Land & Community Revitalization

BROWNFIELDS

Program Summary & Success Stories

November 2002

> "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."
>
> *(Current EPA definition of Brownfields)*

Originally begun as an EPA initiative in January, 1995, the national brownfields program has since evolved into a collaborative effort involving more than 15 federal partners. This collaborative, referred to as the Brownfields national Partnership, was created in June, 1997 to promote beneficial reuse of contaminated sites.

EPA's Brownfields Program consists of various initiatives designed to work with local, state, and tribal partners to foster locally-driven, environmentally-sound brownfields reuse solutions. Below is a summary of the funding for each of the key initiatives.

Summary of Brownfields funding in New England

PROGRAM	CT	ME	MA	NH	RI	VT	TOTAL
ASSESSMENT	$4,490,000	$1,209,017	$8,733,132	$1,340,000	$850,000	$1,600,000	$18,222,149
REVOLVING LOAN FUND	$4,750,000	$1,750,000	$10,468,119	$2,450,000	$1,700,000	$1,000,000	$22,118,119
JOB TRAINING	$600,000	$0	$1,150,000	$0	$200,000	$0	$1,950,000
SHOWCASE COMMUNITIES	$300,000	$0	$500,000	$0	$300,000	$200,000	$1,300,000
SUBTOTAL	**$10,140,000**	**$2,959,017**	**$20,851,251**	**$3,790,000**	**$3,050,000**	**$2,800,000**	$43,590,268
VOLUNTARY CLEANUP PROGRAM	$1,353,636	$233,027	$1,507,925	$1,356,074	$667,790	$0	$5,118,452
STATE TBA*	$614,960	$245,380	$625,000	$813,557	$398,115	$398,000	$3,055,012
EPA TBA*	$1,450,000	$270,000	$2,290,000	$290,000	$305,000	$150,000	$4,755,000
TOTAL	**$13,558,596**	**$3,707,424**	**$25,274,176**	**$6,249,631**	**$4,420,905**	**$3,308,000**	**$56,518,732**

*Targeted Brownfield Assessments

Key Brownfields Programs:

Brownfields Assessment Grant Program

Brownfields Assessment Grant Programs are grants to local, tribal and state governmental entities to conduct site assessment and related activities at brownfields sites. An important goal of this program is to assist recipients in developing a long-range strategy for brownfields reuse. Programs are selected through a national competition.

CONNECTICUT

Bridgeport
Bristol
Danbury
Haddam
Hartford
Middletown
Naugatuck Valley Regional Planning
New Britain
New Haven
New London
New Milford
Norwich
South Central Regional Council of G
Stamford
Winsted

MAINE

Lewiston
Maine State Planning Agency
Portland
Westbrook

MASSACHUSETTS

Boston
Brockton
Central Massachusetts Economic Development Authority
Chelsea
Chicopee
Colrain
Fitchburg
Franklin Regional Council of Governments
Great Barrington
Greenfield
Holyoke
Lawrence
Lowell
Lynn
Mansfield

MASSACHUSETTS (cont.)

Marlborough
Massachusetts Department of Environmental Protection
Methuen
Montachusett Valley Regional Planning
Mystic Valley Redevelopment Authority
New Bedford
North Adams
North Hampton
Pioneer Valley
Salem
Somerville
Springfield
Taunton
Walpole
Westfield
West Springfield
Worcester

NEW HAMPSHIRE

Claremont
Concord
NH DES
Nashua
NH Office of State Planning

RHODE ISLAND

Providence
RI Department of Environmental Management
RI Economic Development Corporation

VERMONT

Burlington
Rutland
Southern Windsor County Regional Planning Commission
Two Rivers Ottauquechee Regional Commission
Windham Regional Commission

Targeted Brownfields Assessments

Under this initiative, EPA uses its contractors to conduct brownfields assessments at sites identified by the local entity as being a high-priority for reuse. Brownfields assessments typically involve a review of existing site records, site sampling and preparation of a preliminary clean-up cost estimate. The information gathered allows local government officials and developers to make informed decisions regarding the redevelopment potential of a site.

CONNECTICUT

Buckland Manufacturing, Manchester
Derby Downtown Business Revitalization District,
Derby Erickson Property, Ledyard
Field-Holstein Property, Glastonbury
50 Miles Street, Bridgeport
Greenwich
H.J. Mills Box Factory, Bristol
Hartford Car Wash, Hartford
Hockanum Mill, Vernon
International Silver - Factory H, Meriden
169 Bartholomew Avenue, Hartford
InterRoyal Mill, Plainfield
Occum Roto Print, Norwich
Penn Central Transportation Co., New London
Plymouth
Rolfite Chemical, Derby
Roosevelt Mills, Vernon
Samarius Property, Shelton
Shelton
Swan Engraving, Bridgeport
U.S. Cap, Inc., Prospect

MAINE

Ayers Island, Orono
Lily Tulip, Old Town
W. S. Libbey Mill, Lewiston
Lewiston & Auburn RR Co., Water Street, Lewiston

MASSACHUSETTS

Alden Corrugated, New Bedford
Amesbury Wharf, Ambesbury
Assets Building, Lowell
Bargaineer, Brockton
Boston's Hope, Dorchester
Boston Specialty Rehabilitation Hospital, Boston
Bellingham
City Pier, Fall River
Church Coal, Taunton
Davidson Street, Lowell
Essex Museum

MASSACHUSETTS (cont.)

Foxborough
Gilbertville Woven Label Site, Hardwick
15 & 23 Hope Avenue, Worcester
Hallmark Van Lines, Holyoke
Knapp Shoe, Brockton
Modern Electroplating, Boston
Ferdinand Block/DPH, Boston
former Tremont Villa, Everett
former Beacon Chevrolet, Lynn
former DPW Yard, Newburyport
Marine Railways Property, Gloucester
Montello Auto Body, Brockton
Old Northhampton Fire Station, Northhampton
Omniwave Electronics, Gloucester
Quarry Street Highpoint Property, Quincy
Roundhouse Parking Lot, Northampton
Spicket River (Oxford Paper Mill), Lawrence
Standard Times Field, New Bedford

NEW HAMPSHIRE

Ambargis Mill, Newport
Craig Supply, Durham
Former Tannery Site (Milton Mills), Milton
Henry's Tire Property, Sutton
Lamont Labs, Londonderry
J.P. Stevens Mill, Franklin

RHODE ISLAND

Narragansett Landing, Providence
Raus Fasteners, Providence

Save The Bay, Providence
Spintex Mill, Central Falls

VERMONT

TLR Complex, Rockingham
Taylor Street Car Lot, Montpelier

Revolving Loan Fund Programs

Under this initiative, funds are awarded to eligible local, tribal and state entities to establish and capitalize revolving loan funds to assist private and public entities in cleaning up contaminated sites. Grants are for up to $1,000,000 and eligible communities may team together to establish larger revolving loan funds pools.

CONNECTICUT

Berlin
Bridgeport
Hartford
Naugatuck Valley / Danbury
New Milford
Stamford
Winchester

MAINE

Lewiston
Orono
Portland

MASSACHUSETTS

Boston
Brockton
Central Massachusetts Economic Development Authority
Franklin Regional Council of Governments
Gloucester
Lawrence
Lowell

MASSACHUSETTS (cont.)

Lynn
Montachusetts Regional Planning Commission
Mystic Valley Development Authority
New Bedford
Pioneer Valley
Somerville
Taunton
Worcester

NEW HAMPSHIRE

State of NH

RHODE ISLAND

RI Department of Environmental Management / RI Economic Development Corporation

VERMONT

South Windsor County Regional Planning Commission

Brownfields Job Training Program

Brownfields Job Training Programs are used to train workers in the field of hazardous waste assessment and remediation. To be eligible for these funds, the applicants must be affiliated with existing Brownfields Assessment Grant Program participants.

CONNECTICUT

City of Stamford
Middlesex Community Technical College
The WorkPlace, Inc

MASSACHUSETTS

Boston Connects People to Economic Opportunities, Inc.
Brockton
Jobs For Youth - Boston
City of New Bedford
STRIVE-Boston

RHODE ISLAND

Groundworks, Providence

Financial Assistance to State Brownfields Programs

EPA offers three types of funding to directly support state brownfields activities:

- **Voluntary Clean-up Program (VCP)** funding is available to assist states in developing or enhancing their voluntary clean-up program infrastructure. This may include regulation development, program management, outreach efforts and other non-site specific activities.

- **Brownfields Site Assessment** funding is site specific and allows States to perform Targeted Brownfield Assessments in their state.

Connecticut
CT DOT Site #1, Freestone Ave, Portland
National Automatic Products (NAPCO), 44 Washington Ave, Berlin
Turnpike Autowreckers, 88 Pond meadow Road, Westbrook
American Tool & Machine, 15 Pierson Lane, Windsor
Berlin Center, Massirio Drive, Berlin
Neoweld Corporation I, 8 River Road South, Cornwall
Samarius Property, Shelton
Hi-G Company Property, 85 Nutmeg Road South, South Windsor
New Hall Street Field (Hamden Middle School), Newhall Street, Hamden
Derby DOT Parcel, Route 34, Derby

Maine
Ayers Island, Orono
Edwards Manufacturing, Augusta
Burt Company Site, 1 Cambridge Street, Portland
Bangor Hydro Substation, East Machias
Smelt Hill Damn, Falmouth
Apollo Tanning Company, Washington Street, Camden

Massachusetts
Middleboro Plating, 98 Cambridge Street, Middleboro
Filmtech Site, 181 Notre Dame Street Westfield
Lewis Chemical Company Site, 12 Fairmont Court, Hyde Park, Boston
Hampden Color & Chemical Site, 126 Memorial Drive, Springfield, MA

New Hampshire
Carnevale Property, Main Street, Sutton
Kaminski, Mont Vernon
Bradford Green/Naughton Site, Bradford
East Coast Steel, Greenfield

(NH cont.)
Bristol Micro Factory, Bristol
Robert Riley Property, New Boston
Contoocook Valley Paper Site, Henniker
Norther Forest Heritage Park, Former Pulp & Paper of America R&D Building Site, Berlin
Shamrock Cleaners Site, 3 Railroad Street, Derry

Rhode Island
Buttonwood Industrial Complex, Bristol
Pontiac Enterprizes, Warwick
T.H. Baylis, Warwick
Potter Ave Warehouse Site
Woonsocket Police Station, 130 Front Street, Woonsocket

Vermont
BCIC Building Complex, North Bennington
Jewell Brook Property, Ludlow
Sweat Comings, Richford

- **Tax Relief Act** funding provides funds for state staff time to evaluate site eligibility for a federal brownfields tax exemption provided for under the Tax Relief Act of 1997. Under the Act, the authority for determining eligibility was delegated to the state government.

Showcase Communities

As part of the multi-federal agency Brownfields National Partnership, sixteen communities were selected to receive Showcase Community designations following a national competition. The federal partners will work with selected communities to revitalize brownfields properties.

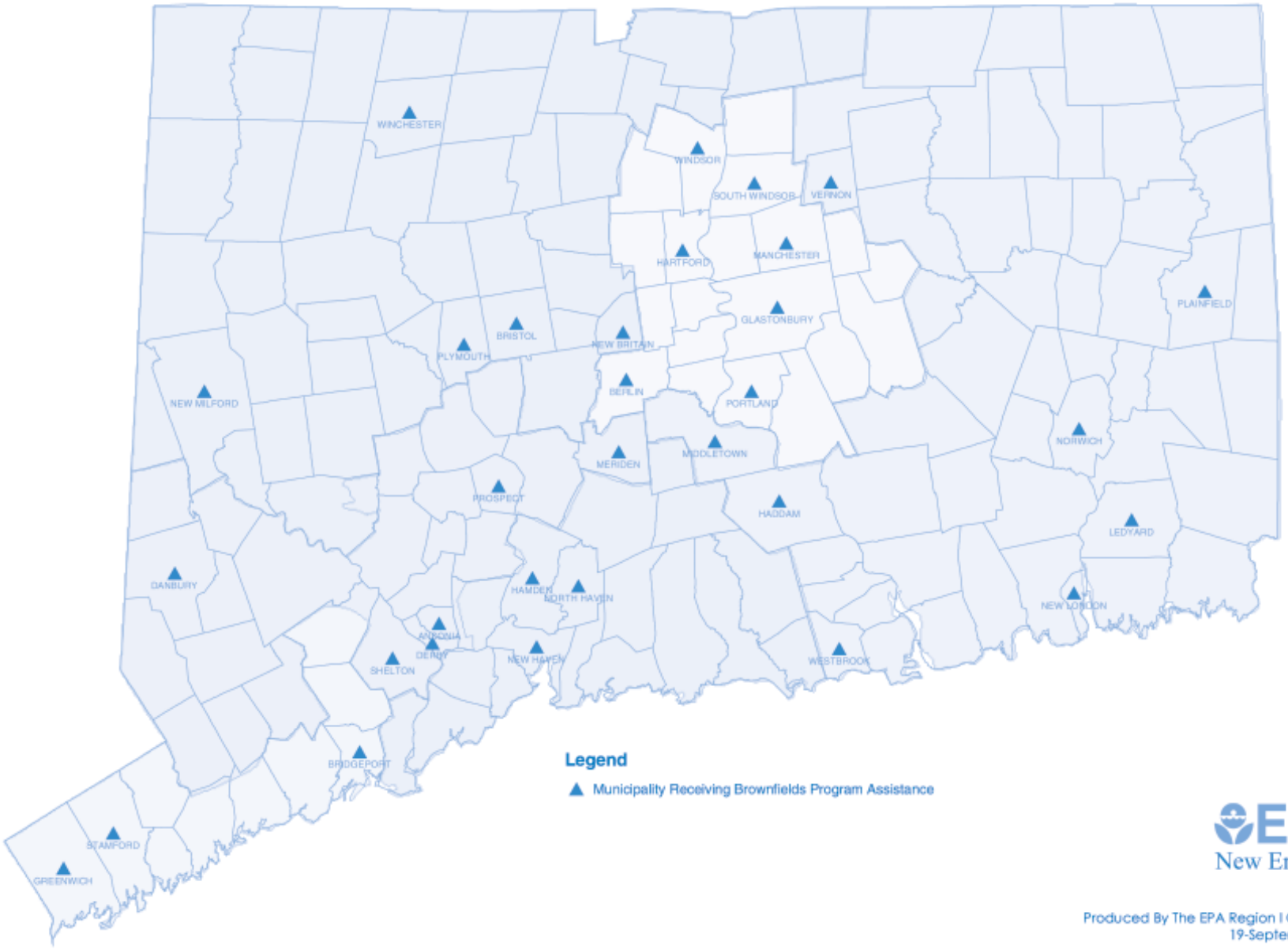
EPA provided each Showcase Community with a $200,000 Brownfields Grant and assigned an EPA-employee to work full time at the designated community for two years.

CONNECTICUT
Stamford

MASSACHUSETTS
Lowell
Mystic Valley (Malden, Medford, Everett)
New Bedford

RHODE ISLAND
Providence

Connecticut Communities Receiving Federal Brownfields Program Financial And Technical Assistance



EPA New England

Produced By The EPA Region I GIS Center
19-September-2002

Went Field Restoration & Expansion Project

Success in EPA-Conducted Targeted Brownfields Assessment and Assessment Grant Program and Job Training Program
Bridgeport, CT

Before: Abandoned buildings on blighted property

On May 1, 2002, the Park City Brownfields Redevelopment Partnership was awarded an EPA New England Environmental Merit Award for their work to restore and expand Went Field Park in the city of Bridgeport, CT. The partnership integrated funding and resources from the EPA Assessment Grant Program, the EPA Job Training Program, an EPA-conducted Targeted Brownfields Assessment (TBA), and leveraged an additional $4 million in funding to achieve their goal of providing improved recreational facilities, open space, and educational opportunities to the residents of the West End neighborhood as well as to improve the overall image of Bridgeport.

The Park City Brownfields Redevelopment Partnership is an umbrella group for a number of the non-profit agencies, community groups, and government entities working to restore and expand Went Field Park, including Went Field Park Association, Groundworks Bridgeport, and Bridgeport Neighborhood Trust. The restoration is the largest community-based project in the city and one of the largest in the country. The $4.4 million project expanded the park from 6 to 10 acres by revitalizing two adjacent brownfields properties. Over $4 million was committed by municipal, state, and federal resources. Significant support also came from the West End community businesses and residents.

After

The expansion of Went Field Park required the city to assess, acquire, and cleanup two adjacent commercial sites. The Exmet site, a former metal extrusion company, had been vacant since 1989. Bridgeport used part of its $200,000 EPA assessment grant to fund environmental site assessments of the Exmet site from 1997 to 2000. EPA conducted a $75,000 TBA on the Swan Engraving site, a former printing company in 2000 with subsequent work at the site funded by the city's assessment grant. The assessments identified the presence of low-level solvents in groundwater. The contamination is being addressed in accordance with the Connecticut Department of Environmental Protection standards. As part of the applied study component of the Job Training Program, local students of the environmental training program will be trained in groundwater monitoring and data management using the existing monitoring program at the site.

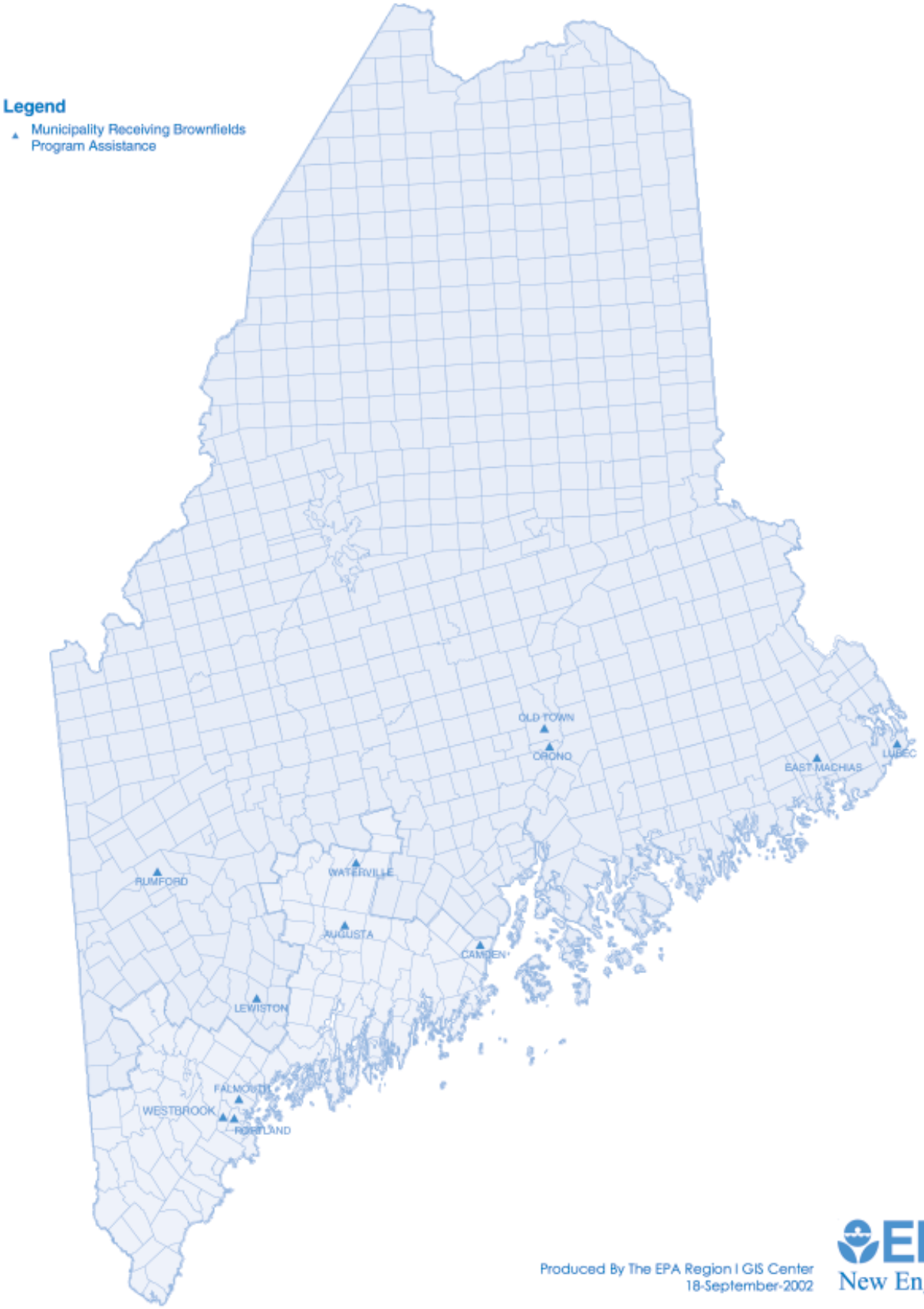
The Went Field Park, immediately adjacent to an Interstate 95 ramp, is a gateway to the 200-acre West End Industrial Area, which currently under redevelopment. Revitalizing resources like the park is essential to improving the overall image of Bridgeport. The park was the P.T. Barnum Circus' winter quarters for over 50 years. Horses, tigers, and other domestic and exotic animals were housed on the property in large stables. Elephants were trained here as well. Performers and trainers resided in the surrounding homes.

Today, seventy percent of the West End neighborhood of Bridgeport is minority and the median annual household income is $8,900. The nearby Elias Howe Elementary School is land-locked with no outdoor play areas. Bassick High School, located a few blocks away, is one of the only high schools in the state of Connecticut that lacks adjoining athletic facilities. The schools and the residents of the neighborhood will now be able to use the expanded and improved recreation facilities at the renovated park.

The city of Bridgeport was one of the first in the nation to use stakeholder involvement together with the redevelopment process to revitalize whole communities, rather than parcels of land. Issues of crime, lack of funding, environmental stigma, and lack of neighborhood involvement were all overcome by meaningful involvement in decision-making. Participation took place in stakeholder meetings, design workshops, public safety meetings, and public gatherings. Stakeholders included residents of the neighborhood, city departments, state and federal agencies, neighborhood groups, neighborhood schools, Barnum Museum, Bridgeport Regional Business Council, West End businesses, Bridgeport Neighborhood Trust, and Latino Softball League.

After

Maine Communities Receiving Federal Brownfields Program Financial And Technical Assistance



Produced By The EPA Region I GIS Center
18-September-2002

EPA New England

Bates Mill Redevelopment

Success in Assessment Grant Program
Lewiston, ME

Exterior before

In 1998, $200,000 was awarded to Lewiston, Maine by EPA's Assessment Grant Program. In 2000, the city of Lewiston was awarded an additional $75,000 in supplemental funding. This money was used to assess property at the Bates Mill (former Bates of Maine Woolen Mill) for environmental contamination. The structure is slated for redevelopment as part of the Bates Mill Community Brownfields Economic Redevelopment Initiative. In 1999, The city was also awarded $500,000 by EPA to capitalize a revolving loan fund for cleanup at the mill. This money will be used to loan to prospective developers of the mill. The majority of shop operations ceased in 1992, with only 50 employees operating in a small section of the massive 1.2 million square foot structure.

Exterior after

The phase I and phase II environmental site assessments revealed contamination with PAH's, metals, PCB's, VOC's, and petroleum products. As a result of the phase I ESA, EPA conducted a Superfund removal action in 1999 which focused on removing PCB contamination, asbestos, and leaking drums. The cost was of this action was $387,000.

The city of Lewiston owns the property. The Lewiston Mill Redevelopment Corporation manages the property. The building is being renovated from the inside-out. The developers are trying to keep as much of the existing structure as possible, so there has been very little demolition. The mill redevelopment is about 25% complete. As of 2001, approximately 284,000 square feet have been cleaned up and leased. Nineteen tenants have already moved into the renovated complex. They include Banknorth, the parent company of People's Heritage Bank, as well as a restaurant and several start-up companies. In 1993, there were less than 100 people employed in the mill complex. In 2000, there were approximately 1000 people employed. It is projected that there will be 5,000 employees in the complex when redevelopment is complete. In 1993, $160,000 was collected by the city in taxes. In 2001, that amount climbed to $543,024 per year. A 600-space parking structure and courtyard plaza have also been constructed using city funds.

Exterior before and after

The city was able to use the funding from EPA to leverage a total of $41 million from federal, state, local sources, including $15 million in private investment.

The city has been committed to community involvement throughout the redevelopment through a series of stakeholder meetings, including downtown businesses, citizens groups, and neighborhood associations. The redevelopment of the Bates Mill is part of a 3 to 10 year long-term plan to revitalize the downtown. The city is focusing on the entire downtown area. The Bates Mill building anchors the downtown area. Now that the mill cleanup and redevelopment is underway, the city is shifting focus to the other sections of the city.

Railroad Park

Success in EPA - Conducted Targeted Brownfields Assessment Program
Lewiston, ME

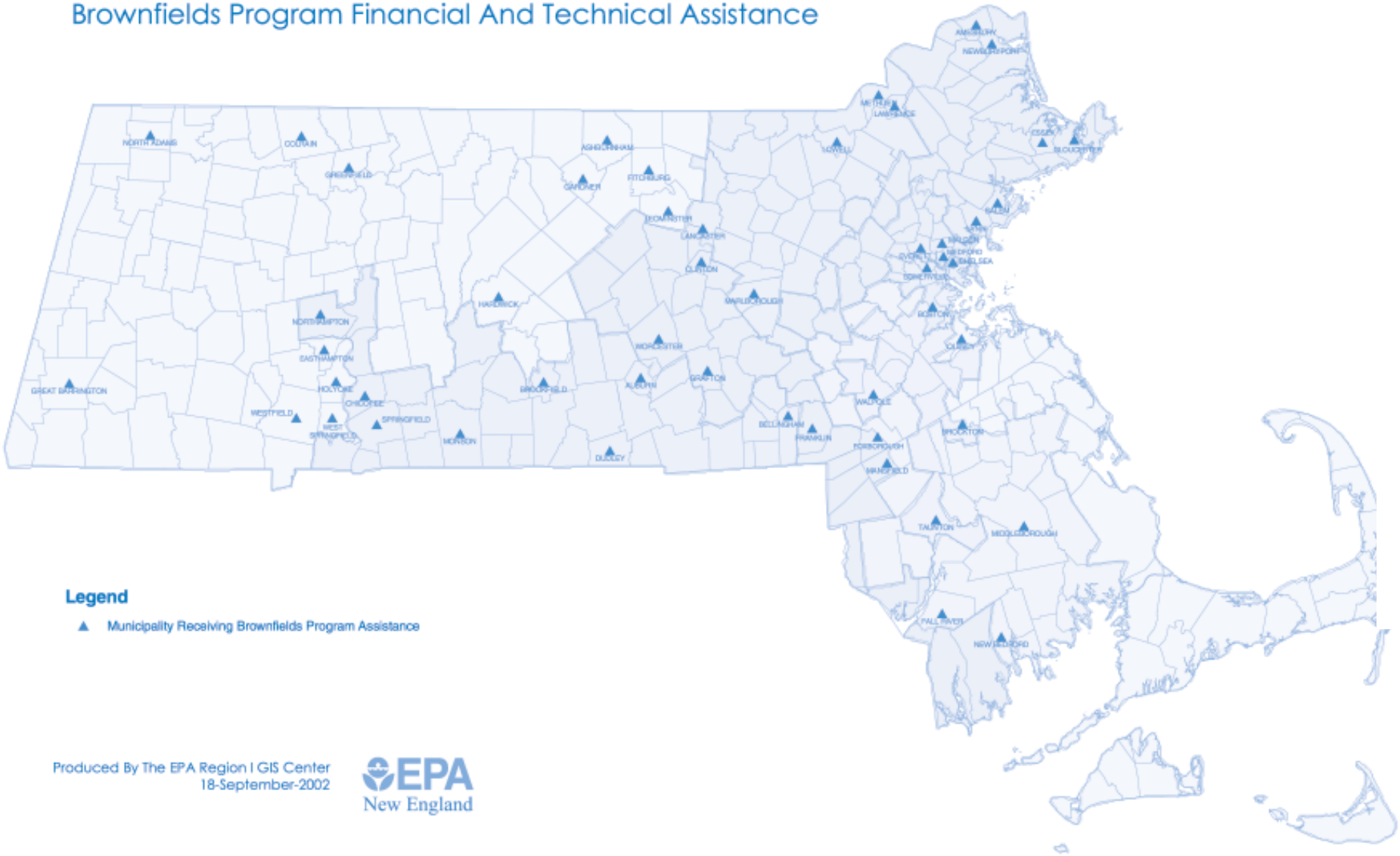
In February of 1999, the City of Lewiston was selected to receive a Targeted Brownfields Assessment from EPA New England. A Targeted Brownfields Assessment is a “grant of services” from EPA where EPA contractors perform site assessment activities on behalf of municipality or non-profit in order to determine what, if any contamination exists at a site and what cleanup is needed to support the intended redevelopment. These site assessments cost between $50,000 and $100,000, depending on site size and scope of work.

The City’s Lewiston and Auburn Railroad Company (a quasi-municipal agency) currently has a 999-year lease on the property located on the Androscoggin River on Water Street in Lewiston. The site has been developed since the early 1800’s. Various light industrial and commercial businesses have occupied the property during its long history of development. The City’s goal was to expand the borders of an adjacent park public park onto the 1.3 acre site.

During late 1999 and early 2000, EPA New England and its contractor worked with the City’s Development Department and the Maine Department of Environmental Protection on developing and implementing the site assessment. The results of the assessment indicated that the site was not contaminated in anyway that would precluded development of the site into a public park. It was later determined that cleanup was not required prior to redevelopment.

Railroad Park is an integral part of the city’s overall downtown revitalization plan which includes the rehabilitation of the Bates Mill Complex. The Park now hosts several public events every year including the annual Great Falls Balloon Festival.

Massachusetts Communities Receiving Federal Brownfields Program Financial And Technical Assistance



Legend

▲ Municipality Receiving Brownfields Program Assistance

Produced By The EPA Region I GIS Center
18-September-2002

EPA New England

60 West Lynde St. & 30 Wickman Drive

Success in Assessment Grant Program
Montachusett Regional Planning Agency
Gardner, MA

In 1998, EPA's Assessment Grant Program awarded Montachusett Regional Planning Commission $200,000 to establish an advisory committee, compile a brownfields inventory, prioritize sites, and perform site assessments within the 22 town area serviced by the commission. Two of the properties selected for assessment were 60 West Lynde Street and 30 Wickman Drive in Gardner, MA. As a result of the assessments, these properties are being redeveloped to host the new Gardner Public Library and affordable housing units.

Home of future library

60 West Lynde Street

This property is located in the downtown area. Formerly the Conant-Ball furniture manufacturing facility, it went out of business in the mid-1980's. A Canadian company bought the property in 1995 and ran a storage and distribution facility out of it until the facility was demolished in 1997.

In the early 1990's, the city became interested in redeveloping the site for a more appropriate use. The wood frame and wood clapboard building needed to be demolished and there was concern for contamination in both the building and the surrounding property. In 2000, the city began a reuse study for the property. The plan evolved to include a parking lot and the new Gardner Public Library. The city purchased the property in April 1998 and the assessment was performed in December 1999. A final draft of the Phase II Comprehensive Site Assessment and Response Action Outcome Statement Report was submitted by the environmental contractor to the city in January 2002. The Library Trustees are conducting additional soil borings and testing of groundwater at the site.

As a result of the assessment, local and state funds have been leveraged to meet 80% of the $7.6 million package for the site cleanup and construction of the library. It is anticipated that groundbreaking will take place next year and the library building will be completed in 2 to 3 years.

30 Wickman Drive

This is the site of a former light manufacturing and welding shop. The owner vacated the property in 1995 without paying property taxes and the city took ownership by tax foreclosure in November 2000. A Phase II Environmental Site Assessment was completed in March 2000. A small portion of the property adjacent to the road was found to be contaminated with EPHs, SVOCs, and lead which required remediation. As a result, there will be an activity use limit on a portion of the parcel.

This site is located in the middle of a residential area, and the Greater Gardener Community Development Corporation is working to return the property to residential use. They plan to construct three, single-family units of affordable housing. Using Community Development Block Grant funds from the city of Gardner, site preparation and utility hook-ups were be completed in August 2002. Potential home owners will have to meet HUD low to moderate income guidelines. GFA, a local credit union, will finance construction by the Montachusett Regional Vocational Technical School, with an expected completion date of May 2003.

Former H.B. Smith Property

Success in Assessment Grant Program
Westfield, MA

In April of 1997, the city of Westfield, MA was awarded $175,000 by EPA's Assessment Grant Program to conduct environmental site assessment activities at the former H.B. Smith property, the site of a former foundry which made cast iron boilers and boiler systems for industrial use. The assessment of this property resulted in the demolition of the existing structure, cleanup of the property, and construction of a Super Stop 'N Shop supermarket.

iew of do

The city of Westfield has been working to revitalize the downtown area. H.B. Smith had dramatically downsized its operation in recent years. Consequently, the factory had a large, outdated facility that was occupying prime downtown property. The city officials of Westfield valued the ic revenue H.B. Smith pr the community. W Developmen city successful ore ap smaller, and

The site of t acres and w the mid 1880

In 1998, the city ess the ex o charac the property. Environmental consustants hired by the city conducted the environmental site assessments. The preliminary assessment revealed animal wastes, asbestos, casting sands, unknown waste piles and barreled wastes, transformers and PCB ballasts, and at least three underground storage tanks. Petroleum products, PAHs and heavy metals were found. Remediation included waste removal, animal waste cleanup, oil pumping from basement, asbestos abatement, underground storage tank removal, and lead waste remediation. Soil remediation totaled nearly $1 million in leveraged funding. O'Connell Development Group worked with the Westfield Community Development Corporation and managed the purchase of the property in November of 1996, and the cleanup and demolition of the buildings in 1999 and 2000. The site was cleaned to meet commercial standards for the Commonwealth of Massachusetts.

New Super STOP N'SHOP

The property was redeveloped into a 69,000 square foot Super Stop & Shop. On this redevelopment effort, there was great coordination between the local, private, and federal partners.

Redevelopment of Parcel 8/505 Tremont St.

Success in Brownfields Cleanup Loan Fund Program
Successful Partnerships Make for Successful Brownfields Programs
Boston, MA

The loan agreement under the city of Boston Brownfields Cleanup Revolving Loan Fund (BCRLF) for the remediation and redevelopment of the former Parcel 8 site was signed on December 3, 2001 by the Boston Redevelopment Authority for $475,000. The planned 8-story redevelopment will provide 20,000 square feet of retail and restaurant space, new theater and support apace for the adjacent Boston Center for the Arts facility, 100 residential condominiums on the upper floors, and a below-grade parking garage with capacity for 350 cars. This redevelopment project is the result of a partnership between the city of Boston, Boston Redevelopment Authority, Boston Center for the Arts, Huntington Theater, and the Druker Company. The total cleanup is estimated to cost $2.8 million and will be managed and overseen by the developer. The developer is contributing $1.8 million towards the cleanup with the BRA contributing the remaining $1 million. Of the BRA's $1 million match, $475,000 will be provided by the BCRLF loan.

Boston, MA and Parcel 8 Background

As a large, urban city with an industrial history, Boston is known as the economic hub of New England. However, the city also has its fair share of unemployment, poverty, abandoned land, and environmental problems. As industries have been phased out of the city and moved to the suburban greenfields, parts of Boston have been left littered with abandoned and vacant properties. Many of these former industrial properties have not been redeveloped due to fears of real or perceived environmental contamination. This loan represents a key milestone in Boston's efforts to redevelop Brownfields.

Ground breaking ceremony

In August 1995, EPA awarded to Boston a Brownfields Demonstration Assessment Grant, and it received supplemental assessment funding support for that pilot in 2000. EPA awarded Boston, a BCRLF Pilot in August 1997. Under this program, EPA has provided Boston with $1,000,000 to capitalize its revolving loan fund.

Located in Boston's South End, the 50,000 square-foot Parcel 8 property has had a variety of past uses including automotive repair and filling stations, an Odd Fellows Hall, and a hotel which was destroyed by fire in the 1960s. In addition, the site is underlain by urban fill. An engineering evaluation/cost analysis identified volatile organic compounds, semivolatile organic compounds (SVOCs), total petroleum hydrocarbons, mercury and lead at levels exceeding state standards. In addition, a localized pocket of light non-aqueous phase liquid (2.5 inches of product in one monitoring well) was found.

The Brownfields Cleanup Revolving Loan Fund Phase

The city of Boston's Economic Development and Industrial Corporation is the Lead Agency for the BCRLF. The Boston Local Development Corporation serves as the Fund Manager. A Massachusetts Licensed Site Professional employed by the city's Department of Neighborhood Development is the site manager. The Boston Redevelopment Authority, the city's planning and economic development agency, is the BCRLF borrower for this project. The loan will be used to support the cleanup and redevelopment of Parcel 8. The proposed loan terms are 5 years at 0% interest.

Artists rendition of future structures

Construction of a proposed garage will require excavation to depths of approximately 30 feet below grade. A detailed soil precharacterization was completed and the estimated quantity of contaminated soil subject to excavation and disposal is approximately 65,000 cubic yards. Total soil excavation and disposal costs are estimated at $2.8 million.

Redevelopment Plans

The property is slated for a 253,120 square-foot mixed use redevelopment. The mixed-use building will include 20,000 square feet of retail and restaurant space, new theater and support space for the adjacent Boston Center for the Arts facility, 100 residential condominiums on the upper floors, and a below-grade parking garage with capacity for 350 cars. The construction will require excavation to 30 feet below the existing grade. Cleanup and construction began in spring 2002.

TeleCom City® Mystic Valley Development Commission

Success In Brownfields Cleanup Revolving Loan Fund Program
Mystic Valley Development Commission
Partnership Between the Cities of Medford, Malden, and Everett, MA

On October 16, 2001 an intra-governmental loan of $225,000 was made by the Mystic Valley Development Commission (MVDC) to facilitate a non-time critical removal action at the 138,000 square foot former Solvent Chemical site located on Lower Commercial Street in Malden, MA within the MVDC's TeleCom City® project boundary. This will curtail groundwater contamination of dichlorobenzene leaching into the Malden River and facilitate the reconstruction of Commercial Street as a "gateway" to the property.

In 1998, the MVDC was awarded $200,000 by the EPA Assessment Grant Program. In May 1999, EPA awarded the MVDC $500,000 as a Brownfields Cleanup Revolving Loan Fund (BCRLF) program. In October 2000, the MVDC was awarded National Brownfields Showcase Community designation, additional $200,000 in assessment funding, and technical assistance. In October 2001, the MVDC made its first loan, an intra-governmental loan, within the TeleCom City® project. It received an additional award of $500,000 in supplemental funding for its BCRLF from EPA. This award brings EPA's Brownfields funding commitment to MVDC to a total of $1.6 million.

The MVDC represents the cities of Everett, Malden and Medford, Massachusetts. The three communities have a population of approximately 142,000 and are located in the inner suburban loop of Boston, five miles north of the city. The three cities have demonstrated unprecedented cooperation to combine resources and collaboratively pursue redevelopment solutions to revitalize their industrial and commercial economic base. The MVDC is focusing brownfields activities on the TeleCom City® project. The TeleCom City® project is the ambitious redevelopment of 207-acres of former industrial property spanning the heavily urbanized communities of Malden, Medford, and Everett along the polluted and underutilized Malden River. The goal is to turn TeleCom City® into a center for the commonwealth's telecommunications industry. When complete, TeleCom City® will be a complex consisting of 1.8 million square feet of office, research and development, and manufacturing space as well as a riverfront park and open space for local residents.

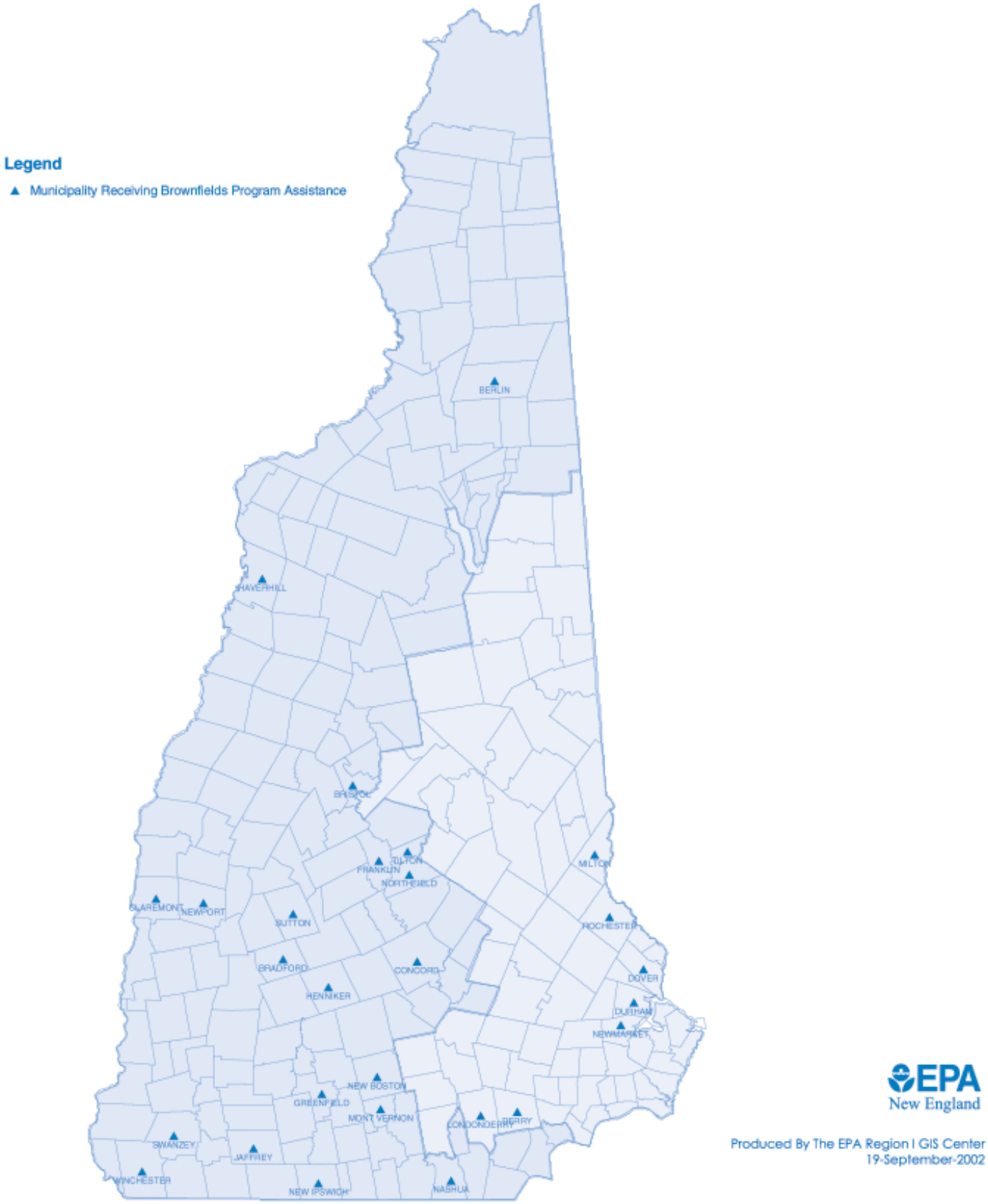
The MVDC serves as the lead agency for the BCRLF program and is responsible for ensuring that environmental cleanups conducted with funding from the BCRLF are done in compliance with all applicable laws and regulations and that the BCRLF funds are used for authorized purposes. The Malden Redevelopment Authority, as Project Manager of the TeleCom City® project, has been designated by the MVDC to be the Brownfields Site Manager and the Fund Manager of the MVDC's BCRLF.

The loan is an intra-governmental loan, the reimbursable transfer of BCRLF loan funds within the same government, and is

eligible for a loan discount of 20% of the loan amount. The discounted principal is $180,000. The interest rate for the loan will be 5%. A repayment schedule of the discounted principal and accrued interest was established based on 10 annual payments starting October 2003. The source of repayment was established as the net proceeds of a lease to be negotiated between MRA and the city of Malden for the Public Works Way property. The lease payments and underling property were pledged to the MVDC and, in turn, were the collateral for the loan. The final maturity of the loan will not exceed ten years from October 2002.

The former Solvent Chemical site currently occupied by a roadway, a produce market, a Department of Public Works (DPW) facility, and other local businesses. The local businesses and DPW yard will remain during and following the removal action. A pool of dichlorobenzene sits approximately 30 feet underground, with the highest concentration of contaminants under Commercial Street between the produce market and the Malden DPW facility. Contamination on the site is believed to be from the manufacturing of dichlorobenzene, among other chemicals. This contamination is leaching into the groundwater and contaminating the Malden River. MVDC intends to install a treatment system to extract the pool of chemicals in order to eliminate this source. The BCRLF will pay for the construction, operation, and maintenance of the treatment system for 1 year, after which MVDC will pay for additional operation and maintenance as needed.

New Hampshire Communities Receiving Federal Brownfields Program Financial And Technical Assistance



Former Seppala and Aho Property

Success in Assessment Grant Program
New Hampshire Department of Environmental Services
New Ipswich, NH

The New Hampshire Department of Environmental Services (NHDES) worked with the town of New Ipswich, NH and used a portion of it's $200,000 EPA Assessment Grant to characterize contamination on the former Seppala and Aho construction compar d at 657 Turnpike Road. The characterization was completed in July 1998. The town, which owned the property, then funded the remediation in 2001 and renovated a number of the existing structures for the town's municipal complex - town office space, a police station, and the highway department.

The 9-acre property was occupied by Seppala and Aho construction since the 1960's. The owner left the company in the early 1980's. Gasoline and diesel underground storage tanks were removed in the late 1980's. The company went out of business in the early 1990's and the Alyward - Dill Trust took over the property in May 1994, acting as a secured (second mortgage) creditor. Alyward - Dill was unaware of the environmental contamination at the time they took over the property. Once it was discovered, they were a cooperative innocent nded a substantial s ome of the environmental problems at the site. This included environmental site investigation and limited r d contamination. The site investigation revealed several area of potential concern due to pas ne, and disposal of hazardous materials. Due to the existence of a sizable lien for unpaid proper d additional monies to perform further site investigation, the trust decided to "abandon" t property for back taxes in July of 1997. The decision by the town to take the property financial as

NH DES hired consultants to characterize the extent of contamination and to fill the da previous assessments. There were six structures on the property. Elevated concentrations of VOC's, PHC's, and metals were detected in a dry well in one of the buildings. A partially buried, intact drum, several crushed drums, and asbestos-containing building materials were observed. The characterization cost $53,000.

The town funded the remediation activities to excavate the dry well and surrounding soil and to remove several crushed drums from the property. Three of the buildings were then renovated, done in large part through intensive volunteer construction work. One building now serves as town offices. The second serves as the police station and office space for the school department. The third building serves as office space and storage for the highway department. NHDES is still monitoring groundwater for contamination.

Former Whitney Screw Property

Success in Brownfields Assessment Grant and Revolving Loan Fund Programs
New Hampshire Department of Environmental Services and the City of Nashua, NH

The first loan agreement under the New Hampshire Department of Environmental Services' (NH DES) Brownfields Cleanup Revolving Loan Fund (BCRLF) program was signed on January 17, 2002 by developers Peter Smith and Dean Jackson, of Smith Jackson, LLC. This $189,000 loan will assist with cleanup costs for the former Whitney Screw site in Nashua, NH. The redevelopment will provide expanded facilities for Goodale's Bike space and for additional tenants.

This success is the outcome of the cooperation and commitment of the U.S. EPA's Brownfields Program; the city of Nashua's Brownfields Assessment Grant; several programs within NH DES, including Brownfields, Ustfields, the Oil Pollution Control Fund Tank Removal Program, and the New Hampshire Petroleum Reimbursement Fund program; and Smith Jackson, LLC. The strength and credibility of the partnerships resulted in approximately $2,000,000 of leveraged private investments by the developers. This is a great example of coordinated use of the Brownfields Assessment Grant Program, the Brownfields Cleanup Revolving Loan Fund, and other important state-agency brownfields tools to transition an abandoned, contaminated property to productive reuse.

Nashua, New Hampshire and Its Brownfields History

Nashua, New Hampshire has a diverse population. The city (population 86,605) has an 11% minority population compared to 6% in Hillsborough County and 4% statewide (New Hampshire Office of State Planning (NH OSP) statistics, 2000.)

Timeline
Redevelopment of Property at 14A and 14B Broad Street (former Whitney Screw property)

1963 Whitney Screw purchases property at 14 Broad Street from White Mountain Freezer Company.

1982 The last property taxes are paid by Whitney Screw to the city of Nashua, NH.

1985 *April* - Whitney Screw ceases plating operations.

1995 *June 28* - All leases assigned to Bank of New Hampshire.

September / October - AGI conducted a limited Phase I environmental assessment.

1997 *November 3* - Whitmey Screw is involuntarily dissolved by the Secretary of State.

1999 *September* - U.S. EPA awards New Hampshire Department of Environmental Services with $1.45 million to capitalize a Brownfields Cleanup Revolving Loan Fund (BCRLF).

September - U.S. EPA awards the city of Nashua $200,000 to fund an Assessment Demonstration Pilot for the Broad Street Redevelopment Corridor.

2000 Census reports Nashua, NH to have population of 86,605 and an unemployment rate of 2.9%.

Aeriel view of Whitney Screw complex and property

Nashua also has a low unemployment rate of 2.9% for 2000, compared to the national rate of 4.0% (Department of Labor, Bureau of Labor Statistics.)

Nashua has a strong record of addressing Brownfields site issues. The city initiated the Broad Street Redevelopment Corridor (BSRC) Initiative, comprised of 95 acres near a $36.5 million major new arterial street that will connect the primary highway in the area to the downtown. The new road will provide access and visibility to a number of older, contaminated industrial properties, including the former Whitney Screw property. The new road is expected to improve the economic viability and redevelopment potential of the area. In 1999, the city applied for and received $200,000 to fund a Brownfields Assessment Grant to prioritize and conduct assessments of sites within the BSRC.

2001 Developers Smith and Jackson, of Smith Jackson, LLC, express interest to NHDES about using the New Hamp shire Brownfields Covenant Program and the BCRLF to assist in the redevelopment of the WhitneyScrew site.

April to July - GZA GeoEnvironmental, under contract with the city of Nashua, conduct Phase I environmental site assessment.

Fall - Smith and Jackson purchase the note for the property from the Bank of New Hampshire. The Nashua Planning Board approves splitting the property into two parcels, 14A and 14B.

September - GZA produces 2 remedial action plans (RAP); U.S. EPA awards NH DES an additional $1.0 million to the BCRLF.

October - NHDES Ustfields Pilot and Oil Pollution Control Fund Tank Removal Program remove 4 underground storage tanks and numerous fuel-containing drums from property.

October 31 - New Hampshire Department of Justice determines that Smith and Jackson is eligible to participate in New Hampshire Brownfields Covenant Program.

November - RAPs refined by GZA; released Environmental Evaluation and Cost Analysis.

2002 *January 17* - BCRLF signed by Smith and Jackson for $189,000.

June - Anticipated opening of Goodale's Bike at 14A Broad Street.

Also in 1999, the NH DES BCRLF, in coalition with the NH OSP, the city of Concord, and the towns of Durham and Londonderry, was established through a cooperative agreement with the EPA. The original award from EPA to NH DES was $1,450,000. In December 2000, the New Hampshiret of Bradford, Greenfield and Newport joined the coalition to request additional funds. In September 2001, the NH DES BCRLF received an additional $1,000,000 from EPA, bringing the total capitalization to $2,450,000.

Old machine shop, before cleanup

Whitney Screw Site Background

The 5.4-acre former Whitney Screw site, at 14A and 14B Broad Street abuts a mix of residential properties and businesses to the north, east, and west; an active rail corridor to the south. The area is home to approximately 6.3% of the city's population. Historical use of the property involved a variety of industrial activities under a series of ownerships beginning in the early 1900s. Whitney Screw's plating room operations ceased in April 1985. Currently, a one-story warehouse complex (89,610 square feet) consisting of 12 attached structures spans the site.

On June 28, 1995, all leases and rents were assigned to the Bank of New Hampshire while Whitney Screw remained the record title owner. Whitney Screw was involuntarily dissolved by the Secretary of State on November 3, 1997. As of December 2000, property taxes had not been paid in 8 years, with back taxes and penalties totaling $350,000.

The Assessment Grant Phase

As part of their Brownfields Assessment Grant, the city hired GZA GeoEnvironmental, Inc. (GZA) to conduct a Brownfields Site Investigation from April to July 2001. After completing the site investigations, GZA developed two Remedial Action Plans (RAP) in September 2001 which documented findings and recommendations. The RAPs recommended the following sources be remediated:

14A Broad Street

- Lead-contaminated soil and peeling lead paint on exterior wall of Building 1A;
- Petroleum-soaked wood flooring in Machine Shop;
- Petroleum-soaked wood boxes;
- Petroleum-contaminated soil under portion of Machine Shop;
- Potential asbestos-containing building material (ACBMs) in buildings to be demolished/renovated.

14B Broad Street

- Asbestos-containing insulation on three exterior pipes;
- Cadmium in soil near Building Number 11;
- Asbestos in soil near Building 8;
- Potential ACBMs in buildings to be demolished/renovated.

The estimated cost for remediation to meet state and federal standards for non-residential use was $360,681. To date, the city of Nashua has spent $123,553 of its Brownfields Assessment Grant funds on completing the site investigation and developing the RAPs for the site.

The Brownfields Cleanup Revolving Loan Fund Phase

As a result of the original owner defaulting on the mortgage loan, Smith Jackson, LLC purchased the option for the mortgage from the Bank of New Hampshire in the fall of 2001 and then received approval from the Nashua Planning Board to subdivide the property into two lots, 14A and 14B. Having secured ownership in the property, Smith Jackson, LLC. then applied for a loan to defray from the cleanup costs. On January 17, 2002, Smith Jackson, LLC borrowed $189,000 from the NH DES BCRLF for eligible cleanup costs. The payback period will be 12 months at an interest rate of 3%.

With respect to the BCRLF administration, NH DES is acting as the Lead Agency under the National Oil Hazardous Substances Pollution Contingency Plan (NCP), as the Brownfields Site Manager to oversee the cleanup, and as Fund Manager (with the assistance of the New Hampshire Department of Treasury and the New Hampshire Business Finance Authority) to handle the financial aspects of the loan. As part of the terms of the loan, NH DES also agreed to provide the developer with Direct Financial Assistance to cover some of the costs associated with compliance with the NCP. To date, NH DES has spent $4,219 for GZA to prepare an EE/CA, develop a Community Relations Plan, and to generate a Quality Assurance Project Plan as Direct Financial Assistance (DFA) under the BCRLF. NHDES anticipates an additional $4,834 to be spent on post-excavation sampling and analysis at the site (also as BCRLF DFA).

During demolition of parts of main building

"We'd been looking for a few years to get all of our operations under one roof, but it was difficult to find space that met our retail traffic and square footage needs. We are very excited about the new facility. It will be a huge benefit to have the retail, offices, and warehouse storage space in the same facility with adequate parking facilities and a lighted lot. My attorney and I were very impressed with how smoothly NH DES handled the loan process. I was impressed by the great teamwork of all involved."

—Brad Hill, owner of Goodale's Bike in Nashua, NH.

Redevelopment Plan

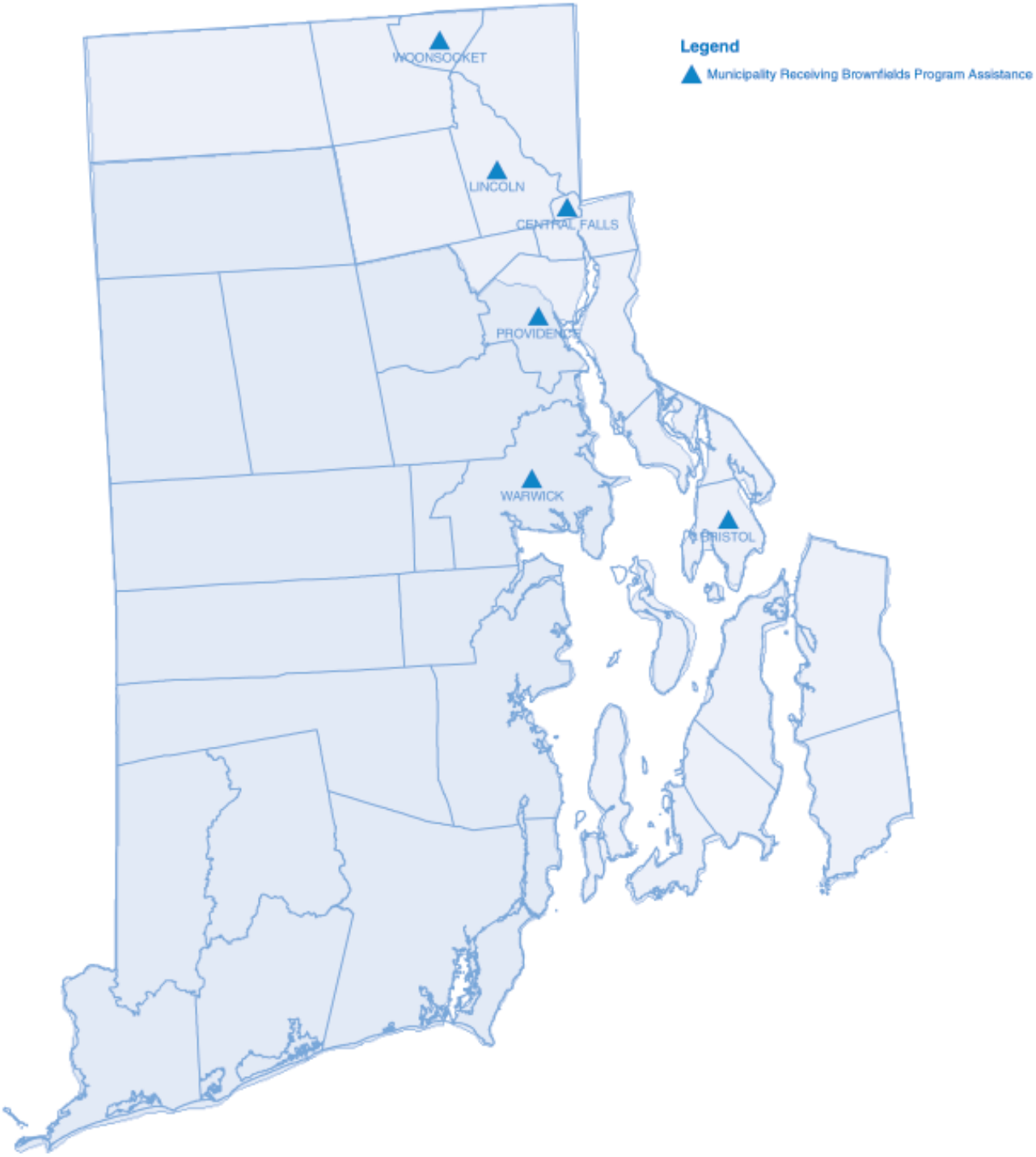
Smith Jackson, LLC plans to spend an additional $2,000,000 on improvements to demolish approximately 20,000 square feet of the existing warehouse complex and to renovate approximately 50,280 square feet of building space to house new tenants. Smith Jackson,LLC signed a purchase and lease agreement. Goodale's Bike, New Englands's largest bicycle dealer, in business since 1919. They have been at their downtown location for the past 31 years. They combined and relocated their 3 separate Nashua facilities to the renovated building. There they have approximately 12,200 square feet of retail and showroom space, as well expanded service and storage areas.

Other Funding and Tools

In addition to receiving a BCRLF Loan, Smith Jackson, LLC also utilized other tools and incentives available to developers working on brownfields in New Hampshire. First, in the fall of 2001, Smith Jackson, LLC applied for an eligibility determination to participate in the New Hampshire Brownfields Covenant Program, a program designed to provide incentives for both environmental cleanup and redevelopment by persons who did not cause the contamination. This is accomplished under a process by which eligible persons can obtain a "Covenant Not to Sue" from the N.H. Department of Justice (DOJ) and a "Certificate of Completion" from the NH DES when investigations and cleanups are performed in accordance with NH DES cleanup requirements. Following an application review, on October 31, 2001 the NH DOJ determined eligibility to participate in the program. Smith Jackson, LLC agreed to provide a Remedial Action Plan in exchange for liability protections provided by the program.

Second, Smith Jackson, LLC was also able to secure an additional $19,164 from the NHDES Ustfields Pilot and the Oil Pollution Control Fund Tank Removal Program was for the removal of four underground storage tanks and numerous fuel-containing drums that were identified by GZA as part of the Brownfields Site Investigation. Removal of the tanks has made the site eligible for up to $1,500,000 from the New Hampshire Petroleum Reimbursement Funds for the removal of floating petroleum product and the associated groundwater contamination.

Rhode Island Communities Receiving Federal Brownfields Program Financial And Technical Assistance



EPA New England

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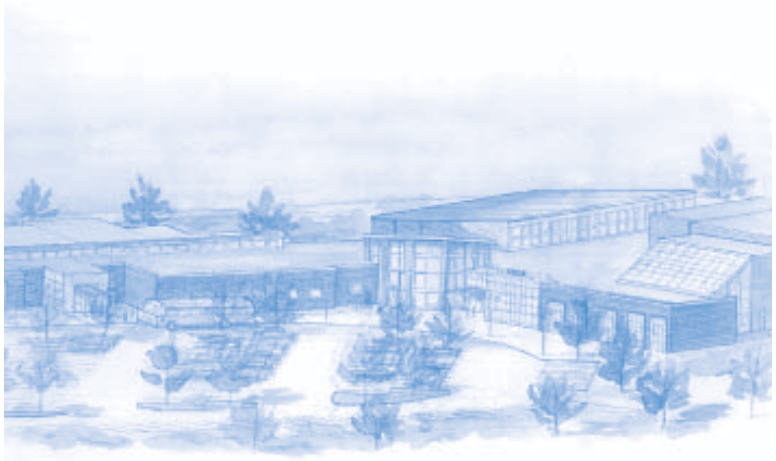
18-September-2002

Greater Providence YMCA Project

Success in the Browfields Cleanup Revolving Loan Fund Program
Rhode Island Economic Development Corporation
Providence, RI

On April 10, 2002 the Young Men's Christian Association (YMCA) of Greater Providence borrowed $500,000 from the Rhode Island Brownfields Cleanup Revolving Loan Fund (BCRLF) to clean up the former Gorham Manufacturing Site in the South Side of Providence for redevelopment into a state-of-the-art YMCA recreational facility that includes a gymnasium, day camp, and community services. This will provide vital social services to one of Providence's low-income communities. The YMCA will be allowed to forego repayment of 30% of the loan amount as a discount to nonprofit borrowers. The new facility will cost approximately $9 million, which will be financed through a YMCA fundraising campaign. The term of the loan shall be for a period of 48 months at a fixed interest rate of approximately 3.25%.

In past years, EPA has awarded the city of Providence (Population 173,000), the Rhode Island Department of Environmental Management (RIDEM), and the Rhode Island Economic Development Corporation (RIEDC) three Brownfields Assessment Grants Program totaling $850,000. The Brownfields Assessment Grants Program has helped leverage the resources committed to the city of Providence as a Brownfields Showcase Community, along with providing site assessments that stimulate revitalization efforts throughout the state. In May 2000, the EPA selected RIEDC for a Brownfields Cleanup Revolving Loan Fund grant, capitalizing the loan fund with $1 million.



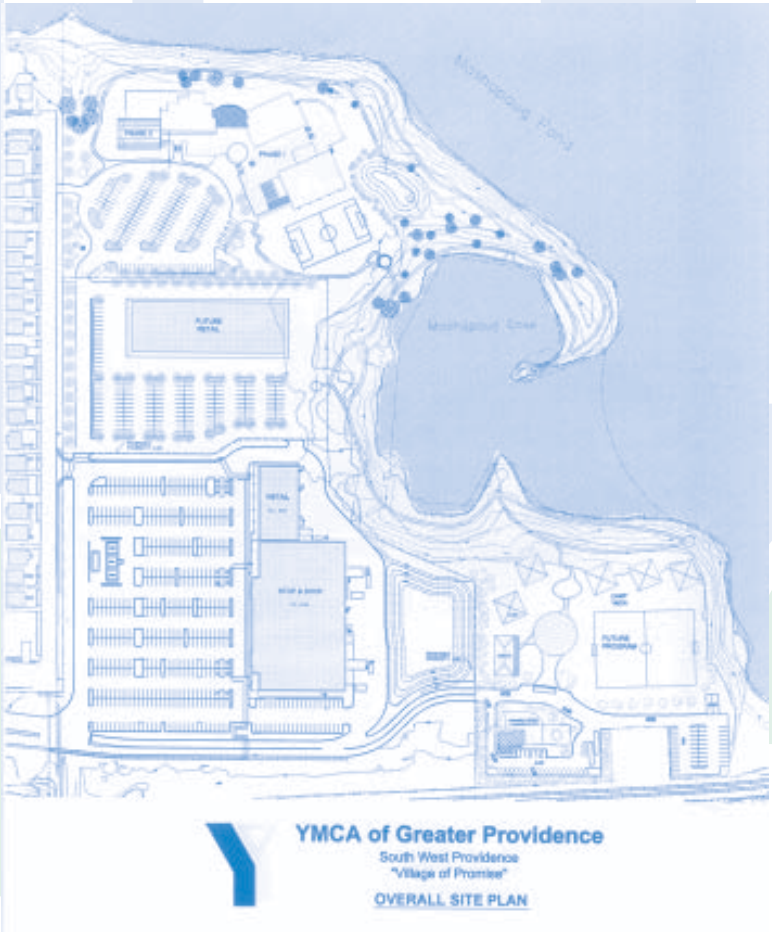
Artists rendition of future YMCA

The state of Rhode Island (Population 1,048,000) has focused its Brownfields efforts on two major areas: the remnants of its industrial heritage and the urban core of its cities, particularly Enterprise Zones. Rhode Island contains eight cities and 11 Enterprise Zones, with some zones reaching poverty levels of 50% or more. The remediation and return of Brownfields to productive use will contribute to economic revitalization through job creation and an increased tax base, eliminate potential environmental and health risks, and reclaim public enjoyment of the few natural resources left in these urban communities. Rhode Island hopes the BCRLF will help enhance environmental justice in disadvantaged communities and act as a catalyst for the reclamation of abandoned land and a return to economic vitality.

The RIEDC is the Lead Agency for the BCRLF program. The Small Business Loan Fund Corporation will serve as the Fund Manager. The RIDEM shall serve as the Site Manager to coordinate, direct, and oversee BCRLF response actions. The respective roles and responsibilities of the RIEDC and RIDEM have been documented in a Memorandum of Agreement.

The focus for this BCRLF loan is a 17-acre site located in one of Providence's Enterprise Zone Empowerment Communities adjacent to residential property and the Mashapaug Pond.

An abandoned property, the site was previously used for the manufacturing of silverware and bronze castings between 1890-1986. Operations included casting, rolling, polishing, lacquering, forging, plating, annealing, soldering, degreasing, machining, and melting. Most of the buildings on the site have been, or soon will be, demolished.



Environmental assessment of the site found levels of volatile organic compounds (VOC), metals (arsenic, copper, chromium, lead, silver, and zinc), as well as oil and/or hazardous materials in the soil that exceed the Upper Concentration Limits for the RIDEM Industrial/Commercial Exposure criteria. Furthermore, the concentration of Trichloroethene and 1,1-Dichlorothylene exceed the GB classification for groundwater, which categorizes water as unsuitable for drinking without pretreatment. The latest site investigation, performed in January of 2002, revealed levels of arsenic and polycyclic aromatic hydrocarbons above RIDEM's residential direct exposure criteria, as well as VOC biodegradation products (i.e. methane) on the site.

The contamination is believed to be from underground storage tanks and former industrial uses that include degreasing and metal processing. The proposed remedial action will be to cap all surface soils surrounding the main building and parking lots with either two feet of clean soil or a combination of a synthetic membrane and soil. To address the VOC contaminants, a passive vent system has been proposed for installation under the foundations of any buildings in the area of groundwater contamination.

Once the cleanup is complete, development of the 50,000 square foot recreational facility, including a gymnasium, swimming pool, and family center, will commence. The proposed project will supply economic, environmental, and social benefits to the community. The YMCA will add dozens of construction jobs and 60 new full-time, permanent jobs to the workforce, thereby attracting economic activity to the neighborhood and encouraging additional redevelopment. Within the heart of a developed urban area, a polluted industrial site will become a YMCA recreation area with wooded habitat, precious open space. The project also will provide the community with valuable social services, such as child-care, sports facilities, and health education. These new YMCA community services will be housed within the aptly named "Villages of Promise" portion of the complex.

Sunshine Island at Fields Point

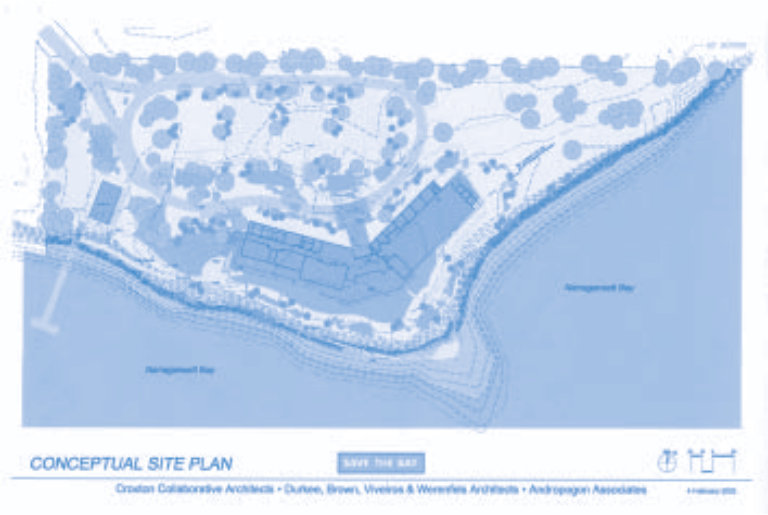
Success in the EPA-Lead Targeted Brownfields Assessment Program, Assessment Grant Program and the Brownfields Cleanup Revolving Loan Fund Program
Rhode Island Department of Environmental Management, Rhode Island Economic Development Corporation and Providence, RI

Save the Bay, a non-profit environmental advocacy and educational organization that protects, preserves and improves Rhode Island's Narragansett Bay, has signed an agreement to borrow $700,000 from the Rhode Island Economic Development Commission's (RI EDC) Brownfields Cleanup Revolving Loan Fund (BCRLF) to clean up a former municipal dump for redevelopment as a state-of-the-art educational center. The Explore the Bay Initiative to clean and redevelop the Sunshine Island brownfields site located at Fields Point on the Providence River will significantly expand the educational opportunities for the public—particularly children from the state's urban core—to experience, understand and protect Narragansett Bay.

Providence, RI and Sunshine Island Background

In past years, EPA has awarded the city of Providence (population 173,000), the Rhode Island Department of Environmental Management (RIDEM) and the Rhode Island Economic Development Corporation (RIEDC) three Brownfields Assessment Grants Program totaling $850,000. In May 2000, the EPA awarded RIEDC for a BCRLF grant, capitalizing the loan fund with $1 million. That grant was recently supplemented with an additional $700,000.

The State of Rhode Island (population 1,048,000) has focused its brownfields efforts on two major areas: the remnants of its industrial heritage and the urban core of its cities, particularly Enterprise Zones. Rhode Island contains eight cities and 11 Enterprise Zones, with some zones reaching poverty levels of 50% or more. The remediation and return of brownfields to productive use will contribute to economic revitalization through job creation and increased tax base, eliminate potential environmental and health risks, and reclaim public enjoyment of the few natural resources left in these urban communities. Rhode Island's goal is that the BCRLF will help to address issues of environmental justice in disadvantaged communities and act as a catalyst for the reclamation of abandoned land and a return to economic vitality.



The Sunshine Island site was once an island and provided the people of South Providence access to the bay. In the 1950s the site was used as a dump, then paved over to be a drive-in theater. It is part of a 60-acre parcel owned by Johnson & Wales University, for which Save the Bay holds a 50-year lease at the rate of one dollar per year.

The EPA-Lead Targeted Brownfields Assessment Program Phase

In the autumn of 2000, EPA New England awarded Save The Bay a Targeted Brownfields Assessment (TBA) for the

Sunshine Island/Fields Point Parcel. During the spring and summer of 2001 field work was conducted on the site. The primary contaminant of concern discovered was methane, a product of historical landfill operations at the site. The assessment also indicated that ash had been disposed of throughout the site, construction and demolition debris were prevalent, and elevated levels of total petroleum hydrocarbons, semivolatile organic compounds, pesticides and metals were detected in the soil. The TBA program also assisted Save The Bay in writing their Remedial Action Work Plan and Engineering Evaluation/Cost Analysis for the BCRLF Program. Suggestions for remedial action include placing a permeable soil cover of at least two feet of clean soil over the entire site to prevent exposure to site users from contaminated soils and locating the building on the portion of the site with the lowest methane concentrations in order to minimize impacts to the building's occupants.

The Brownfields Cleanup Revolving Loan Fund Phase

The RIEDC is the lead agency for the BCRLF program. The Small Business Loan Fund Corporation serves as Fund Manager. The RIDEM serves as Site Manager to coordinate, direct, and oversee BCRLF response actions. The respective roles and responsibilities of the RIEDC and RIDEM have been documented in a Memorandum of Agreement.

Save the Bay will receive a 30% discount. The term of the loan is 60 months, with the interest rate to be a fixed rate per annum equal to the Federal Discount Rate on the date of closing, plus 2%. The cleanup and restoration of the brownfields site is part of an $8.7 million educational initiative of Save the Bay. The organization is engaged in a capital campaign to finance the capital costs of the Center.

Redevelopment Plans

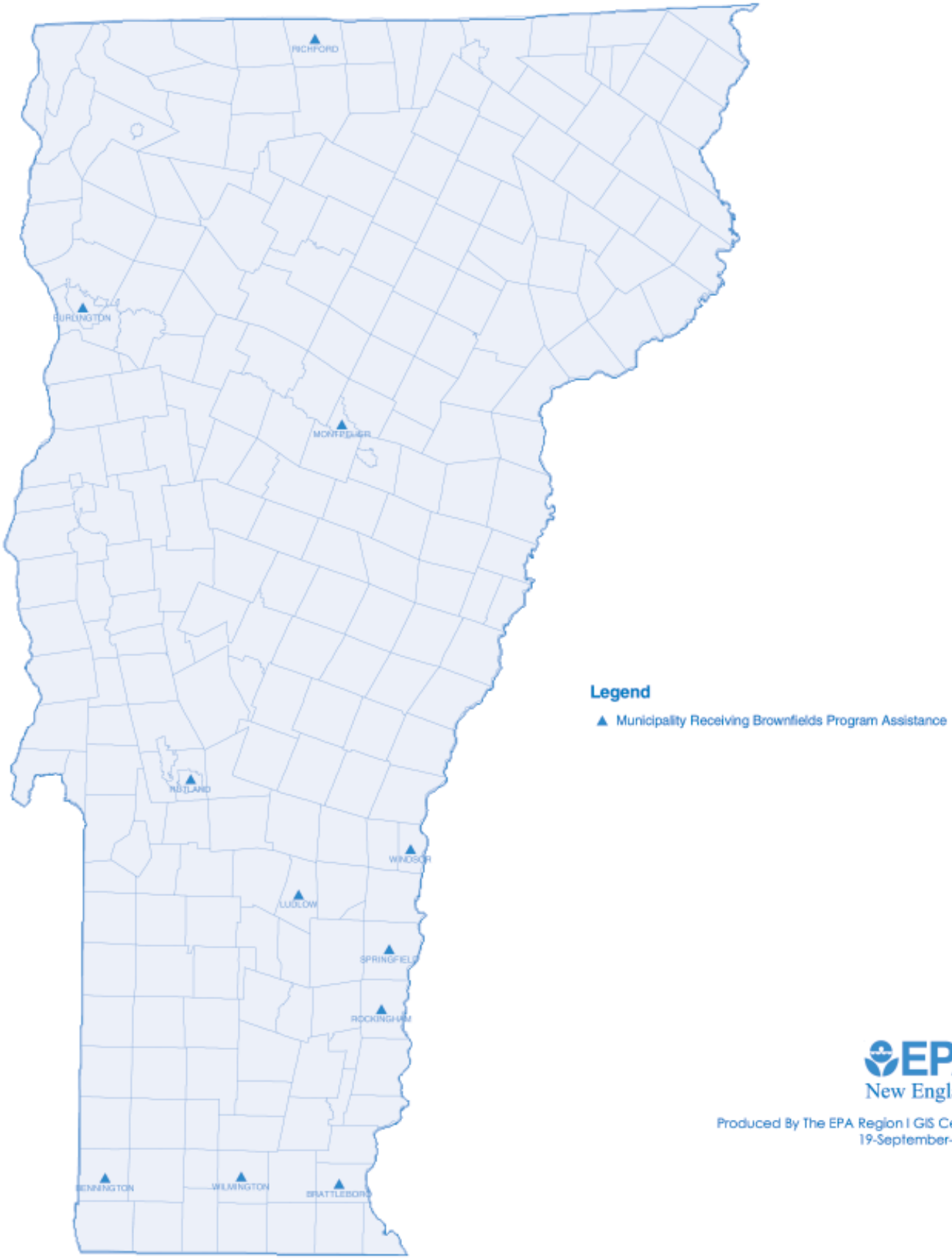
The Explore the Bay Initiative will include construction of a community and family-based educational center, "Explore the Bay Center for Narragansett Bay", on a six-acre site. The center will consist of a 17,600-square-foot, environmentally responsible structure that will house educational classrooms, exhibition space, and new headquarters for Save the Bay; a dock and shore-side facilities to support Save the Bay's fleet, including its education vessel; walking trails; picnic areas; parking/transportation infrastructure; and habitat restoration demonstration projects.

The project is intended to:

- Be the gateway for education programs serving 30,000 children and adults annually, drawing from the urban cores of Providence, Pawtucket, Central Falls, Woonsocket, and Newport;
- Restore access to upper Narragansett Bay at an urban site;
- Serve urban residents who have historically been disconnected from the Bay;
- Be a model of brownfield reclamation and reuse, including habitat restoration and shoreline development; and
- demonstrate environmentally responsible design and construction.

The project will have significant benefits to all Rhode Island citizens. The education center and its programs will be cutting-edge and an invaluable resource. As Save the Bay's new headquarters, the center will house the organization's staff of 34 and will bring new life to the waterfront area that has been void of activity for many years. The project will also create public access to Narragansett Bay for nearby residents as well as for the greater Rhode Island community.

Vermont Communities Receiving Federal Brownfields Program Financial And Technical Assistance



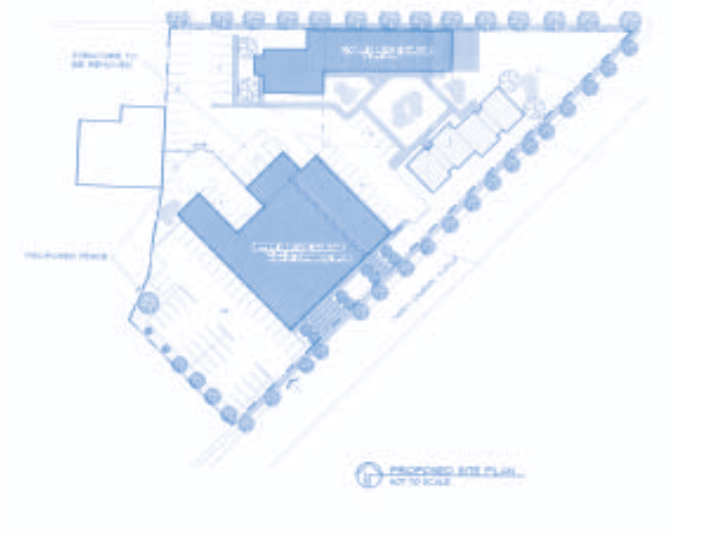
Vermont Bus Barns Project

Success in Brownfields Assessment Grant Program
Burlington, VT

The property at 343 North Winooski Avenue in Burlington, Vermont (also known as the "Vermont Transit Bus Barns" property) was successfully redeveloped as part of Burlington's work with the EPA Brownfields Assessment Grant Program. In 1996 Burlington's Community and Economic Development Office received $200,000 in funding from EPA's Brownfields Program. In both 1998 and 2000, Burlington was recognized as a finalist in the National Brownfields Showcase Communities competition and has received a total of $300,000 in supplemental funding.

Work on the N. Winooski Avenue site commenced in fall of 1998. Completion of the entire project is anticipated for September 2001. It is a highly visible, "gateway property" to Burlington's Old North End. This Enterprise Community is the most densely populated and lowest income area of the city. The property is 2.6 acres and had 40,000 square feet of enclosed space. The site has been continuously in use as a transportation center since 1885. In 1998, Burlington Rapid Transit Inc. owned the site and leased it to Vermont Transit, which is now owned by Greyhound. The facility engaged in routine activities such as oil changing, coolant flushing, washing of buses and parts, tire repair, engine reconstruction, and vehicle painting.

In 1999 Vermont Transit decided to relocate its operations and Burlington Rapid Transit Inc. sold the property to Burlington Community Land Trust (BCLT), a 501 (c)(3) non-profit development organization. BCLT controls the property in limited partnership with Housing Vermont as Bus Barns Housing Limited Partnership (BBHLP). BCLT also partnered with the city of Burlington as co-developer of the property. The Phase I environmental site assessment (ESA) was completed in fall of 1999 by ATC Associates and a full Phase II ESA was recommended. The assessments and development of the corrective action plan cost approximately $80,000. Using EPA Brownfields funds, Burlington paid $60,000 and BBHLP paid the balance. All remediation work has been and will continue to be paid for by BBHLP. Contaminants included asbestos, petroleum hydrocarbons, and a variety of compounds commonly associated with fleet maintenance and repair. Concrete slabs and the contaminated soil were removed from the site by SD Ireland. Ongoing work includes asbestos abatement, interior wall cleaning, and additional soil remediation.



The site had three principle structures; two historic brick barns and one steel-frame garage. The historic brick barns were renovated while the steel-frame garage was demolished to provide greenspace. One barn was converted into affordable apartments. Combined with a newly constructed building, 25 rental units of permanently affordable housing will be created. Burlington is currently experiencing an extreme housing shortage. In 2000, the rental vacancy rate was approximately 0.3%. Over the last 10 years, an average of only 32 new rental units per year have entered the market. The new housing at the Bus Barns site was fully funded by sources including Vermont Housing and Conservation Board, the city of Burlington, and Low-Income Housing and Historic Tax Credits.

The second brick barn was converted for commercial space. One occupant is the Good News Garage, which provides donated cars to low-income families for the cost of repairs only. The garage also includes a training program for low-income people interested in becoming mechanics. There are also several associated projects involving the Department of Public Works through a grant from the Metropolitan Planning Organization aimed at improving public safety though redesigning and improving the streets and sidewalks in the area, changing traffic flow at a dangerous intersection, and enacting traffic calming measures.

New apartments

Former Burnham Property

Success in Assessment Grant Program
Southern Windsor County Regional Planning Commission Brownfields Reuse Project
Windsor, VT

The Southern Windsor County Regional Planning Commission (SWCRPC) has been awarded $350,000 by the EPA Brownfields Assessment Grant Program. SWCRPC used a portion of those funds to partner with the Town of Windsor, Springfield Regional Development Corporation, the Burnham Estate, Country Real Estate, and Lyme Investment Corporation to assess and clean up a property that once housed an old dump. An accounting firm is now located at that site, employing at least 8 people.

Traditional Management Company

The Burnham Property is located on Route 5 in Windsor, Vermont. The town of Windsor leased the property from the Burnham family and used portions of the property as a dump between 1936 and 1954. Few records exist regarding the amount and type of material processed at the former Windsor Town Dump. However, it was reported that the dump received industrial wastes during the years of operation. This material reportedly included cyanide wastes, cutting oils, and metal scraps from a machine tool company located in Windsor. In 1968, a private residence was built on the property. The residence is currently unoccupied.

In 1989, the Vermont Agency of Natural Resources (VTANR) performed a preliminary assessment of the site. In 1998, the United States Environmental Protection Agency (US EPA) contractor completed a site inspection of the Burnham Property. This inspection included collecting soil samples from the property and a water sample from the bedrock supply well. Two volatile organic compounds, 1,2-DCA and methylene chloride, were identified in water collected from the bedrock supply well at levels below the regulatory limits. The EPA categorized the contamination as attributed to on-site sources and recommended that no further federal remediation action be planned for the site.

The bedrock supply well was sampled again in 1999 by the VTANR. Low levels of the same VOCs were detected again. The VTANR performed a Phase I Environmental Site Assessment (ESA). The major findings indicated that the property should be connected to the municipal drinking-water system, future use of the area should minimize excavation in the former dumping areas, and that groundwater testing in the immediate vicinity of the dump should be performed.

Marin Environmental performed additional assessment activities and submitted the final Phase II ESA report on November 22, 2000. The purpose of the Phase II ESA was to determine if former dump activities had impacted soil and overburden groundwater on the property and to evaluate the lateral extent of buried materials in the dumping area. Site work completed last fall showed trace amounts of metals and levels of lead and arsenic slightly higher than State standards. It included drilling test borings on the property to confirm the location of the dump and installing four monitoring wells down gradient of the dumping area before the state of Vermont would take the site off of the active hazardous sites list. The recommendation was to connect the property to the municipal water system, or to test the current well again and to do some monitoring in the spring. The wells were retested the following spring and it was determined that the VOC concentrations had diminished.

The Country Real Estate of Hartland, VT entered into negotiations with Lyme Investment Company when the site was undergoing site assessment work. A purchase and sales agreement was signed the week after site work was completed on November 16, 2000, and the property was redeveloped to house Traditional Management Company, an accounting firm, employing at least 8 people.

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