



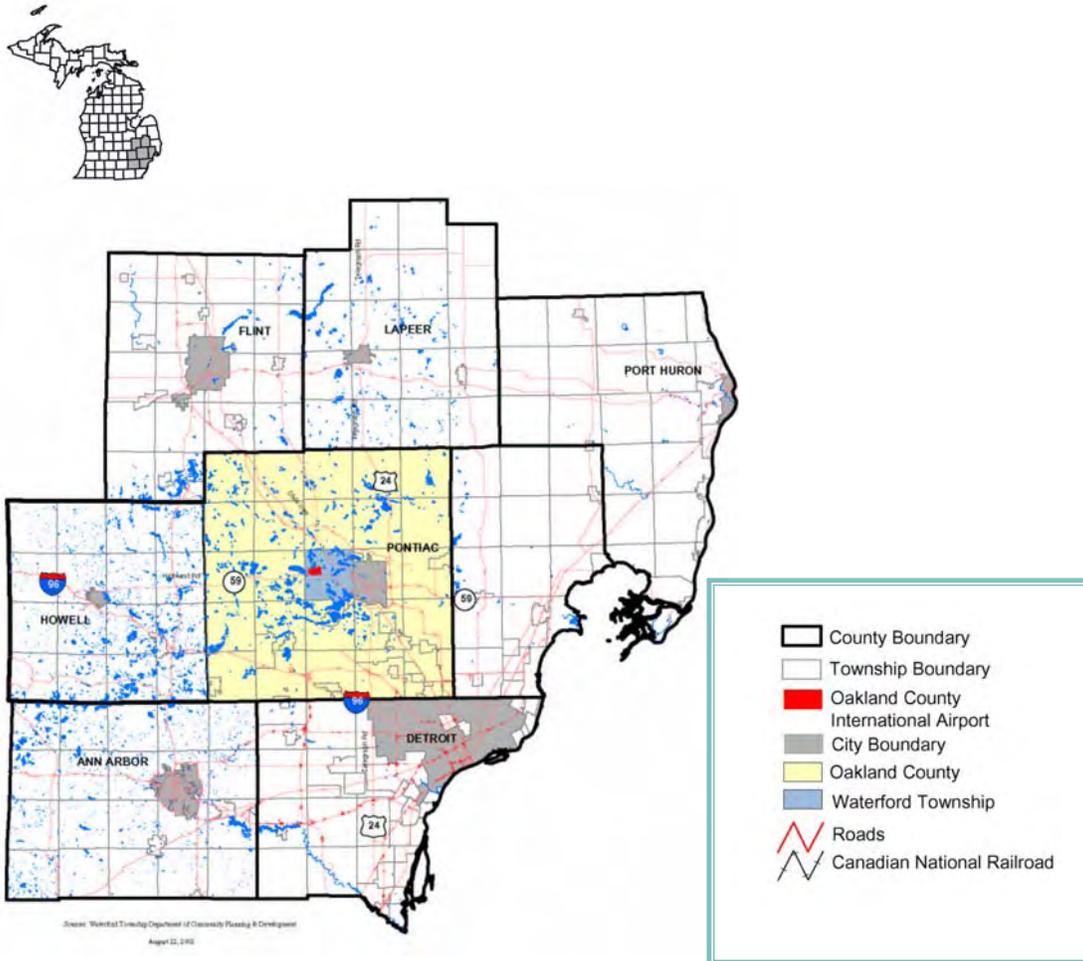
CHAPTER 3 – GEOGRAPHY AND BRIEF HISTORY OF WATERFORD TOWNSHIP

GEOGRAPHY

Waterford Township, comprising approximately 35 square miles, is located in the geographic center of Oakland County, Michigan. As shown in Map 1, the general location of the Township is in the northwestern portion of the greater Detroit metropolitan area. Waterford borders the Cities of Lake Angelus, Pontiac, and Auburn Hills on the east; the Townships of Springfield, Independence and Orion on the north; the Township of White Lake on the west; and the cities of Sylvan Lake and Keego Harbor, and the Townships of Commerce and West Bloomfield on the south. Waterford is 30 miles northwest of downtown Detroit, 25 miles southeast of Flint, 55 miles east of Lansing, and 35 miles northeast of Ann Arbor.

Map 1

Location of the Charter Township of Waterford



Geology

The geology of Waterford Township has been visibly influenced by the glacial history of the United States. Large areas of glacial deposition occurred in the south-central portions of Michigan, including Waterford Township, as evidenced by the existing topography, deposits of glacial drift, and the presence of the many lakes in the Township. The topography of the Township is generally low rolling hills with variations on a minor scale, existing throughout the majority of the area. Land elevations differ between 930 feet and 1,104 feet above sea level.

Climate

The climate of this area is typical of that of the rest of the State of Michigan and other Midwestern states. There are four distinct seasonal changes in the climate, with a moderate growing season from late April to early October. The temperature ranges from an average maximum of 82° Fahrenheit in July to an average minimum of 16° Fahrenheit in January, with an annual mean temperature of 48° Fahrenheit. Annual precipitation averages about 30 inches, with February averaging the lowest monthly precipitation at 1.49 inches and June averaging the highest monthly precipitation at 3.16 inches.

Natural Features

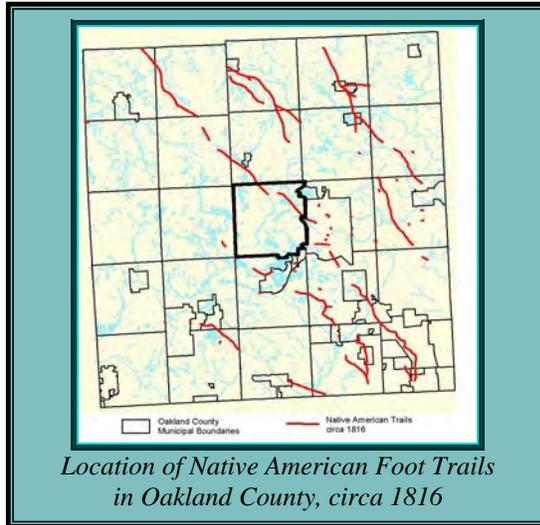
Perhaps the most outstanding natural attraction in Waterford Township is the abundance of water bodies. To a great extent, the opportunity to live near one of these water bodies has been the prime catalyst for Waterford's population growth. Waterford has more than 34 lakes, containing 3,080 acres, which provide ample year round recreational activities. In addition, the main branch of the Clinton River runs through the approximate center of the Township from north to south. Several large wetland areas are also located throughout the Township, particularly in the southwest quadrant of the Township and adjacent to the Clinton River flood plain.

In addition to the lakes and the Clinton River, Waterford Township is fortunate to have two state parks located within its boundaries. Dodge Park No. 4 features an excellent beach on Cass Lake. Pontiac Lake State Park, in addition to a large lake and beach, offers archery and rifle ranges as well as hiking and biking trails that attract outdoor enthusiasts from around southeast Michigan. Combined, the two parks total six square miles of state owned park recreational land. The Michigan Department of Natural Resources (DNR) also maintains access sites on six of the large lakes located in Waterford. These lakes are Oakland, Loon, Maceday, Pontiac, Crescent, and Cass. A locally recognized nature preserve called the Drayton Plains Nature Center is located on the Clinton River and encompasses 137 acres in the center of the Township. The Nature Center provides a haven for waterfowl and wildlife and is a stopover site during spring and fall bird migrations. The Nature Center has an education facility that provides outdoor science programs for local school children and for the citizens of Waterford to learn about their natural environs. Within this Nature Center, the DNR utilizes several rearing ponds each spring to raise native game fish, such as Pike and Walleye, which it stocks in lakes and rivers throughout the State. There are also over 600 acres of Township-owned recreation land and over 400 acres of School District-owned recreation land. About one-third of the total recreation land owned by the Township is contained in its largest park, Elizabeth Lake Woods, a natural conservation area located in the south central part of the Township. The first parcels of this park were purchased in the early 1990s with funds provided by The Nature Conservancy and a State of Michigan grant. The parcels were then deeded to the Township. These parcels contain a mature oak forest occurs on sandy knolls paralleling the Clinton River. The oak forest is bordered on either side by floodplain forest and southern swamp. This forest type is of local and regional ecological significance, as estimates show that less than one percent of the original oak forests of Michigan remain intact. In 1987, of the remaining forests types surveyed by the Michigan Natural Features Inventory, Elizabeth Lake Woods ranked second in sites of statewide importance. The sandy tree-covered hills also provide protection for the rare and endangered freshwater mussel communities, which occur in this section of the Clinton River, but are rapidly

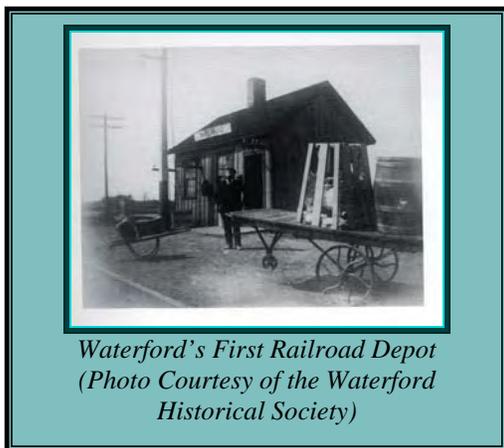
disappearing in other parts of the State. The park provides a tranquil setting for canoers, hikers, and wildlife enthusiasts looking for an escape into nature. *(Please refer to Map 9 on Page 7-35 for general location of parkland and public open space).*

Transportation Links

The Township's landscape has been affected over the years by efforts to create means of moving to and through the Township. The earliest transportation impact on the natural landscape was relatively minor, and was that of Native Americans moving along the Clinton River and the various lakes by canoe. In addition, native Americans initiated a foot trail that provided a way through Waterford, along a route where Dixie Highway and the railroad currently exist. As European settlers began moving into the area, this foot trail developed into the Saginaw Trail. The Saginaw Trail provided the primary route for horse-powered transportation through Waterford and to the first village areas that developed around this early transportation route.



Location of Native American Foot Trails in Oakland County, circa 1816



*Waterford's First Railroad Depot
(Photo Courtesy of the Waterford Historical Society)*

After the development of steam-powered rail transportation, a section of the Detroit and Milwaukee Railroad was built parallel to the Saginaw Trail in 1842. The location of the railroad line continued to concentrate human settlement in this area of the Township until the advent of the automobile. This freight rail line, now owned by the Canadian National Railroad, is still active. The railroad's impact on the surrounding environment has been minimized since there is little new development dependent on rail transport.

Waterford's geography has had a major impact on the Township's road system. Because of the numerous lakes, the traditional grid road system was not feasible. Most of the secondary road system meanders, with no existing single road to directly access sections of the Township in a north-south direction. Waterford's landscape does possess three principal regional highways through the Township, all of which serve as the Township's primary commercial corridors. Dixie Highway (U.S. 10) follows the original route of the Saginaw Trail, passing diagonally across the northeastern portion of the Township from the border with the City of Pontiac in a northwesterly direction to the border with Independence Township. Telegraph Road (U.S. 24) forms the principal eastern boundary with Pontiac and serves as the gateway into the Oakland County government complex. Highland Road (M-59) traverses the center of the Township in an east-west direction and is the gateway to the Oakland County International Airport. These three principal regional highways also serve as Waterford's primary access to the region's major interstate highways, I-75, I-96, I-696, US-10 and US-23.

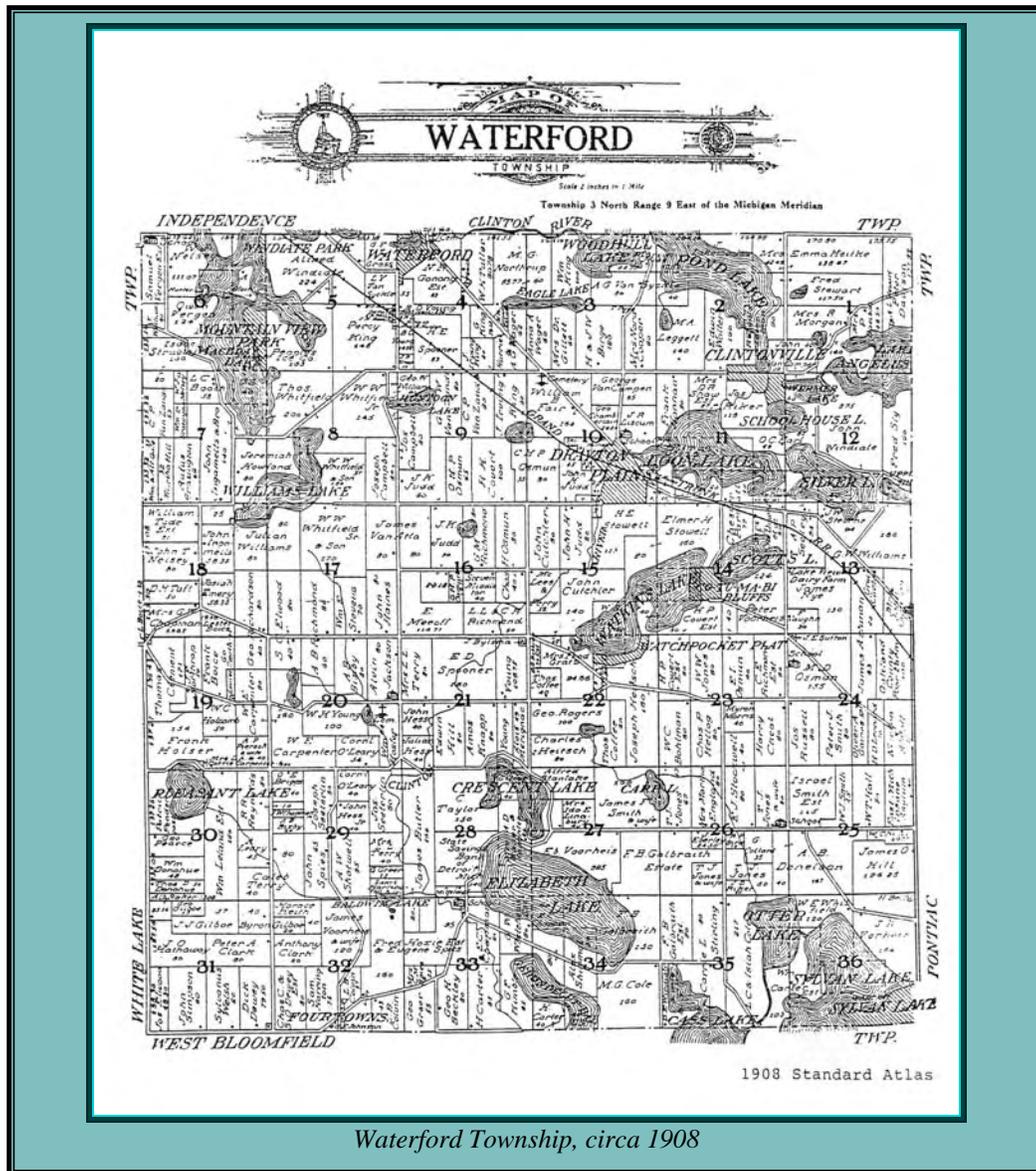
In addition, the region's premier general aviation facility, the Oakland County International Airport, is located on M-59 in the western portion of the Township. This airport opened in 1928 and is Michigan's second busiest airport based on take-offs and landings. The Airport continues to

influence land use and the geographic features of the Township. Land uses affiliated with an airport use, the height of buildings throughout the Township, the location of residential properties, maintenance of clear zones along runway paths, and traffic patterns will continue to be affected by airport operations.

HISTORY

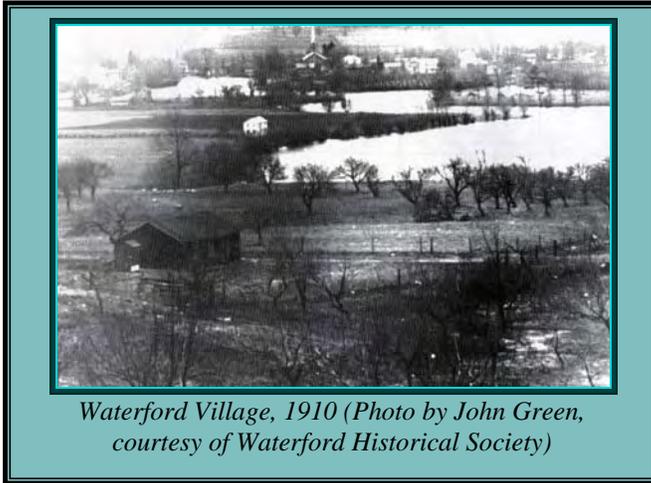
Waterford, organized as a Township in 1835, is nicknamed the “Lakeland Paradise”.¹ It has grown from a wilderness settlement of two families in 1819 to an urban community of 73,150 persons in 2000.

When the first white settlers came to the area, the Shiawassee and Saginaw Indian tribes inhabited the wooded countryside. Chief Pontiac, for whom the City of Pontiac was named, was the area leader of the local Native American tribe. While numerous other tribes hunted in this area, there is no evidence that any tribe made Waterford their year-round residence. Historians suggest this may have been due to the large areas of lowlands and wetlands.



Waterford Township, circa 1908

¹ Samuel W. Durant, *History of Oakland County, 1817-1877* (E. H. Everts and Company, Philadelphia, Pennsylvania, 1877).

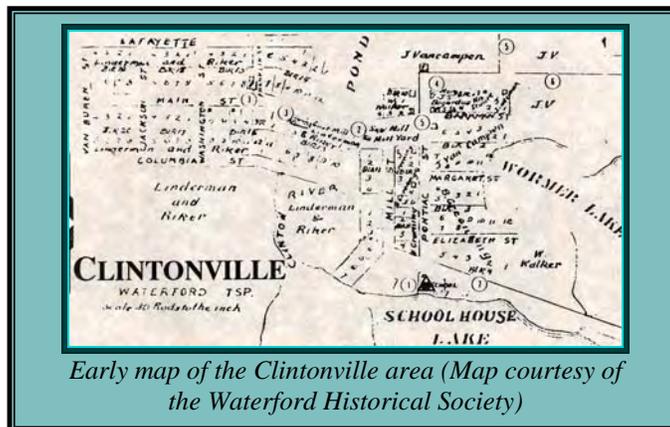


Waterford Village, 1910 (Photo by John Green, courtesy of Waterford Historical Society)

Among the first settlers who came to Waterford were two unrelated families named Williams. Major Oliver Williams, his wife and family of eight children journeyed up the Saginaw Trail from Detroit, taking two days and one night for the trip. In March 1819, they built a log house on the banks of what is now Silver Lake. Also in 1819, Alpheus Williams settled his family in the area where the Saginaw Trail crossed the Clinton River, as did Archibald Phillips. This site developed into Waterford Village, which is now a designated historic district in the Township (*please refer to Map 10 on Page 7-47*). Records

show that the Williams families each paid \$2.00 an acre for their land. The first school classes in Waterford were held in 1821 in an old sheep shed on the farm of Oliver Williams. In 1822, a schoolhouse was built and 12 pupils attended their first classes. The second school was built in 1828 and was also used for town meetings, church services and recreation programs for the early pioneers.

In 1834, two other village areas developed within the Township. One settlement named “Clintonville” developed around what is now the intersection of Walton Boulevard and Clintonville Road. Another, named “Drayton Plains”, developed around the area of the Dixie Highway and Frembes Road intersection. All three areas became rival pioneer villages as rural community gathering places and shopping nodes, with a mix of general stores, shops, small factories, taverns, mills, hotels, post offices, and railroad stations to serve the local farming community and travelers throughout the area.



Early map of the Clintonville area (Map courtesy of the Waterford Historical Society)

The last surviving structure from this pioneer village era is the general store that was known as Jacober's Store. This structure was located at the Andersonville Road and Dixie Highway intersection until it was moved to a permanent location at Greenfield Village.

None of the three village areas ever incorporated, although the residents of the area maintained a strong identification with the old village area names. In fact, Drayton Plains maintained its post office designation into the early 1990s. The village areas remained unincorporated, serving as community activity centers and gathering places into the twentieth century.

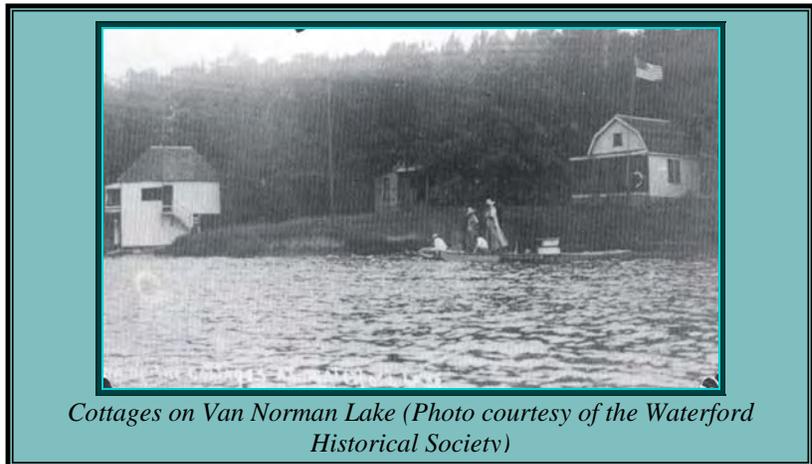
The 1877 History of Oakland County states that “Waterford Township derived its name from the circumstance of its containing so large an area of water surface.”² There is still some speculation as to how the Township came to be named Waterford. There was a ford across the Clinton River and some say that it was a result of this crossing that the area was named Waterford. The exact location of the river crossing is not known but it was either in the Drayton Plains area near the old hatchery ponds located at the Drayton Plains Nature Center, or at the point where the Saginaw Trail crossed the river in the Waterford Village area. The area named Drayton Plains was thought to be named after a mill Daniel Windiate owned when he lived in England.



Alec Seeterlin, father of former Township Supervisor James E. Seeterlin, operating his grain binder on his Lochaven Road Farm (Photo courtesy of the Waterford Historical Society)

After the initial settlements, people from widely scattered parts of the east and south of Michigan began to migrate to the Waterford area to begin new lives. Many of them traveled the Erie Canal from the eastern states, through Detroit, and into Waterford via the Saginaw Trail and eventually by railroad. After the Civil War, Waterford Township experienced a small growth spurt due to government land grants to war veterans. Large farms predominated throughout the 35 square miles within the Township. The Township's population grew to around 400 people by 1870.

By the 1920s, the population of Detroit and Pontiac had increased dramatically as people migrated to both cities for jobs in the new automobile industry. This migration had a long-term effect on Waterford. Initially, the railroad between Detroit and Pontiac made it possible for the auto workers in Detroit to travel up to the lakes area, use their growing income to purchase land to build summer cottages on the many lakes, and then commute with their families during the summer months. As automobiles became more affordable to workers and reliable road systems were built to handle the growth in traffic, workers found it easier to consider year-round lake living while making a daily commute to their factory jobs. This impact on Waterford can be shown in the doubling of the population every ten years between 1930 and 1960. The population went from 7,942 in 1930; to 12,019 in 1940, to 24,275 in 1950; to 47,008 in 1960.

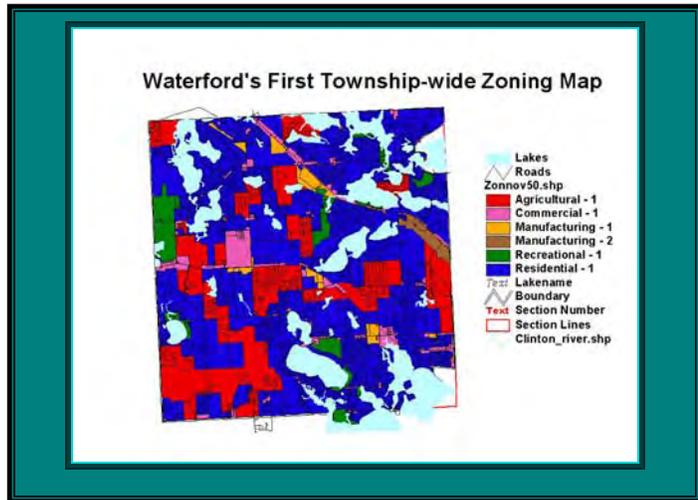


Cottages on Van Norman Lake (Photo courtesy of the Waterford Historical Society)

² Durant, History of Oakland County, 1877

By 1941, the population growth prompted Waterford's elected officials to hold their first zoning effort, which, as with many communities, preceded the adoption of a formal Master Plan. In January 1941, a building zone ordinance was passed for the Elizabeth Lake Estates area. This early zoning effort established four zoning classifications, Residential-1 through-3 and Commercial-1. Each zoning classification set standards for rear, front, and side yard size, height, lot area, building area, and building size. The residential minimum lot sizes ranged from 7,500 square feet to 15,000 square feet. Also in 1941, Waterford opened a new Township Hall at the corner of M-59 and Crescent Lake Road. At the time, this Township complex was large enough to house all of the Township personnel.

It was not until November 1950 that the first Township-wide Zoning Ordinance was passed. Under the 1950 Zoning Ordinance, six zoning district classifications were established, Residential-1, Commercial-1, Manufacturing-1, Manufacturing-2, Agricultural-1, and Recreation-1. In April 1952, Waterford adopted its first Building Code.



In the early 1960s, Waterford continued to strengthen its ability to guide the growth of the community. The Township decided to take advantage of the additional authority and powers to perform desired governmental duties under the Charter Township Act by becoming a Charter Township in 1961. In 1963, the Township Board established Ordinance Number 45, a new Zoning Ordinance which included eleven (11) zoning districts. There were now provisions for two agricultural districts, two single-family residential districts, two multiple-family residential districts, two industrial districts, two recreational districts, and one parking district. The minimum lot sizes for residential use ranged between 9,100 square feet to 12,000 square feet. There was a one-acre minimum for the dwindling agricultural uses in the Township.

Because of the conversion of Waterford from an agricultural community into a bedroom residential community, by the early 1960s there was commensurate growth in commercial development along the major roads. Between 1958 and 1962, the number of retail establishments nearly doubled, from 256 to 436. Twenty-eight percent of this increase was due to the construction of the Pontiac Mall, which is now known as the Summit Place Mall and soon to be renamed the Festivals of Waterford. In order to attempt to plan for the continuation of this growth, the Township took advantage of the federal Urban Planning Assistance Grant funding to prepare its first Master Plan. Five volumes of background planning studies were published in 1963 and 1964. Waterford's first Comprehensive Development Plan was published in April 1965. The Plan envisioned a community consisting primarily of single-family residential, several areas of low-density multiple housing, four small areas devoted to high-density multiple housing, commercial designations located in the Pontiac Mall area, along Elizabeth Lake Road, and in the Union Lake, Waterford Village, Drayton Plains, and Clintonville areas. Industrial areas were shown in the center of the Township and along Dixie Highway. Research industry and office spaces were clustered around the Airport. This Plan also envisioned road improvements, construction of Township water and sewer systems, a new Township Hall, fire stations, a parks and recreation building, construction of sidewalks, and acquisition of property for cemeteries and parkland. At the time the Plan was approved, there were 805 acres of parkland in the Township with an additional 533 acres proposed for acquisition to meet future recreation needs.

In December 1968, Waterford produced its first and only Capital Improvements Program. The Program identified several capital needs for the growing Township. The existing Township Hall, Police Building, and Fire Stations were deemed inadequate and identified for replacement. There was a need for additional fire stations and library space. A new Water and Sewer building and garage had been built in 1964 on the current Civic Center site, located off of Crescent Lake Road north of M-59, to accommodate the staff and equipment needed to operate and maintain the expansion of the Township's water system. A new library building was also built on the Civic Center site in 1965. A Sanitary Sewer Master Plan was adopted in 1965 to implement a Township-wide sanitary sewer system to protect the hydrological environment from the tremendous growth in septic systems that followed the population and housing expansions.

By 1970, the Township population had grown another 26 percent, to 59,123 persons. The community continued to grow as a bedroom community. Multiple housing did grow to occupy 270 acres of land by the mid 1970s. The commercial corridors continued to develop without the formation of a central business district. Growth appeared to occur in a haphazard fashion. Commercial growth did occur at a slower pace due to the national economic instability occurring throughout the nation and the Detroit metropolitan region during the 1970s. Industrial development remained a minor factor in the Township's economic base, occupying only 205 acres of land compared to 670 acres for commercial. In 1975, an update to the 1965 Master Plan was adopted. This Plan provided an emphasis on several important goals: (1) Preserving the residential character of the community while taking full advantage of Waterford's lakeland geography; (2) Encouraging optimum commercial development along the three major highways; (3) Encouraging more industrial development; (4) Acquiring more parkland; and (5) The development of a thoroughfare plan to allow safe movement of both pedestrians and vehicles. No major changes to the future land use map or to the Zoning Ordinance were made at that time.

Significant funding sources became available for physical developments in Waterford during the 1970s. In 1975, Waterford began receiving annual Community Development Block Grant (CDBG) funds from the U.S. Department of Housing and Urban Development. The CDBG funds were used for housing rehabilitation and a variety of public improvement projects such as storm drainage, street paving, and sidewalk installation. CDBG funds were also used to acquire and rehabilitate an historic church in the Waterford Village area, which was established by the Township Board as Waterford's official Historic District in 1977. This facility was then used as office space for the Parks and Recreation Department. Waterford took advantage of new state legislation to establish an Economic Development Corporation, an appointed body able to place full faith and credit behind the issuance of industrial revenue bonds to attract industrial companies to the Township. In the mid-1970s, a Township-wide bikepath plan was developed and a millage passed to fund the implementation of the plan. At the height of the energy crisis in the late 1970s, Waterford received federal energy grant funds that were used to fund the construction of a new three-story Township Hall building in the Civic Center complex. The Township government offices moved to the new building in 1979. The old Township Hall became the main headquarters of the Police and Fire Departments.

Between 1970 and 1980, the Township's population increased an additional 8.7 percent, to 64,250 persons. Multiple housing more than doubled the amount of land it occupied, growing from 270 acres in 1974 to 584 acres in 1989. Besides the tough economic times that began in the 1970s and continued into the mid-1980s, another important factor in the slowing population growth was the reduction in household size that was occurring throughout the country. In Waterford, the average household size declined from 3.50 persons per household in 1970 to 2.86 persons in 1980. In spite of the tough economic times of the early 1980s, commercial land use expanded from 670 acres in the mid 1970s to 1,238 acres at the end of the 1980s. During the same time, industrial land use expanded from 205 acres to 433 acres.

In August 1981, the Township Board adopted Ordinance Number 135, a new Zoning Ordinance to replace the one adopted in 1963. Overall, the format and content of the new Ordinance was nearly identical to the former Ordinance and was meant to consolidate the eighteen years of revisions to the old Ordinance. There were three major changes. First, acknowledging the demise of agricultural Waterford, the two agricultural land use districts were eliminated and replaced by a district named "Suburban Farm", which allowed for large parcel single-family residential with the remnants of agricultural pursuits. Second, an additional residential district for the construction of duplex housing units was established. Finally, an industrial/technical office district was established.

By the late 1980s, vocal groups of citizens expressed concerns for growth and the effects on the natural environment of the Township. These groups called for the Township Board to establish a moratorium on multiple housing and raised concerns about the protection of the Township's wetlands and woodlands. The moratorium failed due to legal issues, but the Township responded by adopting ordinances to regulate wetlands and woodlands.

The efforts for better environmental quality continued into the early 1990s as the Planning Commission developed a new Master Plan. The 1991 Master Plan reflected the environmental awareness of the citizens by including the protection of wetlands and groundwater as priority goals. The Plan, like its predecessor, envisioned a community consisting primarily of single-family residential. There were substantially more areas of multiple housing shown on this Master Plan map. Commercial land use expanded along the length of M-59, Telegraph Road, and Dixie Highway. Industrial remained nearly identical on both maps. Research industry uses nearly disappeared from the map and office land uses were scattered throughout the Township.

The concerns over growth occurred at a time when the Township experienced the lowest rate of population growth in its history. In 1990, there was a 3.8 percent growth in population, to 66,692 persons. During the 1990s, over 38 percent of the developed land was devoted to single family housing. The concerns over growth of multiple housing in the Township appeared to have a negative effect on the continued development in the 1990s since only 97 additional acres were developed as multiple housing. The average household size continued to decline, to 2.59 persons per household. Commercial land use remained relatively static, using approximately 1,200 acres by the end of the 1990s. During the 1990s, industrial land use increased slightly to nearly 500 acres. The Township began the 1990s with the failure to pass a millage necessary to fund the construction of a community recreation center. The decade ended with an expanded central library building and plans for the construction of three new buildings to house the Fire Department, Police Department, and Department of Public Works.

The year 2000 saw the population of the Township increase by 9.7 percent, to 73,150 persons. The average household size declined again, this time to 2.42 persons per household. The development phase of the Township was nearing its end, with over 92 percent of the land being developed. As it looks to its future, the Township must now face the challenges of redevelopment, economic development, and quality of life issues. The Planning Commission began the current Master Plan process to guide Waterford to successfully meet these new challenges and continue the progress that has guided Waterford throughout its history.