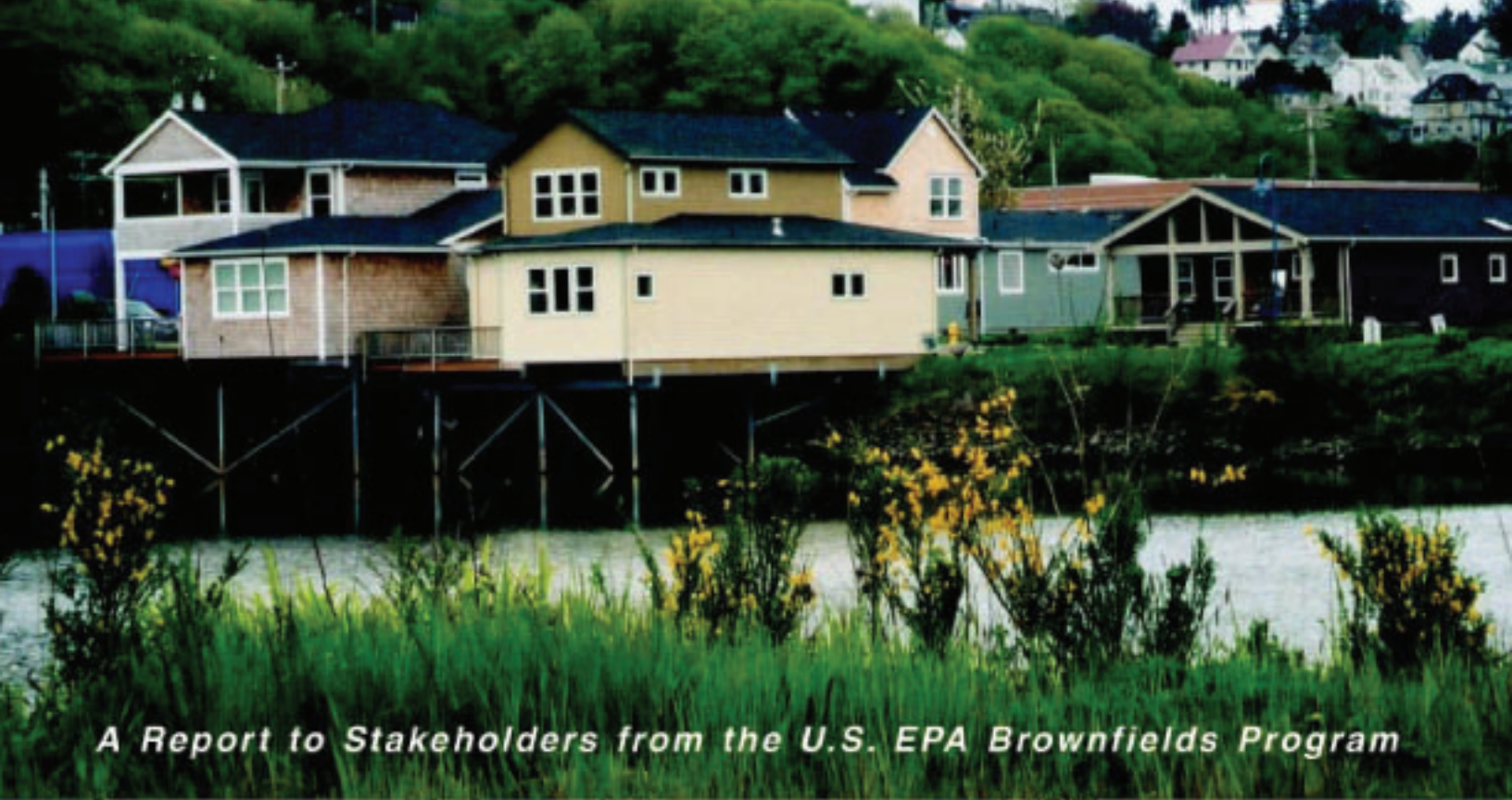


Reusing Land Restoring Hope



A Report to Stakeholders from the U.S. EPA Brownfields Program



Jordan Valley Park is a community designed multi-use park in the heart of Springfield, Missouri. The 250 acre Jordan Valley Industrial Corridor was once prime industrial land, which had been underused and abandoned for years. Today, the area is bustling with activity. In 2002 Springfield celebrated the grand opening

of the Civic Park and an Ice-Skating Arena. A ballpark, and an exposition center is currently under construction, and a multi-use arena is in the design phase. Funded by public and private sources, the Springfield residents have taken a new interest in community revitalization since the grand opening occurred in 2002.



The Jordan Valley Park water feature is a popular attraction.

This report is dedicated to Bill Librizzi, of the New Jersey Institute of Technology, former director of Region 2's Waste Management Division, in memory and appreciation of his vision, leadership, and support to the brownfields effort.

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Aerial view of the Jordan Valley Ice Park—a two-sheet ice-skating arena—and the western entrance to the Jordan Valley Civic Park.



The Springfield, Missouri, Assessment Pilot worked closely with the community to determine its need for recreational facilities.



Springfield, Missouri, residents enjoy an evening concert in the park to celebrate the Grand Opening.



Overview

This report chronicles the milestones and accomplishments of the U.S. Environmental Protection Agency's (EPA) Brownfields Program, which began in 1995 as an ambitious initiative to change the way people think about contaminated properties. For decades, uncertainty about the presence of contamination, fear of potential cleanup liability, and finite cleanup resources, resulted in thousands of potentially contaminated properties blighting the American landscape. EPA's Brownfields Program has been working to address this national environmental issue.

The Brownfields Program has grown from its modest beginnings into an award-winning national movement that has revolutionized the way people perceive, address, and manage property. Over several years, EPA has provided technical and financial assistance for brownfields revitalization through an approach based on four main goals: protecting the environment, promoting partnerships, strengthening the marketplace, and sustaining reuse. This approach created a dynamic, flexible program that evolved in response to the needs of state, tribal, and local governments and other stakeholders. Since 1995, the investment in EPA's Brownfields Program—less than \$700 million—had leveraged \$5 billion in cleanup and redevelopment funding from the public and private sectors and created more than 24,000 jobs, often in economically disadvantaged areas that needed them most. Brownfields Pilots assessed more than 4,300 brownfields properties, approximately one third of which were found to have no significant contamination, or levels so low they required no cleanup prior to the property's reuse.



The Jackson County, Michigan Assessment Pilot facilitated the restoration of the historic U.S. Post Office, which now serves as the entrance of the Consumers Energy headquarters building.



The cornerstone of EPA's Brownfields Program was its investment in Brownfields Pilots. Three types of pilots provided "seed" money to jump-start state and local efforts to assess, clean up, and leverage redevelopment of brownfields. Brownfields Assessment Demonstration Pilots funded environmental assessment of brownfields as well as local inventories, planning, and community outreach regarding their cleanup and redevelopment. Brownfields Cleanup Revolving Loan Fund Pilots provided state, tribal, and local governments with capital to make low or no interest loans to finance brownfields cleanups. Brownfields Job Training and Development Demonstration Pilots benefitted communities affected by brownfields contamination by training local residents for jobs related to brownfields cleanups. These pilots helped ensure that the economic benefits derived from assessment and cleanup activities stayed in the communities that had suffered from the adverse effects of brownfields.

Activities undertaken as a result of the Brownfields Pilots provided a crucial step in achieving brownfields cleanup and redevelopment. Communities were able to reduce uncertainty about environmental contamination that had kept individual properties idle for years. In cities and towns across the country, brownfields were converted into new homes, health care facilities,



An artist's rendering of the completed Tremont property in Boston, Massachusetts.



new parks, museums, and cultural centers. The catalyst of Brownfields Program “seed” money helped return brownfields to productive uses, creating new jobs, generating additional tax revenue, and stimulating investment in community revitalization.

In 2002, Congress enacted the Small Business Liability Relief and Brownfields Revitalization Act, providing the Brownfields Program with a congressional mandate, increased funding, and meaningful opportunities to advance brownfields reuse nationwide. The law supports the existing approach of EPA’s Brownfields Program, offers additional opportunities for financial assistance to communities, strengthens liability protections for contiguous property owners and prospective purchasers of brownfields properties, and expands assistance to states and tribes for their brownfields response programs. Additionally, the new Brownfields Law included an expanded definition of brownfields: “Brownfields are defined as real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of hazardous substances, pollutants, or contaminants.” EPA moved forward immediately to implement the new Brownfields Law. In 2003, EPA announced more than \$73 million in grants: 117 Assessment Grants, 28 Revolving Loan Fund Grants, 10 Job Training Grants, and 69 Cleanup Grants.



Accomplishments to date:

- **554 Assessment Pilots/Grants—4,310 properties assessed**
- **171 Revolving Loan Fund Pilots/Grants—40 loans totaling \$17.2 million**
- **67 Job Training Pilots—1,740 people trained—two out of three employed**
- **69 Cleanup Grants**





Since 1995, EPA's investment—nearly \$700 million—in the Brownfields Program has leveraged \$5.09 billion in brownfields cleanup and redevelopment funding from the private and public sectors, and helped to create more than 24,920 new jobs for citizens in brownfields communities.

This report, the first in a series that will be updated as the Brownfields Program changes and grows, illustrates the collaborative and innovative spirit of people across the country who have transformed perceptions about brownfields cleanup and redevelopment. The report provides baseline information, organized into the following chapters:

- *Catalyzing Change* describes the brownfields dilemma and how EPA's program stimulated significant changes in the national mindset about brownfields redevelopment.
- *Revitalizing Communities* illustrates the impact of the Brownfields Program in improving the environment, enhancing the lives of thousands of citizens, and generating economic benefits. Each EPA Region portrays its unique approach to implementing the Brownfields Program in a special Regional section at the end of *Revitalizing Communities*.
- *Moving Forward* focuses on how EPA's Brownfields Program is forging ahead and breaking new ground under the new Brownfields Law, and considers what the future holds for this unique and dynamic program.



Construction activities on the Tremont property were facilitated by a cleanup loan from the Boston, Massachusetts, BCRLF Pilot.



Catalyzing Change

Brownfields are defined as real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant.

—Small Business Liability Relief and
Brownfields Revitalization Act, 42 USC 9601 (39)
enacted January 2002



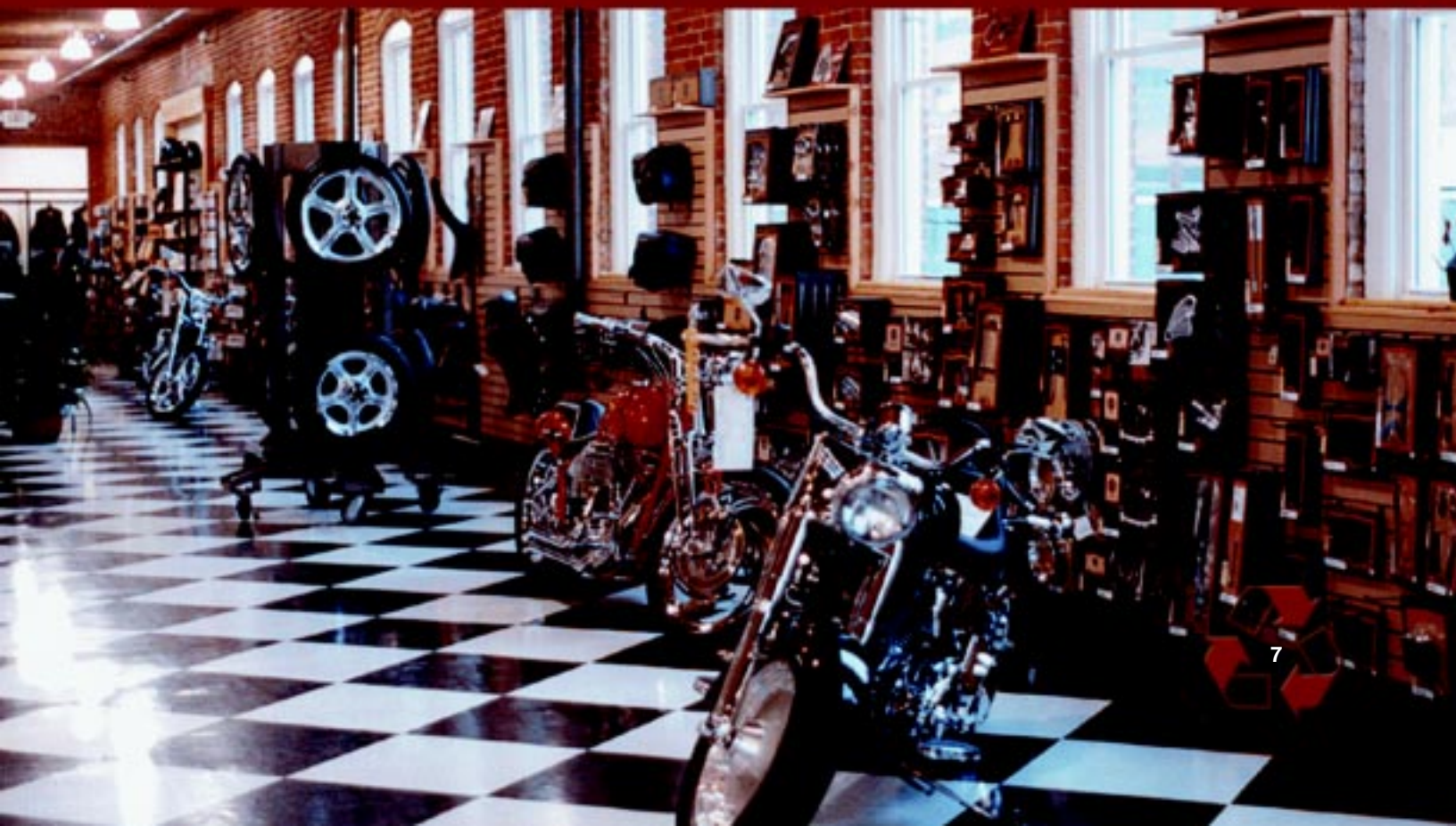
A former printing and engraving facility was redeveloped into the Harley Davidson/Buell Motorcycles shop in Stamford, Connecticut.

Putting the Problem in Context

Communities across the country have suffered for many years from the blight and negative economic impact of abandoned, underused, and potentially contaminated properties called brownfields. These brownfields are the remnants of industries that fueled the nation's economic engine during the past two centuries, but closed down or moved as economic conditions changed. In the smallest towns and the largest cities, empty warehouses, decrepit factories, and junk-filled lots are constant reminders of how quickly a source of community pride can become a dangerous, unsightly, and unwanted burden. Estimates of the number of brownfields across the country range from 450,000 to as many as a million.^{1,2,3}

Brownfields are usually located in areas with access to transportation and utility infrastructure. Nevertheless, developers are often hesitant to redevelop brownfields because of the investment risk and potential liability for cleanup costs associated with owning contaminated or potentially contaminated property. Developers are more attracted to uncontaminated land in outlying areas with fewer financial risks. One of the primary results of this push to develop untouched land is what is called sprawl.

As developers interest shifted to outlying areas, cities and towns continued to grapple with the negative economic and environmental impacts of brownfields. The inability to draw investors and developers to brownfields redevelopment projects pushed property values and tax revenues down, and unemployment up. Many brownfields were located in poor, disadvantaged, and predominantly minority neighborhoods where the negative effects of job loss and poverty were felt more acutely. By the early 1990s, the U.S. Conference of Mayors pointed to brownfields as one of the most critical problems facing U.S. cities.⁴





The 88-acre former Firestone Tire plant closed in 1983. It has been targeted by the Memphis, Tennessee Assessment Pilot for redevelopment into an affordable golf course.

Early Efforts

State, tribal, and local governments have been dealing with environmental cleanup issues for many years. In 1980, enactment of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), commonly known as Superfund, gave the federal government the authority to respond to and clean up abandoned or uncontrolled hazardous waste sites. CERCLA created a comprehensive liability plan that holds owners, operators, and other responsible parties jointly and severally liable for the cleanup.

In the years following the enactment of Superfund, states and tribes began to enact cleanup laws and regulations to address the thousands of abandoned and contaminated sites across the United States that the federal Superfund program would not have the resources to address. Many state cleanup programs followed the federal Superfund model, and enacted state cleanup programs with similar liability plans. For more than a decade, states and tribes, in partnership with EPA, worked to assess and clean up thousands of contaminated properties that threatened public health and the environment. Despite these extraordinary efforts, the sheer number of sites continued to challenge both federal and state cleanup resources. More needed to be done about the entire universe of sites, particularly the newly emerging realm of “brownfields.”

Recognizing these issues, a few states and some cities began to pioneer approaches to address the brownfields problem directly. The creation of innovative state programs, *e.g.*, voluntary cleanup programs, provided opportunities for state liability relief, recognizable cleanup standards and procedures, and other incentives to property owners, investors, and developers interested in cleaning up and redeveloping brownfields. Early efforts varied widely, with only a few voluntary cleanup programs in existence before 1995. Many early state initiatives needed time and dedicated resources to grow and mature, as the federal and state Superfund programs had done over the preceding decade.⁵ Over time, it became apparent that a broader, national approach that linked federal, state, tribal, and local efforts while providing greater access to federal resources was needed to address the brownfields problem adequately.



EPA's Brownfields Initiative

EPA formally launched its Brownfields Initiative in 1995 and began a national effort to demonstrate that environmental cleanup and redevelopment of brownfields could bring life and economic vitality back to communities. The program would have to bring together a wide range of stakeholder interests, including many federal agencies that operate under different authorities. The program would have to change the perception that brownfields had no value and that investing in them was too risky. It would have to demonstrate that brownfields cleanup and redevelopment are economically viable and provide important environmental and quality-of-life benefits.

To meet these challenges, EPA designed the Brownfields Initiative to promote and support innovative, local approaches to brownfields issues. The program was designed to be flexible so that communities could tailor approaches to meet their unique local needs. The program fostered strong partnerships among local stakeholders and across all levels of government to help marry environmental, economic, and community interests. EPA also worked to clarify issues of liability in order to help knock down barriers to brownfields cleanup and redevelopment.



The Hawaii Department of Business, Economic Development, and Tourism Assessment Pilot has targeted Lihue Sugar Lands. Plans for the property include a community center with commercial and residential development.



The Foster Paper Company property, abandoned since the 1980s, has been targeted by the Utica, New York, Assessment Pilot for redevelopment.



Sioux Falls, South Dakota Assessment Pilot targeted a scrap metal yard to become part of a larger park, composed of former brownfields.

Jump-Starting Local Programs

From the beginning, the centerpiece of EPA's Brownfields Program was its investment in locally-based Brownfields Pilots. These pilots offered communities nationwide the opportunity to use federal funds creatively to assess and clean up properties, and to manage risks associated with their redevelopment.

Brownfields Assessment Pilots helped communities lift the cloud of uncertainty about contamination that had kept individual properties idle for years. Environmental site assessments conducted through the pilots revealed the presence or absence of contamination. This information enabled pilot recipients to plan for needed cleanup at target brownfields. Properties that did not require cleanup were freed for redevelopment. In Ogden, Utah, Assessment Pilot funding helped transform a group of 17 brownfields, remnants of old railroad operations and factories, into a new office complex. The Pilot conducted Phase I and Phase II environmental assessments. Ogden City Redevelopment Agency then provided funding for the cleanup of properties where contamination was found. The cleanup was conducted under a Voluntary Cleanup Agreement with the Utah Department of Environmental Quality. Ogden is just one example of more than 500 Assessment Pilots announced by EPA's Brownfields Program.



The Village at St. Anthony Falls redevelopment project in downtown Minneapolis, Minnesota, the cleanup of which was in part funded by the Hennepin County BCRLF Pilot.

Historically, lack of cleanup funding had been a barrier to revitalizing contaminated properties. The Brownfields Program helped eliminate this obstacle with its Brownfields Cleanup Revolving Loan Fund (BCRLF) Pilots. These pilots provided state and local governments with capital to make low or no interest loans to finance cleanup of brownfields. EPA has announced nearly 170 BCRLF Pilots. For example, the Hennepin County, Minnesota, BCRLF Pilot made three loans totaling \$1.3 million for brownfields cleanup. The loans are helping to transform brownfields in downtown Minneapolis and in the city's Prospect Park neighborhood. The Pilot includes an innovative escalation clause in loan agreements that provides for the loan of additional cleanup funds, if additional contamination is found during cleanup. This unique approach reduces administrative burdens on both the issuing agency and loan recipients. Loans made through the Pilot have catalyzed more than \$40 million in public and private investment for the downtown Minneapolis project. This major development project, called the Village at St. Anthony Falls, includes new retail space and affordable housing for local residents.





As part of the Twin River Development Complex, the Boyle Furniture Warehouse was refurbished and connected to the new building housing the IRS in Ogden, Utah.

EPA's Brownfields Program Funding and Assistance Types

Assessment Grants

- Provide funding to inventory, characterize, assess, and conduct planning and community involvement related to brownfields.

Revolving Loan Fund Grants

- Provide funding to capitalize a revolving loan fund and to provide subgrants.

Cleanup Grants (new in 2003)

- Provide funding to carry out cleanup activities at brownfields.
- Grantee must own the properties for which it is requesting funding.

Brownfields Job Training Grants

- Provide funding for environmental employment training of residents in communities impacted by brownfields.



About 30 percent of properties assessed through EPA Brownfields Pilots were found not to require cleanup.*



The STRIVE-Boston Job Training Pilot provided residents of Brooklyn, New York, with hands-on environmental cleanup training.





Class is being conducted in Albuquerque, New Mexico at the Bernalillo County Environmental Health Department Job Training Pilot.

As communities cleaned up brownfields, EPA recognized the need for a workforce with environmental cleanup skills. EPA's Brownfields Job Training and Development Demonstration Pilots funded job training programs for residents of brownfields-impacted communities. The skills developed through these training programs, including the use of alternative or innovative technologies, have prepared the graduates for employment in the environmental field. The Brownfields Program has announced 60 Job Training Pilots/Grants. These pilots were typically located in urban, low-income, and high-minority areas. Job Training Pilots recruited not only disadvantaged residents of communities affected by brownfields, but also those in public assistance programs (including Welfare-to-Work), under- or unemployed residents, single mothers, and veterans. The pilots helped ensure that the economic benefits derived from assessment and cleanup activities stayed in the communities that had suffered from the adverse effects of brownfields.

The Richmond, California Job Training Pilot developed and conducted a three-cycle training program that included training in the use of innovative assessment and cleanup technologies. The Pilot targeted Welfare-to-Work and other disadvantaged residents of neighborhoods surrounding the 900-acre North Richmond Shoreline. The demise of shipbuilding and other heavy industry in Richmond had contributed to entrenched poverty and persistently high unemployment in these neighborhoods. Ninety-seven percent of participants in the job training program graduated. Seventy-seven percent of those graduates obtained employment with an average hourly wage of \$14.75.

Brownfields Pilots have given communities across the nation the freedom to develop innovative approaches to brownfields cleanup and redevelopment tailored to meet their unique needs. Communities have welcomed this opportunity, as demonstrated by the fact that the number of pilot applicants rose from more than 100 in 1995 to more than 1,300 in 2003.



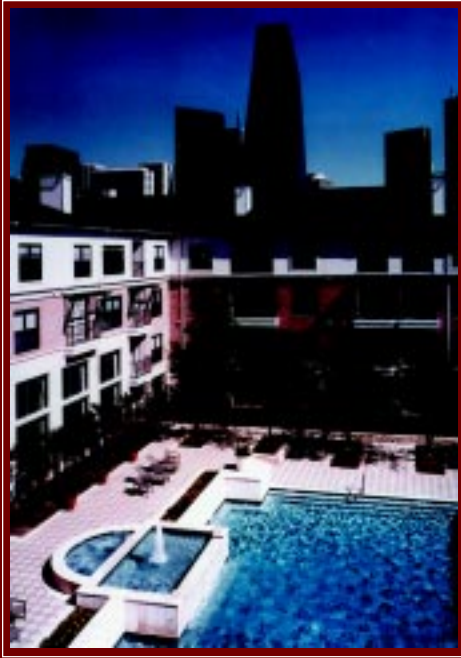
Creating Partnerships

Communities have access to a patchwork of federal and state programs with resources and expertise to assist various aspects of brownfields projects. However, each of these programs is designed to meet a specific need or respond to a particular problem. It is often difficult for agencies to work beyond their traditional program limits. At the local level, it is hard for communities to navigate the maze of agency programs. EPA worked to bring agencies together and provide the context each agency needed to evaluate how its programs could address brownfields issues.

In 1996, EPA launched a landmark partnership effort, bringing together more than 20 agencies and nonprofit organizations to form the Brownfields National Partnership. The Partnership focused on the range of issues faced by communities impacted by brownfields. Beyond the environmental threat, brownfields communities often face unemployment, substandard housing, outdated or faulty public infrastructure, crime, and a poorly-skilled local workforce. The Partnership's Action Agendas detailed how their individual programs would work more creatively and productively for these communities. In Smithville, Texas, a federal-state partnership successfully aided the cleanup and redevelopment of the abandoned Marhil Manufacturing property. EPA provided funding for the assessment; the city then worked closely with the state voluntary cleanup program to determine acceptable cleanup standards. The city combined its own funding with \$23,500 from the Economic Development Administration (EDA) to develop a marketing plan for the property. The city purchased the property and leased it to a small furniture manufacturer, creating seven new jobs. In 2002, the Administration reinforced and added vigor to this national brownfields partnership with 100 additional new commitments.

Volunteers at the Stevenson Street Habitat for Humanity property in Fairfax, Virginia, attend the signing of the EPA and Habitat for Humanity Memorandum of Understanding on February 13, 2002.





The Dallas, Texas Assessment Pilot and Showcase Community worked together to help ensure the construction of a new multi-family housing complex accommodating 540 families.



Construction activities are underway on the former Jefferson North End property in Dallas, Texas.

Over three years, the Partnership designated 28 Brownfields Showcase Communities to demonstrate the benefits of partnerships of federal, state, tribal, and local governments, as well as nongovernmental organizations. Showcase Communities received targeted technical and financial assistance to support their efforts to restore and reuse brownfields. In addition, a federal staff person, loaned to the community, helped the community coordinate technical and financial support, and handle the myriad of environmental issues. The success of Showcase Communities projects—such as those in Dallas, Texas; Stamford, Connecticut; and East Palo Alto, California—has proven the value of public-private collaboration at all levels in addressing brownfields.

In addition to working with other federal agencies, EPA has championed the importance of brownfields cleanup internationally, and has collaborated on cross-border initiatives with Canada and Mexico. Through international organizations, such as the United Nations, Organization for Economic Cooperation and Development, and the European Union, EPA has supported research into technical approaches and policy options with potential for replication in this country. The U.S. program has benefitted from the international interaction, transferring ideas such as Groundwork Trusts from the United Kingdom. Groundwork Trusts are independent partnerships between the public, private, and voluntary sectors in England, Wales, and Northern Ireland working to improve the quality of the local environment, the lives of local people, and success of local businesses. In 1996, the National Park Service's (NPS) Rivers & Trails program, together with the EPA's Brownfields Program, launched the Groundwork USA Initiative to transform blighted urban neighborhoods. NPS and EPA have provided financial and community planning assistance to focus on improving the environment, economy, and quality of life through local action.



Since 1996, EPA has sponsored annual National Brownfields Conferences as a forum for investors, developers, property owners, municipalities, states, tribes, community groups, technical experts, and academic institutions to share the latest research on brownfields issues. The conferences provide stakeholders an opportunity to exchange successes and lessons learned, as well as find out about new ideas and opportunities. The conferences have helped new partnerships emerge, and have encouraged more people to see brownfields as opportunities. In addition, they provide momentum to keep the Brownfields Program operating and expanding. The tremendous growth in stakeholder interest is clearly demonstrated by the increasing attendance at annual Brownfields Program conferences. The first Brownfields conference, held in Pittsburgh in 1996, drew approximately 1,000 attendees. The Brownfields 2002 Conference in Charlotte, North Carolina, had over 3,300 registrants.



Participants at the Brownfields 2002 Annual Conference held in Charlotte, North Carolina. (Photo Courtesy of ICMA.)

To meet the challenges posed by brownfields projects, EPA has consistently stressed the importance of partnerships. EPA has partnered with diverse agencies, all levels of government, and international organizations to focus attention on brownfields, and to access resources. In addition, by sponsoring annual national conferences, EPA has provided a forum for all the players in brownfields cleanup and redevelopment to network and exchange information.

Annual Brownfields Conference Attendance From 1996 Through 2002





Working with States and Tribes

As the federal Brownfields Initiative matures, the relationship between EPA and state and tribal governments continues to develop and grow. Under the Brownfields Program, EPA partnered with states to develop Memoranda of Agreement (MOAs) that clarified roles and responsibilities and encouraged the cleanup of contaminated properties. By August of 2003, EPA had signed MOAs with 19 states. In addition, EPA signed RCRA Memoranda of Understanding with a number of states.

Seeking to support the development of state and tribal voluntary cleanup programs, EPA provides financial and technical assistance to states and tribes. Recognizing that brownfields cleanup and redevelopment required partnering with all levels of government, the financial and technical assistance focuses on creating or increasing state and tribal capacity to meet the challenges posed by brownfields cleanup and redevelopment. EPA also provides assistance through its Targeted Brownfields Assessments (TBA) Program, which enables EPA, states and tribes to conduct environmental assessments, investigate cleanup options, and develop cleanup estimates.



Targeted Brownfields Assessments were completed at over 900 properties.



Clarifying Liability

For some time, through the issuance of guidance and enforcement discretion policies, EPA has worked to clarify federal liability, particularly under CERCLA, that had hindered brownfields cleanup and redevelopment. Over the past decade, the Agency has streamlined administrative practices and clarified enforcement policies for prospective brownfields purchasers, developers, and lenders. For example, EPA developed and used liability management tools, such as “comfort/status” letters and “prospective purchaser agreements,” that provide additional certainty for developers or lenders that they will not have to pay for contamination they did not cause. Clarifications of enforcement policies and the use of such tools changed private sector perception of brownfields from “too risky” to “worth considering” for redevelopment.

EPA also removed thousands of lower-risk properties from the Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) Inventory, the database of potentially hazardous sites under EPA’s Superfund Program. EPA had no further response action planned at the vast majority of these properties. Separating these properties from the sites still under consideration for federal response action was extremely important in



The Emeryville, California Assessment Pilot facilitated the redevelopment of an industrial property into a multi-use retail space, including a town center.



removing the stigma of contamination from the properties. This process gave comfort to lenders interested in financing brownfields redevelopment projects. According to Jim Smith, former Brownfields Pilot Coordinator for Buffalo, New York, EPA's removal of the former LTV Steel property from CERCLIS cleared the way for progress by assuring those connected to the property that no further federal action was expected—"We probably couldn't have done this [the cleanup and redevelopment] without those assurances."

Creating a Win-Win Situation

Through its initial years, EPA's Brownfields Program evolved to meet the changing needs of its stakeholders and to incorporate lessons learned. As the program matured, its appeal grew as it demonstrated that brownfields cleanup and redevelopment were a "win-win" opportunity for all stakeholders.

Property owners, developers, and investors were provided with tools to aid in brownfields cleanup and redevelopment. Congress passed the Brownfields Tax Incentive as part of the Taxpayer Relief Act, enacted in 1997 and amended in 2000, to make environmental cleanup costs fully deductible in the year they are incurred. EPA's actions to remove properties from CERCLIS provided peace of mind to brownfields stakeholders. As a result, lending institutions have become more willing to consider investing in brownfields redevelopment.



The "Phillips to the Falls" project, is transforming the Sioux Falls, South Dakota riverside. In 1978, the riverbanks were dominated by underused and abandoned industrial and commercial buildings. Today, the riverbank is known as Falls Park and is the centerpiece of downtown Sioux Falls with its 300-foot waterfall.

"The state gets a contaminated site cleaned up, and we create jobs for the community. It's a win-win situation for everybody,"

*—Tom Obrecht, Maryland developer,
told Business Week magazine in 1996*



Located on a former junkyard, the Mackenzie Bakery is open for business in Kalamazoo, Michigan.

State, tribal, and local governments saw successful Brownfields Pilots open the door for cleaning up thousands of properties, and increasing prosperity in their communities through increased revenues from property, income, and sales taxes. "The state gets a contaminated site cleaned up, and we create jobs for the community. It's a win-win situation for everybody," Tom Obrecht, a Maryland developer, told *Business Week* magazine in 1996.

Environmental Justice has been one of the consistent themes of EPA's Brownfields program. Environmental groups saw thousands of environmental assessments completed, cleanup plans developed, and redevelopment efforts moved forward in hundreds of communities. In addition, brownfields redevelopment efforts were more environmentally friendly than sprawl-producing alternatives that could cause destruction of sensitive habitat, and reductions in water and air quality.

Most importantly, thousands of citizens in communities affected by brownfields saw real improvements in their communities, replacing hopelessness with pride and optimism. Eyesores turned into new homes, health care facilities, new parks and recreational areas, museums, and cultural centers. Community residents received training to join the environmental workforce. Returning brownfields to productive use created new jobs, generated additional tax revenues, and stimulated increased investment in community revitalization.

In community after community, EPA's Brownfields Program has proved that effective partnerships can convert thousands of dollars in federal investment into millions of dollars of support, building momentum that continues to turn brownfields into community assets. The achievements of EPA's Brownfields Program during its first nine years have provided a foundation from which to take on the challenges of the future. The next chapter looks at the impact of EPA's Brownfields Program in individual communities and neighborhoods throughout the country.



1

Brownfields in Small Towns

Communities in the small towns of New England's Region 1, in addition to the large, heavily-industrialized cities, suffer from the contamination and blight of brownfields. The center of small towns is often occupied by an abandoned factory, tannery, or mill that once brought jobs and economic stability to the community, but now stands empty. These small towns have found it difficult to compete for EPA's Brownfields Pilots and Grants.



Region 1 has made a special effort to level the playing field for New England's small towns. After tackling many of the brownfields in cities such as Boston, Massachusetts, and Hartford, Connecticut, Region 1 began marketing the brownfields program to New England's regional planning commissions, which bring together nearby communities to jointly pursue common planning goals. Region 1 is sparking redevelopment even where regional planning commissions are not present or are not addressing brownfields. Using Targeted Brownfields Assessment funds, Region 1 has been able to help small communities assess their abandoned properties and get the redevelopment process started.

Since working with the first revolving loan fund pilots to make a loan, Region 1 has continued to market the BCRLF program as a source of funding for brownfields cleanup. BCRLF grants provide funding to capitalize a revolving loan fund which is used to provide low- or no-interest loans for brownfields cleanup. Modeling their programs on Region 1's success, states have also set up their own revolving loan fund programs, including New Hampshire's highly successful \$2.4 million fund.



Highlights of Region 1 Successes

Bates Mill, Lewiston, Maine

Using EPA grants and a property-specific revolving loan fund capitalized by EPA, Lewiston redeveloped the former Bates of Maine Woolen Mill into a complex that features a bank, restaurant, and several start-up companies. The building was renovated from the inside-out, keeping as much of the existing structure as possible and minimizing demolition.

Whitney Screw Property, Nashua, New Hampshire

The first loan under New Hampshire's Revolving Loan Fund was used to assist cleanup efforts at the Whitney Screw property, a former industrial site in the center of town. The community also tapped into EPA assessment grants and state resources to redevelop the property into an inviting space for retailers, including Goodale's Bike, New England's largest bicycle dealer.

Region 1: Serving Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont, and ten Tribal Nations.



Life After EPA Funding

Brownfields in Region 2 range from very old industrial properties in the Northeast U.S. to abandoned pharmaceutical and energy properties in Puerto Rico. With such diverse challenges, cultivating partnerships with communities enables the Region 2 Brownfields Program to provide resources that go beyond the basic needs of the community.

Region 2 has developed unique relationships with other federal and state agencies, including the Army Corps of Engineers, Housing and Urban Development, Department of Transportation, New Jersey Department of Environmental Protection, New York Department of Environmental Conservation, and the Puerto Rico Environmental Quality Board. These and other partners help Pilots build entire brownfields programs that continue well beyond the EPA grant and remain as

viable, long-term local efforts to clean up and redevelop contaminated properties.

The Region 2 Brownfields Team becomes active partners with the Regional Pilot recipients and is committed to providing the resources needed to successfully implement a brownfields program. Starting with a kick-off workshop for each newly awarded grantee, Region 2 helps the communities start up their brownfields program by introducing them to brownfields concepts. The process continues with quarterly state roundtable meetings and interagency workgroup meetings with grantees and various state and federal agencies. Pilots get help establishing and keeping their brownfields programs alive with technical assistance and training from EPA offices and partners like the New Jersey Institute of Technology.

Highlights of Region 2 Successes

507 Elm Street, Kearney, New Jersey

Redeveloping a former tool and dye facility, abandoned for two decades, the town of Kearney is creating much needed park space for local residents. With funding from the Hudson County Brownfields Pilot and input from a stakeholder group, the town is transforming the property through cleanup and redevelopment into a toddler park, giving residents easier access to greenspace.

Voluntary Cleanup Program, Puerto Rico

Under a cooperative agreement from Region 2, Puerto Rico's Environmental Quality Board (EQB) has made significant steps in establishing a Voluntary Cleanup Program (VCP). The board worked with the New Jersey Institute of Technology and Northeast-Midwest Institute to propose a structure for a Puerto Rico VCP. In August 2000, the Senate of Puerto Rico passed legislation allowing the EQB to implement the program.



Region 2: Serving New Jersey, New York, Puerto Rico, U.S. Virgin Islands, and 7 Tribal Nations.

Greening Brownfields

Throughout mining communities and along the Chesapeake Bay, a major focus of the Region 3 brownfields program has been supporting and encouraging “green” design. Integrating the concepts and technologies of “green building” and “green development” design increases the environmental benefits of brownfields redevelopment. Green design technologies, such as energy efficiency, low impact design, pollution prevention, open space, and beneficial landscaping, provide more environmental benefits than traditional development practices. These technologies result in reduced air and water pollution, water and energy conservation, and reduced solid waste production.

Region 3 designed a workshop for Brownfields Pilot communities at which attendees learned the basics of green design and how it can be incorporated into brownfield redevelopment projects. Several communities in the area have since incorporated green building design into brownfields redevelopment projects, including cities like Baltimore, Maryland, and Washington, D.C., and rural communities like Cape Charles, Virginia.

Building on the greening success in Region 3, EPA launched a national pilot initiative to provide assistance for constructing green buildings on brownfields. In Region 3, the National Aquarium in Baltimore was selected as one of eight Green Buildings on Brownfields showcase projects. The Aquarium’s new Center for Aquatic Life and Conservation, which will house additional space for animal care, breeding, education, and marine mammal rescue operations, will be built on a brownfield. The building’s proposed green design will feature photovoltaics, thermal mass walls, heat exchange technology, innovative ventilation, materials low in polluting volatile organic compounds, and storm water management.



Highlights of Region 3 Successes

Nine-Mile Run, Pittsburgh, Pennsylvania

An EPA Brownfields Pilot allowed Pittsburgh’s Urban Redevelopment Authority to fully assess a long-neglected 238-acre tract known as Nine-Mile Run, a former industrial slag dump, and the Lectromelt property, a former electroplating plant. In a feat of urban ecological restoration, more than 700 new energy-efficient homes will be nestled alongside a rehabilitated natural habitat area.

Whitehall Robins Expansion, Richmond, Virginia

With expansion of its pharmaceutical research facility, Whitehall Robins brought hundreds of new jobs and millions of investment dollars to northern Richmond, Virginia. The city facilitated the expansion by providing municipally-owned land for the facility and using an EPA Brownfields Pilot to hire environmental consultants for environmental assessment review and advice on detailed cleanup techniques.

Region 3: Serving Delaware, District of Columbia, Maryland, Pennsylvania, Virginia, and West Virginia.

Pursuing Environmental Justice

In the southeastern United States, Region 4 is marked by not only small mill and agricultural towns, but also some of the country's fastest growing metropolitan areas. While dealing with inner city blight and sprawl throughout the area, Region 4 is also addressing environmental justice issues by actively engaging communities.



Bringing together federal partners and community groups, Region 4 enhances community awareness and coordination of brownfields efforts among government and community stakeholders, enabling communities to assess, clean up, and redevelop eyesores. For example, in Spartanburg, South Carolina, the Arkwright community used Assessment Demonstration Pilot funding to spark the redevelopment process. These funds enabled this predominantly African-American community, where about 18 percent of citizens fall below the poverty level, to complete a brownfields inventory, assess properties, work with stakeholders on brownfields issues, and obtain input for its cleanup plan.

Webb Corner, a community in Columbia, Mississippi, is home to a population that is 87 percent minorities, with a 67 percent poverty rate and 58 percent unemployment rate. Actively involving all interested parties in the redevelopment of brownfields in areas such as Webb Corner, the city of Columbia formed the Columbia Brownfields Redevelopment Partnership. Inviting community members to discuss plans and voice their concerns in public forums, the partnership is reaching redevelopment decisions that are beneficial to the low-income and minority residents directly impacted by brownfields. The city has tied environmental justice to brownfields redevelopment by using a Brownfields Assessment Demonstration Pilot grant to identify and inventory brownfields, conduct property assessments, and hold public forums and other outreach activities to encourage community involvement.



Highlights of Region 4 Successes

Enterprise Zone, Clearwater, Florida

As the site of the first revolving loan fund loan in Region 4, Clearwater is successfully addressing hundreds of properties in the Clearwater Brownfields Area, a state-designated Enterprise Zone. Leading the way for other communities, the city also published an environmental justice guidebook in conjunction with the International City/County Management Association.

Airborne and Special Operations Museum, Fayetteville, North Carolina

Working with local citizens and state and federal partners, Fayetteville revitalized an area of former car lots and gas stations to pay tribute to the military. Starting the process with a Brownfields Assessment Demonstration Pilot grant, the city transformed abandoned properties into the Airborne and Special Operations Museum.

Region 4: Serving Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, and Tennessee.



Partnering for Redevelopment

Brownfields redevelopment is thriving in the older industrialized areas of America's former Rust Belt. With hundreds of old, abandoned industrial properties, the Great Lakes states in Region 5 are ripe for redevelopment. Realizing the importance of state involvement in redeveloping these properties, Region 5 has cultivated strong relationships with state programs, which in turn build and maintain relationships with local communities. With the new Brownfields Law in effect, Region 5 is extending the hand of partnership to its 35 tribes.

In its annual Nuts and Bolts of Brownfields Redevelopment conference, Region 5 builds relationships and encourages partnerships among EPA and state, local, and tribal governments. This five-day training course introduces local government staff and officials to the real-life details of assessing, cleaning up, and redeveloping brownfields. Bringing in representatives of local



communities who are in the process of redevelopment or have successfully completed it, Region 5 illustrates the benefits of partnering for successful brownfields redevelopment. The learning continues throughout the conference with presentations by EPA brownfields staff and professionals in related fields, such as cleanup contracting, finance, insurance, and architecture, and from other EPA offices.

Region 5 facilitated partnering in Hennepin County, Minnesota, to improve Habitat for Humanity's property acquisition process by incorporating environmental assessments into the process. Several groups, including the Metropolitan Council, Minnesota Environmental Initiative, and Braun Intertec, an engineering and consulting firm, work together to screen properties with environmental concerns, allowing Twin Cities Habitat to build housing on properties it otherwise would have been forced to pass over.

Highlights of Region 5 Successes

Bairstow Property, Hammond, Indiana

Under a larger project to restore the George Lake watershed, the city of Hammond stabilized a lakeshore ecosystem desecrated with slag at the Bairstow property, a former steel mill slag waste dump. Along with other redevelopment, the property's driving range, nine-hole youth golf course, and planned 18-hole golf course have helped stimulate the local economy and slow a residential exodus.

Job Training, Toledo, Ohio

Starting with an advisory group that included unions, potential employers, and community groups, Toledo's Job Training program trained residents in skills that included spill cleanup, lead and asbestos abatement, and emergency response. Environmental cleanup jobs are bringing new aspirations to residents in neighborhoods with poverty rates of up to 60 percent and unemployment as high as 31 percent.

Region 5: Serving Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin, and 35 Tribes.



Brownfields On the Border

Spanning the Mississippi River delta, the United States-Mexico border, and the great Southwest, Region 6 cleans up brownfields in the nation's backyard. Working through a proactive and aggressive outreach team, the Region is tackling brownfields along the Rio Grande.

Large cities throughout Region 6 are ringed by sprawling suburbs and separated by rural expanses dotted with small towns. Rather than focusing on brownfields in disparate urban areas, Region 6 works on projects clustered across a region, thereby incorporating regional planning into the process and addressing varying landscape and community needs. This method is especially helpful in dealing with the area's ubiquitous oil production sites. These are not just the corner gas station typically associated with petroleum brownfields, but remnants of the area's oil industry.

Along the United States-Mexico border, the Rio Grande Council of Governments (COG) used a Brownfields Pilot project grant to identify brownfields in the Upper Rio Grande area of southern New Mexico and west Texas. The city of El Paso, Texas, was also awarded a Brownfields Pilot project grant to further inventory and assess brownfields in the city's Empowerment Zone. Emphasizing community involvement in redevelopment planning, the city and the COG together are transforming brownfields into building blocks for community revitalization and sustainable urban redevelopment. Along with Region 6, these organizations further pursued this goal with a border brownfields workshop in El Paso. The conference promoted brownfields awareness and collaboration across borders, and sparked a continuous information exchange between the two nations.

Highlights of Region 6 Successes

Native American Cultural Facility, Oklahoma City, Oklahoma

A Targeted Brownfields Assessment on a former oil field sparked the planning for a Native American museum and cultural center featuring green design elements. Oklahoma City, the Native American Cultural and Educational Authority, Oklahoma Department of Transportation, EPA, and others will soon redevelop the area with leveraged funds from the U.S. Department of Housing and Urban Development, and other organizations.

Heifer International Center, Little Rock, Arkansas

Heifer International, a nonprofit organization that provides food- and income-producing livestock to impoverished families around the world, selected a former light-industrial and transportation property to house its new headquarters. The planned green building will include an education center, an international gift shop, and indoor/outdoor education programming.





Sustainable Development in the Heartland

Region 7 serves communities in a 4-state region in the heart of America. This Region is largely agricultural with many small communities, some mid-sized towns and a few major urban centers. Communities across this spectrum are challenged by abandoned and underutilized property and the resulting loss of tax base and community pride. They are also challenged by the costs of expanding infrastructure (streets, sewers, power & communication links) to accommodate growth on the fringes and by the resulting environmental impacts to air and water, loss of natural areas and farmland and the need to improve quality of life for residents.

The Region 7 Brownfields Program works directly with communities to assess, cleanup and plan for redevelopment of brownfield properties. Staff provide assistance and encouragement for communities to implement designs which improve environmental quality, reduce energy and water consumption, prevent pollution, increase the quantity of green space and assure sustainable reuse of land and infrastructure. Regions 5

and 7 collaborated to sponsor a Midwest Summit on the Sustainable Redevelopment of Brownfields for community leaders, government organizations and consultants to share information on new technologies and design techniques.

Region 7 is also partnering with other federal, state and local governments and non profit organizations to encourage, through education and incentives, green architecture and landscaping, the development of trails, parks and greenways, community involvement in planning for revitalization, transit and pedestrian-oriented development and reuse of historic buildings.

Region 7 has awarded job training grants to community colleges in the Region to prepare students for employment in the environmental cleanup field and has also partnered internally to assure that all relevant environmental issues are addressed during brownfields assessment and cleanup. As a result of these mutual efforts, there are a growing number of sustainable development actions in the Region.

Highlights of Region 7 Successes

Heritage Trail, Kansas City, Kansas and Kansas City, Missouri

Kansas City KS/MO has a new Heritage Trail which links Kansas City, MO and Kansas City, KS, connecting recreational open space and parks with employment, commercial, retail and residential centers along the urban riverfront and brownfields redevelopment corridor. Recent brownfield projects include the restoration of the historic railroad roundhouse for office space, the Missouri Department of Natural Resources' Discovery Center for children and EPA's new Science and Technology Center, a certified green building.

Habitat for Humanity, Wellston, MO

Using a Brownfields Assessment Demonstration grant, the St. Louis County Economic Council assessed 16 properties in the small urban community of Wellston, facilitating the transfer of these 12 properties to Habitat for Humanity St. Louis. Habitat subsequently constructed 12 new homes on these properties.

Region 7: Serving Iowa, Kansas, Missouri, Nebraska, and nine Tribal Nations.



Success in Funding Support

Region 8 approaches brownfields from a unique perspective, shaped by the special characteristics of this western area. Lacking the heavy industrial brownfields prevalent in other parts of the United States, Region 8 was one of the first areas in the country to focus on preservation of greenspace and beneficial reuse of open spaces such as mine-scarred lands.

As one of the least populated EPA regions, Region 8 faces particular economic challenges posed by the large number of primarily rural and tribal communities. Lacking the financial opportunities for brownfields redevelopment that are available in more populated parts of the country, these communities may have difficulty stimulating developer interest in their reuse plans.

As a result, tribes and rural communities must be creative in enticing developer interest and leveraging funds. Tribes, in particular, seek additional funding from other federal agencies, some state agencies, and other organizations that fund many existing tribal activities. Tribes are finding that these alternative sources of funding are easier to access *after* assessments have been completed, many funded with EPA grants.

A lack of funding for assessment activities does not have to be the end of the road for communities in Region 8. To address funding challenges, the Colorado Department of Public Health and the Environment, in conjunction with local government and EPA Region 8, developed the Colorado Brownfields Revolving Loan Fund, a model now used in other parts of the country. In 2002 and 2003, the fund provided more than \$2.5 million in low-interest loans to encourage redevelopment of brownfields.



Highlights of Region 8 Successes

Gateway District, Salt Lake City, Utah

An EPA Showcase Community, this 650-acre area just blocks from Main Street is being redeveloped into a mixed-use, mixed-income area. More than \$400 million has been leveraged for redevelopment through a focused effort by the city, state transportation officials, Union Pacific Railroad, and federal agencies.

Turtle Mountain, Belcourt, North Dakota

A Brownfields Job Training and Development Demonstration Pilot, Turtle Mountain Community College has leveraged funding from federal sources to develop training programs for environmental jobs. Under the tribe's Brownfields Assessment Grant, resources and funding are being leveraged to redevelop a former state mental rehabilitation hospital into a tourism area and natural history park.

Region 8: Serving Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming, and 27 Tribal Nations.



Changing Lives through Job Training

Large cities, coastal areas, and federal facilities are among the features that pose challenges to brownfields redevelopment in Region 9. Nevada, for example, is full of secured federal facilities that the Region must work around. In Southern California, vast metropolitan areas struggle to find a bit of green.

The impacts of brownfields redevelopment can extend beyond assessment and redevelopment of a property to the lives of individuals in the community, as Region 9 has demonstrated through job training programs for disadvantaged residents. Locating Brownfields Job Training Pilots within or near a Brownfields Assessment Demonstration Pilot, the Region seeks to train residents in communities impacted by these abandoned properties. This training helps to guarantee that members of communities where brownfields redevelopment is underway have an opportunity to compete for assessment and cleanup jobs. For example, in Los Angeles, California, the Region 9 Job Training Pilot in the city's federal Empowerment Zone is training students in hazardous waste handling and lead and asbestos abatement, skills that will be applied directly to the cleanup of many properties in the zone.

After brownfields cleanup and redevelopment is complete in one area, trainees can seek employment in the environmental field, including cleanups using alternative or innovative technologies. This is exactly what has happened in Long Beach, California, where students have been trained in innovative environmental technologies to meet the rising demands for skilled environmental staff in the area.

Region 9: Serving Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations.



Highlights of Region 9 Successes

Young Community Developers, Inc., San Francisco, California

Historically an African-American neighborhood, the Bayview Hunters Point community has a 16 percent unemployment rate, and typical household incomes only two-thirds the city average. Young Community Developers used a Brownfields Job Training grant to train disadvantaged residents as environmental technicians, and created their own local remediation company in the process.

National Guard Armory, Las Vegas, Nevada

Using the first Brownfields Cleanup Revolving Loan Fund loan, Las Vegas cleaned up soil contaminated with hazardous waste and petroleum hydrocarbons at the former National Guard Armory property. By redeveloping the property into a community center with space for a senior center, a small business incubator, and a cultural center, the city has created a place of pride and activity for local citizens.

Where One Size Cannot Fit All, a Tailored Approach

Serving four states and 269 tribes, Region 10 must tailor its approach to the needs of its diverse communities. The Region is home to both cities leading the way in smart growth and small rural towns facing the shutdown of timber, fishing, and mining industries. The ecosystems of Region 10 are likewise diverse, from temperate rain forest to high desert, from tiny urban wetlands to vast expanses of tundra. With so much variation, the approach to cleanup and redevelopment must be appropriate to each community's unique mix of physical, economic, and social factors.

For each brownfields project, Region 10's role depends on the needs of the community. Targeted Brownfields Assessments are used where a community does not have the capacity to manage a grant, as well as with Alaska Native villages which are legally prohibited from competing for assessment and cleanup grants. State and tribal response program funding reflects both the variety of our partners' levels of capacity and means

to address the unique environmental cleanup issues. And some properties, with a combination of past users, overlapping current jurisdictions, and competing interests for reuse, require the Region to take a cross-programmatic approach.

Ecological issues also shape how assessment, cleanup and redevelopment are accomplished within Region 10. For example, sampling windows and techniques are often affected by the migration patterns, spawning/mating seasons, or habitat conditions of the incredible diversity of fish, birds and mammals within the Region (especially those covered by the Endangered Species Act). With thousands of miles of coastline, rivers, lakes, and estuaries, improving conditions at ports and along waterfronts is both important throughout the Region and complicated. In some specialized areas, such as dealing with contaminants in sediments, the Region is a leader within national working groups.

Highlights of Region 10 Successes



Oregon Mills, Astoria, Oregon

Working in partnership with EPA, the Oregon Department of Environmental Quality, ECOTRUST, and the community, the City of Astoria cleaned up the city's abandoned mill sites and transformed them into thriving waterfront properties. With a jump-start from a Brownfields Pilot grant, two properties on the site, located adjacent to downtown Astoria's historic area, are being developed into a public promenade, shops, and residential housing.

Environmental Extension Service, King County, Washington

King County used an EPA grant to spark brownfields redevelopment, creating a home for the Environmental Extension Service, run by the non-profit Environmental Coalition of South Seattle. The Environmental Extension Service provides assistance in pollution prevention and direct, door-to-door assistance to manufacturing and industrial businesses in assessing and cleaning up contaminated land.

**Region 10: Serving Alaska, Idaho,
Oregon, Washington, and Native Tribes.**

Moving Forward

"You'll see the possibilities of what can happen when people work together."

*—President George W. Bush,
at signing of Small Business Liability Relief and
Brownfields Revitalization Act on January 11, 2002*

Since its inception in 1995, EPA's Brownfields Program has grown from a powerful concept into a dynamic, results-oriented program that has changed how people view and treat brownfields in their communities. The success of the program has inspired similar efforts in other parts of EPA, including the Resource Conservation and Recovery Act (RCRA) Brownfields Prevention Initiative, the USTfields Initiative, and EPA's new Land Revitalization Initiative, each of which is helping transform blighted areas throughout the country into safe, liveable communities.



In 2002, the President signed the Small Business Liability Relief and Brownfields Revitalization Act. The new Brownfields Law affirms and expands federal efforts to promote the cleanup and reuse of brownfields. The law underscores the value of stakeholder partnerships and the innovative approaches created and tested during the first nine years of EPA's Brownfields Program. It preserves the basic structure of the program, but expands its reach and capacity, providing new tools and new opportunities.

The Challenges Ahead

During 2003, EPA worked hard to develop policies, establish procedures, and create new programmatic structures to fully implement the programs newly authorized under the Brownfields Law. Attention now turns to the challenges that lie ahead, and the program changes needed to meet those challenges.

There still are hundreds of thousands of brownfields in almost every city, town, and rural area across the country that need to be put to better use. There is no single or simple way to carry out this daunting task. The sheer enormity of the problem far outstrips available federal resources, even under the new law. The Brownfields Program will build on the foundation laid in its early years to meet that challenge. The program will continue to provide financial support to local projects, assist state and tribal response programs, clarify liability obstacles, and address other issues in order to assess, clean up, and plan for the sustainable reuse of brownfields across the country.



With the help of the Providence, Rhode Island Assessment Pilot, a former gravel pit is now a nine-hole golf course.





A job training class in Los Angeles, California provides local residents with environmental cleanup classroom and hands-on training.

EPA's Expanded Brownfields Program

Building partnerships will remain a cornerstone of EPA's Brownfields Program. It is the key to leveraging enough resources to make a difference. EPA is working to find new and better ways to empower collaborative partnerships formed at every level of government, and with stakeholders from the public and private sectors. Towards this end, EPA will work with its federal partners on innovative partnership activities such as the "Portfields" project, sponsored by the National Oceanic and Atmospheric Administration, which focuses on the cleanup and redevelopment of brownfields in and around ports, harbors, and transportation hubs.

Brownfields Grants: Building on Local Momentum

Competitive Brownfields Grants will continue to be the centerpiece of the EPA's Brownfields Program. By authorizing up to \$200 million per year, the Brownfields Law significantly expands the potential funding available for grants. It also opens the Brownfields Grants to new types of properties, including properties contaminated with petroleum, mine-scarred lands, and properties contaminated by the illegal production of controlled substances. In fact, the law requires that a quarter of the grants awarded address brownfields contaminated with petroleum.

The law provides for Brownfields Assessment, Revolving Loan Fund, and Job Training grants, building on the pilots awarded under the initial program. In addition, it authorizes EPA to award Cleanup Grants for the first time. This authority enables the Brownfields Program to provide direct funding to non-liable property owners for brownfields cleanup activities. The first round of grants competition under the new law has been tremendously successful; EPA received more grant proposals and awarded more brownfields grants than ever before. The 2003 grants include 117 Assessment Grants, 28 Revolving Loan Fund Grants, 69 Cleanup Grants, and 10 Job Training Grants totaling \$73.1 million. These include 102 grants specifically designated for properties with petroleum contamination.

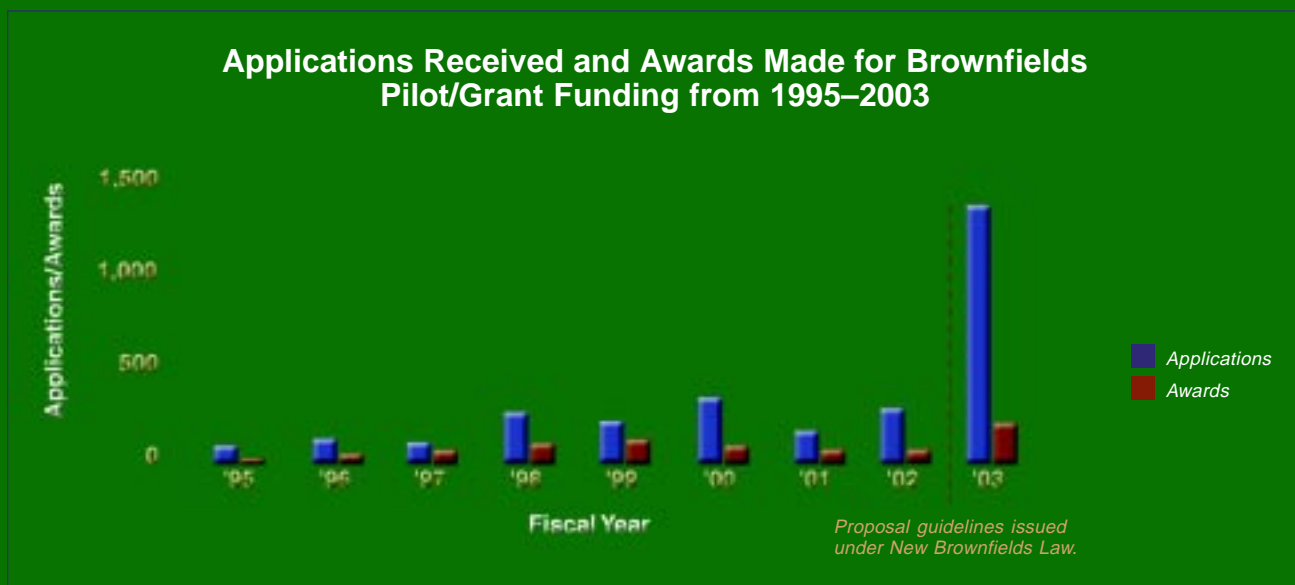


Providing More Resources to States and Tribes

The Brownfields Law recognized the significant role state and tribal response programs play in cleaning up brownfields. The continued demand for brownfields cleanup and redevelopment in communities throughout the country, coupled with increasingly limited state and tribal resources, makes access to federal funding critical.

The law authorizes EPA to provide up to \$50 million in grants to states and tribes to establish or enhance their response programs. Generally, these response programs address the assessment, cleanup, and redevelopment of brownfields. In 2003, EPA distributed almost \$50 million among all 50 states, 31 tribes, the District of Columbia, and the Virgin Islands. This new funding will enable states and tribes to develop or enhance response program's infrastructure and capabilities. For some recipients, the funding will provide an opportunity to create new response programs to address contaminated properties. States and tribes also can use the new funding to capitalize a revolving fund for cleanup, purchase environmental insurance, or develop other insurance mechanisms to provide financing for cleanup activities. In addition, the funds can be used to establish or maintain the statutorily required public record and to oversee cleanups.

Providing financial assistance to states and tribes increases their capacity to meet the brownfields cleanup and redevelopment challenges. It will also help to ensure that properties are cleaned up safely, according to state and tribal standards.





A former corner service station, the Arciform Building now houses three new local businesses serving Oregon's Tri-County Metropolitan Transit District.

Reducing Liability Barriers

The Brownfields Law provides a number of statutory landowner liability protections and is a major step forward in reducing uncertainty and concerns about potential cleanup liability for purchasers of contaminated brownfields. Uncertainty about cleanup liability has halted many brownfields redevelopment efforts.

The Brownfields Law's landowner liability provisions protect bona fide prospective purchasers and contiguous property owners, who have not caused or contributed to contamination at brownfields, from the potentially deal-breaking possibility of joint and several CERCLA liability. These property owners must, however, satisfy certain statutory requirements to qualify for the liability protection. The Agency has been active in issuing policies explaining how EPA intends to effectuate the landowner liability protections, in order to provide prospective purchasers and others more certainty and a better understanding of the issue.

In addition, EPA has established a federal advisory committee to develop and propose federal standards for conducting "all appropriate inquiry," one of the landowner liability protection requirements. The committee is developing a consensus proposal that reflects the combined expertise of EPA's public- and private-sector stakeholder partners.

The Brownfields Law also provides federal CERCLA liability protection for parties who conduct a cleanup of certain properties under a state response program designed specifically for protection of human health and the environment. Prior to this change, a state could provide state liability protection for brownfields cleaned up under its laws, but a state could not provide federal liability protection. EPA quickly issued guidance, explaining which properties currently in the CERCLA system will be eligible for federal liability protection. While the new provision offers protection from the specter of federal CERCLA liability at such properties, it also preserves the federal safety net by specifying situations in which EPA can revisit a cleanup.



Residents of Albuquerque, New Mexico receive environmental cleanup training with funds from the Bernalillo County Environmental Health Department Job Training Pilot.



Extending the Brownfields Program's Reach

The expanded definition of brownfields under the new law encompasses all “real property,” including residential property, mine-scarred lands, and certain petroleum-contaminated and controlled substance-contaminated sites. Low levels of residual contamination may remain on these different brownfield types after cleanup, and safeguards are necessary to prevent future property uses and activities that would expose people to contamination at unsafe levels. Institutional controls, legal and administrative mechanisms limiting the possible future uses of a property, are used as protections against exposure to residual contamination on brownfields. EPA is working with local governments, states, and tribes on a national effort to create a network of linked systems that can be used with confidence to track institutional controls and requirements for long-term cleanups. Effective use of institutional controls will help ensure that the expanded universe of brownfields remain safe after cleanup by linking the planned future use of the property to the level and method of cleanup.



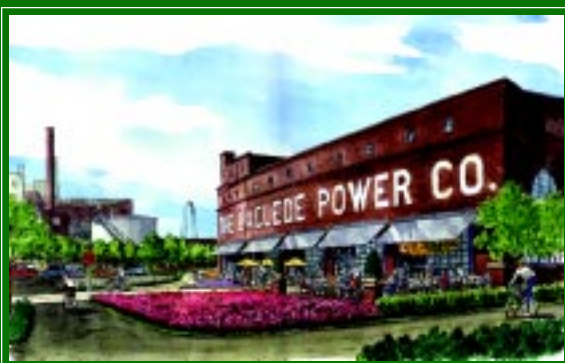
The Albuquerque, New Mexico Assessment Pilot facilitated the redevelopment of a historic high school into a loft-style apartment complex housing numerous local families. The building and landscaping materials, along with the proximity to downtown and public transportation, made “The Lofts” an award-winning green building. (Photos by Paul Kohlman.)



Promoting Sustainability

The Brownfields Program will continue to take on the challenge of ensuring sustainability of brownfields redevelopment. The new Green Buildings on Brownfields Initiative, launched in 2002, encourages the use of “green” building techniques at brownfields. “Green” buildings conserve energy, water, and materials, and create healthy indoor and outdoor environments. Under this new initiative, EPA is providing expert-consultant services to help pilot projects in eight states incorporate “green” building concepts and technologies into their brownfields redevelopment efforts.

EPA’s recently announced Land Revitalization Initiative complements the Brownfields Program. It applies the central tenet of the EPA’s Brownfields Program—that environmental cleanup and reuse are mutually supportive goals—to all of EPA’s hazardous waste cleanup programs. Like the Brownfields Program, the Land Revitalization Initiative recognizes that assessing and cleaning up contaminated properties and putting them to productive use can help reinvigorate communities, preserve greenspace, and prevent sprawl.



Artist's rendering of the redeveloped Laclede Power Plant building which will serve as gateway to the Katy Trail, a greenbuilding project including a pedestrian/bike trail running through Missouri and the St. Louis riverfront.

Conclusion

What began in 1995 as a bold experiment has grown into a major national program. EPA's Brownfields Program has galvanized local creativity, state ingenuity, and free enterprise to successfully revitalize blighted properties and spark beneficial development in depressed areas. The Brownfields Program has revolutionized the way people perceive and manage potentially contaminated properties. As a result, the program has helped to replace hopelessness with community empowerment and economic revitalization, and has enhanced the quality of life for residents of many disadvantaged neighborhoods.

The momentum generated by the program is leaving an enduring legacy. Environmental assessments conducted through the pilots, the removal of federal liability obstacles, and the emergence of environmental insurance have eliminated uncertainties about thousands of properties, and resulted in the investment of billions of dollars in cleanup and redevelopment.

Working together, the Brownfields Program and its partners have accomplished a great deal. Clearly, there is still much to do. With enactment of the new Brownfields Law, EPA's Brownfields Program enters a new era. The law provides a Congressional mandate, increases potential funding, and creates many opportunities for establishing policies that will advance brownfields reuse nationwide. EPA looks forward to working with its many partners to continue the momentum generated by past success.



Facilitated by a cleanup loan from the Colorado Coalition BCRLF Pilot, the Colorado Rockies baseball team has a new field to call home.

Community members and officials participated in the groundbreaking ceremony at the future site of the Addiction Science Center in Trenton, New Jersey.



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References

- ¹ "The Future of the Market—Part 3," *Brownfield News*, Vol. 7, No. 2, p 25-30, Mar./Apr. 2003.
 - ² Robert A. Simons. "How Many Brownfields Are Out There? An Economic Base Contraction Analysis of 31 U.S. Cities." *Public Works Management & Policy*, Vol. 2 No. 3, p 267-273, Jan. 1998.
 - ³ *Superfund: Extent of Nation's Potential Hazardous Waste Problem Still Unknown*. U.S. General Accounting Office, GAO/RCED-88-44, Dec. 1987.
 - ⁴ *Recycling America's Land: A National Report on Brownfields Redevelopment*, U.S. Conference of Mayors, Jan. 1998.
 - ⁵ Charles Bartsch, Christine Anderson, Bridget Dorfman. *Brownfield Voluntary Cleanup Program Impacts: Reuse Benefits, State by State*, Northeast-Midwest Institute, Nov. 1999.
 - ⁶ Jonathan P. Deason, George William Sherk, Gary A. Carroll, M.S., School of Engineering and Applied Science, The George Washington University. *Public Policies and Private Decisions Affecting the Redevelopment of Brownfields: An Analysis of Critical Factors, Relative Weights and Areal Differentials*, prepared for Outreach and Special Projects Staff, Office of Solid Waste and Emergency Response, U.S. Environmental Protection Agency, Sept. 2001.
 - ⁷ *Brownfields Redevelopment: Performance Evaluation*, Council for Urban Economic Development (now International Economic Development Council), prepared for Outreach and Special Projects Staff, Office of Solid Waste and Emergency Response, U.S. Environmental Protection Agency, Oct. 1999.
 - ⁸ *Recycling America's Land: A National Report on Brownfields Redevelopment*, Volume IV, U.S. Conference of Mayors, 2003.
- * The information presented was taken from the U.S. EPA Brownfields Management System (BMS). The BMS database contains the accomplishments reported by Pilot recipients under the Brownfields Program. Leveraged accomplishments were not directly funded by EPA, but were reported to occur as a result of EPA Pilot funding.





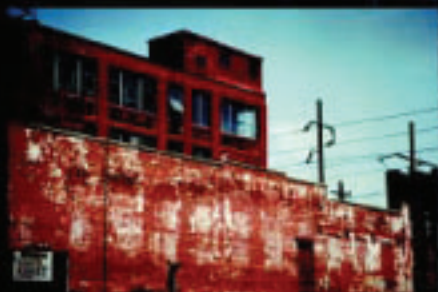
This CD-ROM offers additional information that will get you better acquainted with EPA's Brownfields Program. The CD has a structure similar to that of this report, and is organized by the same four primary sections—*Overview, Catalyzing Change, Revitalizing Communities, and Moving Forward*. Each section supplements the report by providing more detailed information, printable documents, and links to web sites. As with the report, the information contained in the CD represents temporal snapshots of EPA's Brownfields Program activities and accomplishments. More current information can be obtained by visiting EPA's Brownfields web site, www.epa.gov/brownfields.



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