Land Recycling and Other Specialized Techniques

Industrial development left wastelands in almost every community throughout Pennsylvania. These areas of abandoned industrial sites are called brownfields. Usually located along rivers and transportation corridors, these sites are a testimony to a rich industrial heritage. There are estimated 400,000 brownfield sites across the nation.

Selling land that had been contaminated and polluted by previous owners became a liability issue. Purchase of such property was avoided due to cleanup requirements and lack of funding. Such lands remained a challenge for redevelopment. The Land Recycling Program (Brownfields Law – Act 2) clarified liability issues and established health standards that made redevelopment of brownfield sites more attractive. It provided unprecedented opportunities to recycle abandoned and old industrial sites into productive properties that could strengthen the economic viability of our cities and towns and provide new areas for parks and green space.

The Land Recycling Program promotes redevelopment in sustainable communities. These communities feature a mixture of uses, provide a variety of housing choices, are pedestrian friendly, have access to public transportation and greenways.

By incorporating these qualities, the program acts as an incentive to improve cities and towns, making them more desirable places to live.

Brownfields reduce sprawl by reusing sites and focusing development where existing infrastructure exist instead of developing farmland or open space. It also cleans up hazardous sites. Sites can be obtained for $1.00 just to have them redeveloped. They are situated in prime locations near business districts, waterfronts and existing neighborhoods.

Once a brownfield is assessed, it must still be remedi- ed before used. This is costly but state funds are available for assessment and implementation of a cleanup plan. Certain design strategies can be applied in dealing with contamination. For example, if contamination is localized to one portion of the site, this portion could be capped and used for parking.

Enterprise Zones are areas where property taxes are adapted for a specific period of time to encourage economic development. Keystone Opportunity Zones are examples of enterprise zones which are active in Pennsylvania from 1998 to 2010. Areas are usually depressed but infrastructure is available or nearby. Improving these areas for residential, recreation and commercial use allows development to occur on previously developed land thus protecting existing natural resources.

Compact Development: Design philosophy where the space needs of a population can be satisfied with less land area. Compact development can take various forms. From a regional perspective, it may limit development of land in cities and towns so that it does not extend into rural areas. The following are types of compact development:

Conservation Subdivision Design: A technique that provides the developer flexibility in newly developed areas by clustering the development into concentrated areas that can protect natural habitat. Square footage of buildings may remain the same but compact clusters reduce dimensions of lot sizes and shorten road lengths. The open space protected could be more than half of the development and may be owned by a homeowner association or conservation organization. By building houses on smaller lot sizes and having the open space usable and visible, homeowners seem to be attracted to this concept. They not only preserve natural and cultural landscapes, they reduce construction costs and long-term maintenance due to the shorter streets.
Mixed Use Development: A development that contains at least three different uses including residential. Mixed use development integrates the concept that a community is a place for people to live, shop and walk. Stores, homes, offices and public transportation are pedestrian oriented. Conventional zoning actually discourages this and segregates land uses. Conservation design features a balanced mix of land uses and compact development reminiscent of traditional Pennsylvania cities and towns. Traditional Neighborhood Development (TND) is a compact form of new development used to create a small town character as its primary goal. This is achieved by a number of aspects of community design such as sidewalks and narrow streets. It has a mixed-use core of community facilities, retail businesses and a variety of housing types. It requires a municipality to amend local zoning and subdivision ordinances.

Infill Development: Occurs in locations where some development has already taken place and the infrastructure is already there. In urban areas, infill development refers to the conversion of old buildings such as schools into new uses or by filling the space with new development. Abandoned lots could be replaced by housing or parks.

Urban Growth Boundary: A planning strategy by which a planning agency establishes a boundary line around a community within which urban infrastructure and development are to be encouraged. Outside the boundary, development would be discouraged and set as low density, open space and agricultural easements.

Reduce Impervious Surfaces: Groundwater recharge and surface water runoff are impacted by paved surfaces. A one-acre parking lot was found to produce a runoff 16 times as large as the runoff produced by a meadow. Reducing overall paved surfaces and utilizing pervious materials for paving will help reduce the problem.