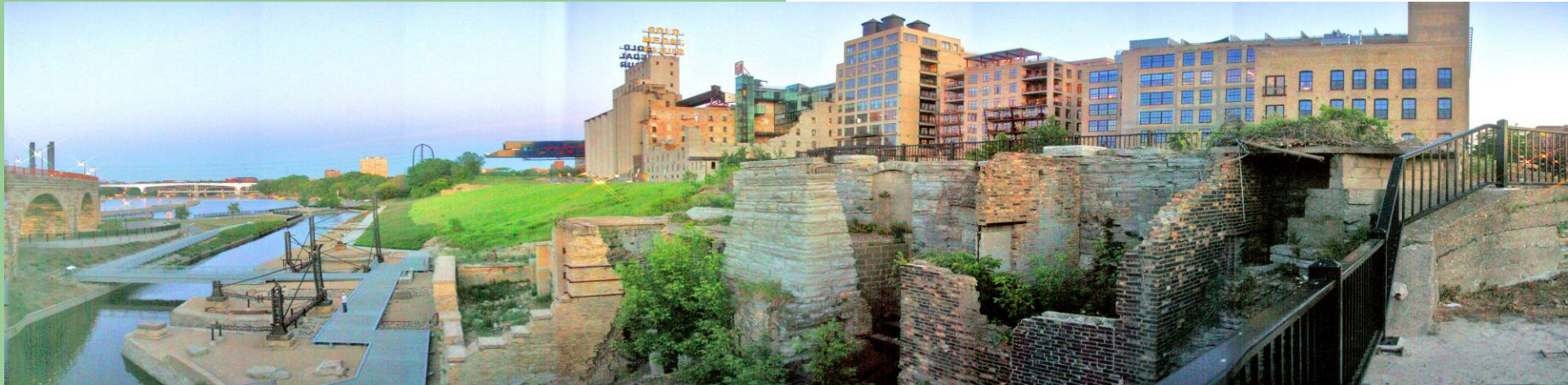


US EPA ARCHIVE DOCUMENT

How many Greener Cleanups



View of the Mill Ruins from the Stone Arch Bridge in Minneapolis

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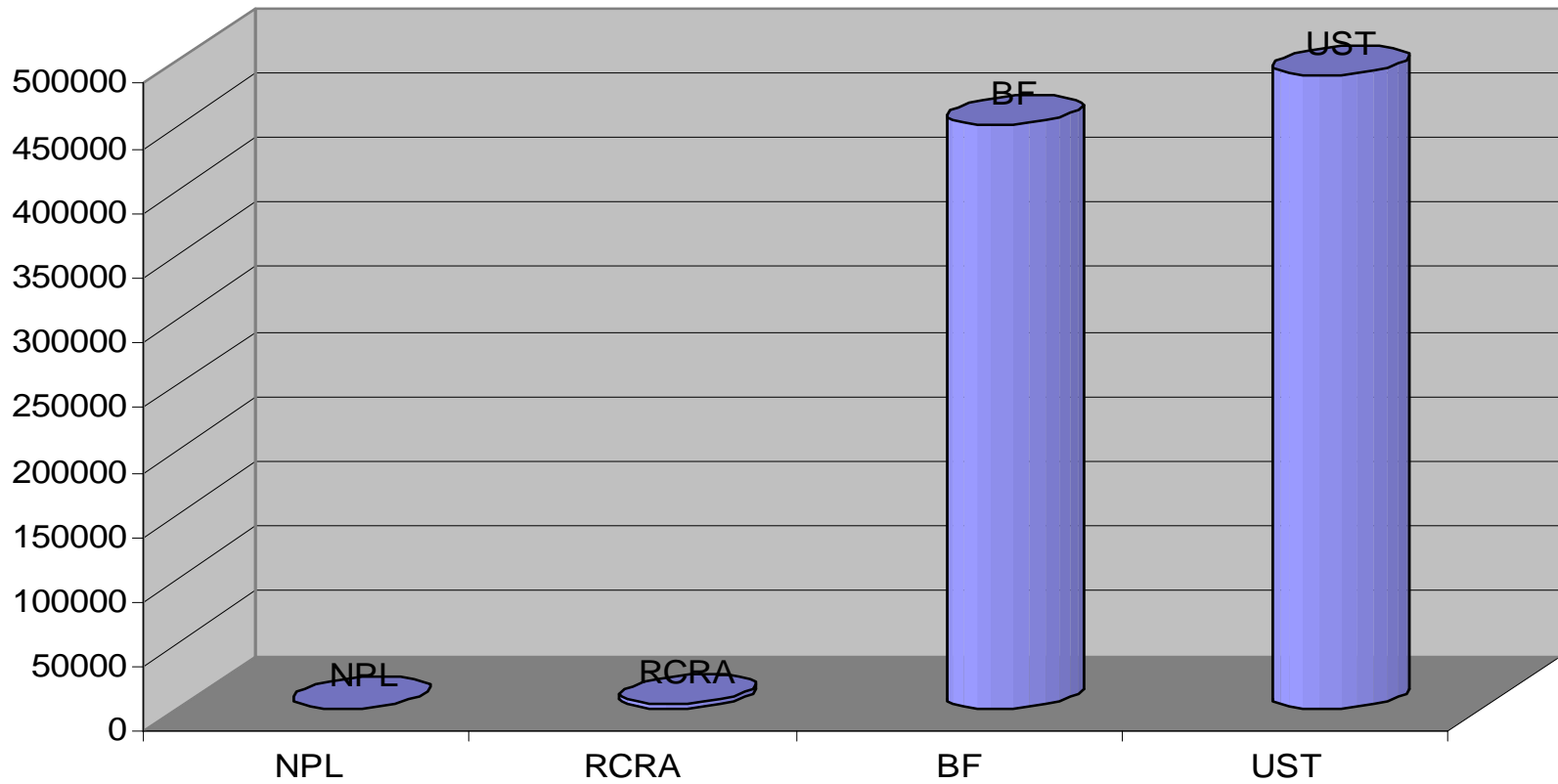
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Number of Cleanups



Brownfield Site Definition


- “...real property, the expansion, redevelopment or reuse of which may be complicated by the presence or potential presence of hazardous substances, pollutants, contaminants, controlled substances, petroleum or petroleum products, or is mine-scarred land.”



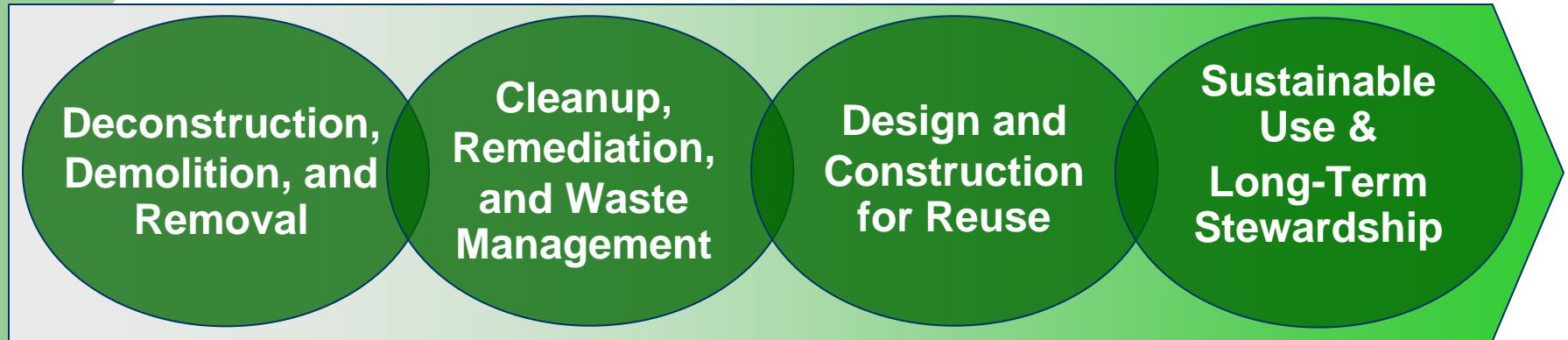
Abandoned Industrial Buildings in Paw Paw, Michigan

EPA's Office of Brownfields and Land Revitalization (OBLR)

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.



So, how do we “Green” Our Programs?



Use a systems approach; Look for environmental opportunities; identify and balance tradeoffs

Brownfields Proposal Guidelines support Sustainable Outcomes

- Describe environmental benefits, beyond remediation of contaminants, associated with sustainable redevelopment of sites under this grant including the use of existing infrastructure. Discuss how this grant will support EPA initiatives such as Construction and Demolition Materials Recycling, Low Impact Development and/or Green Remediation

What project elements are promoted by the Brownfields Program?

- Recycling and reuse of demolition materials
- Green building and infrastructure design
- Energy efficiency
- Water conservation
- Innovative storm water management
- Renewable energy development
- Native landscaping

Principles for Greener Cleanups

- 1) Total Energy Use and Renewable Energy Use
- 2) Air Pollutants and Greenhouse Gas Emissions
- 3) Water Use and Impacts to Water Resources
- 4) Materials Management and Waste Reduction
- 5) Land Management and Ecosystems Protection

Sylvan Slough Natural Area – Former Midway Oil Company in Rock Island, IL



Rock Island transformed a blighted industrial property on the Mississippi River into a Natural Area that incorporates native plantings, bioswales, permeable paving, among other things.



Buildings were surgically deconstructed to form the architectural features of the natural area and to reincorporate salvaged material into the landscape. Materials suitable for reuse onsite were separated from materials hauled to a landfill. Brick was ground up and used as permeable paths, and precast panels were removed intact to be used as risers and walkways.



The Natural Area is adjacent to the Great River Recreational Trail and offers views of the historic Sylvan Island, Arsenal Island and the Arsenal Power Dam.

Chicago Center for Green Technology - 445 North Sacramento in Chicago



The site was cleared of over 600,000 tons of concrete, which took 45,000 truck loads to remove. The city sold the concrete and other materials to recycling firms and to other city departments for use in their projects including crushed concrete that was reused in the construction of Millennium Park.



"The Chicago Center for Green Technology demonstrates environmentally sound design, uses clean, renewable energy, and is the home of both a green technology company and a community landscaping program," said Mayor Daley.

Mason Run Residential Redevelopment, Monroe MI

- Former corrugated box mfg on 185 acres
- Much of site covered with 1-2 feet of coal ash and cinders
- Total cleanup costs in excess of \$8M
- Phased residential redevelopment in “new urbanism” tradition



Innovative measures to reduce costs and “carbon footprint” of cleanup

- Recycled building foundations as base material for roads
- Cinder/ash fill encapsulated under road ROWs and green space
- Environmental and Health Benefits
 - Reduction in energy consumption, carbon emissions, and waste handling; less impact on air quality and local infrastructure.



New Urbanism Elements of Mason Run

- Front porches, alleyways and detached garages to promote neighbor interaction
- 10% set aside for walking paths and interconnected parks.
- Environmental and health benefits
 - Storm water mgmt
 - Aesthetic setting
 - Provides areas for walking & exercise



Former Ottawa Street Power Station Lansing, MI

- Coal-fired power plant constructed in 1930s and vacant for 10+ yrs
- Historic structure in both design features and appearance
- Wide-spread soil and ground water contamination from historical industrial and commercial operations in project area
- Hazardous building materials including asbestos and lead paint



Construction of “Linear” Park Along Grand River

- Funded primarily by CMI Waterfront Grant
- Minimized contaminated surface soil transported off-site by on-site containment
- Park will connect downtown with adjacent parks and returns public access and walkability to the riverfront



Greener Cleanup and Sustainability

- Deconstruction waste mgmt by diverting 7,000 tons of material away from landfills including 800 tons of steel and 600 tons of concrete
- Buildings will be LEED certified
- Attention to indoor air and environmental quality by using low VOC-emitting materials, maximizing day lighting and views, and thermal comfort
- Use of under floor air distribution system allowing temp control of individual work areas





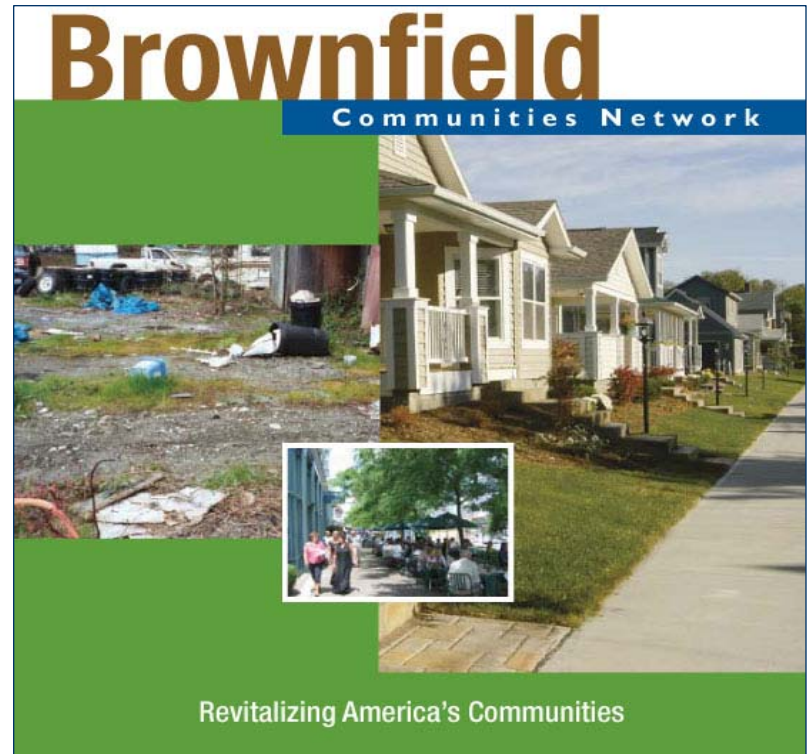
About NALGEP

- The National Association of Local Government Environmental Professionals provides our members with:
 - Peer to peer learning opportunities,
 - Training and technical assistance,
 - A voice in Washington, and
 - Information on environmental policies, tools, and information.
- Spiegel & McDiarmid: A mid-sized, Washington, DC-based law firm provides staff and management to NALGEP.

Brownfield Communities Network

Join Today!

- Network of over 1200 individuals
- Membership is free!
- Funded by a grant from U.S. EPA



Brownfield Communities Network Activities

- Workshops, Conferences and Web Casts
- Topics We Have Addressed:
 - Liability and Acquisition of Brownfields
 - Brownfields and Sustainability
 - Small Sites
 - Green Remediation
 - Renewable Energy on Brownfields Sites

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