

Condition of Infrastructure The region's deteriorated sewage infrastructure is polluting the County's streams and rivers. The ALCOSAN service area has at least 450 combined and separate sanitary sewer overflow structures from which untreated sewage is discharged into local streams during wet weather, more than any other authority in the country. Polluted stormwater runoff that often infiltrates into municipal storm sewer systems is also an issue. The polluted water is transported from municipal separate storm sewer systems (MS4s) into local rivers and streams without treatment.

Stormwater Management The regulatory basis for stormwater management in Pennsylvania is Act 167 of 1978, known as the Storm Water Management Act. Act 167 requires counties to prepare stormwater management plans for the designated watersheds in the county. Problems associated with inadequate and improper management of stormwater include flooding, soil erosion, and sedimentation of streams and other waterways.

KEY UTILITY CHALLENGES

- Difficulty of Attaining Compliance with Regulations
- Protecting Source Water Supplies
- Lack of Funding for Infrastructure Improvements
- Inefficient and Inequitable Extension of Infrastructure
- Lack of Regional Watershed Management

RECOMMENDATIONS FOR UTILITIES

- A. Protect and Enhance the Quality and Quantity of Water Resources** – Water supplies must be protected and drinking water conserved. The Allegheny County Health Department will explore opportunities for re-establishing and improving a pollutant early warning system on the Three Rivers. *Allegheny Places* supports increased use of best management practices (BMPs) to control stormwater.
- B. Support Planning and Funding for Utility Extensions and Improvements that are Consistent with the Future Land Use Plan** – New development will place demands upon water, wastewater and stormwater utility systems in the County. The intent of the Future Land Use Plan in regard to utility infrastructure is two-fold: to make use of the extensive infrastructure system that is already in place; and to help fund

needed infrastructure improvements by targeting future development to areas with existing infrastructure.

- C. Support Regionalization and the Shared Use of Utility Assets** – The complexity and cost associated with developing and implementing solutions to water resource issues suggest regional approaches to these issues. Regionalization can increase operational efficiencies, increase financial viability and improve the quality of service. Before regionalization is realized, however, greater intermunicipal cooperation may be a necessary interim step.

ENVIRONMENTAL RESOURCES

Land use patterns have a direct effect on the quality of the environment. This is as true today as it was a century ago.

Watercourses are a prominent feature of Allegheny County. Four large rivers flow through the County: the Allegheny, Monongahela, Ohio, and Youghiogheny. The Allegheny and Monongahela rivers meet at the Point in the City of Pittsburgh to form the Ohio River, which is a principal tributary of the Mississippi River.

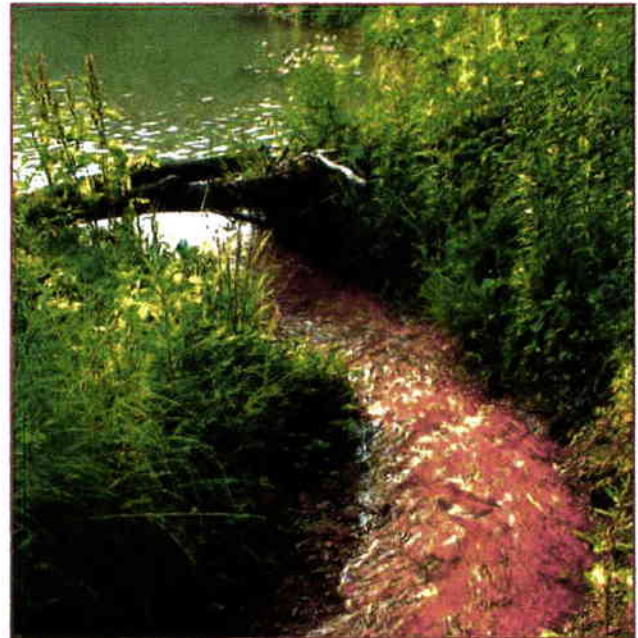
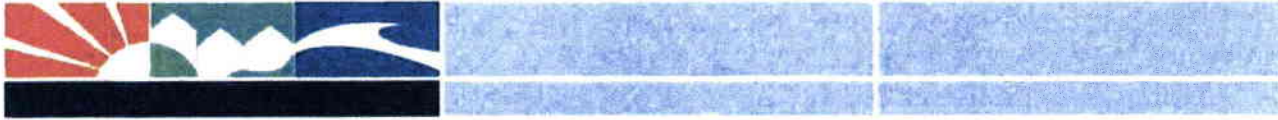


Photo credit: Bernadette E. Kazmarski



Water Quality Today the County's rivers are populated by a diversity and abundance of fish species, and a variety of waterfowl. Still, there are water quality problems that need to be addressed. The State Water Plan, currently being prepared by the Commonwealth, identified the following water quality issues for Allegheny County:

- Lower Allegheny River
 - Inadequately treated municipal and industrial waste causing acid mine drainage and nutrient enrichment
- Monongahela River
 - Mine drainage
 - Untreated and/or inadequately treated municipal and industrial discharge
 - Variety of non-point pollution sources
 - Thermal pollution
 - Landfill leachate
 - Excessive mineral constituent concentrations
- Ohio River
 - Mine drainage
 - Raw and inadequately treated sewage and industrial discharges

Past mining operations have polluted local streams and waterways with Abandoned Mine Drainage (AMD) through exposing acid producing rocks to rainfall and runoff. Mine drainage can also be alkaline, and pollute streams with metals such as iron, manganese and aluminum.

According to the National Research Council, in 2005, overflow of outdated combined stormwater and sanitary sewers directly into streams and rivers was the most serious water pollution problem affecting the County.

Flooding and Stormwater Management When a storm hits the region, 16 multi-purpose flood control reservoirs built and maintained by the U.S. Army Corps of Engineers in the headwaters of the Allegheny and Monongahela rivers retain excess water upstream of the dam. Controlled releases of this excess water help to prevent or reduce downstream flooding. However, flooding problems are still experienced throughout much of the County. Although there is no comprehensive, county-wide inventory of chronic flooding problems, the Allegheny County Emergency Service Department has designated 12 waterways as priority streams relative to flooding.

Natural Heritage Areas The Allegheny County Natural Heritage Inventory identifies and maps important biotic and ecological resources that make up the natural heritage of Allegheny County. These areas, which include Biological Diversity Areas, Landscape Conservation Areas and Other Heritage Areas, provide habitat for a great diversity of plants and animals, including rare, threatened and endangered species. Allegheny County has 30 listed Biological Diversity Areas, three Landscape Conservation Areas and six Other Heritage Areas.



Photo credit: McCormick Taylor

KEY ENVIRONMENTAL RESOURCE CHALLENGES

- Reducing sewer overflows
- Impacts of development on steep slopes
- Impacts of development on landslide-prone areas
- Loss of forest land
- Improving air quality
- Flood prevention and mitigation
- Protecting and improving ground and surface water quality
- Loss of natural heritage areas

RECOMMENDATIONS FOR ENVIRONMENTAL RESOURCES

- A. **Meet Air Quality Standards** -The Allegheny County Health Department's Air Quality Program is developing a plan to control fine particulates in the Liberty/Clairton area. The County will continue working to reduce congestion on roadways in the County, to reduce emissions from motorized vehicles. Transportation and

land use strategies to reduce automobile dependency are a cornerstone of the County's energy conservation and emissions reduction plans.

- B. Improve Quality of Surface and Groundwater Resources** – Since mining has the greatest influence on surface and groundwater quality of any single land use in the County, according to the National Water-Quality Assessment program, efforts to remediate the effects of mining activities will significantly improve water quality. Addressing the problem of untreated sewage and stormwater overflowing into waterways is also crucial to improving the quality of the region's surface waters.
- C. Identify and Protect Ecologically Sensitive Areas** – The Allegheny County Conservation Corridors Plan ranks 29 conservation corridors in order of priority and proposes that they be protected through the actions and partnerships of municipal governments, nonprofit organizations and community groups. The Future Land Use Plan includes recommendations to ensure that land development takes place in a responsible way. This includes the use of appropriate land development controls that lead to development that is high quality and contributes to the long-term conservation of environmental resources.
- D. Encourage Development In Places Identified in the Future Land Use Plan to Minimize Impacts to Greenfields** – *Allegheny Places* promotes the redevelopment of existing centers and brownfields to

reduce development pressures on greenfields. *Allegheny Places* defines greenfields as lands not previously developed at the edge of the urban area. Development in greenfields can require significantly more infrastructure than development in brownfields and in existing centers.

- E. Protect and Restore Critical Environmental Functions** – The County's objective is to protect and preserve the ability of wetlands and floodplains to carry and store flood waters safely, in order to protect human life and property from damage.
- F. Eliminate Pollution Runoff to Protect Streams and Watersheds** – Lands adjacent to streams, lakes or other surface water bodies that are adequately vegetated provide an important environmental protection and water resource management benefit. The County urges local municipalities and landowners to protect riparian zones of streams and rivers and adjacent wetlands with vegetated buffers.

ENERGY CONSERVATION

Our way of life is powered by energy. As energy costs continue to rise, more efficient use of energy will be essential for the continued economic health of the region. Energy conservation practices are also essential for improving and protecting the quality of the County's air and water, and so the health of its citizens. Energy conservation is, in many ways, the key to a truly sustainable future for the County.

In recent years, Allegheny County has installed energy efficient lights, upgraded HVAC, energy management and control systems, and reduced water use in dozens of County facilities. These relatively simple improvements have been projected to save the County over \$740,000 annually.

Pittsburgh has become one of the top five cities in the world in green building, with 17 structures LEED Certified by the U.S. Green Building Council.

Methane Recovery Methane is the major component of natural gas and a potent greenhouse gas that contributes to global warming. Methane that is generated by landfills can be captured, however, and used as a source of energy. The capture and use of landfill methane has substantial



Photo credit: Kevin Smay



economic and environmental benefits. There are currently two methane recovery facilities at landfills in the County.

Alternative Energy Sources The Pennsylvania legislature passed the Alternative Energy Bill in November 2004. The Bill requires a total of 18% of Pennsylvania's electricity to be generated by alternative energy sources by the year 2020. The Bill has increased interest in implementing alternative energy production systems statewide and in the County.



Photo credit: Kevin Smay

KEY ENERGY CONSERVATION CHALLENGES

- Inefficient use of energy and its relation to global warming
- High reliance on automobiles

RECOMMENDATIONS FOR ENERGY CONSERVATION

- A. Protect and Enhance the Environment and Public Health by Promoting Energy Conservation and Continuing to Improve the County's Air Quality** – Since the Pittsburgh region is in non-attainment for a criteria pollutant, Allegheny County is required to develop and implement a plan to reduce ozone and particulate matter (PM_{2.5}) pollutant levels. The County's maintenance status for carbon monoxide (CO) indicates that it is nearing the goal of attainment, but will continue existing activities and pursue new opportunities to reduce CO levels. Because most emissions are from motorized vehicles in congested areas, the County will continue to work with and encourage PennDOT to develop plans to reduce congestion on State roadways.
- B. Establish Compact Mixed-Use Centers that Provide a Dense Population of Potential Transit Users, Both for Trips Within and Between Centers** – The Future Land Use Plan for Allegheny County directs land use to designated Places in the County in order to conserve energy. Most Places designated on the Future Land Use map will be more supportive of transit use. Transit-Oriented Development (TOD) is a key element in the County's planned economic growth.
- C. Make Transportation Corridors Multi-Modal by Providing Vehicular, Transit, Pedestrian and Bicycling Options** – Transportation and land use strategies to reduce the need to drive are a cornerstone of the County's energy conservation and emissions reduction plans. Street systems for designated Places will incorporate development patterns that maximize connectivity, convenience, safety and efficiency for pedestrians and bicyclists.
- D. Provide Incentives to Develop Certified Green Buildings and Use Alternative Fuels and Renewable Energy** – Educating the public, including public officials, about the benefits of green building, energy conservation and sustainable development is essential for Plan implementation.

PUTTING IT IN PLACES

Allegheny Places is a blueprint for the future for Allegheny County, showing how growth and redevelopment can be directed to existing and future Places to provide new economic opportunities, revitalize existing communities, protect natural features, and conserve open space and historic and cultural resources.

Allegheny Places is also a call to action. The comprehensive plan will be implemented through independent and collaborative actions – not through coercion – and through a desire to see its Places come to life for the benefit of all. *Allegheny Places* will be implemented cooperatively through regulations crafted and adopted by local municipalities, through the actions of State agencies in awarding grants and permits, and through strategic targeting of resources by the County and others. Developers and property owners are important partners in this future collaboration. As they work to develop, redevelop, and conserve their land in consistency with the Plan, they will be supported by and benefit from municipal, State, and County involvement.

County Commitment and Leadership *Allegheny Places* becomes the day-to-day policy document of the County regarding development and redevelopment. The decisions of Allegheny County and its Authorities will be consistent with *Allegheny Places*, including capital budget expenditures. Unequivocal support from County-level public officials will make it easier to persuade local officials, developers and others to take the Plan seriously.

Plan implementation depends upon a much more prominent County planning role in the coming years. Allegheny County will need a planning staff that is comparable in size and capabilities to other counties in Pennsylvania that are populous, diverse and committed to planning as a means to achieve economic growth and a high quality of life.

County Outreach to Municipalities The County will develop a formal planning assistance program with local governments and other planning partners. The program will include the delivery of specialized professional planning



Photo credit: Kevin Smay



Photo credit: McCormick Taylor

services to local governments under contractual terms and/or the distribution of small grants to municipalities to assist them in engaging their own professional planning expertise.

The County will publicize the Plan and provide information to its public and private planning partners so they can take actions necessary to support Plan implementation. The County looks to its constituent municipalities, including the City of Pittsburgh, to take actions in support of *Allegheny Places'* policies. Actions include adopting local comprehensive plans and ordinances that are generally consistent with *Allegheny Places* and providing planning and design support for the development of designated Places in the Plan. Cooperation, cross-acceptance, and consistency are the key guidelines toward establishing a solid relationship between municipalities and *Allegheny Places*.

Councils of Government (COGs) are organizations that bring neighboring municipalities together for common purpose and should be utilized in the implementation of *Allegheny Places*. The County understands the need for additional funding as the COGs take on new responsibilities.

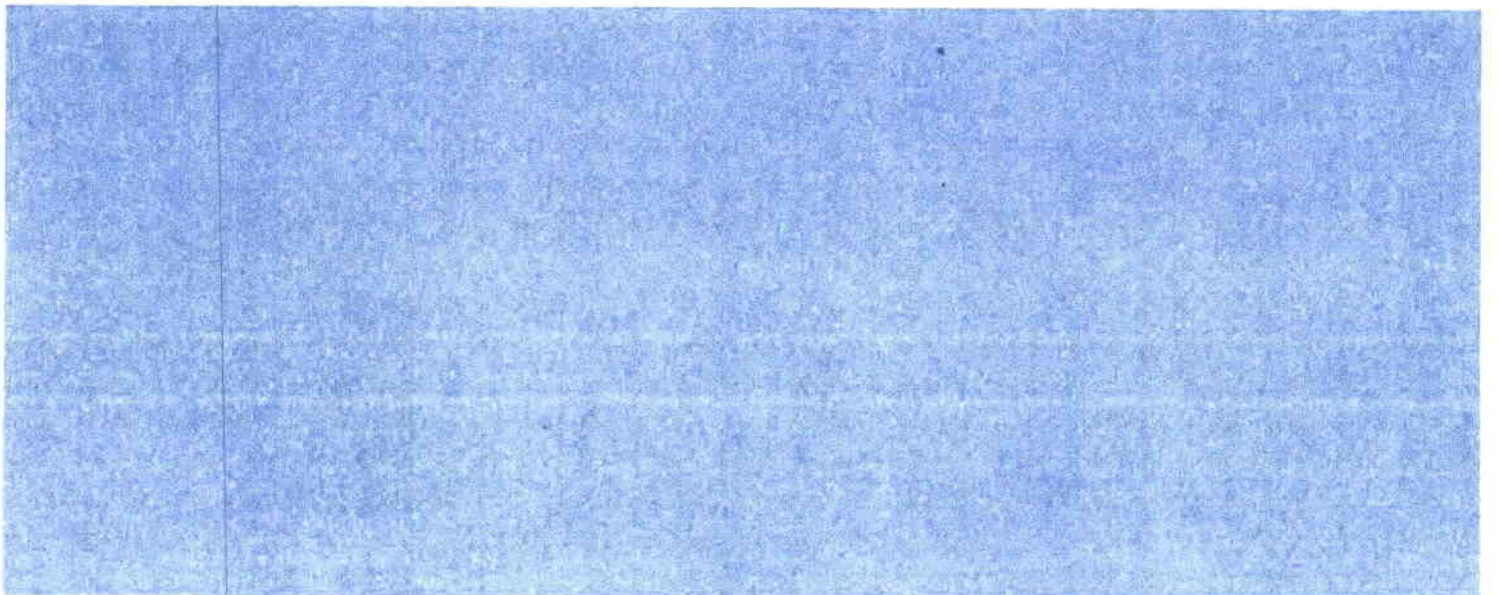
County Outreach to Other Groups While the municipalities will be critical to the Plan's ultimate implementation, there are many other groups that will be equally important partners in Plan implementation. The County will provide outreach and education about the Plan to key groups for all levels of government and other institutions that have an interest in the Plan, and/or are important for implementation.

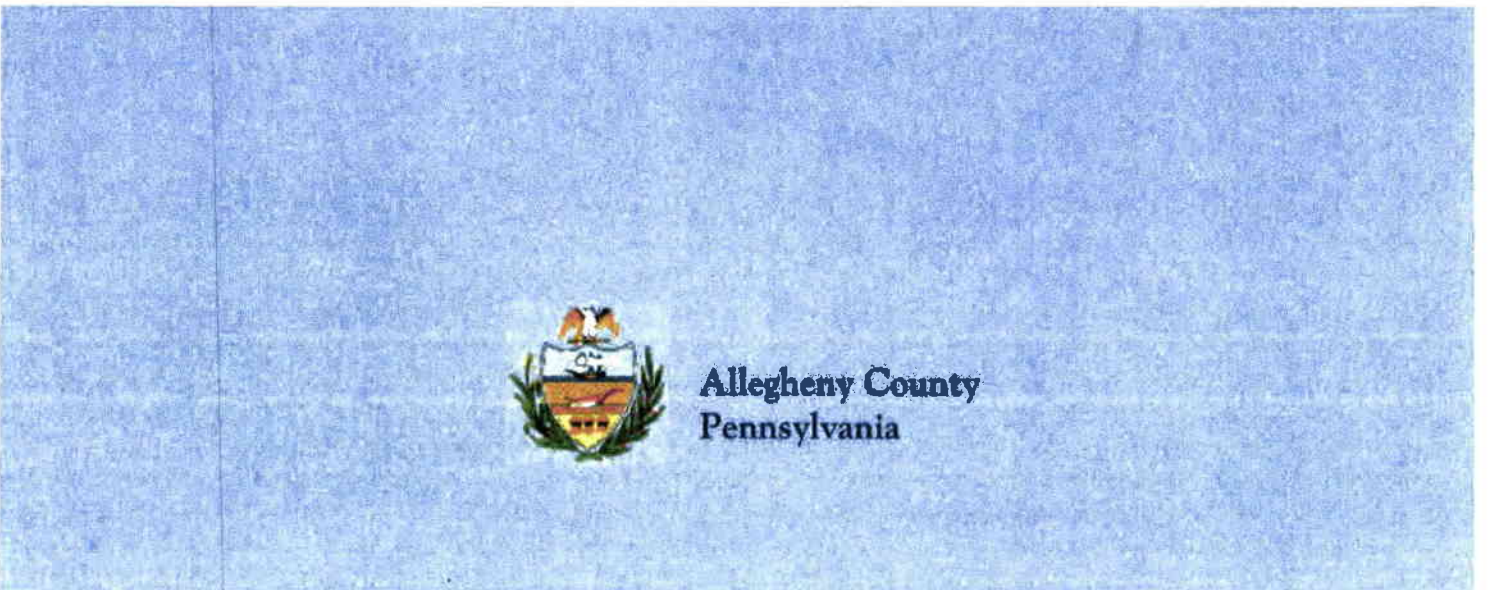
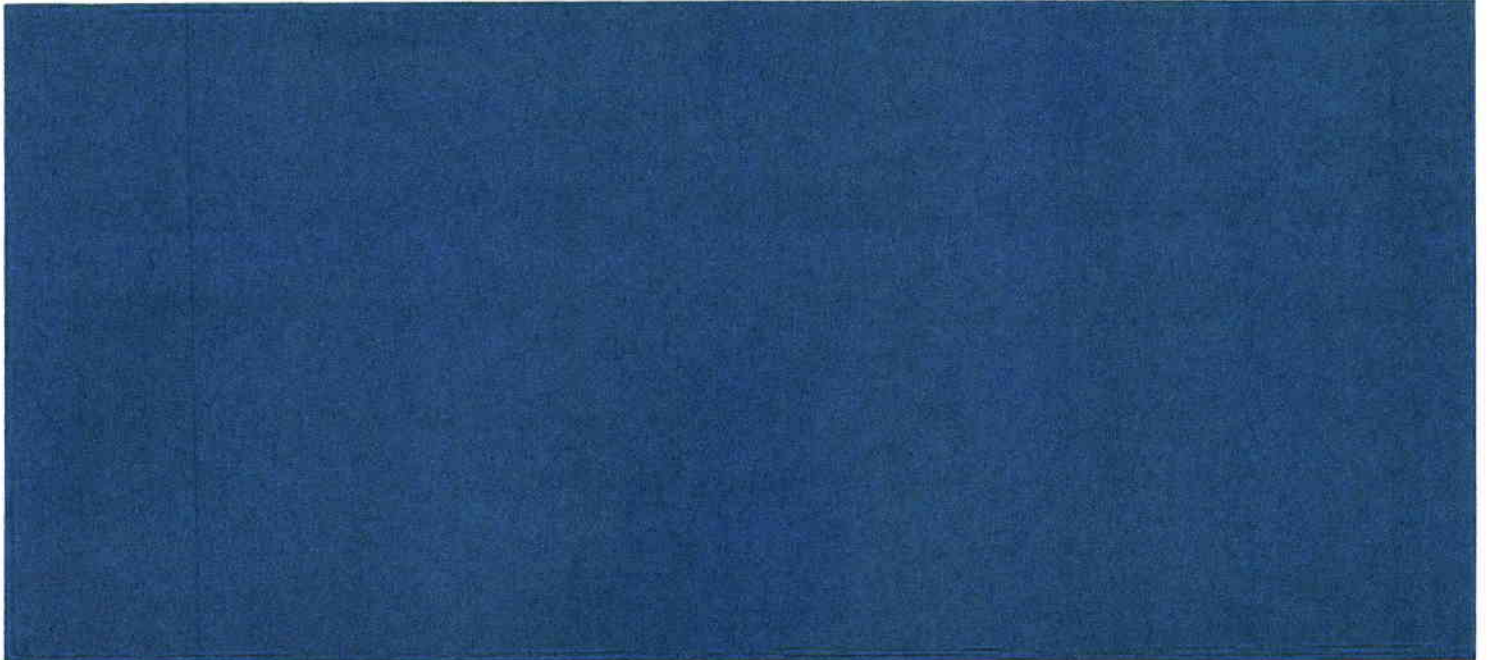
Yearly Activities and Plan Updates The chief mechanism for updating *Allegheny Places* will be the Annual Review. County planning staff will prepare an annual report to the County Executive and County Council summarizing development activities in the County and progress on Plan implementation. The approved Annual Plan will be completed in time to be considered in the preparation of the County Capital budget. Proposed capital budget items will be reviewed by County staff for consistency with the Plan.

The Allegheny Places Fund The County's resources, including funding available through the County's general taxing powers and its special Authorities and grants from State and Federal agencies, will be applied toward the implementation of *Allegheny Places*. Many of the required implementation actions are basic commitments that adoption of a County Plan implies, such as education and outreach, cross-acceptance with local communities, and reviews of local plans and ordinances for consistency with the Plan.

Adoption of *Allegheny Places* also implies a commitment to follow through with the establishment or revitalization of Places, as designated in the Plan. Through *Allegheny Places*, the County has targeted specific locations for development and redevelopment. Bonds issued by the County would provide funding for economic and community development and redevelopment projects in designated Places. The *Allegheny Places* Fund (APF) will support the mission of implementing *Allegheny Places*. The APF will provide no more than 75% of total project costs for any eligible project. The local match may come from a variety of sources.

Action Plan for Implementation *Allegheny Places* outlines the steps necessary to implement the Plan. The roles and responsibilities of the key 'actors' involved in the implementation of the Plan's recommendations are identified and an action plan to get the Plan off to a quick start toward realization is described. Model ordinances are also provided.





Allegheny County
Pennsylvania