Redeveloping Brownfields to Enhance a Community's Long-term Quality of Life

Brownfields Cleanup and Reuse: Sustaining Reuse

EPA's Brownfields Program is designed to empower states, communities, and other stakeholders in economic redevelopment to work together in a timely manner to prevent, assess, safely clean up, and sustainably reuse brownfields. 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. EPA's Brownfields Program provides financial and technical assistance for brownfield revitalization, including grants for environmental assessment, cleanup, and job training.

Linking the Economy and the Environment: Recognizing the Value of Sustainable Development

In the years prior to EPA's Brownfields Program, communities dealt with a steady loss of greenspace as land development crept further outward from the urban core. Along with that sprawl came the proliferation of abandoned, former commercial and industrial sites as well as declines in urban investment, property taxes, and employment opportunities for city residents. Communities across the country were negatively affected by these trends in sprawling development.

While EPA's Brownfields Program has proven success in returning properties to use—having assessed more than 3,500 properties and leveraged $3.7 billion in redevelopment funding—the Program has also made sustainable development one of its primary goals. In the context of restoring brownfields, sustainable development does not refer solely to removing potentially hazardous contamination and getting a new business located on the property. Ultimately, sustainable development means finding an approach to brownfields reuse that offers the most significant long-term benefits to the local community—taking into account economic, environmental, and other quality of life measures.

EPA's Brownfields Program recognizes that, ideally, property reuse plans should consider the environmental, economic, and other quality of life

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On a former brownfield, a 2,700 foot-long boardwalk runs through natural habitat in Cape Charles, Virginia.

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needs of the community and provide market incentives toward reuses that will meet those needs. The social structure, economy, and environment of a community are all interconnected, and any property reuse plans should reflect this synergy. The grants awarded through EPA's Brownfields Program have proven that redevelopment can be at once ecologically, economically, and socially sustainable—leading to the creation of eco-industrial parks, other green building designs, new greenspaces or other nonprofit facilities, as well as the restoration of ecologically sensitive areas. These projects have not only enhanced the quality of life for local residents but, through their design, will continue to offer those benefits in the years to come—hopefully breaking the cycle of property contamination and abandonment.

Cleanup in progress on a former industrial site in Clearwater, Florida.

Promoting Green Reuses to Benefit the Environment and Community

Cape Charles, Virginia, a small, picturesque town on the southern tip of Virginia's Eastern Shore, is a model how ecology works in tandem with industry, enabling both to thrive. An EPA Brownfields Assessment Pilot award funded environmental assessments of a 25-acre, former junkyard selected as the center of a new 200-acre eco-industrial park. The design and development process for the park began with community-wide interactive workshops where local residents offered feedback.

The park's first building, which was funded with a $2.5 million county bond, was a 30,930-square-foot facility that included a solar electric roof system. The largest of its kind in North America, this roof is capable of generating 42 kilowatts of power for the building's tenants. Wetlands were installed around the building as a natural landscaping enhancement, and the facility features indoor air quality monitoring, skylights for natural lighting, and porous storm water runoff chutes. One of the building's first tenants was Solar Building Systems, a company that manufactures the same photovoltaic panels used in the roof system. Solar Building Systems hired 30 local residents to assemble panels. Many of these workers had been laid off from a local crab processing plant, where they developed a manual dexterity that translated perfectly to their new jobs.

In addition to the economic benefits of this project, nearly one-half of the land in the park was set aside as natural habitat, including a 30-acre Coastal Dune Natural Area Preserve and approximately 60 acres of other natural areas. The entire park, including walkways, trails, and a Chesapeake Bay overlook, is now open to the public. Cape Charles' eco-industrial park is a genuine example that economic growth and environmental protection can coexist and flourish.

Improving the Quality of Life for Local Residents

The Clearwater Brownfields Assessment Pilot target area, with approximately 220 potentially contaminated commercial, industrial, and residential properties located on more than 1,800 acres, has the distinction of being the first state-certified brownfields area in Florida. Among Clearwater's many successful brownfields restoration projects is the site of a former gas station that was transformed into a free health clinic. This clinic was built to serve the residents of North Greenwood, the largest minority community in the city, as well as one of the poorest.

Once EPA's Brownfields Pilot had performed assessments on the property, the State of Florida provided $200,000 for cleanup of underground storage tanks and contaminated soil. Another

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$320,000 from the state paid for construction of the new facility. Representatives of North Greenwood participated in redevelopment planning and voted unanimously for the city to lease the property for use as a nonprofit clinic. North Greenwood residents now have a free health facility offering immunizations, physicals, tests and screenings, flu shots, and health counseling services.

In Dallas, Texas, a brownfields redevelopment boom has produced a new housing and shopping development, an environmental training and technology center, more than a thousand new jobs, and a new look for downtown Dallas. Through the efforts of Dallas' EPA Brownfields grant and a Showcase Community designation, more than $887 million in public and private funding has been leveraged toward cleanup and redevelopment of the city's blighted areas.

One of these properties was a 2.64-acre vacant lot located in a low-income residential community that is now home to a recreation center. Professional basketball player Larry Johnson, who grew up in the neighborhood, donated $1 million to the city for the recreation center's construction. The city assessed the property's environmental condition and determined that no cleanup would be required prior to redevelopment. An additional $500,000 was leveraged for the project through Community Development Block Grant funding from the U.S. Department of Housing and Urban Development. The recreation center is now open to local residents and has a staff of five.

The City of Providence, Rhode Island—which is the recipient of a Showcase Community designation in addition to its EPA Brownfields grant—has also placed a strong emphasis on recreational reuses as part of its economic development and community revitalization efforts. With help from federal, state, and local partners, the Woonasquatucket River Greenway Project (WRGP) is producing a series of linear parks joined together by a 6.6-mile bike loop that extends from downtown Providence to the Johnston City border. The WRGP begins behind the Providence Place Mall (a brownfield that was once an abandoned railyard) and ends at the Button Hole Golf Course (another former brownfield).

Community leaders from the neighborhood had the opportunity to review and comment on technical design drawings for the park, which will be considered the premiere recreational site in the area upon its completion in 2004. In addition to a bike path, the park will feature a play area, a water park, a skateboarding park, a stage with electricity, a canoe dock, and a sheltered picnic area. The Button Hole golf course, a nine-hole course with a driving range, opened in the summer of 2001, providing many neighborhood youths with their first ever opportunity to play the sport. By the end of 2002, local residents will be able to travel to the Button Hole Golf Course along the new bike path, on which the Rhode Island Department of Transportation has started construction.

The new Larry Johnson Recreation Center in Dallas, Texas.

In Houston, Texas, a cluster of brownfields located on the city's east side included a former railroad station, an industrial facility, and a corrugated metal manufacturer. These properties offered little if any benefit to the surrounding community. Following assessments and cleanup, this 38-acre group of brownfields has been redeveloped into a 42,000-seat baseball stadium. This $310 million project has created approximately 223 new jobs and is a leading force behind the overall revitalization of downtown Houston.

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Sustaining the Philosophy of EPA's Brownfields Program

As the Brownfields Program continues to build successful sustainable redevelopment models, future projects have examples to follow. The Program's philosophy is to reflect a model of environmental protection that creates economically viable, environmentally sound, self-sustaining communities. Making sure that brownfields redevelopment choices are sustainable is an essential component of that philosophy. By ensuring that reuses are environmentally sound while providing local residents with the greatest possible benefit, the Brownfields Program will continue to improve the quality of lives in neighborhoods across the country and prevent the creation of future brownfields.

CONTACTS:

To find out more about of EPA's Brownfields Program works to protect the environment, visit EPA's Brownfields web site at:

http://www.epa.gov/brownfields/

or call EPA's Office of Brownfields Cleanup and Redevelopment at (202) 566-2777.