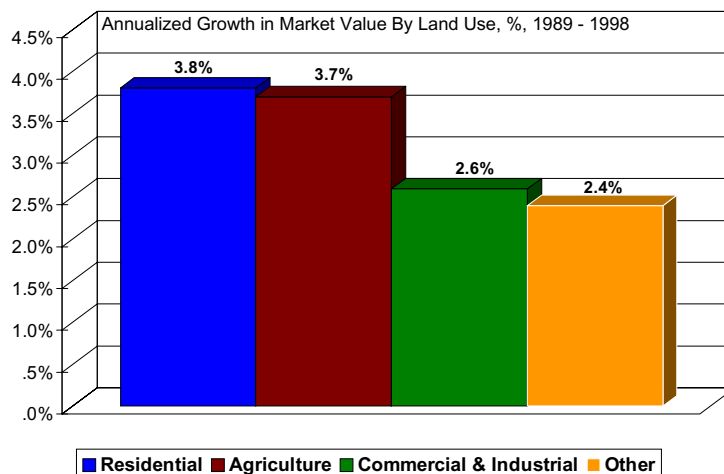


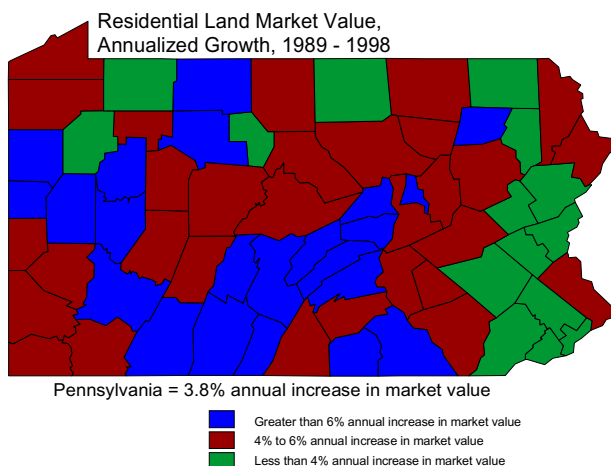
Market Value of Land



Source: State Tax Equalization Board

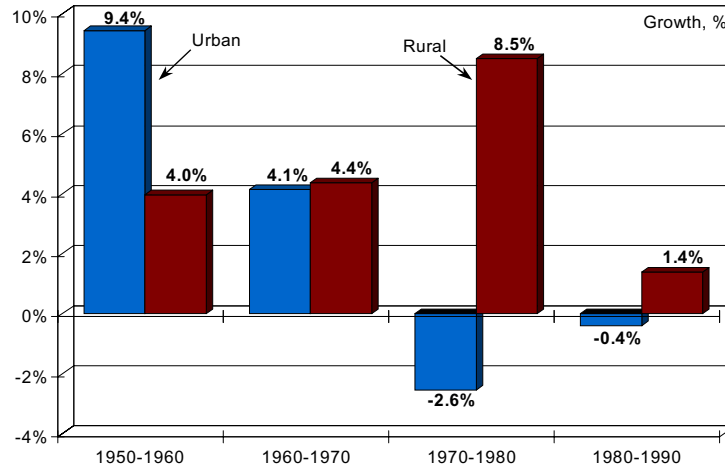
Land market values are estimated from the State Tax Equalization Board’s assessed value by land use category. Common level ratios are applied to these assessment values to arrive at a market value. Land values are important indicators of land development. Strong residential demand supports strong price appreciation in surrounding properties. As residential demand increases, there is increasing pressure on undeveloped agricultural land. Thus, land values for agricultural land are appreciating strongly, as this open space is consumed for housing.

Pennsylvania’s total land is valued at approximately \$475 billion with the largest share attributed to residential development, then to industrial and commercial land, and finally agricultural land use. Out of these land categories, residential and agricultural property owners are seeing the greatest appreciation in the market value of their assets. Pressure on land values is primarily outside of Pennsylvania’s largest cities. The strongest price appreciation is occurring in Southcentral, Central, and Northeast Pennsylvania, while the Eastern region is realizing below-average appreciation for these land categories. An overbuilt housing market in Southeast Pennsylvania and a downturn in economic conditions in the early 1990’s led to little price appreciation in these counties between 1989 and 1998.



Source: State Tax Equalization Board

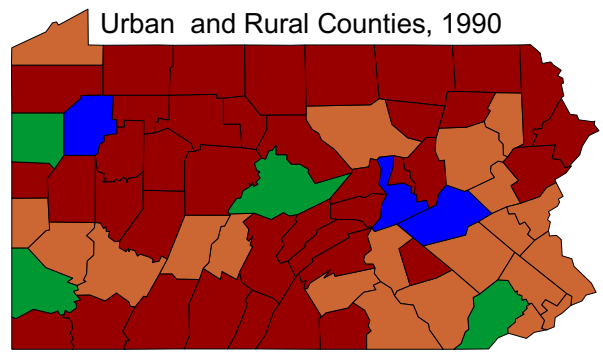
Urban and Rural Population Growth



Source: 1990 Population & Housing Unit Counts, 1960, 1970, 1980 Number of Inhabitants, United States Census Bureau

The Census Bureau defines an area as being either urban or rural. An urban area comprises all territory, population, and housing units located in urbanized areas and in places of 2,500 or more inhabitants outside of an urbanized area. An urbanized area is a continuously built up area with a population of 50,000 or more. It is made up of a central city and densely settled surrounding areas called urban fringe, more commonly known as the suburbs. All else is considered rural.

Pennsylvania’s rural areas are gaining population while its urban population is declining. Rural areas saw a 50,304 increase in population in comparison to a decline of more than 32,556 people in urban areas between 1980 and 1990. The acceleration in population growth in traditionally rural areas is most prominent in regions bordering higher cost areas such as New Jersey and Maryland. Although 63% of Pennsylvania’s counties are considered rural, the majority of Pennsylvania’s population resides in urban areas. Approximately 69% of Pennsylvanians live in urban counties with the largest share of these people living in the Pittsburgh and Philadelphia area. Since 1970, seven counties have been reclassified. Centre, Chester, Mercer, and Washington changed from predominantly rural to predominantly urban. Conversely, Northumberland, Schuylkill, and Lawrence switched to predominantly rural because they lost population in their urban areas.



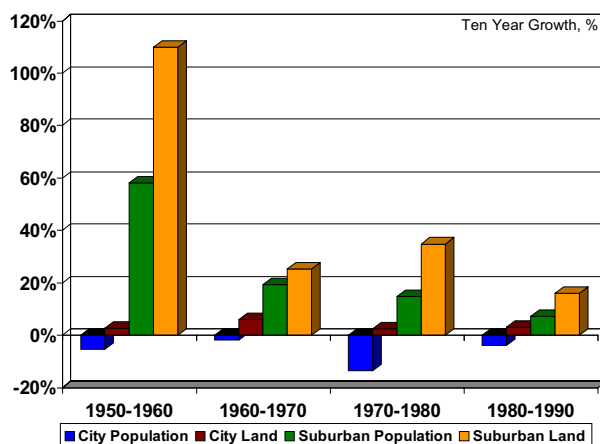
Pennsylvania Urban Population = 69%, Pennsylvania Rural Population = 31%

■ Newly Classified Rural County
■ Rural County : Rural Population Greater Than 51%
■ Newly Classified Urban County
■ Urban County : Rural Population Less Than 51%

Note: Urban and Rural County Population Represented As Share Of Total Population

Source: United States Census Bureau, Center for Rural Pennsylvania

Urbanized Land Development

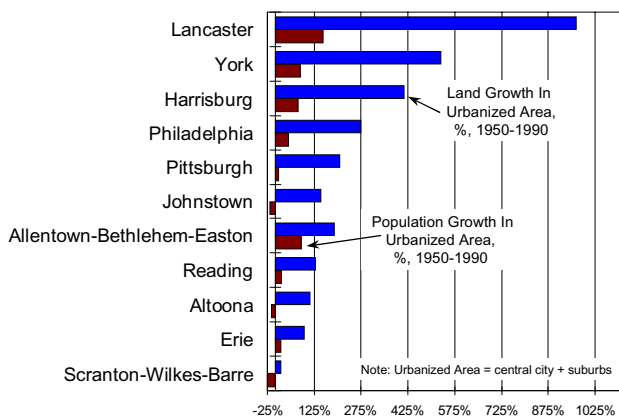


Source: 1990 Population & Housing Counts, 1960, 1970, 1980 Number of Inhabitants, United States Census Bureau

An urbanized area has a minimum population of 50,000. It comprises the land and the population of central cities and their adjacent densely settled territory called the urban fringe. This fringe, commonly called the suburbs, is the continuously built up area surrounding the principal city.

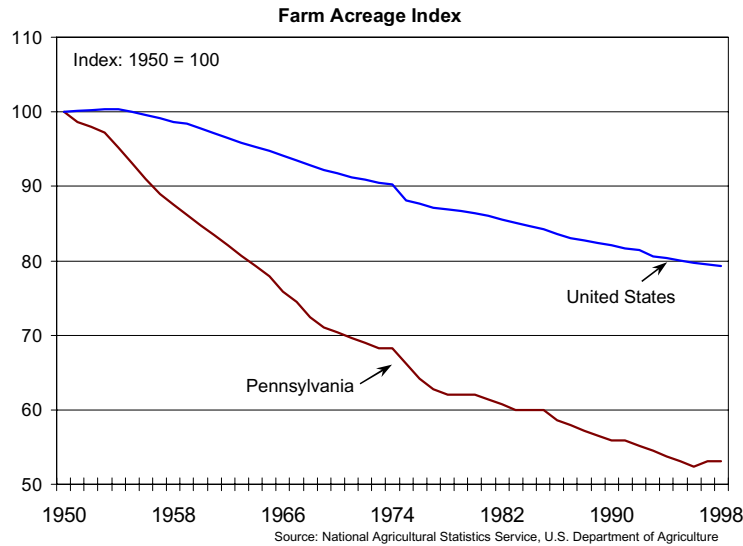
Between 1950 and 1960, the entire increase in population and 99% of the increase in urbanized land area in the eleven urbanized areas in Pennsylvania occurred in the suburbs. Between 1960 and 1990, population in these areas grew by 13% while their land area grew by 80%, according to Bureau of Census data. In particular, the suburbs are growing larger at the expense of central cities in Pennsylvania. The suburban population continues to grow while central cities continue to lose people (see chart above). Furthermore, suburban land development is outpacing its population growth, as development is spreading out and is using increasingly more land. This trend is also occurring in central cities even as people are moving out of these areas. When comparing Pennsylvania's eleven largest urbanized areas, Lancaster, York, and Harrisburg are the fastest growing areas in terms of land growth, which is outpacing population growth significantly. In contrast, Altoona, Johnstown, and Scranton-Wilkes-Barre are also experiencing a great degree of spreading, low-density development, as land development continues even with a decline in population (see chart below).

Change in Land and Population for Urbanized Areas



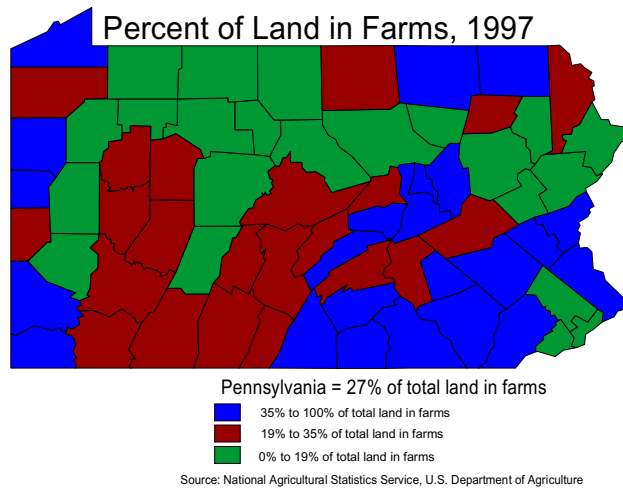
Source: Rusk, David. Social & Economic Costs of Urban Sprawl in Pennsylvania, United States Census Bureau

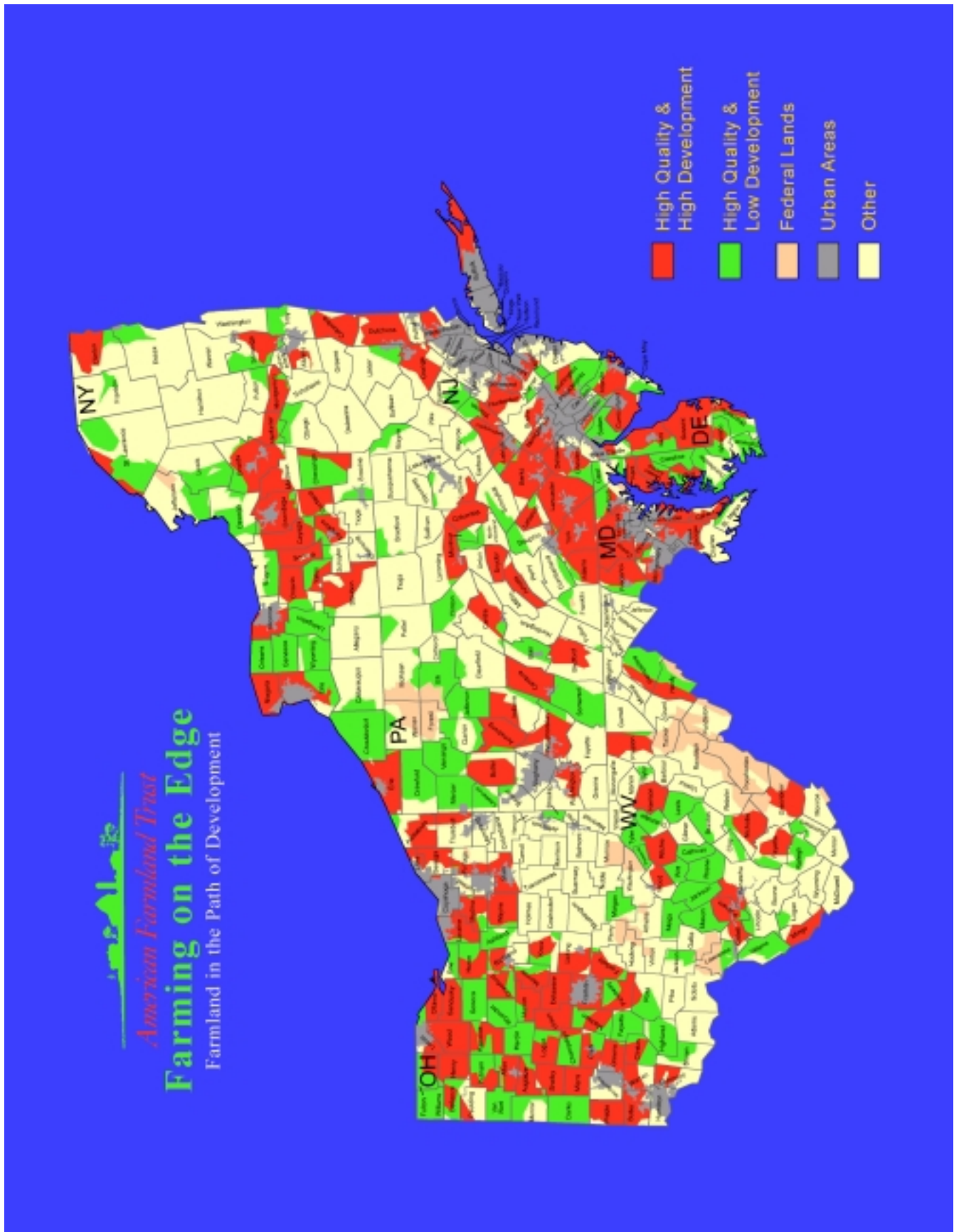
Loss of Farmland



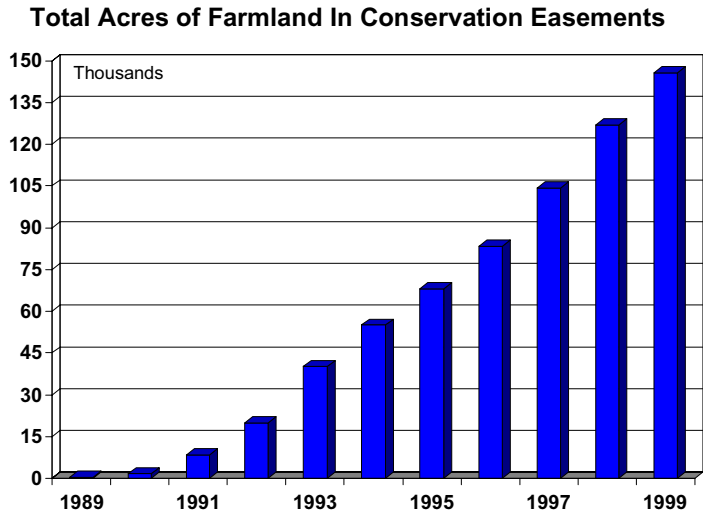
The farm acreage index, created from the National Agriculture Statistics Service, estimates farm acreage in Pennsylvania and the United States. To calculate the index, the farm acreage from each year is divided by the farm acreage in the base year, which is 1950. Acreage in farms includes land used for crops, livestock, pastureland, woodland, wasteland and idle farmland.

Since 1950, Pennsylvania has lost nearly half of its farmland compared to a loss of 20% nationally. Several factors ranging from the profitability of farming to urban growth pressures are behind the loss of farmland. As illustrated in the American Farmland Trust map on the next page, high quality farm acreage is coming under increasing development pressure. Southeast, Southcentral, and Southwest Pennsylvania soil is among the richest agricultural land in the state. Farmland in counties surrounding Philadelphia and Pittsburgh is at high risk as people and businesses are migrating to more affordable and more open spaces in Armstrong, Berks, Butler, Chester, Lancaster, Indiana, Washington, and Westmoreland counties. Longer term, RFA expects rapid land development in Lehigh Valley, Southeast, and Southcentral counties, as the economic performance of these counties will remain above average compared to the state. Farmland in counties on the border with Maryland will also be at risk as households move into these areas seeking a lower cost of living.





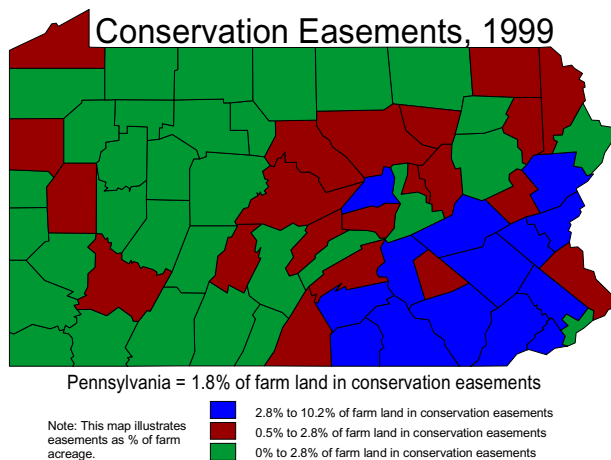
Farmland Preservation



Source: Bureau of Farmland Protection, Pennsylvania Department of Agriculture

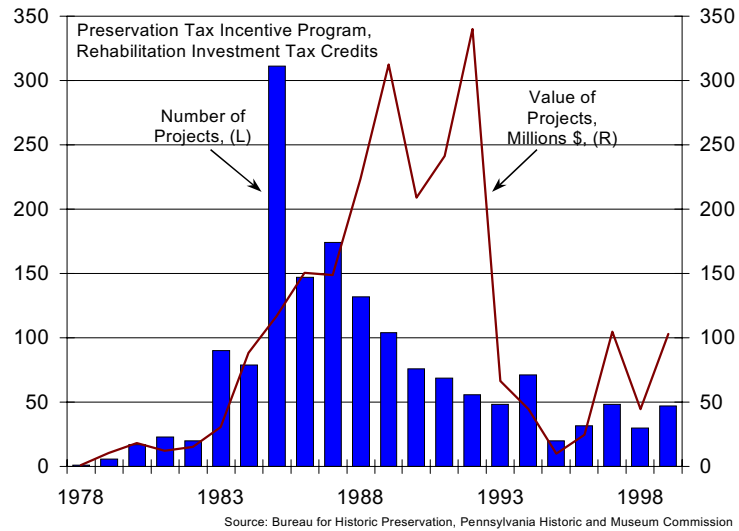
The Pennsylvania Farmland Preservation Program (Agricultural Conservation Easement Purchase Program) enables the state, county and local governments to purchase agricultural conservation easements from farmers whose land qualifies under the program. Through this program, the development or improvement of the land is restricted to agricultural uses by the holder of the easement; thus, the rural nature of the land is preserved permanently. As of November 1999, 1,175 farms in 41 counties are covered by easements totaling 145,663 acres.

The amount of agricultural land under conservation easements is growing in Pennsylvania, but this program is still small. Less than two percent of total farm acreage falls under the program as of this year. Governments in Southeast and Southcentral Pennsylvania have acquired the highest number of development rights in terms of acreage. Lancaster, Berks, and Chester counties account for nearly 25% of all Pennsylvania land subject to easements. The pattern of easement purchases reflects the rapid pace of development in Southeast and Southcentral Pennsylvania, as these areas possess high quality farmland that is at high risk due to development pressure.



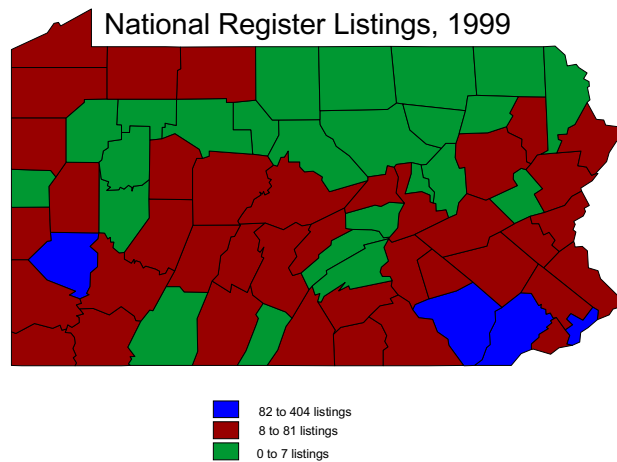
Source: Bureau of Farmland Protection, Pennsylvania Department of Agriculture

Historic Preservation

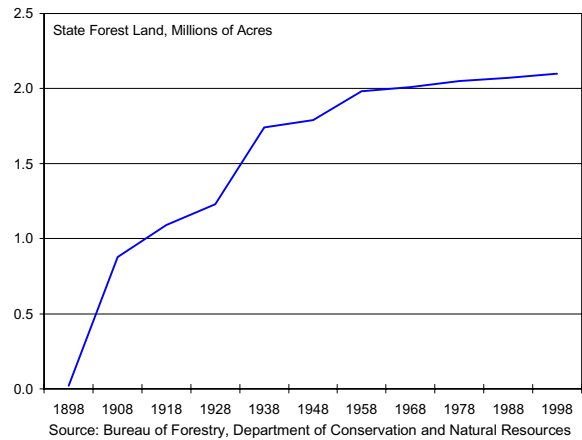
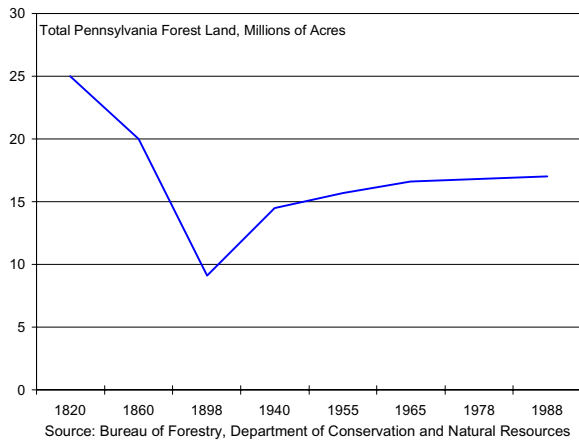


The National Register of Historic Places is the official list of the nation’s cultural resources worthy of preservation under the National Historic Preservation Act of 1966. Historical places include buildings, structures, objects, and sites that are important for their historical, architectural, archaeological, or cultural values. The U.S. Department of the Interior and the Pennsylvania Historical and Museum Commission provide incentives for historical preservation. For example, property owners may receive federal investment tax credits for the rehabilitation of historic income producing properties.

Since the inception of the Investment Tax Credit Program, over \$2.2 billion has been invested in approximately 1,600 Pennsylvania projects. Since the start of this decade, 60 historical rehabilitation projects on average have qualified for investment tax credits per year. This number is significantly lower than the 100 projects on average that qualified for federal credits each during the 1980s due to changes in the Internal Revenue Code. In Pennsylvania, nearly 3,000 individual properties and historic districts are listed in the National Register. The largest concentration is in Southeastern Pennsylvania. Pennsylvania also supports historic preservation through the Historic Preservation Act of 1961. Sixty-nine municipalities, spread throughout the Commonwealth but also concentrated in the Southeast, have established historic districts under this act.

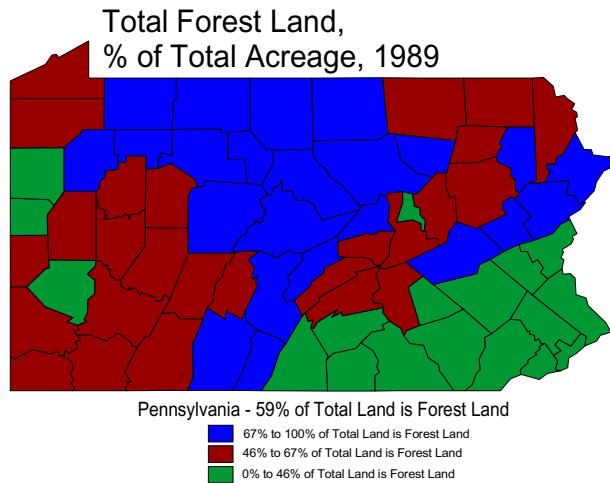


Forest Land



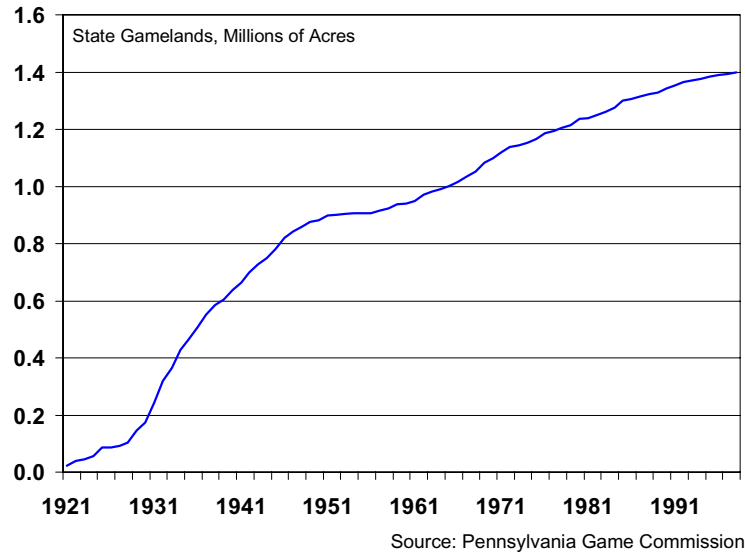
One of Pennsylvania’s greatest resources is its forest land. This land cover provides the state with aesthetic beauty and many environmental and economic benefits, including natural water and air filtration, a renewable source of timber, open space, wildlife habitat, and vast recreational opportunities.

Using the Department of Conservation and Natural Resources’ definition of forest land, forests cover 17 million acres or more than half of Pennsylvania. A large portion, 74% or 12.6 million acres of this land is privately owned. Various government agencies own the remaining acreage with the state in charge of 12% of Pennsylvania’s forest land. The acquisition of forest land by the Bureau of Forestry occurred primarily in the early to mid-1900s in response to the dramatic decline in forest land during the 1800s. State purchases have tailed off dramatically with only 6% of state owned forest land purchased since 1960. Forest land is concentrated in Northern and Central Pennsylvania. Consequently, state-owned land is also primarily located in these counties. In contrast, Southeast and Southcentral Pennsylvania lack forest land, as these counties have a high concentration of farmland and development.



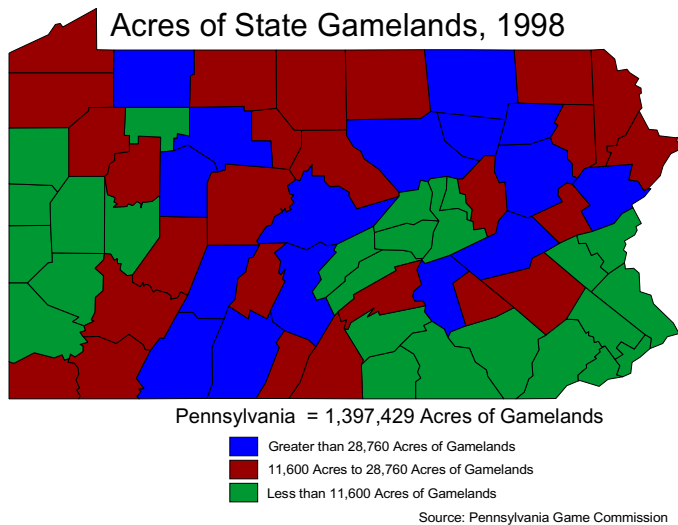
Source: U.S. Forestry Service, United States Department of Agriculture

State Gamelands

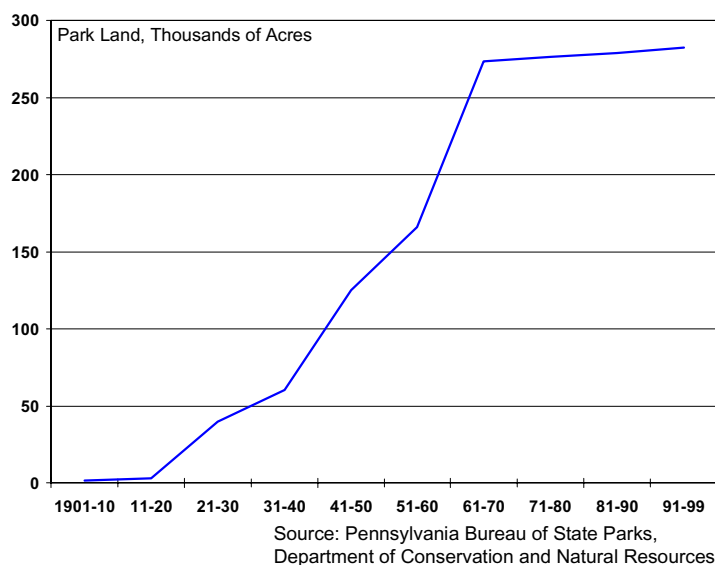


The benefits of gamelands extend far past their immediate use as public hunting grounds. State management of this land helps to conserve wildlife and their habitat and also broadens recreation alternatives for tourists and Pennsylvania residents. Gamelands also provide important watershed protection for the Commonwealth. Gamelands include all land under the stewardship of the Pennsylvania Game Commission.

Gamelands account for 4% of Pennsylvania’s total acreage and are the second largest holding of state land. The acquisition of this land occurred primarily in the first half of this century, when approximately 60% of state gamelands were purchased. While land has been purchased since then, the pace of acquisition has been considerably slower over the second half of this century. Counties with the highest share of their acreage as gamelands are concentrated in the Northeast and Central regions of Pennsylvania. These areas also have a high share of forest land. Southeast and Western Pennsylvania have the least amount of gamelands, as these counties tend to have less forest land and more farmland and development.

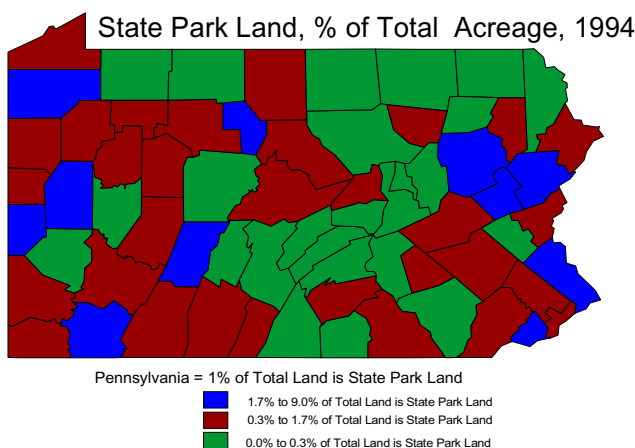


Park Land



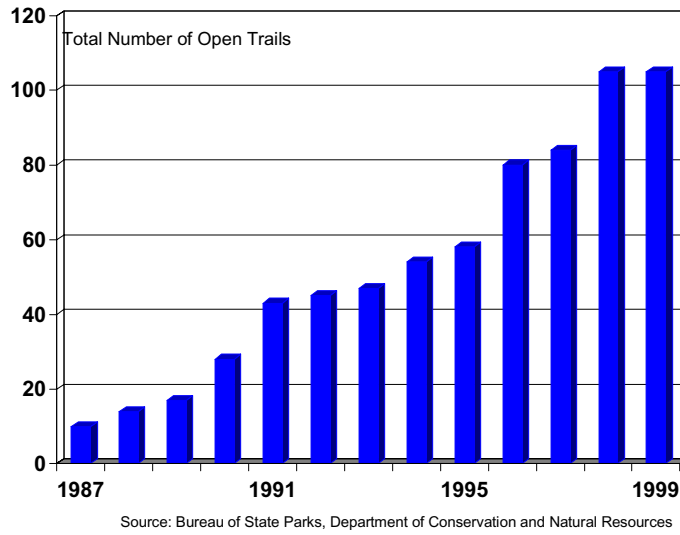
Pennsylvania State Parks provide opportunities for outdoor recreation and environmental education. In addition, park land provides economic benefits from tourism and recreational activities. Parks may include forest land, historical sites, fields, lakes, or wetlands. This land is protected from development. Counties and municipalities also maintain approximately 200,000 acres of park land across the Commonwealth.

The acquisition of land for state parks has given the Bureau of State Parks stewardship over only a small portion of Pennsylvania's land, approximately 282,249 acres. The expansion of the park system occurred primarily before 1970 when roughly 96% of state park land was acquired. The largest wave of park land purchases occurred between 1960 and 1970 when 37% of total state park land holdings or 107,246 acres were acquired. Since that time, the state has continued to acquire land, but at a significantly slower pace. Parks are much more scattered throughout the state than other recreation sites because of "Project 70," a 1960's initiative seeking to place a state park within 25 miles of every Pennsylvania resident. The largest of these parks are located in Northeast and Western Pennsylvania.



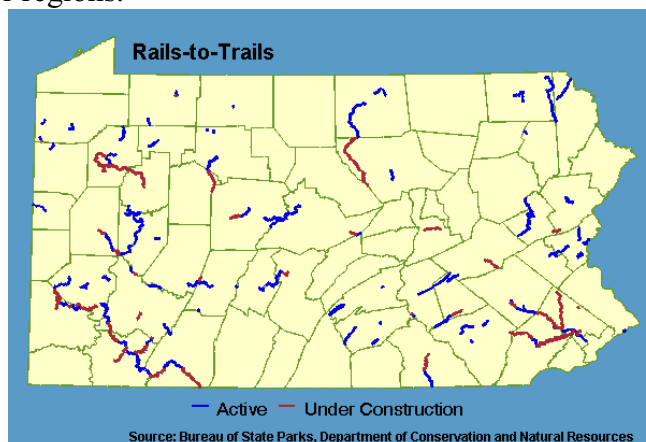
Source: Bureau of State Parks, The Pennsylvania Department of Conservation and Natural Resources

Greenways and Rails-to-Trails

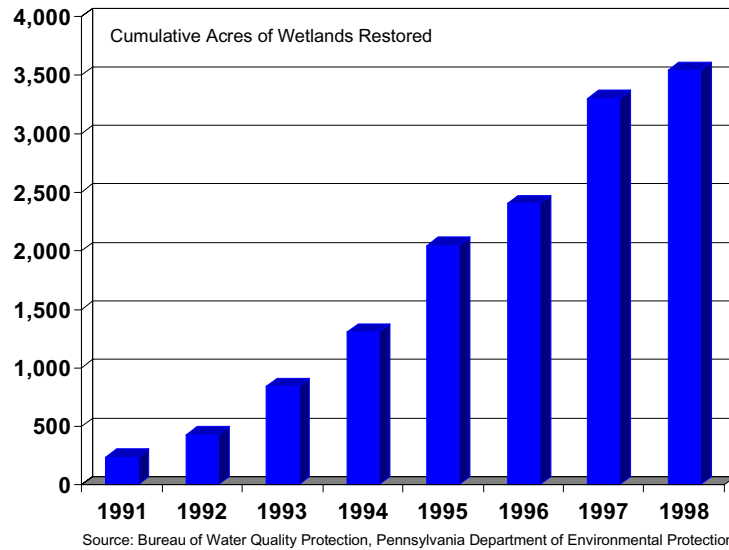


Greenways are open-space corridors that serve multiple purposes including recreational trails, habitat for wildlife, natural buffers along rivers and streams, and community open space and natural areas. They also help protect water quality, provide close-to-home recreation outdoor recreation opportunities, and generally improve the quality of life and enhance economic development opportunities in communities. Pennsylvania has thousands of miles of greenways and trails on its state park, forest and game lands, and in its county and community parks. The Governor’s Pennsylvania Greenways Partnership Commission, which was created in 1998, is in the process of inventorying the Commonwealth’s greenways and developing a statewide greenways plan.

Many greenways were developed using abandoned railroad right of way. The state’s 900 active miles of rail-to-trails qualify as one of the largest rail-to-trails systems in the country. With over 100 trails, Pennsylvania has more trails than any other state. Since 1987, the conversion of abandoned rails to public trails has increased tenfold. Pennsylvania’s vast network of railroad lines presents the state with an opportunity to utilize these resources as valuable open space. These trails are found throughout the Commonwealth, although Western Pennsylvania has the largest concentration of trails in comparison to other regions.

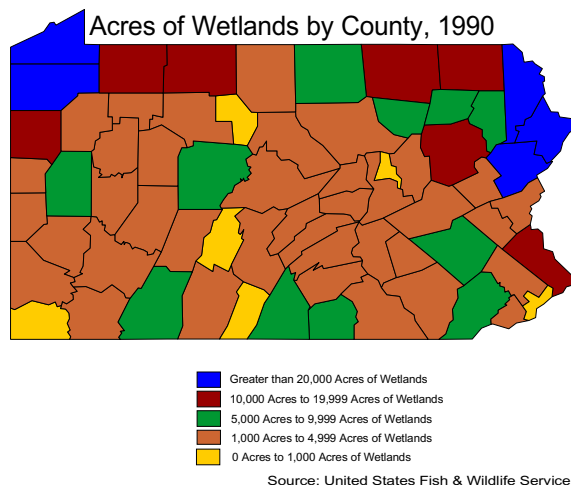


Wetlands Restored

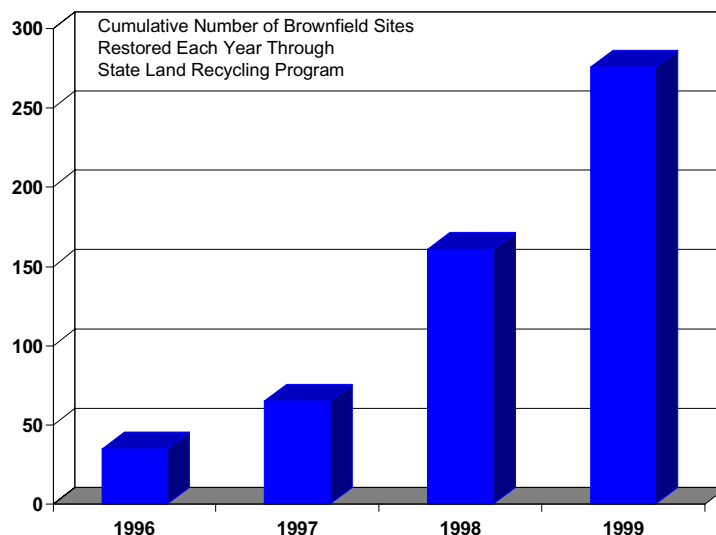


Wetlands are areas that are wet for significant periods of time. They include the periodically flooded lands occurring between uplands and lakes, rivers, streams, and estuaries. Wetlands are also found in low-lying areas in valleys as well as depressional areas throughout Pennsylvania forests. Wetlands are commonly referred to by a host of terms, such as mudflats, wet meadows, hardwood swamps, marshes or bogs, based on their location and characteristics. They provide protection against flood and storm damage, control erosion, store water, and act as a pollution control measure because of their filtering function. Wetlands also provide habitat for a wide variety of plants and animals, including many that are now threatened or endangered because of historic wetland losses.

Since the settlement of Pennsylvania, over half of Pennsylvania’s wetlands have been drained or filled. However, in 1978, the Pennsylvania legislature enacted laws that stemmed the loss of wetlands. Since 1988, in cooperation with federal and state agencies, a gain of 3,500 acres of wetlands has been realized. U.S. Fish & Wildlife Service studies indicate that roughly 430,000 acres now remain. The map provides the approximate number of wetlands located within each county in the Commonwealth.



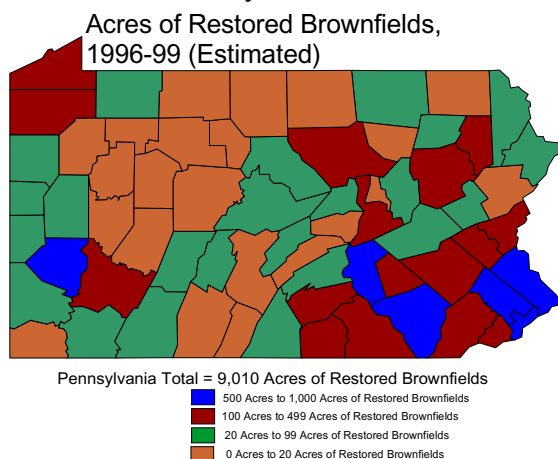
Brownfields Restored



Source: Bureau of Land Recycling and Waste Management, Pennsylvania Department of Environmental Protection

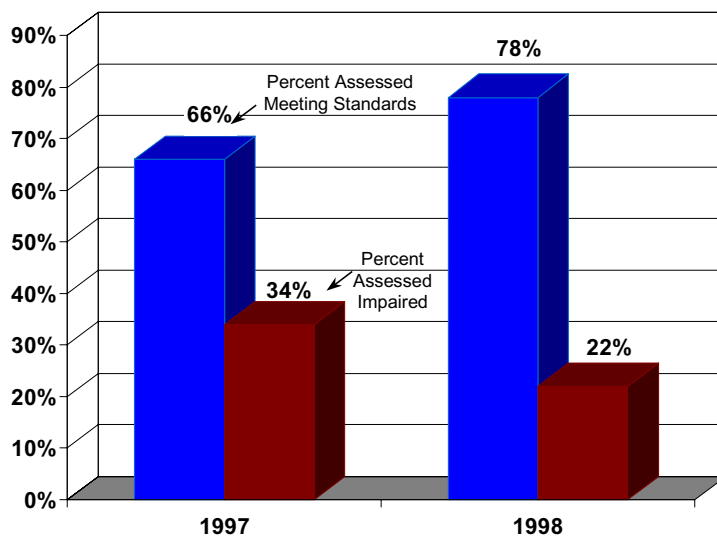
The Department of Environmental Protection defines brownfields as abandoned, idle, or under-used industrial and commercial facilities where expansion or redevelopment is complicated by real or perceived environmental contamination. Pennsylvania's Land Recycling Program is focused on returning such sites to productive use by offering tax incentives and financial assistance in the form of low interest loans and grants to private entities, municipalities, and non-profit economic development agencies for the restoration of approved sites. Redevelopment plans for brownfields include mixed-use development that incorporates different commercial land uses and housing choices as well as the opportunity to create more green space in the form of parks, greenways and trails.

The Land Recycling Program in Pennsylvania has been very successful with 236 out of a total of 537 sites restored this year. The number of brownfield sites restored has increased seven fold since 1996. As expected, the oldest urbanized areas are leaders in the restoration of their brownfield sites, as the regions surrounding Philadelphia, Pittsburgh, York, and Erie are saddled with a large share of abandoned industrial and commercial sites. Southeastern Pennsylvania accounts for nearly 40% of the completed projects.



Source: Bureau of Land Recycling and Waste Management, Pennsylvania Department of Environmental Protection

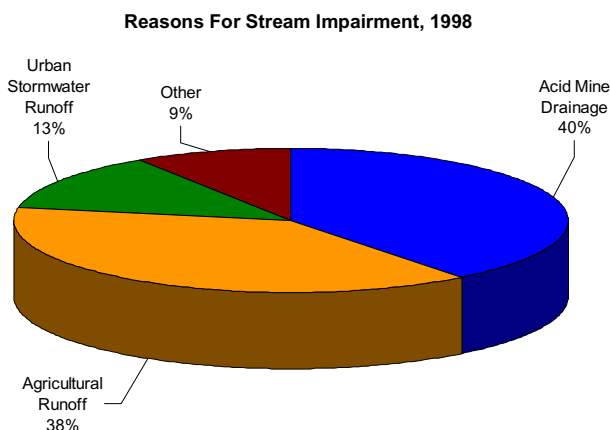
Assessed Streams



Source: Bureau of Watershed Conservation, Pennsylvania Department of Environmental Protection

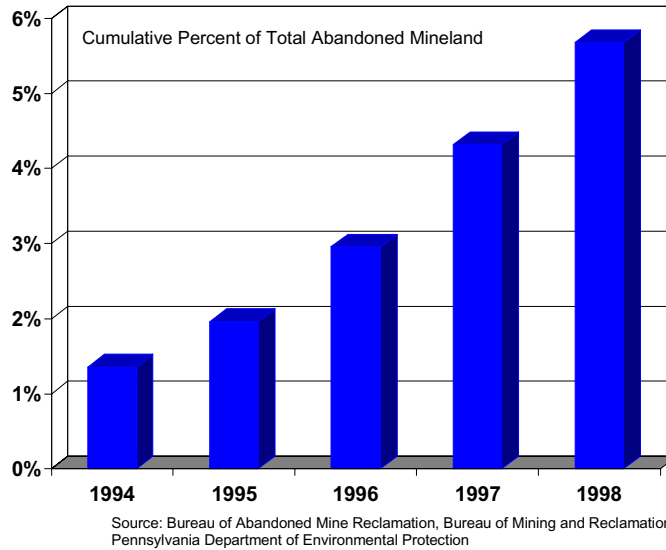
Land use directly affects the quality and quantity of water in Pennsylvania’s waters. Runoff from urbanized areas, agricultural land, and abandoned mine sites have contributed to pollutants in Pennsylvania. Impaired streams are waterways that do not meet national standards for water quality.

Of the waterways that have been assessed in the state, only 22% fail to meet standards for water quality. The primary cause of impairment is acid mine drainage from Pennsylvania’s abandoned mines. In 1998, approximately 2,150 assessed stream miles in Pennsylvania were polluted for this reason. Another 2,075 miles were affected by agricultural runoff and 711 more miles were impaired due to urban storm water runoff. Despite these problems, the quality of Pennsylvania’s waterways improved as the number of assessed streams increased between 1997 and 1998. However, only 30% of Pennsylvania’s 83,240 miles of streams have been assessed to date.



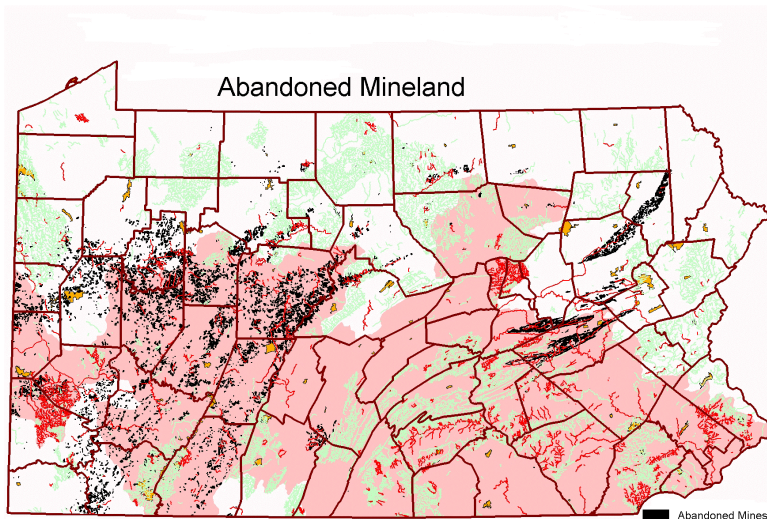
Source: Bureau of Watershed Conservation, Pennsylvania Department of Environmental Protection

Abandoned Mineland Reclaimed



The environmental problems associated with abandoned minelands reduce the potential use of land in communities located near these sites. Abandoned mine reclamation is the process of cleaning up environmental hazards associated with such sites and returning the land to more productive uses. Reclamation eliminates hazards such as acid mine drainage, open pits, mine fires, dangerous highwalls, and erosion. Pennsylvania’s “Reclaim PA” initiative works in conjunction with state watershed restoration efforts, as abandoned sites greatly affect surrounding water quality and wildlife habitat.

Pennsylvania is saddled with one-third of the nation’s abandoned mines according to DEP, or approximately 250,000 acres. As of 1998, nearly 6% of this acreage has been restored through state, federal and private sector efforts. As seen below, the Northeastern and Western parts of the state have the highest concentration of abandoned minelands. As a result, these areas also have a substantial amount of impaired streams that fail to meet water quality standards.



Source: Bureau of Watershed Conservation, Bureau of Abandoned Mine Reclamation, Pennsylvania Department of Environmental Protection