Brownfield Reuse

What is it?
A “Brownfield site” is defined by Federal law as “… real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant.” Brownfield sites include all real property, including residential, commercial and industrial properties. North Carolina, for the purposes described in the Brownfield Program, defines a brownfield as “an abandoned, idled, or underused property where the threat of environmental contamination has hindered its redevelopment.” The Voluntary Cleanup Program in South Carolina defines a brownfield as “an abandoned, idled, or underused industrial or commercial facility, where expansion or redevelopment has been complicated by real or perceived environmental contamination.”

The goal of brownfield reuse is to regain community benefit from pieces of property that because of contamination, represent a loss to the community.

Shared Impact and Benefits
- Cleaning up brownfields changes the way the property is perceived, addressed, and managed—and opens up new possibilities for community revitalization in areas that often need it most.
- Removing pollutants reduces the risk of community health issues arising from known or unknown health impacts.
- Cleaning up and reinvesting in these properties increases local tax bases and facilitates job growth.
- Most brownfields sites are served by existing infrastructure, so their redevelopment may save these costs.
- Brownfields re-use takes development pressures off of undeveloped, open land, and both improves and protects the environment.
- Programs in the Carolinas offer tax incentives to eligible property owners who complete the clean up or “safe-making” actions outlined in an original agreement.
- Speaking at the signing of the new CERLA brownfield legislation in 2002, President Bush noted that “every acre of brownfield that is redeveloped saves 4.5 acres of open space.”

How long does this take to implement?
- Timing varies depending on the work required per site Federal programs allow up to three years to clean up a site.
- Community assessments can take two years.
- “A brownfield project is really just a real estate redevelopment with a number of additional issues that add to the complexity of the project.” Jeff Finkle, Brownfields Redevelopment Manual: Chapter IV, IEDC

Costs
Costs vary but brownfield clean up and redevelopment is expensive. Each step of the development process takes longer than normal.

The Bottom Line
Brownfields redevelopment takes time and money, and is not as quick or easy as new development in greenfields. However, it pays big benefits in terms of a safer environment, job creation, open space preservation, and community revitalization.
Who needs to be involved in implementation?

- Governing Board must support the program
- General Contractors and Developers
- Community groups
- Environmental groups
- Citizens
- Planners and Economic Developers

Action Steps

1. Investigate EPA's Brownfields Program (www.epa.gov/brownfields), 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. It is estimated that there are more than 450,000 brownfields in the U.S. Cleaning up and reinvesting in these properties increases local tax bases, facilitates job growth, utilizes existing infrastructure, takes development pressures off of undeveloped, open land, and both improves and protects the environment.

2. Be aware that brownfield redevelopment is complicated by legal liability questions, cost issues, and remediation agreements. The enactment of the federal Small Business Liability Relief and Brownfields Revitalization Act, provided new tools for the public and private sectors to promote sustainable reuse of contaminated sites. It outlines environmental liability and delineates jurisdictional control, and is another good resource to check out before proceeding with program implementation.

3. Communities can start their brownfield program by assessing the location, condition and number of brownfields in the jurisdiction. Assessment grants from the Environmental Protection Agency (EPA) provide funding for a grant recipient to inventory, characterize, assess, and conduct planning and community involvement related to brownfield sites. An eligible entity may apply for up to $200,000 to assess a site contaminated by hazardous substances, pollutants, or contaminants (including hazardous substances co-mingled with petroleum) and up to $200,000 to address a site contaminated by petroleum.

4. Grants to clean up brownfields are available from the EPA to non-profit corporations that own brownfield properties. Grants are awarded through a competitive process.

5. The Brownfield Program in North Carolina is market-driven, aimed at owners of brownfield sites, that were not responsible for the contamination and that intend to redevelop the site.

6. The process starts when a prospective developer sends a Letter of Intent to the North Carolina Department of Environment and Natural Resources. The Department must determine if the project is statutorily eligible for the program.

7. A Brownfield agreement provides site owners with a covenant not-to-sue contingent on the developer making the site suitable for a specific reuse. The agreement provides both site-specific actions to make the site suitable for reuse and an agreement not to sue.

8. North Carolina does not offer funding but the Brownfield Agreement includes property tax abatement on the improvements made to the property for a period of five years.

9. Other decontamination programs are available in North Carolina for property owners responsible for site contamination.

10. In South Carolina, the Brownfields component of the Voluntary Cleanup Program (VCP), enacted in May 2000, allows a non-responsible party to acquire a contaminated property with State Superfund liability protection for existing contamination by agreeing to perform an environmental assessment and/or remediation. The amount of environmental work is site specific and dependent on the intended future use of the site.

11. Once South Carolina and a non-responsible party have agreed upon an approved scope of work for a site investigation and/or remediation, the party enters into a voluntary cleanup contract. The State oversees the cleanup efforts and upon completion of the negotiated work in the voluntary cleanup contract, the non-responsible party receives State Superfund liability protection.

12. The first step in entering into the VCP as a non-responsible party is to fill out an Information and Certification form, available from the South Carolina Department of Health and Environmental Control.

13. Financial incentives are available in South Carolina for non-responsible parties who have entered into the VCP. Those incentives include: State corporate income tax credit for expenses incurred by a taxpayer in cleaning up a site; Jobs tax credit in the amount of an additional $1000 per job; Property tax exemption, with county concurrence; and Fees in lieu of property taxes, with a $1 million threshold minimum.

14. After financing and appropriate approvals are in place, clean up can occur, and redevelopment plans put into place. Brownfields redevelopers should engage local planning staff very early in the process to ensure that all local planning and environmental (stormwater management, etc.) requirements are met.
Resources

- The SC Department of Health and Environmental Control offers programs and information at their website, for SC residents and property owners. [http://www.scdhec.gov/environment/Lwn/html/grants_recip.htm](http://www.scdhec.gov/environment/Lwn/html/grants_recip.htm)
- In NC, the Department of Environment and Natural Resources administers the Brownfields program. The NC Brownfields Program encourages the reuse of abandoned properties that have some measure of environmental impairment. Under a “brownfields agreement” with a prospective developer, NCDENR defines the necessary cleanup and land management actions, and the prospective developer receives liability protection that allows him/her to obtain previously unobtainable loans for the project. In doing so, the program serves as a tool to turn these abandoned properties into productive use rather than building in a green-space area and contributing to urban sprawl. Program information available at [www.ncbrownfields.org](http://www.ncbrownfields.org)
- The US Environmental Protection Agency offers a wealth of information about grants at their brownfield website, [www.epa.gov/brownfields](http://www.epa.gov/brownfields)
- The federal Department of Housing and Urban Development (HUD) offers a Brownfields Economic Development Initiative (BEDI), a loan guarantee program, that HUD administers to stimulate and promote economic and community development. CDBG entitlement communities and non-entitlement communities are eligible to receive loan guarantees. Information at [www.hud.gov/offices/cpd/economicdevelopment/programs/bedi/index.cfm](http://www.hud.gov/offices/cpd/economicdevelopment/programs/bedi/index.cfm)
- In Charlotte, NC, the City of Charlotte Economic Development Office assists business, property owners and developers with redevelopment projects throughout the city. The City encourages and assists redevelopment of brownfields. Information is available at [www.co.mecklenburg.nc.us/Departments/Economic+Development/Redevelopment/Brownfields.htm](http://www.co.mecklenburg.nc.us/Departments/Economic+Development/Redevelopment/Brownfields.htm).
- Catawba Regional Council of Governments assists its local governments with Brownfields issues that hamper redevelopment. CRCOG provides professional services from grant writing to project management and is the Brownfields Revolving Loan Fund administrator for the state of SC. This $4.75 million loan pool provides capital to facilitate the removal and clean-up of brownfield sites. Program information available at [www.catawbacog.org](http://www.catawbacog.org).

Who’s doing this?

- The Brownfields Assessment Program in Raleigh, NC, is designed to fund environmental assessments. The previous Raleigh Brownfields Assessment Program focused on the Garner Road Industrial Area (GRIA). A total of eight Phase I assessments, three Phase II assessments and a wetlands assessment were completed.
- The industrial center of St. Louis, like those of many older jurisdictions, is composed of city blocks occupying two to three acres. Since industrialists now tend to build out rather than up, cities need to assemble and prepare ready-to-build sites ranging from two to ten acres in size if they are going to compete for plants with greenfield locales. As Mayor Bosley emphasized, "No business is going to spend the time and money to (acquire and clean sites) even if they prefer the hub location of the city." St. Louis spent $7.6 million to assemble a 50-acre industrial park; this translates into $6.00 per square foot for ground valued at $1.50 per square foot.
- One of Charlotte’s first forays into tackling brownfields was in 1994, when the City of Charlotte was working to assemble land in the center city to site a football stadium for the City’s NFL Carolina Panthers Franchise. The City was able to assemble 13.4 acres for the stadium and practice fields, but in doing so found that several acres of the land were identified as a State Superfund site. The land contained high levels of Lead and PCB contaminants. Knowing the site was contaminated, the City agreed to buy it at $13 per square foot, yet made arrangements with the seller that money to clean up the site would come out of the purchase price, which ended up dropping the purchase price to approximately $10 per square foot. The City retained about four acres and after the development of the stadium, property values rose. The City, remediating the four acres for approximately $1.8 million, sold the property and netted $4.8 million, while putting an additional four acres of prime Center City real estate back on the tax roll.
- The City of Concord received a $200,000 grant from the EPA to address high-priority sites within its economically distressed city center. The city has identified more than 275 sites within the 5,500-acre center of the target area.
- The City of Rock Hill has a strong brownfields program, with primary emphasis in its Old Town area—1 ½ mile radius incorporating downtown. Recent initiatives include redevelopment of the Highland Park Mill, demolition and clearance of the Arcade Mill, completion of the Hagins-Fewell Neighborhood Master Plan and implementation of the Textile Corridor Master Plan. Program information available at [www.oldtownrockhill.com](http://www.oldtownrockhill.com).
Basic Information

Barriers to brownfield reuse: In many places, “developers and investors, cautious of environmental liability, have shied away from brownfield sites. Contaminated properties, which are subject to many environmental regulations and procedures, also are vulnerable to costly construction delays. Pollution concerns have led developers to pass up opportunities in urban centers for ones in rural and suburban areas (a.k.a. greenfields) where land is perceived to be less expensive and free from unknown liability.” (p.2, Brownfield Basics, An Issue Primer, Northeast Midwest Brownfield Institute, 2001)

The following example illustrates the expense of brownfield reuse. Table compares the costs of a brownfield redevelopment project versus new greenfield construction. They were provided by J. Duncan Shorey, a real estate consultant active on brownfield issues in Cleveland. Table 1 is a hypothetical example, a composite based on several projects that Shorey advised.

Programs in the Carolinas have been developed to address the concerns about liability and increased cost. In conjunction with the USEPA’s Brownfields Initiative, SC DHEC established a Brownfields Program under the SC Voluntary Cleanup Program (VCP). The process starts with an application to SC DHEC and includes a 60 day public comment period. www.scdhec.gov/environment/LWn/html/grants_recip.htm

The NC Brownfields program (Brownfields Property Reuse Act of 1997) encourages third party investors to purchase property and restore it to productive use. The responsible party (party that caused or contributed to the contamination) remains legally liable for additional cleanup of the property and is not eligible to enter into a brownfields agreement. Investors in brownfield properties do not assume the full liability for the contamination caused by the previous owner. They assume only the liability specified in the brownfields agreement negotiated with the NC Department of Natural and Environmental Resources (DENR).

Often, the environmental liability of the property is a barrier to obtaining financing for redevelopment of neglected, contaminated property. The developer can apply to the NC

Table
Hypothetical Project Comparison
Brownfield vs. Greenfield
Assumptions for All Projects: 20 acres
Building Space: 261,360 sq. ft. (10% office)

<table>
<thead>
<tr>
<th>Expenses</th>
<th>Brownfield Sites</th>
<th>Greenfield Sites</th>
</tr>
</thead>
<tbody>
<tr>
<td>Site Acquisition</td>
<td>$500,000</td>
<td>$500,000</td>
</tr>
<tr>
<td>Legal and Consulting (including site assessment)</td>
<td>100,000</td>
<td>350,000</td>
</tr>
<tr>
<td>Remediation</td>
<td>500,000</td>
<td>5,000,000</td>
</tr>
<tr>
<td>Project Construction</td>
<td>7,056,720</td>
<td>7,056,720</td>
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<tr>
<td>Other &quot;Core Area&quot; Costs</td>
<td>100,000</td>
<td>200,000</td>
</tr>
<tr>
<td>Total Costs</td>
<td>$8,256,720</td>
<td>$13,106,720</td>
</tr>
<tr>
<td>Difference: Brownfield vs. Greenfield Total Costs</td>
<td>-$35,000</td>
<td>+$4,815,000</td>
</tr>
</tbody>
</table>

FAQ’s

Q. Why the interest in redeveloping brownfields?
A: When brownfields sit idle, everybody loses. Neighbors face environmental worries and reduced property values. Cities see roads, sewers, and other infrastructure underused. New business, seeking out "greenfields" or undeveloped land, encourages sprawl. And brownfield owners must deal with a long list of worries—from potential lawsuits to deriving too little income from their property. When owners or developers clean up brownfields and put them to new uses, many people benefit. Cleanups address environmental problems. Redevelopment can bring new jobs and higher tax revenues. Revitalized brownfields can breathe new life into neighborhoods. Brownfields offer opportunities that go beyond their old uses. Developers have transformed brownfields into everything from golf courses and driving ranges to mixed developments with housing, offices, shopping, and open space. Smaller properties have found new life as bakeries and greenhouses. In short, many uses may be open to a clean site. "Many communities, businesses, and environmentalists agree that brownfield redevelopment is worth encouraging. As a result, a variety of private and public sector guidance and incentives have been developed to encourage brownfield redevelopment. Redevelopment is seldom easy or risk-free. But if done right, redevelopment can bring special rewards: peace of mind, income, and a cleaner environment." (The Brownfields Center at the Environmental Law Institute in Washington, D.C., www.brownfieldscenter.org/big/about.shtml)

Q. What is a greenfield?
A: Greenfields are undeveloped lands such as farmlands, woodlands, or fields located on the outskirts of urbanized areas. Businesses often prefer to develop new facilities on greenfields to avoid the real or perceived difficulties associated with brownfields redevelopment. The Brownfields Center at the Environmental Law Institute in Washington, D.C., www.brownfieldscenter.org/big/about.shtml

Q. What are the benefits of brownfield redevelopment?
A. Benefits to the community:
- Eliminating health and safety hazards
- Eliminating eyesores
- Bringing new jobs into the community
- Bringing new investment into the community
- Increasing the productivity of the land
- Increasing property values and tax receipts by local and state governments (the effects of increased property values on poor residents may, however, need to be mitigated)
From The Brownfields Center at the Environmental Law Institute in Washington, D.C., www.brownfieldscenter.org/big/about.shtml

Q: Why do some owners leave a brownfield property in its current condition?
A: Many brownfield owners are satisfied with leaving their properties in their current condition. In some cases the neighborhood property values may seem too low to justify any sort of investment in the site. In other cases, the level of contamination is so slight that it seems unlikely to harm anyone. A property owner who decides to do nothing should be sure that the decision is based on a full understanding of the situation. Unfortunately, many owners may not have full information or analyze all the implications of leaving a brownfield as is. Community members may be able to convince an owner to reconsider the decision to let the property sit, but the owner may resent
Intersecting Interests

GREENWAYS/OPEN SPACE
A number of industrial uses were sited adjacent to streams or rivers, where there was a good supply of water and/or a good place to discharge waste. A number of brownfields sites therefore offer the potential for development of riparian buffers, parks and greenways, adjacent to the redeveloped industrial building itself. This, in turn, provides the benefits of natural buffers and preserved open space, particularly important in more urban settings.

WATER SUPPLY/WASTEWATER PLANNING
Many brownfields are served by existing water and sewer infrastructure. In many cases, the sites are well-served with higher capacity lines, because they are centrally-located. This means that redevelopment can make use of this infrastructure without the need to add capacity in greenfields—which are generally located in areas where the lines are smallest and have least capacity. In short, brownfields redevelopment can save the need for water or sewer line expansion and make best use of existing resources.

CONNECTIVITY FOR MULTI-MODAL TRANSPORTATION
Many older brownfields were sited for ease of pedestrian or transit access, it being understood that most of the workers did not own cars. These sites therefore come with “built-in connectivity” to surrounding uses, making it easier to include multi-modal transportation in site redevelopment planning.

INFILL DEVELOPMENT/REDEVELOPMENT
Because many brownfields sites are old mills or industrial sites around which communities grew, they represent excellent opportunities for infill development or redevelopment. Creating a mixed use or office and retail center in an old mill (similar to the development of The Cotton Exchange in Wilmington, NC) can create an economic development focal point for an older downtown.

For More Information
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**Basic Information**  
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Department of Environment and Natural Resources (DENR) for a brownfields agreement; DENR reviews the project for eligibility under the state brownfields statute. If the project is eligible, DENR outlines actions necessary to make the site safe in a brownfield agreement; or if more data is needed, DENR helps the developer conduct additional assessments of the site.

North Carolina DENR staff negotiates a Brownfields Agreement with the developer, that provides liability protection as well as defines certain aspects to be performed (including cleanup and/or land-use restrictions). After 60 days of public comment, the brownfield agreement is signed and recorded on deed. Once the improvements are made to the property, the developer is eligible for property tax incentives. (Information from NC DENR)

**FAQ’s**  
(Continued from Page 5)

such an intrusion. In particular, the owner should look at possible liabilities for environmental contamination. Even potential liability can affect a business, making it harder to get credit or raise equity for projects not directly related to the brownfield. Also, a property owner who is letting a brownfield sit idle should make sure that things are not about to get worse. If the site is posing a health or environmental threat to neighbors, delay could lead to bigger injuries and bigger liabilities. On a site bad enough to justify government attention, an owner who waits may be inviting cleanup on expensive terms dictated by the government, possibly with years spent with attorneys arguing over the process. In such a situation both the owner and the community may lose as the cleanup is likely to take longer, be more expensive, and not be coordinated with redevelopment options. Even when cleanup appears to be a losing proposition, prompt cleanup may make sense as a way for an owner to cut losses. (Excerpted from The Brownfields Center at the Environmental Law Institute in Washington DC, www.brownfieldscenter.org/big/about.shtml).

**Q:** Specifically, what can be done about getting rid of vacant gas stations?

**A:** EPA offers grants for non-profit or public owners of vacant gas stations to help pay to assess the property and to help pay for cleanup. The grant is competitive and requires a viable end use of the site. A recent report entitled *Recycling America’s Gas Stations* found the best approach to reuse for vacant gas stations was to develop a site reuse plan that included remediation and reuse of the site rather than focusing solely on clean-up of the site.

Local governments must strongly support brownfield development to promote the reuse of expensive, marginal sites. For example, the developer of an inner-city Cleveland parcel (who converted an industrial warehouse site into a small neighborhood shopping center) spent nearly $225,000 per acre for site testing, remediation, and preparation; he estimated that similar activities for a comparable project at a suburban greenfield site would have cost only $40,000 per acre. In this case, however, strong support from the city encouraged him to proceed. (Example quoted from “Coming Clean for Economic Development”, 1996 by Northeast-Midwest Institute).

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**Tracking Progress**

Let CCOG know when you have implemented this action by calling 704-372-2416 so that we may document regional progress on this item and results.