

INTRODUCTION

Most everyone has heard of the Cuyahoga River. It burst into national prominence in April, 1970, when Cleveland Mayor Carl Stokes testified before a Congressional hearing on the Clean Water Act that “the Cuyahoga was on fire just a year ago.” Cleveland’s “*burning river*” immediately caught the attention of the nation. Comics joked about it and environmentalists grieved. The image was readily adapted as a rallying symbol for the Clean Water Act, and afterwards, the environmental movement. The Cuyahoga River became the poster child for America’s environmental awakening.

When the Clean Water Act passed, friends and foes alike would look to the Cuyahoga River for evidence of improvement - it would become America’s barometer of change. The Cuyahoga would answer our nation’s question: Can we revive our polluted industrial waterways? Today, the Cuyahoga stands out as a model of revitalization and renaissance through a dedicated public/private partnership effort that has dramatically improved our once polluted river. A cleaner Cuyahoga has opened up further opportunities for riverbank parks and trails, protected natural areas, and entertainment districts.

The story of the Cuyahoga River is similar to many American rivers. It has played a central role in the succession of community development and has served numerous community needs. Native Americans valued the river in their everyday lives; they drank its water, bathed, washed and fished in it, hunted along its banks, and used the river for travel and transportation. The first European immigrants settled near the river for similar reasons; expanding its role in serving agriculture and harnessing it as a source of power for numerous mills.

It was the industrial revolution that created a major shift in the community’s value of the river and its subsequent roles. Industry and its companion, urbanization, used the river’s water for production purposes. It became the sewer pipe for byproducts and waste. Manufacturing plants chose riverside sites with the result that the residential population grew distant - having little, if any, contact with this natural resource. River valleys were converted to landfill sites; the river became the place to discard what one no longer needed.

A dry summer day in 1969 in Cleveland allowed a spark from a passing rail car to ignite debris floating in the river below the railroad bridge trestle. The fire was fed by oil slicks on the river’s surface - sending up a black billow of smoke over Cleveland’s skyline. It was not the Cuyahoga’s first fire; nor its biggest. Yet, its story had a profound impact on the way our nation values its natural resources. The modern day story of the Cuyahoga is a story of community reinvestment towards a goal of reinstating the importance of the Cuyahoga River as a source for recreation, education, entertainment, and industry. Americans would learn again what Native Americans had always known - to value the Cuyahoga River in their everyday life.

I. DESCRIPTION OF THE PROPOSED AMERICAN HERITAGE RIVER AREA

The proposed area of nomination for the American Heritage River designation is the Cuyahoga River and its watershed in northeast Ohio (see map). Native American tribes and early missionaries referred to the river as the “Cujahaga”, “Diohaga”, “Cuyagaga”, and “Cuyohaga” - most of these names meaning “crooked river.” One only has to view the river as it flows through the Cuyahoga Valley National Recreation Area or the Cleveland Flats to appreciate how appropriate this title remains. A further explanation of the river’s name can be seen in the way it flows from north (in the Geauga County headwaters) to south (through Akron) before turning north again and heading towards Lake Erie and its mouth in Cleveland.

The 100-mile long, V-shaped river and its 1,100 stream miles of named and unnamed tributaries drain 813 square miles of Geauga, Portage, Summit and Cuyahoga counties, along with small portions of Medina and Stark counties. The watershed represents less than three percent of the land area in Ohio, while supporting fifteen percent (1.6 million) of the state’s population.

The unique topographical and hydrological features of the Cuyahoga River result from a complex glacial history. Two fingers of glacial ice more than two miles thick covered this section of the northern Ohio Allegheny Plateau over 15,000 years ago. As they retreated in response to a warmer climate, billions of tons of melting ice carved out valleys from the rock while depositing sand, gravel and clays in the channels left behind. The Cuyahoga valley is characterized by many areas containing steep, narrow ridges up to 300 feet high. Some of these ridges are sharp enough that no level land can be found

on them, while others are wide and level enough that roads and houses have been constructed on them. These ridges are the result of the thick, easily eroded glacial drift material deposited here by the receding glaciers.

Another remnant of this epoch is the watershed divide between the Great Lakes and Mississippi River basins which runs along an east - west axis through Akron. Water north of the divide flows into Lake Erie, while water on the south side flows towards the Ohio River. The Cuyahoga River, which originates well north of the divide, flows southward for 55 miles, hits the sandstone divide, takes a sharp 180-degree turn and then flows 45 miles northward to where it empties into Lake Erie. As a result, the headwaters of the Cuyahoga are located only 30 miles east of the mouth of the river. This unique, V-shaped watershed phenomenon is thought to occur in only one other river in the world.

As the last glaciers receded, the water level in Lake Erie and its predecessors rose and fell numerous times until a lake formed in a depression bounded by the Portage Escarpment, the Appalachian foothills and the Great Lakes/Mississippi watershed divide. Water filling this depression was originally called Cuyahoga Lake. Over time the water level receded and the area became a wetland which today serves as the source of the Cuyahoga River.

While traveling from these headwaters in Geauga County to the mouth in Cleveland, a wide variety of landscapes and a multitude of land uses can be observed. Lands in the upper reaches of the Cuyahoga are primarily forests, wetlands, pasture and cropland. Several large reservoirs dot this area, serving as the source of drinking water for the City of Akron and surrounding communities, as well as providing a myriad of recreational opportunities. The lower Cuyahoga River basin is one of the most densely populated and industrialized urban areas in America. A large tract of relatively undeveloped and scenic open space, the 32,000-acre Cuyahoga Valley National Recreation Area, is situated between the two major urban centers of Cleveland and Akron. Looking at the entire watershed, a 1994 Landsat cover map indicates that less than 16 percent of it is urbanized, while roughly 22 percent is dedicated to agricultural uses. Woods, forests, and shrubs make up 56 percent of the watershed and the remaining 6 percent consists of wetland areas.

Over 80 communities are located within the Cuyahoga watershed boundaries. Population projections forecast an overall increase in watershed residents by approximately two percent by the year 2010. Current and anticipated population redistribution patterns show a decrease in population for Cuyahoga County with corresponding increases in Geauga, Portage, and Summit Counties. It has been estimated that the population of Geauga and Portage counties may increase by fifty percent in the next twenty years.

Heavy industry brought people to the major urban areas along the river in the early part of the century, but most residents lived far enough from the river so they could not smell it. Now, as the industrial base changes and river improvements are more noticeable, people are moving to areas where they can easily access the river for recreational and other purposes. Whether it is the redevelopment of places like the old warehouse district and the Flats in Cleveland into new upscale apartments and entertainment ventures, or new suburban developments incorporating trails that skirt the river, the people are returning to the Cuyahoga, the "crooked river." The American Heritage River Taskforce is pleased to nominate the Cuyahoga River watershed for recognition as an American Heritage River.

II. DESCRIPTION OF NOTABLE RESOURCE QUALITIES

Historical and Cultural Features

The 'Cuyahoga Frontier,' as this area was known by many historians, is rich with significant events that historically and culturally shaped the making of the United States. When Moses Cleaveland arrived at the mouth of the river in 1796, the river had been in use for nearly 12,000 years. Five known prehistoric settlements, dating from the Paleo-Indian period through the Late Woodland culture, utilized the river valley's resources for food, living space, and trade. Dominant Native American cultures include the Eries and Iroquois. The Cuyahoga River was utilized as the primary leg of a journey from the Great Lakes to the Ohio River. The Signal Tree, a Native American marker of the portage path between the Cuyahoga and the Tuscarawas Rivers, can still be viewed in a Summit County Metropark.

Europeans first explored the Cuyahoga valley in the early 18th Century. Fur traders commonly set up shop along the river

to trade with the natives. The Cuyahoga “War Trail,” as the river and portage became known, was a major north-south route through the valley for French, English and early colonial forces as they set out to conquer the Northwest Territory.

As a result of the Battle of Fallen Timbers between the Shawnee Chief Tecumseh and Revolutionary War General “Mad Anthony” Wayne in 1795, the Treaty of Greenville designated the Cuyahoga River as the western boundary of the United States. This treaty marked the beginning of one of the most unique land establishments in history. The area newly abandoned by the natives was part of a large tract of land granted to the Colony of Connecticut from King Charles I in 1631. After the Revolutionary War, this land holding was pared down to a 120 mile wide strip from the Pennsylvania border westward along the south shore of Lake Erie between the 41st and 42nd parallels. This area became known as the Connecticut Western Reserve. In 1796, Moses Cleaveland, a surveyor with the Connecticut Land Company and the City of Cleveland’s namesake, established his headquarters and supply warehouse on the east bank of the Cuyahoga River at Lake Erie. He set out to survey and divide northeast Ohio into townships and ranges according to New England surveying methods.

Pressure from early settlers gradually drove the natives occupying the west bank of the Cuyahoga farther west. New villages, towns and cities needed foodstuffs and building supplies, so they turned to the Cuyahoga and began to build dams and artificial waterfalls to harness the water’s power for gristmills and sawmills. In 1825 the first dam was built at Bailey Avenue in Cuyahoga Falls followed by five more dams in an area less than a quarter mile long. Remains of many of these old dams and millraces can still be seen throughout the watershed.

Prosperity in the Cuyahoga valley region increased significantly in 1827 with the beginning of construction of the Ohio & Erie Canal - the nation’s first inland waterway link between the Great Lakes and the Mississippi River. Thousands of immigrants came to America to help dig the canal by hand. Their legacy still remains in the rich ethnic mixture that is seen in the Cleveland area, which is now home to over 80 ethnic groups representing all continents and races.

While the Canal opened new markets for agricultural products, the completion of the Valley Railroad in 1850 encouraged industrial development and led to the growth of many settlements. The advent of the railroad also precipitated the demise of the canal and, following the great flood of 1913 which destroyed large sections, the canal ceased operations. Many portions of the canal, its locks, and numerous historic sites and buildings along its banks are still intact today. In 1966, a section of the canal near Tinkers Creek was designated as a National Historic Landmark, followed by the listing of Deep Lock by the American Society of Civil Engineers in 1976. In 1979, areas of the canal within the Cuyahoga Valley National Recreation Area were listed on the National Register. On November 13, 1996, President Clinton signed into law the Omnibus Parks Bill and created the Ohio & Erie Canal National Heritage Corridor.

Between 1850 and 1860, Cleveland’s population grew by 26,000 residents, an increase of 153 percent. With this rapid growth in the lower section of the watershed, the river began to experience an increasing intensity of use. “With the benefits of a geographic location midway between extensive deposits of natural resources, access to land and transportation networks, and the evolution of inter-related industries such as oil, chemicals and paint; sewing machines and clothing; and iron, steel, fasteners, machine tools, automobiles, and shipbuilding, the Cuyahoga Valley emerged as the setting for one of the most significant examples of industrialization and urbanization in America” (Northern Ohio Cuyahoga Valley Corridor Executive Summary, 1992).

Natural Features

The headwaters of the Cuyahoga River begin in two branch streams 1,300 feet above sea level in Geauga County and converge in Burton Township approximately 30 miles east of Cleveland. The area from which the Cuyahoga River originates is a lush area of marshes and swamp forests where development is limited to beaver lodges, goose nests and mink latrines. Several rare swamp forest bird species, such as the prothonotary warbler, make their summer homes here. From here, the river flows sluggishly on a south/southwest path through hilly knob and kettle topography, falling at a rate of 3-4 feet per mile until it reaches the municipality of Kent. “Standing Rock,” a large glacial erratic rock located in the river just north of Kent, was an important native American landmark, used by various tribes as a place for the exchange of information. The river continues its course through the valley and enters a stretch along a sandstone ridge which drops into the falls and cascades of Cuyahoga Falls in Summit County. The actual falls for which Cuyahoga Falls is named are currently under the

water upstream of the Ohio Edison Dam at the Gorge Metro Park. As the river cascades through this area, it falls at a rate of about 25 feet per mile before entering the City of Akron. Here, it meets with the Little Cuyahoga River and the Ohio & Erie Canal before turning north to begin its 30-mile trek through the Cuyahoga Valley National Recreation Area, Ohio Canal Reservation, and finally through several urbanized Cleveland areas. The lower 5.6 miles of the river contain five major oxbows, winding through the area known as “the Flats” of downtown Cleveland. These last few miles of the river are federally maintained as a navigation channel and are dredged annually to a 24-28 foot depth to accommodate shipping. Both sides of the channel consist of steel bulkhead for the entire length. The journey ends at Cleveland Harbor, where the Cuyahoga enters Lake Erie. The present location of the river mouth was originally another oxbow, but was channelized straight into the lake to allow for easier shipping.

The natural flow volume of the river is affected by old mill dams, canal water diversion structures, drinking water storage reservoirs, power plant dams, and municipal and industrial wastewater discharges. Taking these factors into account, as well as the wide variation in regional annual precipitation, the average contribution to Lake Erie from the Cuyahoga River is approximately 664.5 million gallons per day.

Over 37 named tributaries and countless unnamed streams and rivulets make up the natural network of the Cuyahoga River watershed. The diverse character of the tributaries is an outstanding natural highlight of the region. The spongy wetlands of the West Branch of the Upper Cuyahoga, the wildflower-rich floodplain of Furnace Run, the majestic 65-foot falls of Brandywine Creek, the wildly diverse terrain of Big Creek, the magnificent hemlock-lined gorges of Tinkers Creek, and the unique urban meanders of Mill Creek provide a wide variety of landscapes and influx into the mainstem of the river. Over 60 natural and man-made waterfalls are found within the watershed boundary. Most of these, including Blue Hen, Buttermilk, Brandywine, and Bridal Veil Falls, are located within the Cuyahoga Valley National Recreation Area.

The original vegetation of the watershed was dominated by beech/sugar maple forests, supported by the deep glacial soils of the area. Remnant patches of beech/maple forests are still found in scattered upland areas. The majority of the remaining forested areas are mostly second growth stands of mixed hardwoods which vary widely in their composition, containing beech/maple, oak, and hemlock stands. The Cuyahoga River valley is biologically unique, a “botanical crossroads” situated in the transition zone between the Central Lowlands to the west and the Appalachian Plateaus to the east. The valley serves as a natural dividing line between these eastern mountain and western prairie provinces. This unique blend of species has helped create “rare plant islands” of different species associated with the dominant northern and southern species. These plant islands tend to be found on steep bluffs and ravine slopes, stretching from wet flat areas to bedrock cliffs. Flora native to both Canada and Ohio are among examples of the significant botanical features that can be seen in the Cuyahoga Valley National Recreation Area. Northern hemlocks survive in many of the tributary ravines that branch from the valley floor into the rolling uplands. Several rare and significant species are found in isolated wetland areas. Tinkers Creek Gorge contains a virgin presettlement forest where a beech/maple/hemlock association thrives on the moist floor and an oak/hickory association flourishes on the drier areas at the top. Stumpy Basin, a 22-acre wetland located in the Recreation Area, preserves a variety of plant species of regional and statewide rarity, including bottle gentians, stiff gentians, buffalo berry, two species of juniper, and several species of prairie grasses. In addition, the Recreation Area supports a virgin pigmy forest. Once buried by a slumping hillside, the forest has to date failed to reach its mature height.

The Cuyahoga River watershed is home to 252 species of animals that are considered to be endangered, threatened, or of special interest. The Ohio Department of Natural Resources Division of Wildlife has designated 85 threatened and 59 endangered species of flora and fauna that are found in the watershed. The majority of the designated species are fish and mollusks which are an integral part of the aquatic community found in the river.

The Ohio Environmental Protection Agency monitors the water and biological quality of the river on a regular basis. In a study conducted in 1991, 23.9 percent of the river miles surveyed were in FULL attainment of the Warmwater Habitat aquatic life use designation, 20.7 percent were in PARTIAL attainment and 55.4 percent (49.6 miles) were in NON attainment. Although much of the river still does not meet the use designation, significant improvements in river water quality and its biological communities have been observed over the past 25 years. In particular, the stretch of river between Akron and Cleveland was once considered a “dead” zone because of poor water quality and lack of fish. Now over 25 species of fish are found here and the river meets chemical water quality standards most of the time. The river is pointed to as a symbol of the environmental progress that has been achieved in the last two decades by the enactment and

enforcement of strong environmental legislation.

Scenic and Recreational Features

The natural features discussed above provide the focal point for numerous scenic and recreational features found in the watershed today. Standing out among these is the collection of city, county and national parks that are located along the river and its tributaries.

The Cleveland Metroparks was established in 1917 to develop a comprehensive plan to create a system of connecting parkways encircling Cleveland. Today, that system of parks is a reality, and includes 14 reservations and the Cleveland Metroparks Zoo. The 19,000-acre park system is known as the “Emerald Necklace.” With its newest addition, the Ohio & Erie Canal Reservation - located along a 6-mile stretch of the river and nearby canal, the “pendant” to the necklace is being created and will provide a contiguous link to the Cuyahoga Valley National Recreation Area. It is the first Cleveland Metropark to be located on the mainstem of the river and in the heart of the metropolitan area which the park district serves. The Canal Reservation will promote fishing and canoeing in the river and canal, along with more traditional services.

In 1974, Congress authorized the formation of the Cuyahoga Valley National Recreation Area (CVNRA), now recognized as one of the highlights of the region in terms of natural and historical preservation, cultural arts, and outdoor recreation. The CVNRA conserves over 32,000 acres of relatively undeveloped and scenic open space in a pastoral valley lying within thirty miles of four million residents of northeastern Ohio. It includes 22 miles of the Cuyahoga River and valley extending from the northern edge of Akron to the southern edge of Cleveland. Today, the CVNRA preserves numerous forested tributary watersheds, open grassy plateaus, and a few rural communities. Small, privately owned agricultural tracts dot the landscape, while a substantial portion of the acreage is held in public and quasi-public ownership as park lands, recreational facilities, camps, nature preserves, and primitive areas. The park has benefitted the public by providing access to the river via a 22-mile linear trail using the old Ohio & Erie Canal towpath bed. Opened in 1993, the Towpath Trail runs parallel to and between the river and the canal. The park attracts over 2 million visitors a year, making it one of the nation’s most popular and most utilized national parks. Master planning is underway to continue the Towpath Trail northward through the Canal Reservation to eventually link with Cleveland Harbor. Southward extensions into the City of Akron are also underway.

When completed, visitors will be able to hike or bike over thirty miles from Akron to Cleveland. The Cuyahoga Valley Scenic Railroad currently runs through the park near the river and trail, with extended service into downtown Cleveland being seriously considered. The Flats Oxbow Association is helping to coordinate public access plans in downtown Cleveland for the many trails, bike paths, and railway extensions that are being planned.

The Metro Parks, Serving Summit County provide recreational access and associated services at several locations along the river in the middle portion of the watershed, while the Geauga County Park District provides similar opportunities along with canoeing access in the upper portions of the watershed. In 1974, a 25-mile stretch of the river in the upper watershed was designated as the Upper Cuyahoga Scenic River by the Ohio Department of Natural Resources, one of only nine rivers in the state to be designated. The cities of Cuyahoga Falls and Kent have constructed riverfront boardwalks and access points for local residents and tourists. Hiking, biking, birding, fishing, skiing, and other recreational opportunities are now readily available to watershed residents and others, restoring their once lost connection to the Cuyahoga River.

Economic Features

The Cuyahoga River has a history deeply rooted in this country’s economic development that makes it stand out among America’s rivers. Of notable economic importance is the valley area at the mouth of the river known throughout the country as “The Flats.” This bottomland forms a natural divide between the surrounding plateaus where Cleveland’s founding fathers chose to settle. The swampy character of the area caused many illnesses during the 18th century. This caused the early settlers to move to higher ground, and for a period, the valley was used chiefly for agriculture use. However, with the opening of the Ohio & Erie Canal in 1832, industrial uses quickly occupied the land formerly used for farming. Just before the Civil War, railroads were constructed on the valley floor and on bridges that crossed the river. Because the area was easily accessible by ships, trains and roadways, and located adjacent to a vast, cheap labor supply, industrial development

became increasingly intense until World War II. Then the industries began to relocate to outlying areas of the city near highway interchanges and portions of the Flats became less intensively used.

The Cuyahoga River has provided a mix of resources appropriate for the development of a manufacturing and shipping capital for the Great Lakes. Northeast Ohio's reputation as a world corporate center today is the outgrowth of a movement launched in the early 1800's to attract new industrial entrepreneurs to this region. Many well-known companies which were started in this area over the last 150 years remain in their original location; those that have expanded into national and international corporations have kept their headquarters here in northeast Ohio. The Sherwin-Williams Company, the creator of ready mix paint, was incorporated in 1884 on the Cuyahoga's east bank in Cleveland. The Standard Oil Company (now BP America), built by John D. Rockefeller, is the company that "made the Cuyahoga shores the nation's oil refinery" (Ellis, 1966). The Cleveland-Cliffs, Oglebay Norton, Hanna Mining, Republic Steel, Jones & Laughlin (now merged with Republic as LTV Steel), and George Hulett companies are a few of the names that made the Cuyahoga Valley an important player in the iron and steel industry.

The development of the Port of Cleveland is owed to Lorenzo Carter, who built the first ship, the *Zephyr*, and the first log warehouse to store goods waiting to be transported. Carter saw the need to develop an industry to transport the raw and finished materials produced throughout the valley. Dozens of shipyards followed suit and the industry flourished, making the Cuyahoga the shipping headquarters of the Great Lakes. As a result, the Port of Cleveland became the first major U.S. full-service port on the Great Lakes, driving the development of the banking, insurance, customs and storage industries. Today, the port is the third largest on the Great Lakes, and has the distinction as being one of the nation's largest overseas general cargo ports, shipping and receiving cargo from 100 ports worldwide.

The economic evolution of the City of Akron is a very distinct story, as it was the capital of another industry significant to the nation. Benjamin Franklin Goodrich changed the Midwest economy forever with the establishment of the rubber industry. Rubber fire hoses, machinery belts, fruit jar rings, pump valves and the first pneumatic tires were made in Akron with water from the Cuyahoga River. Names like Goodyear, Firestone, and Seiberling expanded the business until Akron was known as the "Rubber Capitol of the World."

The Cuyahoga River and its tributaries provided the essential ingredient - water - to turn the mills and transport the raw materials and finished products for a successful grain industry. In a matter of years, Akron evolved into the nation's cereal capital, home of the famous Schumacher Milling Company and Quaker Oats Company. A 1911 Governor's Deed, along with subsequent state legislation, gave Akron the authority to use the Cuyahoga River as a public drinking water source. This resulted in the building of several large municipal reservoirs (LaDue, East Branch, Mogadore, and Lake Rockwell) to provide an adequate and safe drinking water supply for the residents of the Akron area. (This application is submitted with the understanding that an American Heritage River designation will in no way have a negative impact or otherwise impair the rights conferred under that Governor's Deed and subsequent legislation.)

Cleveland and Akron would not have been able to remain as economic centers without a connection to other markets. Equally important, development of the interior portions of the country relied on efficient transportation. This importance was noted by a young aide to Governor Benjamin Harrison of Virginia named George Washington. Later, in 1784, he proposed the building of a canal system linking the Cuyahoga and Muskingum Rivers, thereby connecting Lake Erie to the north and the Ohio River to the south. Water from the Cuyahoga River was diverted to become part of the Ohio & Erie Canal when it opened for business in 1832. This canal was the nation's first inland waterway and would become known as the most prosperous canal system in the state, as well as one of the most extensive and successful in the nation.

Unfortunately, the Industrial Revolution that put northeast Ohio on the map became a problem for later generations. In the process of refining, grinding, boiling, pumping, and mixing, industrial pollutants were mixed with untreated sewage and debris from the densely populated urban areas. On several well known occasions, the Cuyahoga River even burst into flames. As a result of the infamous fire of 1969, the Cuyahoga became the 'poster child' of the polluted environment, and a national cry for clean water and air ensued. In response, Congress established the United States Environmental Protection Agency in 1970, enacted the Clean Water Act, and ratified the Great Lakes Water Quality Agreement with Canada in 1972. The population of the Cuyahoga River watershed, and indeed the nation, were not content with their disconnection to the river caused by industry and pollution. The movement had begun to clean up and restore the river, and to reconnect the

residents with their greatest natural resource.

Historically, municipal sewers and sewage treatment plants discharged high levels of biochemical oxygen demanding substances (BODs), solids, ammonia, and phosphorus which resulted in increased algal growth and a lack of dissolved oxygen in portions of the river and Lake Erie. Heavy metals, oils, solvents, polychlorinated biphenyls (PCBs), and other industrial pollutants were discharged to the river causing a negative impact to fish and other aquatic life. In response to the Clean Water Act, hundreds of millions of dollars were spent by watershed municipalities and industries to build and upgrade wastewater treatment facilities. In the lower Cuyahoga River, the elimination of coking plant operations, improved industrial wastewater collection and treatment facilities, process water recycling, production cutbacks and process eliminations, and tie-ins to sanitary sewerage systems have resulted in drastic reductions of waterborne pollutants. Today, most high pollutant levels have been eliminated and dissolved oxygen levels are sufficient in a majority of the watershed. Several pollution-sensitive fish species, such as reddsided dace and rainbow darter, have returned to areas formerly devoid of life.

The cleanup of the Cuyahoga changed the way in which people viewed and used the river, and provided the impetus for significant economic development. People valued the river again and started to initiate programs and projects to bring them back together. Parks, trails, and bike paths were built along its banks. Old industrial area warehouses were converted to housing and new commercial enterprises. Riverside lands and historical sites came under the protection and preservation of the Cuyahoga Valley National Recreation Area and other organizations. People began to travel or relocate to areas where they could reconnect and recreate with the river.

Perhaps the greatest measure of success caused by the transformation of the Cuyahoga River is seen in Cleveland and the Flats area. Where debris and scum on the river's surface commonly caught fire in the early part of the century, we now have a redeveloped, bustling waterfront industry complete with trendy restaurants, marinas, concert venues, condominiums, tourist facilities, private businesses, and light industries. Over 3.5 billion dollars has been invested in the Cleveland area in recent years. The North Coast Harbor area is now home to Voinovich Park, the Great Lakes Science Center, and the Rock and Roll Hall of Fame & Museum. Gund Arena and Jacobs Field (home of the 1997 American League Champion Cleveland Indians) will soon be joined by a new municipal football stadium. The Regional Transit Authority's Waterfront Line is now in operation, providing mass rail transit between these newly redeveloped areas along the river and waterfront. Cleveland (and the Flats) is now a major destination for recreation, entertainment and tourism in the United States. This remarkable renaissance has received international attention, attracting foreign visitors and dignitaries wanting to know the story of the Cuyahoga River. It serves as a shining model for the future of other rivers in the United States, as well as the world.

III. DESCRIPTION OF THE COMMUNITY'S PLAN OF ACTION

A. Community Vision and Challenges to Community Action

The community vision for the Cuyahoga River is a renewal and renaissance of the river by integrating it back into the everyday life of the community. This vision is focused on sustainable development of the Cuyahoga River watershed through balanced planning of economic and environmental uses of the river and the surrounding landscape. The challenge for the future is to find ways to share information and coordinate projects throughout the entire watershed in order to maintain and restore beneficial uses to the whole river. Designation of the Cuyahoga River as an American Heritage River will help to further the renewal and renaissance through a coordinated effort that delivers improved water quality; expanded recreational opportunities; protected natural, cultural and historic resources; and continued economic growth and development.

The Cuyahoga River has made substantial progress since it was described as a "virtual waste treatment lagoon" in the 1960s (Burns, 1985; RAP Stage One Report, Public Review Summary, 1992). Federal legislation passed in the early 1970s forced dischargers to improve their waste treatment processes. Industries had to reduce the volume of metals and other pollutants which they once dumped into the river unchecked. Municipal sewage treatment plants on the Cuyahoga expanded their treatment capacities in the 1970s and 1980s, thus reducing the volume of raw sewage overflows to the river.

With the major dischargers now in compliance with the Clean Water Act, the 1980s witnessed the return of clean-water organisms which cannot tolerate pollution. Caddisflies and mayflies, along with the fish that selectively feed on them, have come back. Twenty years ago, not even the pollution-tolerant fish could survive in the river. Fishermen today tell of catching

trout and salmon in the river.

The Flats area in downtown Cleveland supports major industries that rely on the river and has also become a thriving entertainment district, with popular restaurants and night clubs along the shores of the river. Recreational boaters are back in large numbers at the river's mouth. The highly visible problems that brought Cleveland much embarrassment in the 1960s - the oil slicks which burned, the discolored water and odors - are largely gone.

However, significant problems still exist within the Cuyahoga watershed, such as the presence of persistent pollution. Persistent pollution, which may be found in the water at very low concentrations, can accumulate in wildlife and human systems. The presence of persistent pollutants throughout the Great Lakes has reduced wildlife populations and threatened human health. For example, occasional exceedances of chronic water quality standards for metals and dissolved oxygen, particularly in the navigation channel, threaten the ability of fish to spawn upriver and the survivability of larval fish on their journey back to Lake Erie. Elevated bacterial levels in the water continue to be a problem, in part due to combined sewer overflows draining directly to the river or its tributaries. Elevated bacteria levels create a human health hazard and impair the recreational uses of the river. Other sources of elevated bacterial levels include storm water runoff, both from urban areas as well as from heavily concentrated areas of animal waste; failing home sewage systems; or treatment plant malfunctions. These problems can be more difficult and more costly to solve.

In many cases, there is no single, large source of the problem, as there was in the 1960s, at which to point a finger. Moreover, there are existing problems which are caused by, or magnified by, our own personal habits and choices. These types of problems include degraded aesthetics and impairments to recreation due to debris and litter; degraded aquatic or terrestrial wildlife habitat due to a loss of wetlands and riparian buffer zones; and lack of recreational opportunities and access to the river.

Although increased development of the watershed has led to thriving local economies, development in once rural areas poses new problems for the various groups responsible for restoring and protecting the Cuyahoga River and to those wishing to maintain the rural character of their surroundings. Thus the challenge is to find a balance between all of the beneficial uses of the watershed, without compromising either the health of the river or the prosperity of those who live and work in the watershed. We realize that a healthy river is the key to a healthy community and the region's future prosperity.

B. Description of Major Partnerships, Projects & Products, and Future Goals

A substantial network of both formal and informal local partnerships exists within the Cuyahoga River watershed to support and provide resources for the community's plan of action. Together, their combined memberships and various efforts address the full spectrum of issues surrounding natural resource and environmental protection, historic and cultural preservation, and economic revitalization within the watershed. Four major planning partnerships who currently operate within the watershed serve together as lead agencies in carrying out the plan of action set forth herein. These four major partnerships include: the Cuyahoga River Remedial Action Plan (RAP) Coordinating Committee; the Ohio and Erie Canal National Heritage Corridor; the Water Quality Planning Task Force of the Northeast Ohio Areawide Coordinating Agency (NOACA) and the NE Ohio Four County Regional Planning & Development Organization (NEFCO); and the Upper Cuyahoga River Watershed Task Force. A description of each of these partnerships' roles, some of their projects and products, and future goals are described below:

1. The Cuyahoga River Remedial Action Plan ("RAP") Coordinating Committee was established in 1988 as a 33-member, community-based planning organization whose mission is "To prepare and recommend a Remedial Action Plan for the Cuyahoga River Basin and Lake Erie nearshore areas, which will enhance their environmental quality and restore beneficial uses and value as an environmental and economic resource to the Northeast Ohio community in accordance with the Great Lakes Water Quality Agreement" (Cuyahoga River RAP Stage One Report, June, 1992). The Cuyahoga River RAP Coordinating Committee is nationally recognized as a model for the preparation of a remedial action plan by a grassroots, community-based organization.

The RAP Coordinating Committee's 33 members come from four different groupings of interested stakeholders: (1) state and federal agencies; (2) industrial, commercial and private interests; (3) community interest groups; and (4) local public

jurisdictions. State and federal agencies represented include: the U.S. and Ohio Environmental Protection Agencies, the U.S. Army Corps of Engineers, the Ohio Department of Natural Resources, the Natural Resource Conservation Service, and the Cuyahoga Valley National Recreation Area. Industrial, commercial and private interests are represented by individuals from LTV Steel, Goodyear Tire & Rubber Company, American Steel & Wire, the Lake Carrier's Association, and organizations representing smaller businesses such as the Flats Oxbow Association, Flats Industry, and the Greater Cleveland Growth Association. Represented community groups include the Cleveland Waterfront Coalition, the Sierra Club, the League of Women Voters, Friends of the Crooked River, and the Greater Cleveland Boating Association. Local public jurisdictions are represented by the public utilities divisions of the Cities of Cleveland and Akron, the Northeast Ohio Areawide Coordinating Agency (NOACA), the NE Ohio Four County Regional Planning & Development Organization (NEFCO), and the Sanitary Engineering Offices for Cuyahoga and Summit Counties, the two most populated counties within the Cuyahoga River Watershed.

In 1989, the Cuyahoga RAP formed its own nonprofit corporation, the Cuyahoga River Community Planning Organization ("CRCPO"), to seek public and private foundation funding to hire paid staff and proceed in its community-based effort to plan and implement the remediation of the Cuyahoga River. The chairman of the Cuyahoga RAP Coordinating Committee also acts as president of the CRCPO.

As it approaches its ten year anniversary, some of the accomplishments of the RAP and the CRCPO are as follows:

- 1992 - completion of the Stage One Report (1,600 pages) for the lower 43 miles of the Cuyahoga River, which identifies those conditions in and surrounding the river which impair desired beneficial uses identified in the Great Lakes Water Quality Agreement and spells out a research agenda.
- 1992 - completion of a community preference poll to determine attitudes of the general public regarding remediation of the lower Cuyahoga River.
- 1994 - completion of a fish tissue study for the lower 43 miles of the Cuyahoga River; and the completion of a creel study to determine consumption habits of consumers for fish caught in the lower river and the near-shore area of Lake Erie.
- 1995 - completion of the Stage One Update (130 pages), providing newly acquired data and information.
- 1995 - funding and implementation of a streambank stabilization program that enables public and private riparian landowners to leverage public funds to stabilize the banks of the Cuyahoga River and its tributaries through bioengineering techniques. (Four such stabilization projects are currently underway in this program.) (Ongoing)
- 1995/1996 - design and implementation of two prototype stream stewardship programs to promote community and citizen awareness of tributary watersheds and their impact upon the Cuyahoga River. (Ongoing)
- 1996 - completion of an Early Implementation Report, outlining the many projects and programs now underway or committed to implementation in the near future.
- 1996 - completion of a technical feasibility study for artificially aerating the lower 5.6 miles of the Cuyahoga River.
- 1996 - completion of a benefits study to determine the impact artificial aeration would have on fish species within and above that portion of the river used as a federal navigation channel.
- An extensive public involvement program, which includes a major storm drain stenciling effort aimed at stenciling all the storm sewer catch basins within the lower Cuyahoga River watershed (approximately 2700 storm drains were stenciled in Cuyahoga and Summit counties in 1997); stream clean-ups; a speakers bureau; and tree and willow planting projects. (Ongoing)

In order to restore beneficial uses to the river, the Cuyahoga RAP is working toward the following goals:

- a. assist other agencies in building capacity for an ecosystem approach to watershed management;
- b. establish a forum to provide informed public input to water quality management agency decisions;
- c. provide specific direction to Ohio EPA on water quality standards issues in the lower portion of the Cuyahoga River;
- d. support and encourage riparian protection actions by landowners and local jurisdictions in the Cuyahoga watershed;
- e. build public constituencies for and assist in developing community watershed plans for subwatersheds in the Cuyahoga basin;
- f. support research related to health effects concerning beneficial use impairments;
- g. assist in coordinating environmental assessment and remedial action planning with Cuyahoga river management agencies; and
- h. build partnerships among stakeholder agencies and organizations to enhance capabilities to do remediation.

Specific planning objectives for the future include:

- An ambitious research agenda that includes a fish larval survival study for the federal navigation channel.
- Researching feasible methods of improving water quality and fish survival without impeding navigation within the lower 5.6 miles of the river.
- Development of a set of model stream water quality and riparian zone protection ordinances for adoption by municipalities and communities throughout the watershed.
- Facilitating stream bank stabilization projects using state-of-the-art soil bioengineering techniques.
- Promoting stream stewardship programs to raise community awareness and citizen involvement with the streams in their backyards through education and hands-on projects; promoting additional stream stewardship programs modeled after the two current prototypes.
- Integrating pollution prevention concepts into curricula for grades K-12 and colleges/universities within the watershed.

2. The Ohio and Erie Canal National Heritage Corridor (Canal Corridor) is co-managed by three non-profit organizations: Ohio & Erie Canal Association; Ohio Canal Corridor; and Ohio & Erie Canal Corridor Coalition. These three organizations are coordinating their efforts to develop an 87-mile linear park system from Cleveland's lakefront to the Village of Zoar, Ohio. They have a combined membership of individuals, companies and organizations that exceeds 600, with an interest list of more than 8,000 people.

The mission for the Canal Corridor is to preserve, enhance and interpret the significant natural, historic and cultural resources; to expand recreational opportunities; and to promote sensitive economic developments. The Cuyahoga River is a prime resource in the northern sector of the Canal Corridor; its future indicates a tremendous potential for new recreational trails, parks, interpretive wayside exhibits, and economic opportunities for a mixed-use approach that incorporates housing, retail and light industry.

The process behind the work of the Canal Corridor is to establish working partnerships between government agencies, non-profit organizations, businesses, industries and individuals; to set mutual goals and objectives; and to work together to achieve those goals. The network that has developed around the varied issues and projects has been extremely effective in making progress. The Ohio & Erie Canal Corridor Coalition works in Summit County, while Ohio Canal Corridor focuses on Cuyahoga County. Each organization works with various units of government and with the private sector in initiating and steering economic developments.

Major initiatives within the past four years have included:

- Early 1990s - Construction of the new Settler's Landing Park - a \$2 million public park that tells the story of the foundation of Cleveland and its transportation history.
- 1996 - Construction of Hart Crane Memorial Park - a \$500,000 new park along the Cuyahoga River that tells the stories of the poet Hart Crane, the Cuyahoga River, and the infamous battle of 1836 between the cities of Ohio City and Cleveland.
- 1996 - Federal designation of the Ohio & Erie Canal as America's seventh National Heritage Corridor.
- 1996 - State designation of the Ohio & Erie Canal Scenic Byway as Ohio's first scenic byway. The Scenic Byway is a vehicular roadway from Cleveland to Dover, Ohio, that will serve Canal Corridor visitors and is important to the Cuyahoga River as it delivers people to points of access to the river.
- 1996 - Federal Highway Administration award of \$250,000 toward a way-finding signage system and visitor's guide to serve the Scenic Byway and Canal Corridor.
- Design and construction of fifteen additional miles of the Towpath Trail, a multi-purpose trail which parallels the Canal and the Cuyahoga River. The Trail will eventually run the entire 87-mile length of the Canal Corridor, extending from Zoar to downtown Cleveland. (In progress).
- \$1 million grant in 1998 Department of Interior Appropriations Bill for Canal Corridor projects, such as trails and interpretive exhibits.
- Development of the new Cleveland Metroparks' 300-acre Canal Reservation, linking a number of natural attributes, such as Mill Creek Waterfall, Big Creek, the lakefront, and visitor attractions like the Cleveland Metroparks' Zoo and Rainforest, the Cuyahoga Valley National Recreation Area, and the Cleveland Metroparks. The Canal Reservation is a product of a public/private partnership that included land donations from five major industries along the Cuyahoga River. This \$6 million park will provide access to the river, serving 300,000 residents within a five-mile radius. (To

be opened in Fall of 1998).

- Development of a trail link along Mill Creek (a Cuyahoga tributary) to a long-lost waterfall by the Broadway Area Housing Coalition and Cleveland Metroparks. Phase I of trail construction is slated for spring of 1998. The trail winds through a new 200-home development built by the Zaremba Company, which stands out as the single largest housing project in Cleveland since World War II.
- Extensive study of connectors to the new Canal Reservation. These trails and bikeways will link adjoining communities and neighborhoods to the new Canal Reservation. (1998; Ongoing).
- Extension of the Cuyahoga Valley Scenic Railroad - an excursion railroad that will serve the lower 50 miles of the river valley, from Cleveland to Akron and on to Canton, with rail service that interprets the history and natural environs of the Cuyahoga River valley. (In progress).
- 1997 - Promotion of a new park and greenway system along West Creek, a tributary to the Cuyahoga River.
- Development of Thornburgh Station - a \$12 million private mixed use development along the Cuyahoga River that will serve park users from the Cuyahoga Valley National Recreation Area and the Cleveland Metroparks' Canal Reservation. Thornburgh Station will be a model development that includes riparian protection along the riverbank, integrates the Towpath Trail, and offers a mix of retail stores that serve recreational users. The architecture and land use respect the Ohio Canal era; the project includes interpretive displays, informational kiosks and public plazas. (In progress).

The Ohio & Erie Canal Association will embark on a two-year master planning process for the entire 87-mile Canal Corridor in 1998. This plan will include public participation, incorporate existing community plans, and act as a guidebook for development for the next ten years. All three non-profit organizations will focus their work plans on its completion. Within this plan, a complete set of historic, archeological, natural and cultural resources within the Cuyahoga River and its tributaries will be identified. A plan of action to protect, enhance and interpret the resources will be defined. Public access will be integrated into any final product. Beyond the items for conservation and preservation, economic development opportunities will be explored and mapped. The result will be a holistic approach to the future uses of the Cuyahoga River valley for the lower 50 miles.

3. The Water Quality Planning Task Force of the Northeast Ohio Areawide Coordinating Agency (NOACA) and the NE Ohio Four County Regional Planning & Development Organization (NEFCO), is a joint program of the two areawide water quality agencies designated under the Clean Water Act and their member local governments and public agencies. They are working throughout the entire watershed on a plan to update policies and procedures for managing water quality through facility planning updates, the identification of critical resources, and enhanced procedures for approving environmental infrastructure investments. In 1975, the Governor of the State of Ohio designated NOACA as the Water Quality Management Agency under Section 208 of the Clean Water Act. NOACA continues to serve in this capacity on behalf of Cuyahoga, Geauga, Lake, Lorain and Medina counties. NEFCO serves the same role in Portage, Stark, Summit and Wayne counties. Together, NOACA and NEFCO are undertaking a major update of the region's Water Quality Management Plans, which were originally developed in the late 1970s. A Water Quality Management Planning Task Force has been formed to assist in this undertaking. The Task Force includes representatives of municipalities, counties, sanitary sewer agencies, boards of health, planning commissions, county park districts, soil and water conservation districts, and watershed advisory bodies from each of the counties in the Northeast Ohio 208 planning area, including the entire Cuyahoga River watershed. They are charged with updating the Northeast Ohio 208 Water Quality Management Plan to guide future land use and watershed management decisions in the region, including the Cuyahoga River basin. Major initiatives of the plan update process (to be completed in 1999) include:

- Identification of critical environmental resource areas to be protected within the region.
- Identification of areas of projected development in currently unsewered areas.
- Improved state agency procedures for evaluating and approving wastewater management plans that are protective of critical areas.
- Recommended improvements with county agency procedures for evaluating and approving wastewater management plans that are protective of critical areas.
- Recommended land use guidelines for protection of riparian zones.
- Recommended improvements with county agency procedures for urban sediment and storm water runoff control.
- Coordination with existing watershed planning efforts.

4. The Upper Cuyahoga River Watershed Task Force serves as a round table for member agencies, local government

units, organizations and associations to share information about their respective programs, projects, priorities and concerns, and to benefit from the synergism available through member interaction and cooperation. It assists in publicizing key topics of concern, ongoing projects and efforts of members. The Task Force provides input, advice and coordination to member and joint-member projects. It seeks and undertakes action-oriented tasks to assist members in their efforts to protect the upper Cuyahoga River watershed, primarily in Geauga and Portage counties. The Task Force relies on resources provided by member agencies for internal activities such as meetings. It has helped member organizations garner monetary resources to undertake a variety of projects, which include the following:

- Formation of a regional partnership in 1995, the Upper Cuyahoga Watershed Alliance, between local governments, land trusts, and private citizens to address growing population concerns in this headwater region.
- Carrying out a three-year program funded in 1996 by the Ohio Department of Natural Resources Nature Works Grant for the identification and acquisition of conservation easements in the upper Cuyahoga watershed. In the first year of this program, over forty acres of riparian area have been protected. (In progress).
- Development of a Riparian Area Protection Plan which establishes long-range strategies to protect ground and surface water resources, wildlife habitat and natural landscapes; and to serve as a summary of the existing conditions in the upper watershed. Development of the plan started in 1996, and it will be used to foster on-going training and education of local officials; encourage development of new zoning that protects the riparian corridor; and promote ordinances to protect the public's investment in the restored riparian area. It wisely takes into account the need for encouraging multiple uses of some riparian areas to accommodate the growing population. In this capacity the plan will serve as an excellent reference to local governments, business, citizens and schools interested in learning about the importance of riparian buffers and will also set into motion a program to begin acquiring and restoring riparian easements.
- Installation and demonstration of a home sewage wetland treatment system in 1996. This demonstration of a new treatment technology is still undergoing evaluation. (Ongoing, to be completed in 1998).
- Developing and implementing institutional arrangements between the City of Akron and the Geauga Park District for the management of recreational facilities at the City Reservoirs. A ten-year agreement was signed in 1996 for the East Branch Reservoir. Through these agreements, area residents are able to enjoy recreational opportunities such as boating, fishing, and swimming in these important water resources.

There are many other, less formal partnerships within the watershed focusing on economic development. These operate on more of a free market basis, although they are well represented within the above-mentioned partnerships. A number of industrial, commercial and private interest organizations are working to sustain and revitalize the economic growth along the Cuyahoga River, such as The Greater Cleveland Growth Association, Flats Industry, the Flats Oxbow Association, Cleveland Convention and Visitor's Bureau, Cleveland Tomorrow, Akron Tomorrow and others. These partnerships, which include major stakeholders along the river, work toward the economic revitalization of the Cuyahoga River watershed through retention and expansion of industrial and commercial uses of the river and its valley; development of the Flats as Ohio's second most visited tourism and destination entertainment district; provision of public access to the river through land donations and cooperative planning efforts; and efforts such as the lighting of the bridges over the river as an effort to highlight the early and existing transportation uses of the river as an industrial base. Based on improvements in the water quality of the river, there has been focused investment in the entertainment and tourism industry. We intend to work proactively to engage and collaborate with economic partnership organizations within the framework of the American Heritage River program.

C. Proposed Organization of the Cuyahoga River American Heritage River Program and Federal Role

The challenges we face as a river community today are finding and sustaining a coordinated effort of river restoration, protection, and development throughout the watershed; coordinating and streamlining existing programs to protect, restore and revitalize the natural, scenic, recreational, historic, cultural and economic features of the Cuyahoga River; and finding a balance between economic and environmental revitalization.

As articulated above, several community-based planning organizations are already focusing considerable attention and resources toward achieving the vision for the river. The American Heritage River (AHR) program provides an opportunity for strengthening collaboration for action among these groups, enlarging the base of collaborating organizations over time, enhancing public awareness and involvement through joint activities, and providing a framework for more supportive involvement by federal agencies with a stake in the river.

The AHR program proposed for the Cuyahoga River includes the establishment of an ongoing mechanism for collaboration among the major partnership organizations, such as a Cuyahoga River AHR committee, which would meet periodically to discuss and coordinate goals and priorities. It is proposed that the federal river navigator appointed to support this process would be a non-voting ex-officio member of this committee. The committee would initially meet with the appointed federal river navigator to:

- (1) review the mission of the Cuyahoga River AHR committee;
- (2) develop an ongoing organizational support arrangement;
- (3) develop program elements, including a published annual agenda, a public involvement program, progress reporting of partner programs, and implementation of a strategy to enlarge the AHR partnership base; and
- (4) confirm an AHR action agenda for the first year that addresses: beneficial use restoration planning and implementation for the river, historical and cultural heritage program development, expanded recreational opportunities, expanded programs of preservation and interpretation of natural, cultural and historical resources, public and private investments in river-based economic enterprises, water quality management planning for the entire watershed, and land and water quality protection initiatives.

The anticipated federal role would be to provide a higher level of coordination and prioritization of the many goals of the major partnership organizations and to provide advice to the AHR committee on federal initiatives and available resources that could enhance the program's success. The federal river navigator could provide assistance with ongoing projects, immediate needs, and provide recommendations for future projects. Of particular interest to the local organizations is obtaining access to federal technical resources for improved environmental assessment and monitoring, financial resources for water quality management implementation demonstrations, and a clearinghouse of federally funded projects.

D. Measures of Performance

As an American Heritage River, the measures of performance will be directly related to the goals of the organizations comprising the Cuyahoga River AHR committee. These goals and their measurable results include:

- ❖ planning and implementation to restore beneficial uses to the river
 - development and implementation of a long-range strategic plan by the Cuyahoga RAP
- ❖ development of a historical and cultural heritage program
 - development and implementation of a long-range Corridor Management Plan by the Ohio & Erie Canal Association
- ❖ water quality management planning for the entire watershed
 - completion of the Section 208 Water Quality Management Plan by NOACA & NEFCO Water Quality Planning Task Force
- ❖ land and water quality protection initiatives
 - improvements in water quality, habitat and aquatic life communities as measured by the Ohio EPA
 - increased acreage of riparian lands donated, acquired or placed in easements for preservation purposes
 - implementation of the long-range Riparian Area Protection Plan by the Upper Cuyahoga Watershed Alliance
 - development and implementation of new initiatives by local land conservancies and park districts
- ❖ expanded recreational and public access opportunities
 - completion of Towpath Trail extensions by Cleveland Metroparks; Metro Parks, Serving Summit County; and Ohio Canal Corridor
 - completion of the Ohio & Erie Canal Scenic Byway
- ❖ expanded programs in preserving and interpreting natural, cultural, historic and scenic resources
 - continuation and expansion of programs by the Cuyahoga Valley National Recreation Area and the Ohio Canal Corridor
 - increased visitation and usage of current park facilities
- ❖ expanded public involvement and education programs
 - increased participation in Big Creek and Yellow Creek Stream Stewardship programs; stream cleanups; storm drain stenciling; and willow planting programs by the Cuyahoga RAP and others
 - increased public awareness of river and stream protection issues
 - increased number of schools involved in environmental education programs through the Cuyahoga RAP; Sciencing

with Watersheds and Environmental Education Partnerships (SWEEP); Cuyahoga Valley Environmental Education Center (CVEEC); Great Lakes Science Center, and others.

- ❖ continued public and private investment in river-based economic enterprise
 - increased tourism and revenues
 - improvements in industrial/commercial economic bases

IV. ILLUSTRATION OF WHO SUPPORTS THE NOMINATION AND PLAN OF ACTION

The Cuyahoga river valley has historically been viewed as a dividing line between east and west, as well as between the lower river and the upper river. The process of working to nominate the Cuyahoga River as an American Heritage River has served to unify the entire watershed and to emphasize partnerships rather than focus on physical or political boundaries. It is intended that when designated, the partnerships and initiatives discussed in this application will continue. The American Heritage River Task Force for the Cuyahoga River was formed in June, 1997, to spearhead the initiative and share in the process of forming a community action plan, preparing the application, and soliciting community support. This Task Force is made up of major stakeholders within the entire Cuyahoga watershed.

During the nomination process, three public information meetings were hosted by Task Force members at three different locations throughout the watershed in October, 1997. The purpose of the meetings was to inform the public about the American Heritage Rivers initiative; describe the application process; discuss why the Cuyahoga is an excellent candidate for the nomination; answer questions; get public input on the application and the plan of action; and to garner public support for the nomination. A final public review meeting was held in November, 1997, to get comments on the application package. A smaller editing work group was formed out of the Task Force to put the final application package together.

A wide range of citizens, organizations, agencies, and municipalities throughout the watershed have provided their support in nominating the Cuyahoga River, either by participating on the Cuyahoga River RAP Coordinating Committee and/or the American Heritage River Task Force for the Cuyahoga River; by writing a letter of support; by passing a resolution; or all of the above. Attached as a supplement to this application are almost 500 letters, resolutions, postcards and signed petitions supporting nomination of the Cuyahoga River as an American Heritage River. Tremendous in-kind support has been provided in terms of providing technical and administrative support, research and background information, organizing meetings, soliciting support, contacting local officials, and reviewing drafts of the application. In addition, there has been support from the local media, including several newspaper articles (attached); radio interviews by WQAL-FM 104.1, WCPN-FM 90.3 (Cleveland Public Radio) and WKSU-FM National Public Radio in Kent; and television interviews by WEWS News Channel 5.

The numerous letters of support (attached) reflect the diversity of the river community, including ten elected officials, 21 locally elected officials, 33 local public jurisdictions, 101 community interest groups, 16 industry/commercial and private interests, and 318 citizens from both within and outside of the watershed. Their letters are indicative of both the individual and partnership roles in supporting the American Heritage River designation. Individuals and organizations have shown their commitment to protect, restore, and revitalize the beneficial uses of the Cuyahoga River through technical, human or financial support. In particular, the four major planning organizations mentioned in Section III of the application are dedicated to supporting future planning processes and committed to working together to carry out the plan of action for the entire Cuyahoga River.

Conclusion

Starting in the 1980s, Northeast Ohio created a series of public/private partnerships around various issues and projects. The comeback stories of Cleveland and the Cuyahoga River are both examples of such efforts, as is the designation and development of the Cuyahoga Valley National Recreation Area and the Ohio & Erie Canal National Heritage Corridor. In the past decade, the Cuyahoga River valley has been the focus of the four major partnerships described herein. Each has concentrated on different aspects of the river, dealing with such issues as water quality and habitat restoration, expanded recreation, historic preservation and interpretation, open spaces, land conservation, and new economic developments. There is an undeniable momentum behind this effort. Broad community support is evidenced in major planning efforts as new parks are breaking ground, trails are expanding, sewer interceptors are being built, and a new breed of entrepreneurs are

stepping forward to design and build developments that respect and embrace the river as a place where families can gather to picnic, stroll, ride a bike, canoe or fish.

The American Heritage Rivers program has brought these four partnerships together to forge a new collaboration that will continue to ensure a holistic approach to future planning for the Cuyahoga River watershed. We would welcome the opportunities that an American Heritage River designation would bring to this area, and we are committed to carrying out the plan of action to reintegrate the Cuyahoga River back into the everyday life of the community.

It is time to retire the image of the Cuyahoga River as the symbol for polluted waterways, and to recognize the local initiatives that have diligently worked to clean up the Cuyahoga and restore its place in the community as our most important natural resource. It is time to recognize the Cuyahoga River as an American Heritage River.

REFERENCES

- Bloetscher, Virginia Chase. 1987. Indians of the Cuyahoga Valley and Vicinity. St. Mary's Church, Akron, Ohio.
- Bonnis, Al; Keith McClintock and Dick Wetzel. 1997. A Riparian Area Protection Plan for the Upper Cuyahoga River Watershed: A Streambanking Report. Upper Cuyahoga River Watershed Alliance, Burton, Ohio.
- Braun, E.L. 1961. The Woody Plants of Ohio. Ohio State University Press, Columbus, Ohio.
- Cleveland Metroparks. 1995. Metroparks 2000: Conserving Our Natural Heritage, Park District Plan. Cleveland, Ohio.
- Cleveland Metroparks. 1995. Metroparks 2000: Conserving Our Natural Heritage, Reservation Concept Value Plans. Cleveland, Ohio.
- Cuyahoga River Community Planning Organization. 1991, 1992, 1994. Annual Report. Cleveland, Ohio.
- Cuyahoga River Community Planning Organization. 1996. Cuyahoga Navigation Channel Reaeration Feasibility Study. Prepared by Montgomery Watson, Inc., in association with ASCI Corporation. Cleveland, Ohio.
- Cuyahoga River Community Planning Organization. 1996. Report on the Findings of the Fisheries Advisory Panel Examining the Issue of Reaeration of the Cuyahoga River Shipping Channel. Prepared by EnviroScience, Inc., in collaboration with Dr. Robert Carlson and Dr. Lowell Orr, Kent State University. Cleveland, Ohio.
- Cuyahoga River Remedial Action Plan Coordinating Committee. 1992. Cuyahoga River Remedial Action Plan Stage One Report: Impairments of Beneficial Uses and Sources of Pollution in the Cuyahoga River Area of Concern. Cleveland, Ohio.
- Cuyahoga River Remedial Action Plan Coordinating Committee. 1995. Cuyahoga River Remedial Action Plan Stage One Update Report: Impairments of Beneficial Uses and Sources of Pollution in the Cuyahoga River Area of Concern. Cleveland, Ohio.
- Cuyahoga River Remedial Action Plan Coordinating Committee. 1996. Cuyahoga River Remedial Action Plan: An Early Implementation Report-Progress in Restoring the Environmental Quality of the Cuyahoga River. Cleveland, Ohio.
- Cuyahoga River Remedial Action Plan Fish Consumption Technical Committee. 1994. 1989-1992 Fish Tissue Collection and Analysis. Cleveland, Ohio.
- Ellis, William Donohue. 1966. Rivers of America: The Cuyahoga. Landfall Press, Dayton, Ohio.
- Friends of the Crooked River. 1992, 1993, 1995, 1996, 1997. River Day Brochure. Akron, Ohio.
- Greater Cleveland Growth Association. 1997. Greater Cleveland Fact Book. Cleveland, Ohio.
- Grismer, Karl H. 1932. The History of Kent. The Courier-Tribune, Kent, Ohio.
- James, Clarence C. 1975. An Inventory of Noteworthy Engineering and Industrial Works in Cuyahoga County, Ohio: With emphasis on the Cleveland Industrial Valley. Cleveland Landmarks Commission and Cleveland State University, Cleveland, Ohio.
- Lindsey, A.A. and L.K. Escobar. 1976. Eastern Deciduous Forest Volume 2 Beech Maple Region. United States Department of Interior. Government Printing Office. Washington, DC.
- Lafferty, M.B., ed. 1979. Ohio's Natural Heritage. Ohio Academy of Science. Columbus, Ohio.
- Northeast Ohio Regional Sewer District. 1997. 1996 Annual Report. Cleveland, Ohio.

Northeast Ohio Regional Sewer District. 1997. Greater Cleveland Area Environmental Water Quality Assessment 1993-1995. Cleveland, Ohio.

Ohio Environmental Protection Agency. 1994. Biological and Water Quality Study of the Cuyahoga River and Selected Tributaries, Volume 1. Division of Surface Water, Ecological Assessment Section, Columbus, Ohio.

Ohio Canal Corridor. 1997. Annual Report. Trails, Tracks and Timely Facts. Cleveland, Ohio.

Ohio & Erie Canal Scenic Byway Task Force. 1997. A Management Plan for the Ohio & Erie Canal Scenic Byway. Cleveland, Ohio.

Rankin, Ed; Chris Yoder and Dennis Mishne. 1997. 1996 Ohio Water Resource Inventory: Executive Summary. Columbus, Ohio.

Ray, Genevieve. 1997. Ohio & Erie Canal Reservation: Neighborhood Links & Open Space Connections. Urban Conservation & Design, Cleveland, Ohio.

Schmidt, Copeland, Parker & Stevens, Inc. **199X**. Ohio & Erie Canal Reservation Master Plan. Prepared for Cleveland Metroparks, Cleveland, Ohio.

Sicha, Richard J. 1992. North Cuyahoga Valley Corridor: Executive Summary. Cuyahoga County Planning Commission, Cleveland, Ohio.

Smith, R.C. 1984. Glacial Geology of Summit County, Ohio. Division of Geological Survey Report of Investigation No. 123, Department of Natural Resources, Columbus, Ohio. 25 p.

Swift, Mike. 1996. "In Cleveland, river plan helps transform city." *The Hartford Courant*. Hartford, Connecticut. p. A-10.

Troyer, Loris C. 1995. "Prehistoric Mounds are Treasures in Portage." *The Record-Courier*. Ravenna-Kent, Ohio.

United States Department of the Interior, National Park Service, in cooperation with Cuyahoga Valley National Recreation Area. 1977. General Management Plan. United States Government Printing Office. Washington, DC.

United States Department of the Interior, National Park Service, in cooperation with Cuyahoga Valley National Recreation Area. 1984. Land Protection Plan. United States Government Printing Office. Washington, DC.

United States Department of the Interior, National Park Service. 1992. A Green Shrouded Miracle: The Administrative History of Cuyahoga Valley National Recreation Area. Ron Cockrell, Senior Research Historian, Midwest Regional Office, Omaha, Nebraska.

United States Department of the Interior, National Park Service. 1993. A Route to Prosperity: A Study by the National Park Service of the Ohio & Erie Canal Corridor. Omaha, Nebraska.

Urban Design Center of Northeast Ohio. 1997. The Ohio & Erie Canal and its Corridor: Potential Impacts. Kent State University, Kent, Ohio.

Willis, David P. And Jeffrey A. Foran. 1986. The Cuyahoga River Study. Ohio Wildlife Federation and National Wildlife Federation.