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AIR RIVERS LAND BROWNFIELDS GREEN BUILDING RECREATION TRAILS TRANSPORTATION ENERGY

America's Three Rivers

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Tom Murphy, Pittsburgh's former mayor, likes to begin many of his speeches with the same story of his boyhood growing up on the city's North Side.

"My mother always used to warn me," says Murphy. "Make sure you're home before dark and don't go near the rivers."

That was sage advice for anyone living in Pittsburgh prior to 1972, when the Clean Water Act began to have a noticeable effect on the quality of the Monongahela, Allegheny, and Ohio Rivers — a unique confluence of river systems unlike any other in the world, diverse and more abundant than any other state except Alaska. But for more than a century, Pittsburgh's three rivers were an unsightly cesspool of industrial pollution and disease and avoiding them at all costs was a matter of public health and safety.

Fortunately, these rivers today have become a stunning icon of the Pittsburgh environmental transformation story. Species of fish that had died out decades ago have returned in thriving numbers. In fact, ESPN selected Pittsburgh's three rivers as the location for its 2005 CITGO Bassmaster Classic — the premier bass fishing championship in the United States. Another indicator of the transformation is the fact that there are more registered pleasure boats in the Pittsburgh area than all but one other city in America. And mayflies, a delicate and peculiar breed of insect that can only survive in clean water environments, now return to Pittsburgh each spring in swarming numbers — a telltale indicator of just how far America's three rivers have come.

A Storied Past

The three rivers that meet in Pittsburgh are actually a vast watershed of more than a dozen unique creeks and river systems that include more than 30,000 miles of rivers and streams that extend north to New York State and south into West Virginia. Created by glacial melting at the end of the Ice Age, these rivers are as distinctive in their ecologies as they are in their hydrology, their geography, and their history. The Monongahela is the oldest of the rivers, dating back millennia and is largely a working river, supporting barge traffic up and down through industrial and mining towns in southwestern Pennsylvania and West Virginia. In contrast, the Allegheny still contains stretches of river that are designated wild and scenic. An historic tributary, the French Creek, is one of the most ecologically diverse rivers in America where one can still find many species of fish intact from the last Ice Age. In fact, the French Creek supports 87 species of fish and 27 species of freshwater mussels and clams, some of which are rare or endangered.

Pittsburgh exists because of the confluence of the three rivers. When colonial settlers first arrived here, Pittsburgh was the western edge of the American frontier and the rivers provided critical access to the Great Lakes, the Gulf of Mexico, and eventually, the uncharted Louisiana Territory. Sent to scout locations for military outposts before the American Revolution, Lieutenant George Washington first observed that "nature has well contrived this place," and saw that the Forks of the Ohio would make an ideal location for a fort to defend the young colonies. Years later, from this same location, Captain Meriwether Lewis launched his keelboat *Discovery* on an expedition that would take him and William Clark to the Pacific Ocean and forever change the course of American history.

The westward migration and the Industrial Revolution sealed Pittsburgh's place as a commercial and industrial giant. The rivers provided the means to transport iron and steel made in Pittsburgh to markets around the world and the rivers were valued solely for their commercial utility.

Industrial waste and municipal sewage flowed in massive quantities directly into the rivers untreated. River traffic comprised of barges and steamships jammed the three rivers. The fouled rivers were so polluted that the water often reached temperatures of 130 degrees or more. Steamships could not use Pittsburgh river water in their boilers because the acidity would corrode the metal parts. Cholera, typhoid, dysentery, and other diseases were abundant along the river towns and flooding poured deadly bacteria

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into the community. Virtually every species of fish died out. What was left couldn't support the natural vegetation the rivers needed for their own survival. People moved as far from the water's edge as they could.

Families learned to "be home before dark and stay away from the rivers."

Saving the Rivers

Finally, in 1972, the Water Pollution Control Act Amendments brought the plight of the three rivers into the American spotlight. Stringent controls on industrial pollution helped reduce effluent discharges. Decades of vigilance and increased public and legislative attention on the Western Pennsylvania watershed environment have given rise to both a dramatic improvement in water quality as well as dozens of agencies and organizations whose mission is focused on protecting the rivers.

In support of all of this activity, the Western Pennsylvania Watershed Program was created 11 years ago, to provide match funding to help watershed associations access agency grants to complete restoration projects in their sub-watershed. The Pennsylvania Organization for Watersheds and Rivers tells us that there are 87 such groups in the Allegheny River Drainage Basin. Grants for abandoned mine drainage have brought back to life 440 miles of previously dead streams.

Still, these rivers and watersheds are vulnerable to new threats related to population growth and economic development. As more housing developments are constructed, more roads are built and increased non-point source pollutants threaten their stability. An aging sewer infrastructure can no longer handle the volume of rain and snow melting that causes polluted storm water to overflow directly into the rivers.

But renewed public awareness and appreciation for the role of the three rivers in the quality of life in Western Pennsylvania may help ensure that they can maintain their strategic importance as commercial waterways and recreational amenities. In rapidly growing numbers, people are returning to the rivers to work, play, and live. For the first time since the days of Lewis & Clark, being close to the rivers is not something to avoid — it's something to strive for.

Mayor Murphy's mother would never have believed it.

John Dawes is the Administrator of the Western Pennsylvania Watershed Program. He served as an alternate Commissioner on Governor Ridge's 21st Century Commission on the Environment and currently serves as President of the Board of the Pennsylvania Organization for Watersheds and Rivers. He can be reached at rdawes@aol.com.