2 Introducing Painesville Township

2.1 History

Pre-history: The Erie and the Whittlesey

The Erie Indians, sometimes referred to as the "Cat Nation," inhabited the area south of Lake Erie near Buffalo, and were said to have lived as far west as Sandusky. Estimates of their size put their population at about 10,000 to 16,000 people in 1600.

The Erie eluded European contact, and most information regarding the tribe came from second-hand accounts passed on to historians from other tribes. The Erie supposedly lived in traditional long houses located in scattered, stockaded villages. They were farmers and hunters, like surrounding tribes. During warm weather, the Erie grew and harvested corn, beans and squash. Following the harvest they would embark on the winter hunt, living in winter camps.

The Erie exhausted their local supplies of beaver, which they used to trade with other tribes for the white man's wares. They started to encroach on other tribes' hunting areas, leading to warfare. In the mid-1650s, the Erie were also joined by a number of Huron refugees, fleeing from the decimation of their Confederation by the Iroquois. The Iroquois, however, demanded that the Erie give these Huron over to them. The Erie refused. A tense standoff lasted for nearly two years. It boiled over when all 30 Erie representatives at a peace conference were killed by the Iroquois.

The Erie inflicted heavy losses on the Iroquois but, without the benefit of firearms, they were, ultimately destined to failure. By 1656 the Erie were a defeated people. The few that were not killed were assimilated into the victorious tribes, most notably the Seneca.

A growing group of historians and anthropologists believe the Erie Nation never extended beyond western New York. Instead, they believe the Whittlesey people were the last protohistoric residents of Northeastern Ohio. Like the Erie, the Whittlesey lived in semi-permanent settlements, leading a farming lifestyle. Archaeological evidence of Whittlesey settlements have been found along the Grand River and Lake Erie.

It is believed the Whittlesey people lived in the area from about 900 to 1650, after which they moved from northeastern Ohio around 1650 to the Ohio Valley to join other tribes such as the Shawnee, Seneca and Mingo. With the migration of the Whittlesey from the area, other tribes moved in. Clear cutting sections along the Grand River for growing crops, northeastern Ohio became home to tribes from the Senecas, Wyandots, Ottawas, Chippewas, Cayugas, Tonawandas, Iroquois, and Delawares.

An Indian village named Shanungas was once located at the bend of the Grand River, north of the present-day City of Painesville. The mouth of the Grand River also served for seasonal tribal meetings.

The Western Reserve

As well as being occupied by several Indian peoples, the area that would become Painesville Township was at one time claimed by Quebec, Virginia, New York, Pennsylvania and Connecticut. The French explored and possibly occupied the region in the 1600's and early 1700's, and claimed it by right of exploration and discovery. The English entered the area in battle against the French for control of the western lands in the late 1750's and early 1760's. England defeated the French at Fort Duquesne (now Pittsburgh), Quebec, and Niagara, establishing their right over the lands of the Western Reserve.

During the Revolutionary War, pioneers primarily from Virginia established themselves west of the Allegheny Mountains, principally in Kentucky. George Rogers Clark, a Virginian who settled in Kentucky, convinced Virginia Governor Patrick Henry of the necessity of obtaining independence for the western lands at the same time the colonies were struggling for their independence. Rogers feared that without a

presence west of the Alleghenies, the Colonies would only extend to the mountains if they won independence.

Rogers was commissioned by Patrick Henry to capture the military ports held by the British in the Northwest. He enlisted seven companies of pioneers and defeated the British. Virginia claimed the territory, including the lands of the Western Reserve. At the Treaty of Peace in Paris in 1783, England insisted that the Ohio River was the boundary of the United States. The colonies sustained their claim to the northwest land on the basis that Virginia was in undisputed possession at the close of the Revolutionary War.

Although Virginia claimed the lands in the Western Reserve, New York claimed the land by its charter of 1614 granted by the King of England, Pennsylvania by its charter granted to William Penn in 1664, and Connecticut by its charter granted in 1662. All the royal charters granted land claims to the colonies westward to the mythical "South Sea." Indian nations also claimed these same lands.



It became evident that the only way to open up the Northwest for settlement would be for the states to grant their claims to the United States. Virginia gave up all rights to the land, and Pennsylvania and New York agreed on western boundaries and released the remaining lands to the federal congress. In 1786 Connecticut agreed to give up its claim to the portion of the land that crossed New York and Pennsylvania, and the remaining land to the west except for a portion west of Pennsylvania lying between 41° and 42° 2" latitude.

In 1792, the Connecticut legislature granted 500,000 acres of the western portion of New Connecticut to citizens whose property had been burned by the British during the war. These lands were called the "Fire Lands." In 1795, Connecticut sold the remaining three million acres of land to John Caldwell, Jonathan Brace, and John Morgan, trustees for the Connecticut Land Company. The Connecticut Land Company extinguished all Indian title to the east of the Cuyahoga River, and in 1796 surveyed the area and divided it into townships. "Town 11, Range 1 of the second tier of townships", the area that would become Painesville Township, was considered an "equalizing portion," intended to appease shareholders of the Connecticut Land Company who received less than prime grants of their share of the company holdings.

Painesville Township was one of eight townships formed in August 25, 1800 as part of Trumbull County, making Painesville Township the first governmental unit in what today is Lake County.

Early settlement

The first decade of the 19thcentury was a busy time for the township.

Connecticut ceded the Western Reserve in 1800, with the condition that Congress guarantee land titles already granted there. That same year, John Walworth became the township's first settler, creating a settlement on the Grand River called Blooming Grove. Later in 1800, General Edward Paine and his family arrived from East Aurora, New York, and settled on the Grand River at Newport.

In 1803, Abraham Skinner and Elazar Paine laid out the settlement of New Market. A grist mill was built along Tiber Creek during the same year. In 1804, Abraham Skinner laid out another settlement for Henry Champion. Located in an area known as Oak Openings, the town bore Champion's name for a brief time before it was renamed Painesville, in honor of General Paine. A school was also established that year, along with the Little Red Tavern, said to be the township's first frame structure. In 1805, a road was cleared between the township and Unionville. In 1806, the first tannery was built, along with the first bridge across the Grand River, at New Market. In 1807 the Geauga County seat was moved from Chardon, and a courthouse was built. The first frame schoolhouse in the township was built in 1809, followed by the first church in 1810.

In 1811, the county seat was moved back to Chardon. However, Painesville would again be the county seat in 1840, when Lake County was divided from Geauga County. The 1820 Census counted twice the amount of residents living in Painesville as in Cleveland. Painesville's establishment as a population center could be credited to its location at a convergence point of the region's burgeoning road system and Lake Erie shipping lanes.

Incorporation and fragmentation

In 1832, the central portion of Painesville Township, southeast of New Market, was incorporated by a special act of the State Legislature. In 1851, it became a village, and in 1902 became the **City of Painesville**.

In 1812, the settlement of Grandon was laid out on the east side of the Grand River at its mouth with Lake Erie. Grandon was established to advance the interests of Painesville by providing it with a port. Lots were sold, warehouses built, and the settlement became a vibrant commercial center. In 1820, the harbor at Grandon was dredged for the first time, creating a safe harbor along Lake Erie. In 1831, the harbor became the first federally sponsored port facility on Lake Erie. In 1836, Grandon was incorporated as Fairport, now **Fairport Harbor Village**. Civil government fell dormant in the village in 1869, but was revived in 1889.

Richmond, across the Grand River from Grandon, was established in 1832, when a land speculator named Thomas Richmond began to sell lots. The settlement was based on the assumption that the future Ohio Canal would terminate on the Grand River. By 1835, Richmond had 2,000 residents, and was a strong rival to Grandon, competing in the shipbuilding industry. When the Ohio Canal was built, it terminated in Cleveland instead. The Panic of 1837 left Thomas Richmond with a great deal of debt, so he abandoned the settlement and moved many of its buildings to a new location. Richmond Village was incorporated in 1888, and later renamed **Grand River Village**.

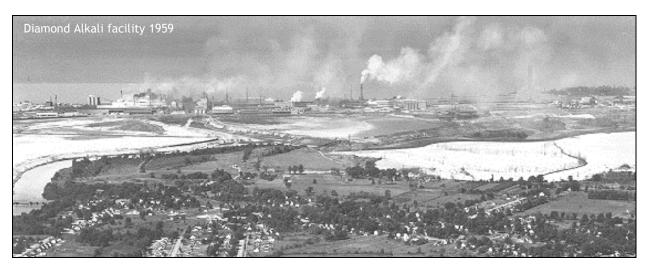
Through the years, the City of Painesville, Fairport Harbor Village and Grand River Village would expand through annexation, eventually dividing the remaining township into four discontiguous areas.

Later years

Painesville Township's built environment was heavily influenced by its early New England settlers. In the 1820s and 1830s, Johnathan Goldsmith, a prolific architect from the township, introduced the Greek Revival style to the Western Reserve. The Fairport Harbor lighthouse, built in 1825, and the Matthews Home on the Lake Erie College Campus, are just two examples of his work. Goldsmith is buried in the Painesville Township Cemetery on Mentor Ave.

The origins of Lake County's significant nursery industry are in Painesville Township, where the Jesse Storrs Nursery was established in 1854.

In 1870, a resort area called Linden Beach was established at the north end of Hardy Road. In 1898, a second resort called the Shore Club was founded west of Linden Beach. Both beach resorts survived until 1925, when the Diamond Alkali Company purchased the property.



A group of glass manufacturers founded Diamond Alkali in Pittsburgh, Pennsylvania, in 1910 to produce soda ash, an important component in the glass industry. Diamond Alkali built a large industrial plant in Painesville Township in 1912. Diamond Alkali changed its headquarters from Pittsburgh to Cleveland in 1948. In 1967 the company merged with Shamrock Oil and Gas of Amarillo, forming Diamond Shamrock. At its peak, 3,000 workers were employed at Diamond Alkali facilities in the township; when it closed on 31 December 1976, 1,200 employees were effected.

In 1896, the Cleveland, Painesville and Ashtabula Interurban Railroad built a streetcar line through Painesville, linking the township with Cleveland. Competition from steam railroads and personal automobiles contributed to the fate of the interurban, and the route was abandoned in 1925.

Casement Airport (PVZ) was built in the eastern section of the township in 1961. For a brief time, commuter service to Cleveland Hopkins Airport was offered from Casement. The last flight departed the 3,800 foot (1160 meter) asphalt runway of PVZ in 2000.

Through the 1950s, the nation's Interstate highway system began to take form. In 1959, the Ohio Department of Transportation began construction of I-90 between Cleveland and the Pennsylvania state line. Through the 1960s, the Lakeland Freeway (State Route 2) and the State Route 44 expressway were built, both crossing Painesville Township. Although early post-World War II era development was the result of urban spillover from the City of Painesville, now the township's fortunes are more closely tied with that of Lake County as a whole; Painesville Township today is more of a suburb of Cleveland than a

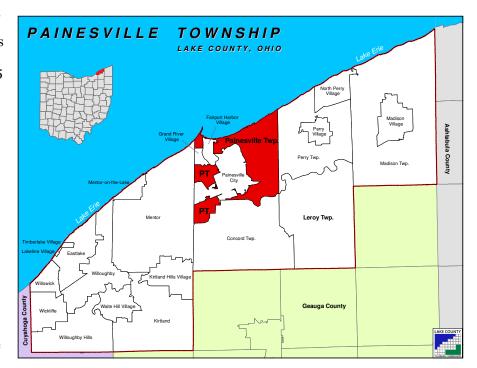
suburb of the small city it surrounds. Since the 1980s, the bulk of the township's growth has been east of the City of Painesville, near the site of the former Casement Airport.

Details regarding specific historic sites are included in the Land Use element.

2.2 Geography and geology

Location

Painesville Township, Ohio, is an unincorporated community located 30 miles (48 kilometers) east of downtown Cleveland and 75 miles (120 kilometers) west of Erie, PA, in north central Lake County. The unincorporated township is bounded by the City of Mentor to the west. Concord Township to the south, Perry Township to the east, and Lake Erie to the north. The northwest corner of Leroy Township touches the southeast corner of Painesville Township. The township is transected by the Grand River, which meanders from the south to Lake Erie in a deep valley. Painesville Township occupied 16.96



square miles (43.93 square kilometers) in 1996; annexation reduced the area to 15.56 square miles (40.3 square kilometers) today.

Three incorporated municipalities are located within the boundaries of Painesville Township. The City of Painesville, the Lake County seat straddles the west bank of the Grand River, and occupies the central portion of the township. Land recently annexed by the City of Painesville extends west to the City of Mentor boundary. Grand River Village is located in the northwestern portion of the township, between the west bank of the Grand River and the City of Mentor boundary. Across the Grand River, along its east bank, is Fairport Harbor Village, located between Lake Erie and the City of Painesville.

The location of the incorporated municipalities effectively divide Painesville Township into five "islands" or discontiguous areas. A small area in northwest Painesville Township is bounded by Grand River Village, the Grand River and Fairport Harbor Village, Lake Erie, and the City of Mentor. This area is occupied by the Morton Salt mine and a portion of Headlands State Park, and has no permanent residents.

In western Painesville Township, Grand River Village, the Grand River and Fairport Harbor Village, the City of Painesville and the City of Mentor surround a predominantly industrial area. The southwest portion of the township, surrounded by the City of Painesville, Concord Township and the City of Mentor, is a heavily developed area; this area includes Painesville Town Hall, the Lake County Fairground, and the bulk of the township's commercial and retail land uses. There is a small unincorporated sliver of land, completely surrounded by the City of Painesville, between these two areas.

The largest contiguous unincorporated area is located in eastern Painesville Township, bounded by Lake Erie, Fairport Harbor Village, the Grand River and the City of Painesville, Concord Township and Perry Township. This area includes the site of the old Diamond Alkali plant, the now-closed Casement Airport, several nurseries, Painesville Country Club and Fairway Pines Golf Course, many newer residential subdivisions, and the long-established Painesville-on-the-Lake cottage community.

The Census Bureau includes Painesville Township in the Cleveland-Akron Consolidated Metropolitan Statistical Area (CMSA) and the Cleveland-Lorain-Elyria Primary Metropolitan Statistical Area (PMSA).

Geology

Past glaciation contributed to the physical characteristics of Painesville Township; a generally flat landscape punctuated by deep stream and river valleys. Wisconsonian glaciers moved through the area from the northeast to southwest during the Ice Age, and scoured the landscape when they retreated. This left the ground covered with silt and thousands of boulders of Canadian rock.

Lake Erie forms the northern edge of Painesville Township. The Lake Erie shoreline ranges from sand-duned beaches to sheer cliffs that erode at an alarming rate. Just inshore is the Lake Plain, formed by retreating glaciers. North Ridge and South Ridge are strand line beach ridges that were formed when lake water levels were much higher than today. Between the ridges is a low-lying, flat, poorly drained area formed when the North Ridge was created, cutting off drainage to Lake Erie.

The glaciers temporarily halted their retreat just south of Painesville Township, leaving behind a small ridge of glacial materials or a *recessional moraine* that would later be known as South Ridge. This was an insignificant feature of the landscape until the glaciers continued their retreat and the predecessors of Lake Erie were formed. A large beach ridge and strand line was formed by the lake on top of this low-lying ridge. This geological formation was responsible for forming the drainage channel that would become the Grand River, which runs through a deep valley that crosses the township. As the river winds its way across the area towards Lake Erie, broad floodplains emerge along its banks. Mentor Marsh, formed on what was an ancient river channel, encroaches into the northwest corner of the Township.

The Salina salt beds are located about 2000 feet (600 meters) below the surface. These salt beds, which extend underneath Lake Erie, are between 500 and 600 feet (150 to 200 meters) thick. Morton Salt operates a deep shaft mine in the township, extracting salt from the Salina beds. The township also has an increasing number of small oil and gas wells.

Details regarding soil types and permeability, drainage, flood zones, watersheds, wetlands and other elements of the natural environment that impact development are described in the Natural Resources element.

Climate

The ecological subregion Painesville Township, as defined by the United States Forest Service, is: Humid Temperate Domain: Hot Continental Division: Eastern Broadleaf Forest (Continental) Province: Erie and Ontario Lake Plain Section.

The climate of Painesville Township is largely influenced by Lake Erie. Though some summer days can be hot with high humidity, the usual summer temperatures are $57^{\circ}-81^{\circ}$ F ($14^{\circ}-27^{\circ}$ C). Spring has the most rainy days, and thunderstorms occur most frequently in June and July. Temperatures range $47^{\circ}-68^{\circ}$ F ($8^{\circ}-19^{\circ}$ C) in May and $43^{\circ}-74^{\circ}$ F ($6^{\circ}-22^{\circ}$ C) in fall. Temperatures are often well below freezing in the winter; $18^{\circ}-32^{\circ}$ F (-5° to 0° C) are January ranges.

Average precipitation in Lake County can range from about 30 inches annually in areas along the Lake Erie Shore, to about 38 inches in Concord Township, to 42 inches in south Leroy. Painesville Township is located north of Ohio's snowbelt, but is still susceptible to lake effect snow, especially areas further from Lake Erie.

The microclimate is somewhat more temperate than areas further from Lake Erie, providing a suitable environment for nurseries.

Lake effect snow forms when a cold air mass crosses a warm Lake Erie. The air mass is usually only a few thousand feet thick, capped by a layer of warmer air. Addition of heat and moisture from the unfrozen lake modifies the air mass allowing moisture to condense into snow clouds. After moving across the lake, the modified air slows down and "piles up" as it approaches the downwind shore. The convergence provides additional list, further enhanced by the Portage Escarpment and hills downwind of the lake. The result: lake effect snow.

2.3 Challenges facing Painesville Township

Tremendous residential development

The most densely populated area of Painesville Township is the southwest section, in the County Fairgrounds/Town Hall vicinity. In 2000, the population density in southwest Painesville was 2,782 residents per square mile (1,075 per square kilometer); relatively low considering the presence of multifamily development. Fast-growing southeast Painesville Township has a population density of only 1,102 residents per square mile (417 per square kilometer). Most new residential development consists of single family houses on 1/3 to 1/2 acre lots.

While most communities encourage development, it is important to achieve a balance between residential, commercial and industrial/manufacturing. This will provide a solid tax base needed to provide the services which initially attracted new residents.

Developed by the American Farmland Trust in 1990, Cost of Community Services (COCS) studies are being completed by communities throughout Ohio. These studies allow township trustees, village administrators, and county commissioners to evaluate how their revenues compare with their expenditures (Prindle 2000). This comparison is divided by land use: residential, commercial/industrial, or farm/forest/open land.

The outcome of COCS's is a ratio of the amount money needed to provide public services (fire, police, education, community centers, etc...) for every one dollar collected in taxes. The results of these studies support the claims presented by Smart Growth advocates, Farmland Preservation Taskforces', and local citizens; conventional suburban residential development requires higher financial resources in the long term to provide public services. Table X illustrates the similar results in five townships and one village who have completed COCS's.

Township/Village	Year	Residential	Commercial/Industrial	Farmland
-Huntington Township Ross County, Ohio	1998	1.006	.383	.186
-Union Township Ross County, Ohio	1998	.998	.314	.598
-Hocking Township Fairfield County,	1999	1.10	.27	.17
Ohio -Liberty Township, Fairfield County, Ohio	1999	1.15	.51	.05
-Madison Township Lake County, Ohio	1993	1.40	.25	.30
-Madison Village Lake County, Ohio	1993	1.67	.20	.38

Source: Prindle (1999, 2000) and American Farmland Trust (1993).

The table above indicates residential land uses are more expensive to serve compared to commercial and agricultural land uses. The highest residential ratio is 1.67:1 in Madison Village and the lowest is .998:1 in Union Township. Farmland figures range from .05 in Liberty Township to .598 in Union Township. Eleven COCS's in Pennsylvania yielded the same results with a residential ratio average of 1.27 and a farmland ration of .08 (Kelsey 1998).

The key point: residential development costs more to provide services (fire, police, road maintenance) than it generates in taxes, thus draining local government budgets. Painesville Township may want to consider a COCS.

Zoning and land use regulation

As the primary tool for comprehensive plan implementation, zoning codes are comprehensive cookbooks for day-to-day development decisions in a community. They expand on the information in the comprehensive plan by providing parcel-specific regulations for the location of different land uses, regulation of those uses, and detailed specifications for the site planning and design of proposed development.

Painesville Township first adopted zoning regulations in 1954, three years after the Ohio General Assembly first authorized zoning in unincorporated areas (1951). The zoning resolution is revised periodically complementing major revisions that occurred in 1979 and 1988-89.

Police power of Ohio townships originates through statutory delegation by the General Assembly, instead of through the state constitution as is the case for incorporated municipalities. Zoning authority of Ohio townships is limited to what is specifically granted by the General Assembly through state statutes. This limits townships from implementing some progressive land use control techniques.

Townships have no power to control land subdivision. Only counties and incorporated municipalities may adopt, enforce and administer subdivision regulations. The Lake County Planning Commission reviews and approves (or denies) requests to subdivide land in Painesville Township.

Redevelopment of commercial areas

When following the Mentor Avenue commercial strip eastward from the City of Mentor, the Painesville Township boundary can be discerned by more than a sign identifying the township limits. Historically, business signs are larger, landscaping is sparser and ingress/egress is haphazard. Recent changes in zoning and state law and the widening of Route 20 have now begun to reverse these trends. Site plan review, updated signage requirements and future access management regulations at the County level will assist in the redevelopment of the Route 20 corridor over the long-term.



Painesville-on-the-Lake and Sunset Point

Painesville-on-the-Lake and Sunset Point, located next to each other in northeast Painesville Township, were founded as cottage communities in the early 20th century. Larger estates were often divided into small lots, where the middle class from Cleveland, Pittsburgh and Youngstown could escape the summer heat in a small cottage of their own.

When the Depression ate away at disposable income, World War II rations limited driving, heavy industry encroached, and once-exotic vacation destinations further afield became more accessible, Painesville-on-the-Lake and Sunset Point became less popular as resorts. The small cottages in the area were winterized, and converted to year-round residences. The natural process of erosion took a heavier toll on the area, where, in some years, 30 feet (10 meters) of land succumbed to the waves of Lake Erie.

Today, while improvements are still needed, much of Painesville-on-the-Lake and Sunset Point has begun the revitalization process. Infill residential construction and major subdivision developments can be found in this area. There are no commercial or retail services nearby, but the current and planned residential developments may attract new businesses. Median family and household incomes are lower than Lake County and the Cleveland PMSA as a whole. Rapid coastline erosion continues to threaten lakefront properties in the area.

Brownfields

The closure of the Diamond Shamrock facility left the township with approximately 1.5 miles (three kilometers) of redevelopable shoreline real estate. Other industrial facilities that once dotted the northern end of Painesville Township are now vacant. The closure of Casement Airport left behind a one square mile (two square kilometer) parcel in the middle of the township's fastest-growing, most affluent census tract.

Vacant industrial and airfield sites present wonderful opportunities for infill development using innovative planning concepts. The proposed Lakeview Bluffs development is an example of these concepts.

Parks and recreation areas

Painesville Township Park, west of the Painesville-on-the-Lake neighborhood, Headlands State Park and Lake Metroparks first facility, Helen Hazen Wyman Park, are primary public parks within the Township. The township also has golf courses, athletic fields at area schools, and the County Fairgrounds. Private open space areas are required in the planned unit developments. These areas are for residents use only and maintained by the local homeowners associations.

Pedestrian and bicycle facilities

A short section of a bicycle path following the former right-of-way of the Baltimore and Ohio Railroad cuts through Painesville Township, between the City of Painesville and Concord Township. Otherwise, there are no designated bicycle lanes on township roads, nor are there any dedicated bicycle and pedestrian paths. Future large-scale developments should encourage multi-purpose pathways.

Brownfield:

Real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant.

It is estimated that there are more than 450,000 brownfields in the U.S. Cleaning up and reinvesting in these properties increases local tax bases, facilitates job growth, utilizes existing infrastructure, takes development pressures off of undeveloped, open land, and both improve and protects the environment. (www.epa.gov)





Many residential and commercial areas in the township lack sidewalks, making pedestrian travel difficult. New developments, predominately utilizing the planned unit development code, are encouraged to install sidewalks.

Shoreline erosion

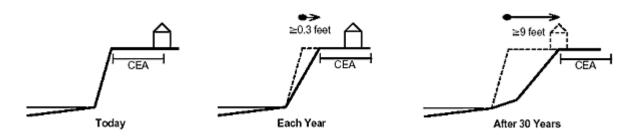
Although it has been millennia since the end of the Ice Age, the Lake Erie coastline continue to be shaped through the natural process of erosion.

The coastline in Painesville Township is subject to severe erosion in many areas. Steep bluffs are formed where the waves impact the land. Since beaches in the study area are narrow, there is little sand on the lake bottom to absorb wave energy. As a result, waves excavate the lake bottom close to shore. As near-shore depths increase, the amount of wave energy increases; this increasing erosion along the shoreline. Items illegally dumped on the beaches with the intent of slowing erosion, such as concrete blocks, rebar,

and even auto bodies only accelerates it, because it doesn't absorb wave energy, and also gouges out bluff material.

In some years when water levels were high and storms were rampant, up to 30 feet (10 meters) of land was lost to the lake. The Ohio Department of Natural Resources has developed the Coastal Erosion Area for the entire shore of Lake Erie. A Coastal Erosion Area is a designated land area along the Lake Erie shore that is anticipated to be lost due to Lake Erie related erosion if preventative measures are not taken. More specifically, a Coastal Erosion Area begins at the top of a bluff, bank, or beach ridge and includes all land predicted to erode within a 30-year period if that distance totals 9 or more feet.





The shoreline near Painesville-on-the-Lake experiences more severe erosion than other parts of the township or county.