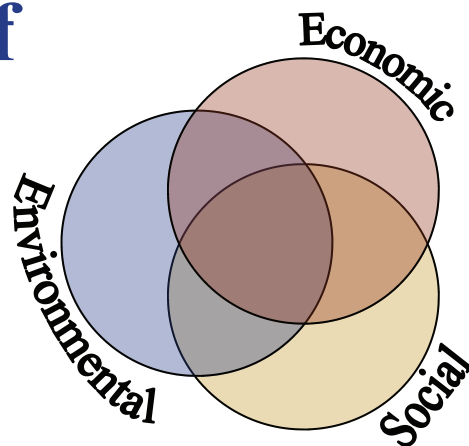


The Triple-Bottom Line of Sustainable Development:

Tools for Implementing Sustainable Reuse Practices for Brownfields Redevelopment

Prepared for the FY09 ARC Guideline Information Sessions - September 2008



SUSTAINABLE REUSE AND BROWNFIELDS REDEVELOPMENT IN NEW ENGLAND

To maximize the long-term benefits of a brownfields project, it is important to consider its environmental, economic and social sustainability. The choices made in planning, design, and materials and methods can have many short and long-term implications that will affect your community, your environment, and the success of your project.

Resources to Achieve Sustainability Goals

The following are links to general sustainability guidance:

EPA Region 1 Sustainable Practices Website

<http://www.epa.gov/region1/topics/envpractice/index.html>

EPA Brownfields – Sustainability and Public Health Publications

<http://www.epa.gov/brownfields/publications/sph.htm>

“Sustainable Reuse of Brownfields” informational pamphlet

http://www.epa.gov/swerosps/bf/policy/BF_Sustain_Trifold.pdf

"Path to Brownfields Assessment, Cleanup and Sustainable Redevelopment" diagrams

http://www.epa.gov/brownfields/publications/PathDiagram_WEB2.pdf

The following are links to green building and infrastructure resources:

"Design Principles for Stormwater Management on Contaminated Soils" publication

<http://www.epa.gov/brownfields/publications/swdp0408.pdf>

"Case Studies of Stormwater Management on Contaminated Soils" publication

<http://www.epa.gov/brownfields/publications/swcs0408.pdf>

EPA LID Website

<http://www.epa.gov/owow/nps/lid/>

EPA Greenscapes Program

<http://www.epa.gov/GreenScapes/>

EPA Green Building Website

<http://www.epa.gov/greenbuilding/>

U.S. DOE - Energy Efficiency and Renewable Energy

<http://www.eere.energy.gov>

U.S. Green Building Council

(the source for LEED certification information)

<http://www.usgbc.org>

Resources to Achieve Sustainability Goals (cont.)

The following are links to information on improving the sustainability of remediation activities:

EPA "Green Remediation" Primer

www.clu-in.org/download/remed/green-remediation-primer.pdf

Cleanup - Clean Air, Diesel Emissions & Greenhouse Gas Reductions

<http://epa.gov/region09/cleanup-clean-air/cca-fs-brownfields-9-5-07.pdf>

Smart Energy Resources Guide

(a tool for remediation managers to help assess and implement technologies and practices)

<http://www.epa.gov/nrmrl/pubs/600r08049/600r08049.htm>

Triad Resource Center

(technically defensible methodology to manage cleanup decision uncertainty, using innovative tools and strategies)

<http://www.triadcentral.org/>

The following are links to resources on sustainable planning practices:

Database for State Incentives for Renewables and Efficiencies (DSIRE)

<http://www.dsireusa.org/>

U.S. EPA - Eco Tools: Tools for Ecological Land Reuse

<http://clu.in.org/products/ecorestoration>

EPA Smart Growth and Water – Resources and Tools

<http://www.epa.gov/watertrain/smartgrowth/resources/index.htm>

Smart Growth Network

<http://www.smartgrowth.org>

Massachusetts Smart Growth/Smart Energy Toolkit

(contains good information for projects outside of MA as well)

<http://www.mass.gov/envir/sgtk.htm>

U.S. EPA New England Smart Growth Program

<http://www.epa.gov/region1/ra/sprawl/index.html>

U.S. EPA - Reducing Stormwater Costs through Low Impact Development (LID) Strategies and Practices

<http://www.epa.gov/owow/nps/lid/costs07>

WHAT HAS BEEN IMPLEMENTED ON BROWNFIELDS SITES IN NEW ENGLAND?

Reduction of Resource Consumption

infrastructure reuse, recycling or sale of unneeded materials from the site, innovative stormwater management/reuse, construction debris/fill reuse, green building and/or energy efficiency building standards, clean/renewable energy use in cleanup of the site, rain barrels, natural landscaping, utilization community recycling programs, local green/open space initiatives/preservation, and building energy codes, ecological revitalization

Pollution Prevention

native landscaping, innovative stormwater management/reuse (LID), green building and/or energy efficiency building standards (LEED, Energy Star, etc.), green roofs, rain gardens, incorporation into community stormwater management plan and recycling activities, links to green infrastructure, pedestrian and bike access, public transit access

Economic Sustainability

leveraged investment, job creation, green building cost benefits, green tax credits, job creation, an expanded tax base, enhanced property values through adjacent green space creation, support of traditional economic activities, improved tenant/owner attraction and retention

Sustainable Communities

smart growth, linked recreational and park areas, affordable housing, pedestrian and bicycle access, historic and cultural preservation, public transportation access, preserve/create public access to water and other natural resources, inclusion of local cultures and traditions, stakeholder involvement, incorporation into community planning goals, inclusion of neighborhood association goals, reduced exposure to hazardous materials and/or abandoned property hazards, outreach and education