. Two hundred police and city staff working at the PSC will improve the safety and stability of the neighborhood. Region 10 Administrator Chris Hladick announced on April 26, 2018, that City of Beaverton was awarded $400,000 in cleanup grants from EPA for this project. Construction started in 2019.
Port of Skagit - Burlington, Washington (Site is in Sedro-Woolly, Washington)

The former Northern State Hospital for psychiatric patients was constructed in 1912 on a 225-acre site in Skagit County, 70 miles north of Seattle. The hospital had medical wards, residential halls, a power plant, rail spur and depot, maintenance facilities, a landfill, and approximately 700 acres of adjacent farmland. At its peak, this historical and beautiful site served 2,200 patients and employed 400 staff. After the hospital closed in 1973, interim uses allowed testing of new ideas. However, contamination concerns became obstacles for future redevelopment. An initial planning grant of $200,000 from the Washington Department of Ecology was funded in 2014. Washington State transferred ownership of the property to the Port of Skagit in 2018.

A brownfield assessment was completed in April 2019 with a $195,000 grant from EPA. This assessment has reduced the uncertainty regarding contamination and provided a better positioning of the property for its new future. The port is now actively applying for cleanup funding through state and federal agencies and is attracting technology companies on a vision of good jobs in a serene environment.

Riverfront Park - Spokane, Washington

In the 45 years since Expo ’74 in the City of Spokane, economic distress and lack of investment in Riverfront Park resulted in deteriorating conditions with negative impact on the city. Although the park consistently ranks as one of the top tourist attractions in Spokane, it has not been significantly upgraded since it opened. A master plan was approved in 2014 followed by the issuance of $64 million in bonds to fund improvements. In 2014, Spokane was awarded $400,000 by EPA to assess vacant, underutilized, and abandoned properties. In 2017, the city was awarded $600,000 in additional EPA brownfield funding to support cleanup and revitalization of the 100-acre Riverfront Park. The EPA funds paid for remedial costs and reduced the uncertainty in estimated project costs. The total cost is expected to exceed $70 million. This site is located in a census tract designated as a federal Opportunity Zone, where new investments, under certain conditions, may be eligible for preferential tax treatment.