

Cleanup Options for Florida's Brownfields

Keith Ihlanfeldt

Background

Industrial and commercial properties that are abandoned, idled, or under-used whose redevelopment is hampered by actual or perceived environmental contamination are pejoratively referred to as "brownfield sites". In most cases, the soil and groundwater of brownfield sites are contaminated by toxic waste spills that may have occurred many years ago. Within Florida there are 73 state-designated brownfield areas, representing 70,461 total acres of land. These areas, which qualify for state financial and regulatory incentives, must first be designated a brownfield area by a local government adopting a resolution. Another list of brownfield sites within Florida is provided by the U.S. Environmental Protection Agency (EPA). The EPA counts 599 sites as brownfields, 51 of which are on the National Priority List (NPL). The NPL are those sites that the EPA considers "severely" contaminated.

Due to growing concerns surrounding urban sprawl, the redevelopment of inner-city brownfield sites has become a major policy objective of many states. Within Florida this objective carries additional importance for two reasons. First, Florida's reliance on groundwater for over 90 percent of its drinking water poses the risk that brownfield contamination will pollute the aquifer, which would threaten this precious resource. Second, the state's economy is highly dependent on tourism, which could be jeopardized if brownfield contamination reduced the quality of Florida's lakes, rivers, and coastal waters.

To spur the cleanup of brownfield sites, in 1997 the Florida Legislature established the Florida Brownfields Redevelopment Program (FBRP). The centerpiece of this program is a voluntary cleanup tax credit of up to 35 percent of the cost of site remediation not to exceed \$250,000 per site per year. The credit can be claimed against either the corporate income tax or the intangible personal property tax. Early last year the FBRP was unfavorably reviewed by the Legislature's Office of Program Policy Analysis and Government Accountability. This review concluded that current state incentives are insufficient to induce interested parties to cleanup and develop brownfield sites, based in part on the finding that only two sites had been cleaned up between the time that FBRP was launched in 1997

and the end of 2001. According to the FBRP 2002 Annual Report, six additional brownfield sites were remediated in 2002, bringing the number of cleaned up sites to a total of eight. However, given the large number of brownfield sites that exist within Florida, the case can still be made that the financial incentives offered by the state of Florida for cleanup and redevelopment are insufficient to have much of an affect on its brownfields problem. Florida is not alone in the inadequacy of its brownfield funding – a survey of 231 cities ranked lack of funding as the biggest obstacle to brownfield remediation and redevelopment for three years in a row.

Brownfield Sites Reduce Surrounding Property Values

Recently published research by DeVoe Moore Center Director Keith Ihlanfeldt provides evidence that many brownfield sites can be cleaned up without expanding the state's budget. This research, which utilized data from Atlanta, Georgia, found that the contamination of brownfield sites significantly reduces the values of surrounding commercial and industrial properties. The data were rich enough to implement an empirical methodology that separated out the spillover effects of environmental contamination from other possible spillovers from brownfield sites, such as air and noise pollution.

Why might proximity to a brownfield site reduce the amount that investors are willing to pay for commercial and industrial real estate? Because they may fear that the contaminants on brownfield sites may migrate to surrounding properties, evaporate and foul nearby air quality, or create a hazard to those who inadvertently cross property boundaries.

Tax Increment Financing

Because brownfield sites reduce surrounding property values, cleaning up the contaminants on these sites should cause surrounding property values to rise. The key finding of Ihlanfeldt's research is that for most brownfield sites the aggregate increase in nearby property values is sufficiently large that private cost-sharing or tax increment financing (TIF) can be used as cleanup options. In a TIF program the local government would issue bonds in an amount sufficient to fund cleanup efforts at a contaminated site. The tax revenue to repay the bonds would come

from the increased tax revenue associated with the incremental increases in property values surrounding the brownfield site post-cleanup. If TIF is to be feasible, the expected increase in property values surrounding a site post-remediation have to be of a magnitude sufficient to pay the annual debt service and to repay the bonds at their maturity. This condition is most likely to be met within inner city areas where brownfield sites are surrounded by many nearby commercial and industrial properties. In Atlanta, assuming a remediation cost of \$1 million, 55 percent of the total number of brownfield sites were found by Ihlanfeldt to be candidates for remediation financing with 5-year bonds. The use of 15 and 30 year bonds would enable the percentage of all brownfield sites that could be cleaned up to rise to 73 and 80 percent, respectively. (These calculations all assume the municipal bond interest rate is equal to 6 percent).

Private Cost-Sharing

An alternative to TIF as a brownfield cleanup strategy is to make surrounding property owners aware of the capital gains that they could experience from the cleanup of a nearby brownfield site. Then local government or a community development corporation could work toward bringing together affected property owners into a private cost-sharing arrangement. The question might be raised why government needs to be involved if nearby property owners are aware of the spillover benefits resulting

from cleanup. Bargaining between nearby property owners and the owner of the brownfield site might result in a cleanup deal being struck, but this becomes less likely when a relatively large number of property owners are affected by the contamination. Ihlanfeldt's findings suggest that the negative externality effects of brownfield sites can extend outward to properties as far away as a mile and one-half. Bringing together relatively large numbers of affected parties into a cost-sharing agreement would require some form of government intervention.

Given the dire budgetary situation within Florida and the importance of cleaning up its brownfield sites, this policy brief has offered a strategy for cleanup that would place the burden of cleanup costs on those parties that would most directly benefit. TIF financing and government's facilitation of private cost-sharing merit consideration as clean up options of Florida's numerous brownfield properties.

Keith Ihlanfeldt is Director of the DeVoe Moore Center, the DeVoe L. Moore Eminent Scholar, and Professor of Economics at Florida State University. This policy brief is based on his forthcoming article "Externality Effects of Small-Scale Hazardous Waste Sites: Evidence from Urban Commercial Property Markets" (with L. Taylor), *Journal of Environmental Economics and Management*.

The DeVoe L. Moore Center at Florida State University is dedicated to increasing knowledge about how government rules, regulations, and programs affect the economy and individuals. The study of state and local regulations is a major focus of Center's program. For more information visit our home page at www.fsu.edu/~policy. If you would like to be put on our mailing list, contact the Center by phone or e-mail us at sihlanfe@mail.fsu.edu.

DEVUE L. MOORE CENTER
150 BELLAMY BUILDING 2220
THE FLORIDA STATE UNIVERSITY
Tallahassee, FL 32306-2220
Telephone: (850) 644-3848 • Fax: (850) 644-0581
www.fsu.edu/~policy