



WHITE LAKE OAKS BASELINE PARK ANALYSIS

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Park Location

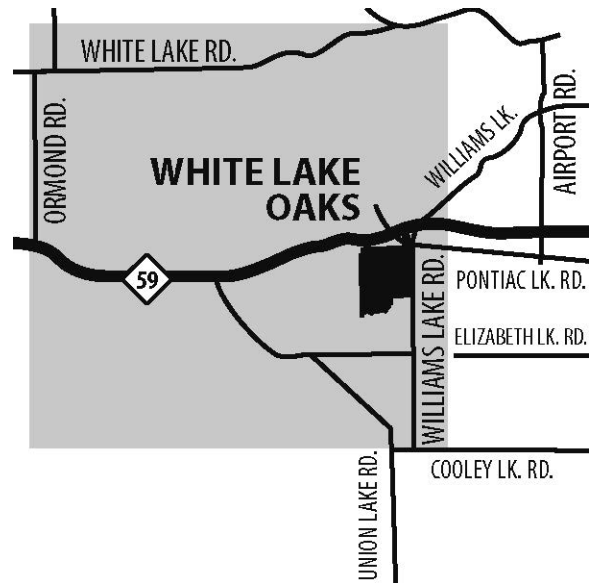
White Lake Oaks County Park is a 236-acre park located near the center of Oakland County in White Lake Township. A small portion of the park (less than a half-acre) is located in Waterford Township.

Park Contact Information

991 North Williams Lake Road
White Lake, Michigan 48386
Park Office: 248-698-2700
www.DestinationOakland.com

Township and Range

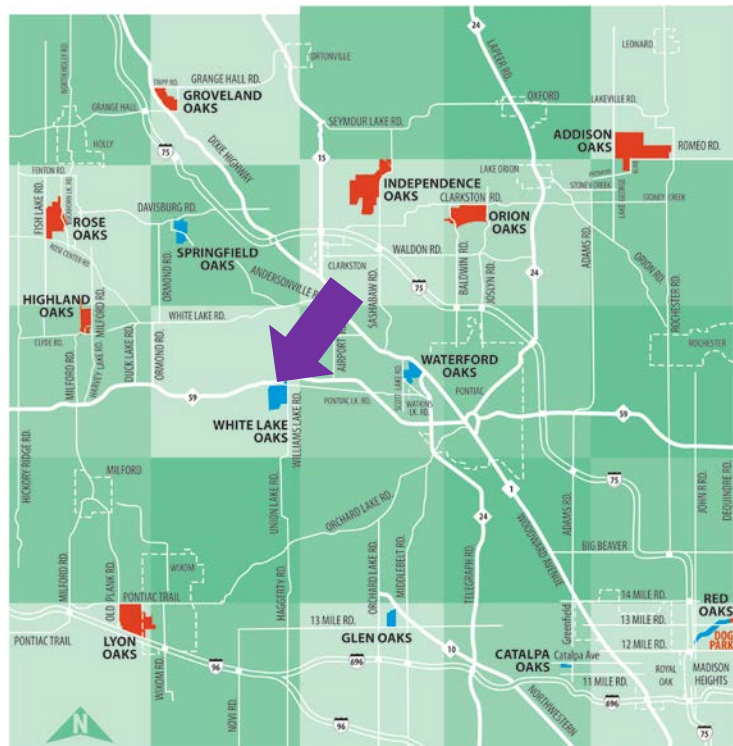
T3N R8E, Sections 13 and 24; R9E Section 18



Community Context

The characteristics of White Lake Oaks are unique and reflect the character of the local communities. It is important to understand the park within the context of its communities – Michigan, Oakland County, and White Lake Township – for multiple reasons:

- To convey a 'sense of place' that is harmonious and complementary to the local environment
- To ensure that Oakland County Parks is not duplicating services provided by local recreational authorities or by the private, non-profit, or larger regional/state providers
- To collaborate with units of governments and organizations related to the Oakland County Parks mission to manage open space and natural areas and provide recreational facilities and programs on an inter-community, county and/or multi-county basis
- To develop facilities and programs that contribute to the implementation of local and county plans
- To ensure compliance with local and county regulations



Oakland County

Oakland County is located in southeast Michigan, approximately 20 miles northwest of Detroit, and covers **907** square miles (SEMCOG, 2015). The estimated population in 2015 was **1,242,304**. In 2010-2015, median household income was **\$66,426**. An estimated **10%** of the population lives in poverty¹ (U.S. Census Bureau, 2015).

According to Advantage Oakland, Oakland County employs nearly 690,000 workers with more than 260,000 commuting from outside the county. The top three employment sectors are Professional and Business Services (26%), Trade, Transportation and Utilities (18%), and Private Education and Health Services (16%). The county is home to nearly 1,000 firms from 39 foreign countries (EDCA).

Within the county, there are 30 cities, 21 townships, and 11 incorporated villages, in urban, suburban, and rural landscapes. The county is home to the headwaters of five major rivers, the Clinton, Flint, Huron, Rouge, and Shiawassee Rivers, all of which are important to the long-term health of the Great Lakes Ecosystem. Many diverse ecosystems are located in the county due to the area's complex topography and geological history and are an important element in the character of the county.

Oakland County Parks and Recreation

Oakland County Parks and Recreation (OCPR) provides parks and recreation services within the geographic boundaries of Oakland County and are open to both residents and visitors to the county. Since 1966, OCPR has expanded and diversified the park system from four parks to thirteen, now totaling over 6,740 acres. Key attractions include managed natural areas, nature centers, waterparks, golf courses, conference centers, campgrounds, fairgrounds and over 65 miles of park trails. OCPR also offers a variety of entertaining and educational recreation programs and services for various ages and abilities.

White Lake Townshipⁱ

White Lake Oaks County Park is located in White Lake Township in the center of Oakland County. The township covers **33.52 square miles**. The estimated population in 2015 was **30,961** and the median household income in 2010-2014 was **\$71,689**. An estimated **7.5%** of the population lives in poverty (U.S. Census Bureau, 2015).

Description from websiteⁱⁱ: "Our Vision – strive for a sustainable White Lake Township that balances the community's economic, environmental, and social needs. Promote the identity of White Lake Township as a small country town with big city amenities by protecting and preserving natural features, encouraging redevelopment of obsolete properties and directing growth and development to a central community core."

Drive-Time Service Area

The purpose of this section is to outline the geographic area that draws the majority of visitors to a specific park or facility (drive-time service area) and describe the demographic and socio-economic characteristics of the people who live there.

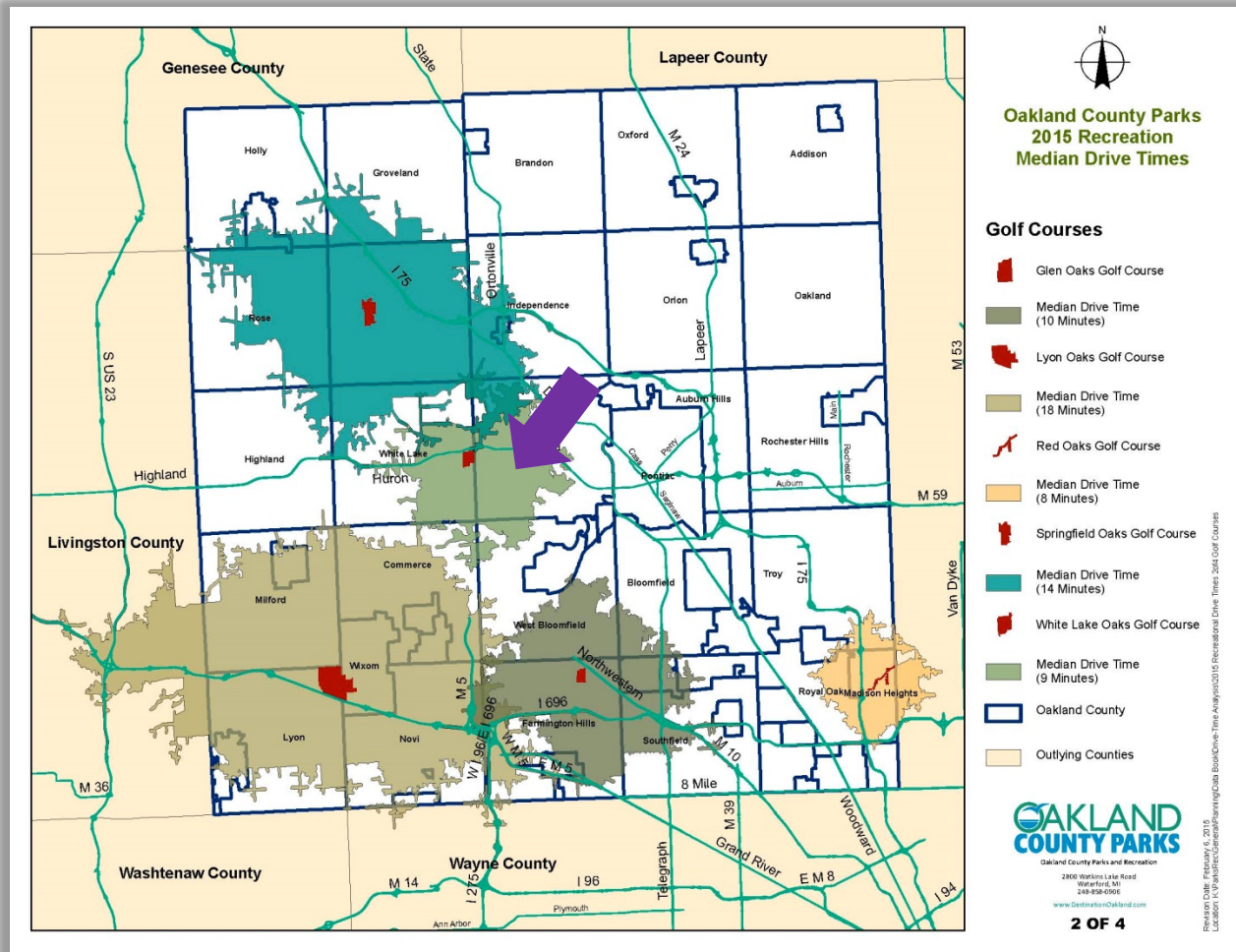
The drive-time analysis is conducted using park visitor home zip codes that are collected at point-of-sale. Please see the 2015 *Annual Dashboard and Data Book* for a detailed description of drive-time analysis methods (OCPRC, 2015). The median drive-time – indicating that half of all visitors drive for a specific length of time or less – is used

ⁱ Because the area in Waterford Township that the park lies in is so small (0.31 acre), demographic analysis focuses only on White Lake Township

ⁱⁱ <http://www.whitelaketwp.com/demographics.asp>

to approximate the service area for each park and facility. In 2015, the median drive-time for White Lake Oaks was 9 minutes.

Figure A: Golf Course Median Drive-Time Map



Population and Income Trendsⁱ

The estimated population in the drive-time service area in 2015 was **53,409** with a **0.47%** annual increase in population forecast between 2015 and 2020. The population is becoming more diverse in race and ethnicity. The population profile and forecast reflects an aging population with the population 65 and older increasing by **22%** from 2015 to 2020. Median age is **41.4** in 2015 and forecast to be **42.3** in 2020. The median household income in 2015 is estimated at **\$62,135** and is forecast to increase at an annual rate of **4.18%** between 2015 and 2020. An estimated **9%** of the population lives in poverty.

Table 1: Population Trends - 9-minute drive-time of White Lake Oaks

Summary	Census 2010	2015	2020
Population	53,131	53,409	54,664
Households	21,375	21,632	22,173
Families	14,419	14,427	14,677
Average Household Size	2.47	2.45	2.45
Owner Occupied Housing Units	17,051	17,066	17,503
Renter Occupied Housing Units	4,324	4,566	4,669
Median Age	40.0	41.4	42.3
Trends: 2015 - 2020 Annual Rate	Area	State	National
Population	0.47%	0.15%	0.75%
Households	0.50%	0.21%	0.77%
Families	0.34%	0.06%	0.69%
Owner Occupied Housing Units	0.51%	0.19%	0.70%
Median Household Income	4.18%	2.79%	2.66%

Figure B: Population by Age – 9-minute drive-time of White Lake Oaks

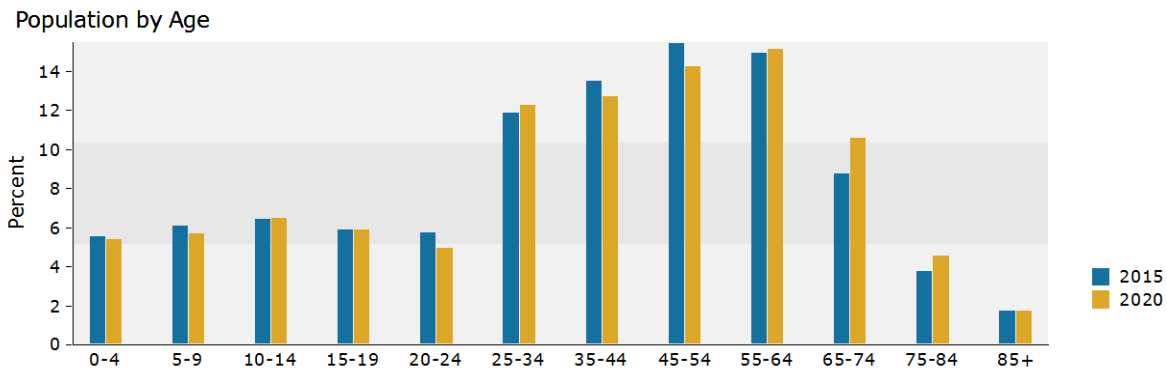


Table 2: Race and Ethnicity - 9 minute drive-time of White Lake Oaks

Race and Ethnicity	Census 2010		2015		2020	
	Number	Percent	Number	Percent	Number	Percent
White Alone	49,142	92.5%	48,749	91.3%	49,116	89.8%
Black Alone	1,413	2.7%	1,638	3.1%	1,981	3.6%
American Indian Alone	211	0.4%	229	0.4%	245	0.4%
Asian Alone	853	1.6%	1,020	1.9%	1,240	2.3%
Pacific Islander Alone	7	0.0%	9	0.0%	9	0.0%
Some Other Race Alone	487	0.9%	562	1.1%	662	1.2%
Two or More Races	1,019	1.9%	1,201	2.2%	1,412	2.6%
Hispanic Origin (Any Race)	2,295	4.3%	2,657	5.0%	3,170	5.8%

ⁱ Population and income profiles are generated for the drive-time service area using Esri ArcGIS Business Analyst Online. Demographic data is compiled by Esri from US Census Bureau data. Esri builds ArcGIS, which “connects people with maps, data, and apps through geographic information systems (GIS). It is a location platform that’s accessible to anyone, anywhere, anytime”. <http://www.esri.com/about-esri#what-we-do>

Market Potential Index – Recreation and Pet-Related Expenditures

ESRI's Market Potential Index (MPI) measures the relative likelihood of the adults or households in the specified trade area to exhibit certain consumer behavior or purchasing patterns compared to the U.S. An MPI of 100 represents the U.S. average.

Table 3: Market Potential – 9-minute drive-time of White Lake Oaks

Product / Consumer Behavior	Percent of Population	MPI
Walking for Exercise in past 12 months	29.9%	107
Households owning 1 dog	26.4%	110
Households owning 2 or more dogs	19.0%	119
Fishing (Fresh Water) in past 12 months	15.6%	126
Overnight Camping Trip in past 12 months	14.9%	117
Jogging/Running in past 12 months	12.8%	100
Golf in past 12 months	11.9%	126
Bicycling (Road) in past 12 months	10.8%	110
Hiking in past 12 months	10.7%	107
Canoeing/Kayaking in past 12 months	6.6%	123
Horseback Riding in past 12 months	2.6%	105

Tapestry Segmentationⁱ

Tapestry Segmentation classifies neighborhoods into 67 unique segments based not only on demographics but also socioeconomic characteristics. It describes US neighborhoods in easy-to-visualize terms to help understand residents' lifestyle choices, what they buy, and how they spend their free time and help identify best customers, optimal sites, and underserved markets.ⁱⁱ

The Esri Dominant Tapestry Map shows the tapestry segments within and surrounding the drive-time radius and provides a list of the Tapestry segments with hyperlinks to detailed descriptions. See *Planning Map Set*, pages 21-22 – Esri Dominant Tapestry Map.

The top five Tapestry segments within the drive-time radius are shown below. Each segment name is hyper-linked to the detailed Esri profile. After the name, we show the percentage of households that are included in each segment – within the drive-time radius and nationally. The Tapestry segment summary from the Esri profile is included with each entry.

[Green Acres \(6A\)](#)

Describes 18.5% of households within the drive-time radius; 3.2% of households in the U.S.

The Green Acres lifestyle features country living and self-reliance. They are avid do-it-yourselfers, maintaining and remodeling their homes, with all the necessary power tools to accomplish the jobs. Gardening, especially growing vegetables, is also a priority, again with the right tools, tillers, tractors, and riding mowers. Outdoor living also features a variety of sports: hunting and fishing, motorcycling, hiking and camping, and even golf. Self-described conservatives, residents of Green Acres remain pessimistic about the near future yet are heavily invested in it.

[Rust Belt Traditions \(5D\)](#)

Describes 15.2% of households within the drive-time radius; 2.2% of households in the U.S.

ⁱ See *Planning Map Set*, page 21 – Dominant Tapestry Map

ⁱⁱ <http://www.esri.com/data/tapestry>

The backbone of older industrial cities in states surrounding the Great Lakes, Rustbelt Traditions residents are a mix of married-couple families and singles living in older developments of single-family homes. While varied, the work force is primarily white collar, with a higher concentration of skilled workers in manufacturing, retail trade, and health care. Rustbelt Traditions represents a large market of stable, hard-working consumers with modest incomes but above average net worth (Index 111). Family oriented, they value time spent at home. Most have lived, worked, and played in the same area for years.

[Comfortable Empty Nesters \(5A\)](#)

Describes 12.1% of households within the drive-time radius; 2.5% of households in the U.S.

Residents in this large, growing segment are older, with more than half of all householders aged 55 or older; many still live in the suburbs where they grew up. Most are professionals working in government, health care, or manufacturing. These Baby Boomers are earning a comfortable living and benefitting from years of prudent investing and saving. Their net worth is well above average (Index 363). Many are enjoying the transition from child rearing to retirement. They value their health and financial well-being.

[Soccer Moms \(4A\)](#)

Describes 9.6% of households within the drive-time radius; 2.8% of households in the U.S.

Soccer Moms is an affluent, family-oriented market with a country flavor. Residents are partial to new housing away from the bustle of the city but close enough to commute to professional job centers. Life in this suburban wilderness offsets the hectic pace of two working parents with growing children. They favor time-saving devices, like banking online or housekeeping services, and family-oriented pursuits.

[Old and Newcomers \(8F\)](#)

Describes 8.4% of households within the drive-time radius; 2.3% of households in the U.S.

This market features singles' lifestyles, on a budget. The focus is more on convenience than consumerism, economy over acquisition. Old and Newcomers is composed of neighborhoods in transition, populated by renters who are just beginning their careers or retiring. Some are still in college; some are taking adult education classes. They support environmental causes and Starbucks. Age is not always obvious from their choices.

Site Analysis

Parcel Analysis

White Lake Oaks County Park is composed of 4 parcels totaling 236 acresⁱ. There is a leased house at 1540 Orchard Drive. Copies of all documents cited in the Parcel Analysis are maintained in the Planning and Resource Development files.

Table 4: Parcel Table for White Lake Oaks

Parcel ID	Acres	Deed/ Lease/ Easement / Agreement	Liber and Page
12-13-478-008 (from -004, -005) (N parking lot)	4.6	1975- Decker/ Kruger (27.78 acres)	6451/125
		2010- Water Main Easement (OC to White Lake Township)	41892/033
12-24-200-008 (clubhouse, parking lot and golf course were formerly 12-24-200-007) Girl Scouts addition formerly part of 12-24-126-008)	201.03	1970- Deed (Twin Lakes GC)	5632/122
		1972- Deed (Kramp)	5944/550
		2000- DTE ROW Easement	21319/419
		2000- Quit Claim Deed (OC to Girl Scouts)	21407/493
		2000-Quit Claim Deed (Girl Scouts to OC)	21407/495
		2000- Quit Claim Deed (OC to RCOC)	26554/132
		2006- DTE ROW Easement	37268/515
		2006- Water Main Easement	37744/613
		2007- Quit Claim Deed (Girl Scouts to OC)	21407/497
		2016 05 04 – Covenant Deed (Girl Scouts to OC)	49333/191
12-24-401-002	19.5	1974- Deed (also 426-028)	06353/605
12-24-426-028	4.1	1974- Deed (also 401-002)	06353/605
13-18-354-001	0.31 (0.15)	1978 04 21 Condemnation (WRC)	7187/638

ⁱ Total park acreage is determined using Oakland County's GIS-based parcel database; this acreage may differ from the sum of acreages listed on individual deeds.

Physical Characteristics

Geologyⁱ

The property lies within the Washtenaw Subsection Ecoregion² and the Jackson Interlobate Subsubsection³. This area is found between three glacial lobes and is characterized by ice-contact topography⁴ and glacial deposits⁵ (Albert, 1995). The landscape of the park was shaped by glaciers and has a rolling terrain. The park is within a large swath of glacial outwash plain of stratified sand and gravel and post-glacial alluvium.

Soilsⁱⁱ

Soil maps indicated six soil types on the property, ranging from well-drained soils of the higher elevation to the very poorly-drained soils of the lowlands. Notable soils include Oshtemo- Boyer Loam and Houghton and Adrian Muck, which include the well-drained loams found on slopes and knolls; and Muck, a very poorly-drained soil of organic material.

Topographyⁱⁱⁱ

Elevations rise 28' over the property, ranging from 940' in the southern wetlands to 968' at the northeast corner along M-59. There are some slopes within the woodlands and along the South Pond.

Hydrography^{iv}

Approximately half of the property is identified by the National Wetlands Inventory (NWI) as potential wetlands. Tributaries of the Huron River flow west and south through the park. Six natural and/or retention ponds are scattered throughout the golf course, with restoration being conducted on some ponds.

Presettlement Plant Communities^v

Presettlement plant community information gives a landscape level perspective based on the federal General Land Office⁶ surveys conducted in the mid-1800s. The presettlement vegetation in White Lake Oaks is predominantly Black Oak Barren with Mixed Hardwood Swamp, with Shrub Swamp/Emergent Marsh in the northeast (Comer & Albert, 1997).

Regional Context

Potential Natural Areas^{vi}

Michigan Natural Features Inventory (MNFI) has identified a Priority Three Natural Area over the west and southwest portions of the property.

Watershed^{vii}

The majority of White Lake Oaks is within the headwaters of the Huron River Watershed and Huron River Subwatershed. A small portion of the southeast corner is in the Clinton River Watershed and Clinton River Subwatershed.

ⁱ See *Planning Map Set*, page 4 – Surface Geology

ⁱⁱ See *Planning Map Set*, page 5 – Soils

ⁱⁱⁱ See *Planning Map Set*, page 6 – Ten Foot Contours

^{iv} See *Planning Map Set*, page 7 – Hydrography

^v See *Planning Map Set*, page 8 – Presettlement Vegetation

^{vi} See *Planning Map Set*, page 9 – MNFI Potential Natural Area

^{vii} See *Planning Map Set*, page 10 – Oakland County Subwatersheds

Green Infrastructureⁱ

The majority of White Lake Oaks County Park is included in Oakland County's Green Infrastructure Vision. Excluded areas include the buildings and parking lot at the northeast corner.

Pontiac Lake, a 612-acre lake, is adjacent to the northeast corner of the park, with the 3,745-acre Pontiac Lake State Recreation Area along the north end of the lake. Walt's Landing, a 2-acre marina on the south end of Pontiac Lake, is 0.13 miles to the north. Wooded wetlands extend from the park at the southeast corner to condominium open space. The park is within White Lake Township's wellhead protection area.

Land Useⁱⁱ

Zoning

The majority of the park is zoned Recreation and Open Space (ROS) with areas of the northeast and southwest zoned Single Family Residential (R1-C). The 40.2-acre addition (former Girl Scouts property) is zoned AG agricultural (northern half) and R1 residential (southern half).

Current Land Use

Current use is focused on recreation and natural resource conservation with one area of residential use.

Surrounding Land Use

The majority of the properties neighboring White Lake Oaks are single-family residential with some multi-family residential, commercial and vacant property in the surrounding area. The area is experiencing increasing suburbanization and development.

East: Williams Lake Road forms the east border of the property, with single-family residential on the opposite side of the road.

North: The park is bordered on the north by M-59 and commercial properties, including the Girl Scouts Service Center. Pontiac Lake Road passes through the park at the north, with the main parking lot and two park buildings located on the north side. To the west of the park property, there is a residence and a multi-family dwelling. Farther west, between the park and M-59, there is a small privately-owned wetland parcel and a recreational vehicle dealership and storage facility.

West: The Huron River forms the park's western boundary. West of that is residential open space, consisting mostly of wetlands.

South: South of the park is single-family residential.

Past Land Useⁱⁱⁱ

Historical aerial photographs provide a snapshot of past land uses and of the development of the park over the decades.

Detailed investigation of the western portion of the property (former Girl Scout property) through a Phase I Environmental Site Assessment (ASTI Environmental, 3/11/2016), which provides the following summary:

"The Property has been vacant from at least 1937 to present. A small disturbance was observed in the aerial photographs beginning in the 1940s and discussion with staff from the Oakland County Parks and Recreation Department indicated that this was a sandy area in the center of the northern half of the Property. Upon visual

ⁱ See *Planning Map Set*, page 11 – Green Infrastructure

ⁱⁱ See *Planning Map Set*, page 12 – 2015 Land Use

ⁱⁱⁱ See *Planning Map Set*, pages 13-20 for views of the park from 1940 through 2015

inspection of this area, the EP opines that it was either the beginning of gravel and sand mining operation or an attempt to construct a pond on the Property. This soil disturbance is considered to represent minimal risk for releases or contamination of the Property.

“Based on the site inspection, interviews, regulatory and municipal records review, and review of historical documentation, it is ASTI’s professional opinion that no de minimis conditions, HRECs, CRECs, or RECsⁱ were identified in connection with the Property”. (ASTI Environmental, 3/11/2016)

ⁱ HREC = historical recognized environmental condition; CREC = controlled recognized environmental condition; REC = recognized environmental condition

Park History

Original clubhouse at White Lake Oaks; it was replaced in 20016, undated photo

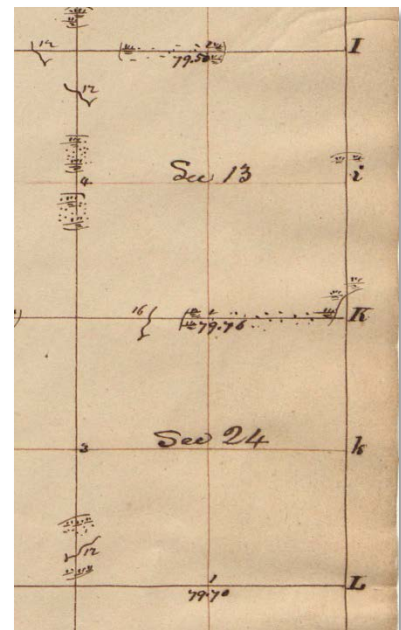


Early Historyⁱ

The majority of White Lake Oaks occupies nearly all of the northeast quarter of Section 24. An additional park area is located in the southeast quarter. 40.2 acres were recently acquired (2016) in the northwest quarter. The main parking lot is located in the southeast quarter of Section 13 (4.6 acres). In Waterford Township, approximately 0.31 acre is located in the southeast quarter of Section 18 and the northeast quarter of Section 19.

The General Land Office (GLO)⁷ survey for Sections 13 and 24 of White Lake Township, Michigan Territory was filed at the Surveyors General Office Ohio on October 15, 1823. The land on the section lines around Sections 13 and 24 is simply described in the surveyor's notes as "level". At the southern boundary of Section 24, it is described as "rolling land" with white and black oak.

Figure C: 1823 Survey of White Lake Township, Sections 13 and 24 (BLM)



ⁱ See Figure 7: White Lake Sections 13 and 24 Historic Plat Maps

White Lake Township: Section 24

William Reid of Oakland County, Michigan Territory entered a land patent on August 2, 1837 for much of the land now occupied by White Lake Oaks in Section 24. This included the entire northeast quarter, the south half of the northwest quarter, and the east half of the southeast quarter. John Hickey of Wayne County, Michigan Territory filed a land patent for the west half of the southeast quarter, also on August 2, 1837. Jesse Mathewson of Oakland County, Michigan Territory filed a land patent for the northeast quarter on May 1, 1837 (BLM).

A survey of historic atlases shows east half of the northeast quarter of Section 24 owned by the Vantine family in 1872, 1896, 1908 and 1947. The 1947 plat map identifies the Vantine property as the Twin Lakes Golf Course. Twin Lakes opened in 1930.

In 1938, the Rural Property Inventories⁸ documented the Twin Lakes club house, built in 1932 located on Williams Lake Road. It was a 1-story, 3-room structure in good condition.

White Lake Township: Section 13

The land patent for the southeast quarter of Section 13 (total 160 acres) was sold to Ezekiel Salisbury of Montgomery County, New York on April 10, 1837.

Historic atlases show the land in the southeast corner of Section 13 within the Vantine family, with a structure and a school building on the north side of Pontiac Lake Road. Two major changes show up in the 1947 atlas: the construction of M-59 and the development of Pontiac Lake. According to the Michigan Department of Natural Resources, Pontiac Lake is a man-made impoundment created in 1926 when Lime Lake, a small lake in the upper Huron River watershed, was dammed (MDNR, 1993). Lime Lake can be seen on the historic plat maps.

In 1938, the Rural Property Inventories documented the Vantine home on Pontiac Lake Road – a 2-story, 14-room wood frame house in good condition. No original construction date is given, but it was remodeled in 1937. The school on the adjacent property on Pontiac Lake Road is documented as being built in 1936 – a 1-story, 3-room wood-frame, brick veneer building with a flat roof in good condition on 0.82 acres of land.

Park History

The White Lake Oaks property was purchased from Twin Lakes Golf Club Inc. by the Oakland County Parks and Recreation Commission on March 15, 1971. The sale was signed off by Donald Vantine who was president of the golf club at the time. The property had functioned primarily as a golf course since its opening to the public in 1930.

An appraisal of the property was done and completed by Richard M. Irwin for Kenneth VanNatta, Director of Oakland County Parks and Recreation in 1970. In his report he stated that the property would be best suited for “recreational or golf course purposes” (Irwin, 1970). Due to the appraisal and the already existing amenities, it was decided the property would continue to function as a golf course. White Lake Oaks golf course was officially established after the purchase of the Twin Lakes Golf Club property. Throughout the years additional construction and renovations have followed to accommodate the growing number of participants.

In 2016, OCPRC acquired a 40.2-acre property in White Lake Township from the Girl Scouts of Southeastern Michigan, increasing the size of the park to 236 acres. The Girl Scouts have retained a 7.3-acre area lot at 8545 Highland Road where the Girl Scouts Service Center is located. The property has a stretch of the Huron River flowing through it that could potentially be incorporated into the regional network of blue water trails. This expansion of the park fits in with Oakland County Parks’ goals to diversify recreational opportunities at its five golf courses.

Past Master Plans

There are no past master plans for this park.

Grant History

White Lake Oaks has not been the recipient of major grants.

Park-Wide Planning Areas

1. Natural Resources

The Michigan Natural Features Inventory has described and abstracted 76 distinct natural community types within the State of Michigan (Kost, 2010). According to MNFI, 40 natural communities occur within Oakland County at varying degrees.




The natural areas around the golf course consist of woodlands, wetlands and naturalized or no-mow areas. To date, 9 natural community types have been identified at White Lake Oaks.

The Huron River headwater wetlands found at the park are an important natural resource and are preserved and enhanced by maintaining natural hydrology, minimizing runoff and preserving habitat connectivity.








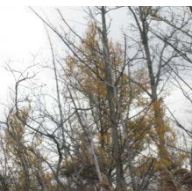
White Lake Oaks is certified by the Michigan Turfgrass Environmental Stewardship Program. This certification requires the park to exceed requirements of environmental laws, protect water resources and enhance the maintenance of turfgrass and open spacesⁱ.

Table 5: Natural Features at White Lake Oaksⁱⁱ

Natural Community	Description	
	Huron River 1 – Huron River	Headwaters of the Huron River. Flows south from Pontiac Lake, through the west edge of the park, to Oxbow Lake.
	Creeks 2 - creeks	Huron River tributaries, many in golf course modified by ditching, flow mostly in a southerly direction. Tributaries in west half link golf course ponds.
	Submergent marsh 3 – Wetland Complex	Part of wetland complex within ponds. Submerged rooted and non-rooted species include pondweed, waterlily, pond lily and duckweed.

ⁱ <https://www.mtesp.org/>

ⁱⁱ See Figure D: White Lake Oaks Natural Features Map

Natural Community	Description
	<p>Emergent marsh</p> <p>3 – Wetland Complex</p> <p>Part of wetland complex scattered throughout non-developed areas of the park, along shores of ponds and streams. Species include cat-tails, blue-flag iris, Phragmites, bulrush, sedge and grass.</p>
	<p>Southern wet meadow</p> <p>3 – Wetland Complex</p> <p>Part of wetland complex scattered throughout non-developed areas of the park. The ground-water influenced wetland is dominated by sedge-- especially tussock sedge, plus swamp milkweed, Joe-Pye weed, aster and goldenrod.</p>
	<p>Southern shrub-carr</p> <p>3 – Wetland Complex</p> <p>Part of wetland complex scattered throughout non-developed areas of the park. A shrub-dominated wetland including dogwood, willow, elderberry, nannyberry, ninebark, and meadowsweet.</p>
	<p>Floodplain Forest</p> <p>3 – Wetland Complex</p> <p>Part of wetland complex scattered throughout non-developed areas of the park. Bottomland forests bordering the Huron river include silver maple, green ash, cottonwood, willow, elm, bluejoint grass, and sensitive fern.</p>
	<p>Southern hardwood swamp</p> <p>3 – Wetland Complex</p> <p>Part of wetland complex scattered throughout non-developed areas of the park, with high quality areas found at southern end of park. The poorly-drained forested wetland species include red and silver maple, yellow birch, cottonwood, quaking aspen, American ash, marsh marigold and skunk cabbage.</p>
	<p>Rich tamarack swamp</p> <p>3 – Wetland Complex</p> <p>Part of wetland complex scattered throughout non-developed areas of the park. The forested wetland is dominated by tamarack. Other species include white ash, yellow birch, red maple, northern white cedar and poison sumac. Black spruce was documented at the park (HRM, 2015).</p>
	<p>Vernal Pool</p> <p>Located within Wetland Complex</p> <p>Seasonal forested pools scattered throughout woodlands, A small vernal pool was documented within the woodlands in the golf course (HRM, 2015). Species include red maple, yellow birch, American elm, and ferns.</p>





Natural Community	Description
 <p>Dry-mesic southern forest 4 – Woodland Complex</p>	<p>Upland woodland on ridges and upper slopes. Also known as oak-hickory forest. Species include white, black and red oak, sugar maple, hickory, white ash, wild black cherry, witch-hazel and ironwood.</p>
 <p>Mesic southern forest 4 – Woodland Complex</p>	<p>Occurs on lower slopes and edges of wetlands. Also known as mixed-deciduous woods or beech-maple forest. Species include sugar maple, American beech, white ash, oak, elm and basswood.</p>
 <p>No mow/naturalized area Located within golf course</p>	<p>Old field habitat within golf course. Species include goldenrod, aster, Queen-Anne's-lace, honeysuckle, multi-flora rose, and grass. Some areas with native prairie species, including big blue stem and Indian grass.</p>
 <p>Bioswale</p>	<p>Native seeds planted in 2010 along slope by Tee 5, and native plugs along pond/wetland between Tee 9 and 18. Species include blue flag, swamp milkweed, arrow arum, Joe-Pye weed, golden Alexander, sunflower, aster and sedge.</p>

Figure D: White Lake Oaks Natural Features Map



2. Park Entrances, Roadways and Parking

The main access to White Lake Oaks is off of Pontiac Lake Road and North Williams Lake Road. The North Parking Lot is located on the north side of Pontiac Lake Road, across the street from the front entrance of the Clubhouse. The Clubhouse features a circle drive for passenger drop-off along the south side of Pontiac Lake Road. The safety of the crossing from the North Parking Lot to the Clubhouse front entrance is a concern.

The South Parking Lot is located south of the Clubhouse and provides access to the Clubhouse via the ProShop. It has two entrance drives on the west side of North Williams Lake Road.

The Maintenance Yard is accessed from Pontiac Lake Road. A latched gate closes off the entrance from the public. The maintenance building is located approximately southwest of the clubhouse, towards the center of the course. A maintenance road through the golf course connects the maintenance building to Pontiac Lake Road. The Maintenance Yard has a small parking lot.

Photos from left: Main park sign; Clubhouse front entrance; Pontiac Lake Road entrance to Golf Course



Photos from left: road crossing on Pontiac Lake Road and view of North Parking Lot; view of South Parking Lot; Williams Lake Road entrance to Golf Course



3. Maintenance, Utilities and Security

The maintenance building is located near the center of the course. It consists of two buildings with a small parking lot adjoining them. A cart barn is located directly behind the clubhouse. A garage located next to the main parking lot on Pontiac Lake Road is used by the park for storage.

Photos from left: Maintenance Building; Cart Barn; Storage Garage



Photo below: aerial view of White Lake Oaks, showing locations of parking lots and the road crossing on Pontiac Lake Road



4. Technology

There is one T-1 line into the park. Public Wi-Fi is available in the Conference Center and Grill Room.

5. Non-Recreational Features



A house and garage are located at the northwest corner of the Pontiac Lake Road parking lot and are leased to a private party. The address is listed as 1540 Orchard Drive. According to the 2015 rental inspection report, the house is in fair to good condition with some damaged areas in need of repair. The furnace is nearing the end of its useful life and will need replacement in the next couple years.

Photo left: Rental house

6. Park Trails and Regional Connectivity



The cart paths are placed strategically throughout the course to ensure accessibility to each hole. The total length of the cart paths is 17,210 feet.

The Huron River travels through the west part of the Park. The recent 40-acre acquisition opens new opportunities for land and water trail connectivity – through collaborative efforts with White Lake Township and regional trail groups.

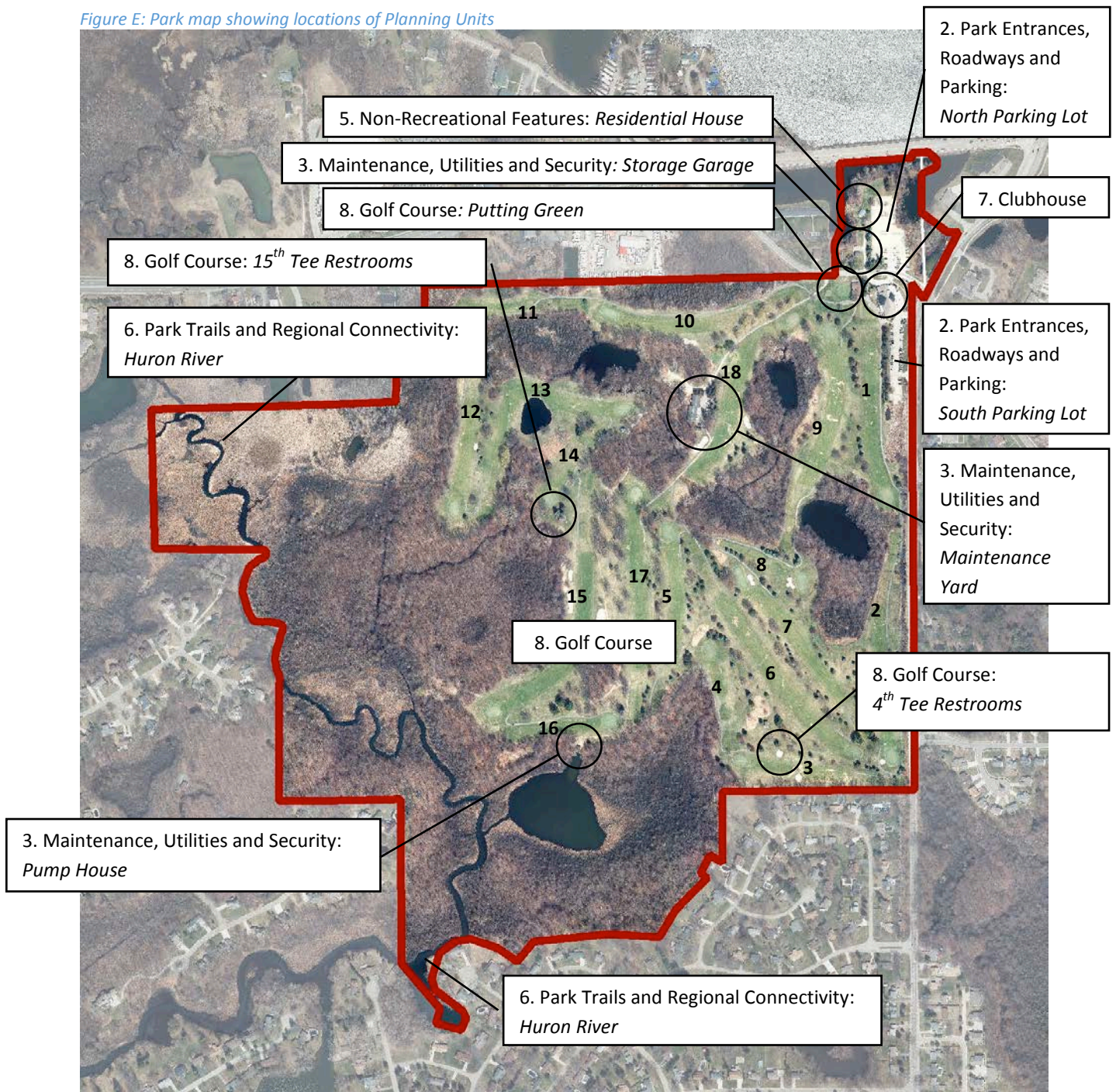
Photo left: cart paths

Photo below: view of the Huron River as it flows through the park property, showing the potential for water trail connectivity



Location-Specific Planning Areas

Figure E: Park map showing locations of Planning Units



7. Clubhouse

The White Lake Oaks Clubhouse, constructed in 2006, is located in the northeast corner of the park. The Conference Center can be reserved for conferences and banquets for groups up to 200. In addition to the Conference Center, the Clubhouse features a Pro Shop for golfers, a Grill Room for casual dining, and garden patio. Public restrooms are available in the Clubhouse (Grill Room and Conference Center) and on the course.

Photos from left: Clubhouse facing Pontiac Lake Road and Williams Lake Road intersection; Pontiac Lake Road entrance



Photo below: aerial photo facing northeast showing rear side of Clubhouse and Williams Lake/Pontiac Lake intersection



8. Golf Course

White Lake Oaks features an 18-hole, par 70 golf course. The golf course has front nine open and back nine tight. Woodlands and wetlands are located at the natural boundaries around the park, with many of the natural areas housing diverse native species. There are six lakes and ponds throughout the course. The course is generally open March through November, weather conditions permitting. In the winter the park is made available for cross country skiing and snowshoeing, depending on weather conditions.

A practice putting green is located behind the cart barn. Two public restrooms are available, one located near the west part of the course in between Holes 14 and 15 and the other located on the southeast side near Hole 3.

Photos from left: on-course restroom and vending; golf course netting adjacent to South Parking Lot; view of greens



Photo below: aerial photograph looking north toward M-59 and Pontiac Lake showing golf course, with Clubhouse in upper right corner



Park Operations

9. Organized Programs and Events

Putting, Chipping and Pitching Clinics

Clinics are conducted by an Oakland County Parks and Recreation Golf Instructor. Class reservation and payment is made directly to the golf course.

10. Data Collection and Management

Estimates for monthly and annual numbers of park visits to White Lake Oaks are compiled from two data sources: Golf Course point-of-sale data, and Conference Center head counts.

Number of rounds of golf, league players, and event/program participants are compiled monthly using information collected at point-of-sale.

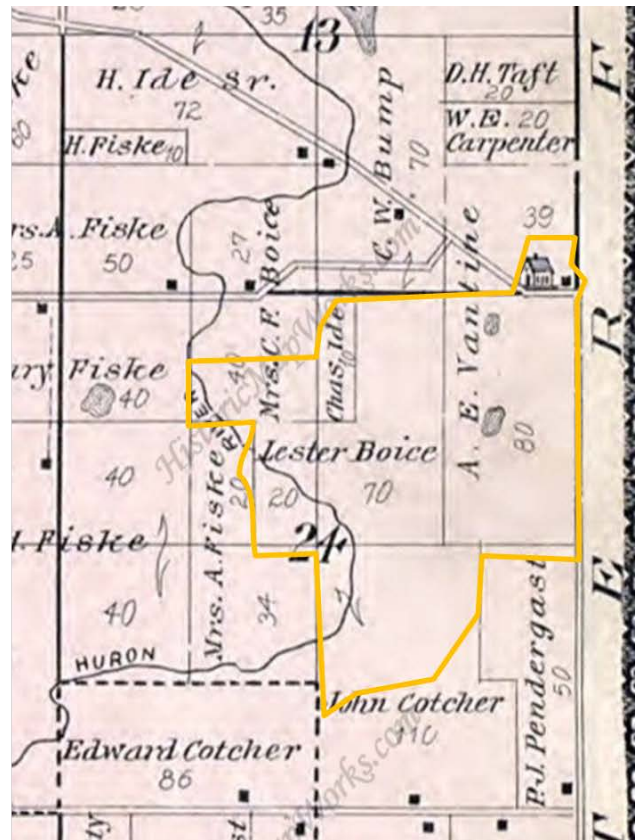
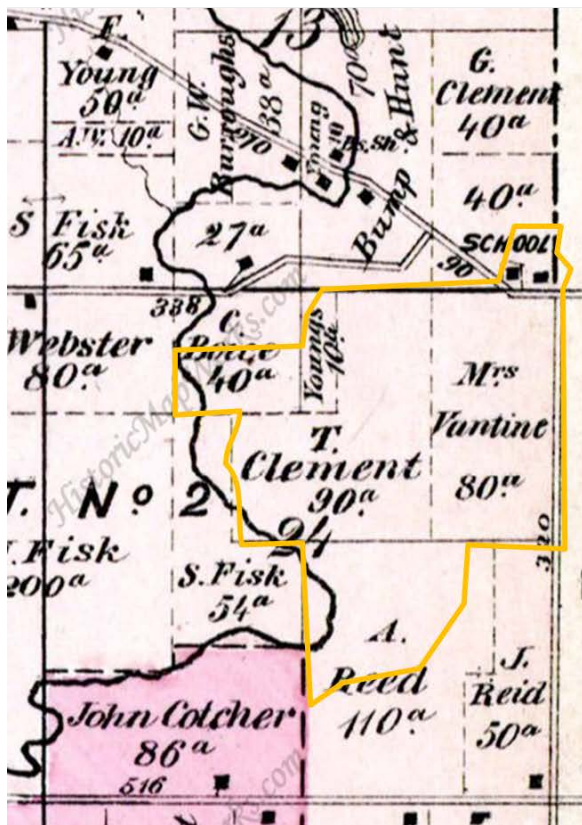
Number of people who attend events and functions at the Conference Center are counted by Katherine's Catering staff and reported to OCPR staff.

Park Maps

A standard set of planning maps are provided in a separate section - the *Planning Map Set*. This section provides other park maps, such as trails, campsites, and golf course features, which are specific to this park.

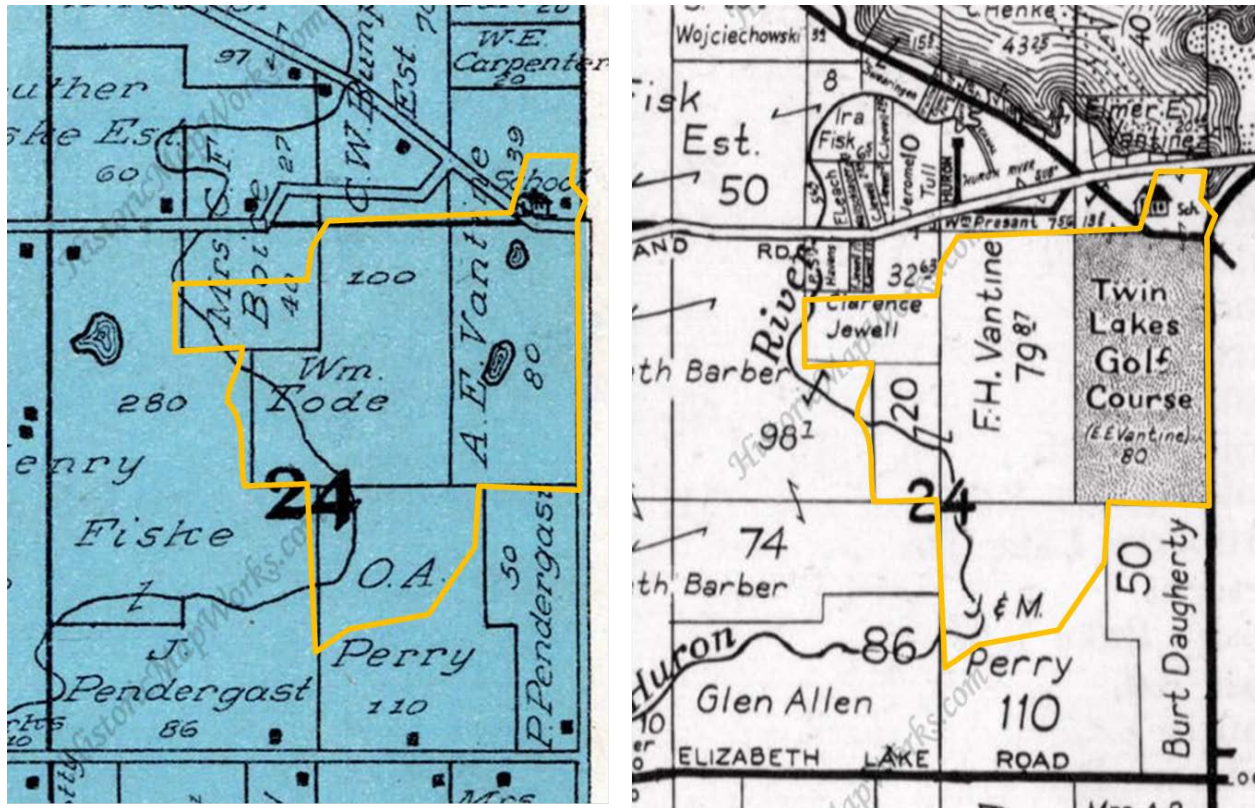
Figure F: Historical Plat Maps - White Lake Sections 13 and 24

1872 Plat Map (F.W. Beers and Co, 1872); 1896 Plat Map (Kace Publishing Company, 1896)



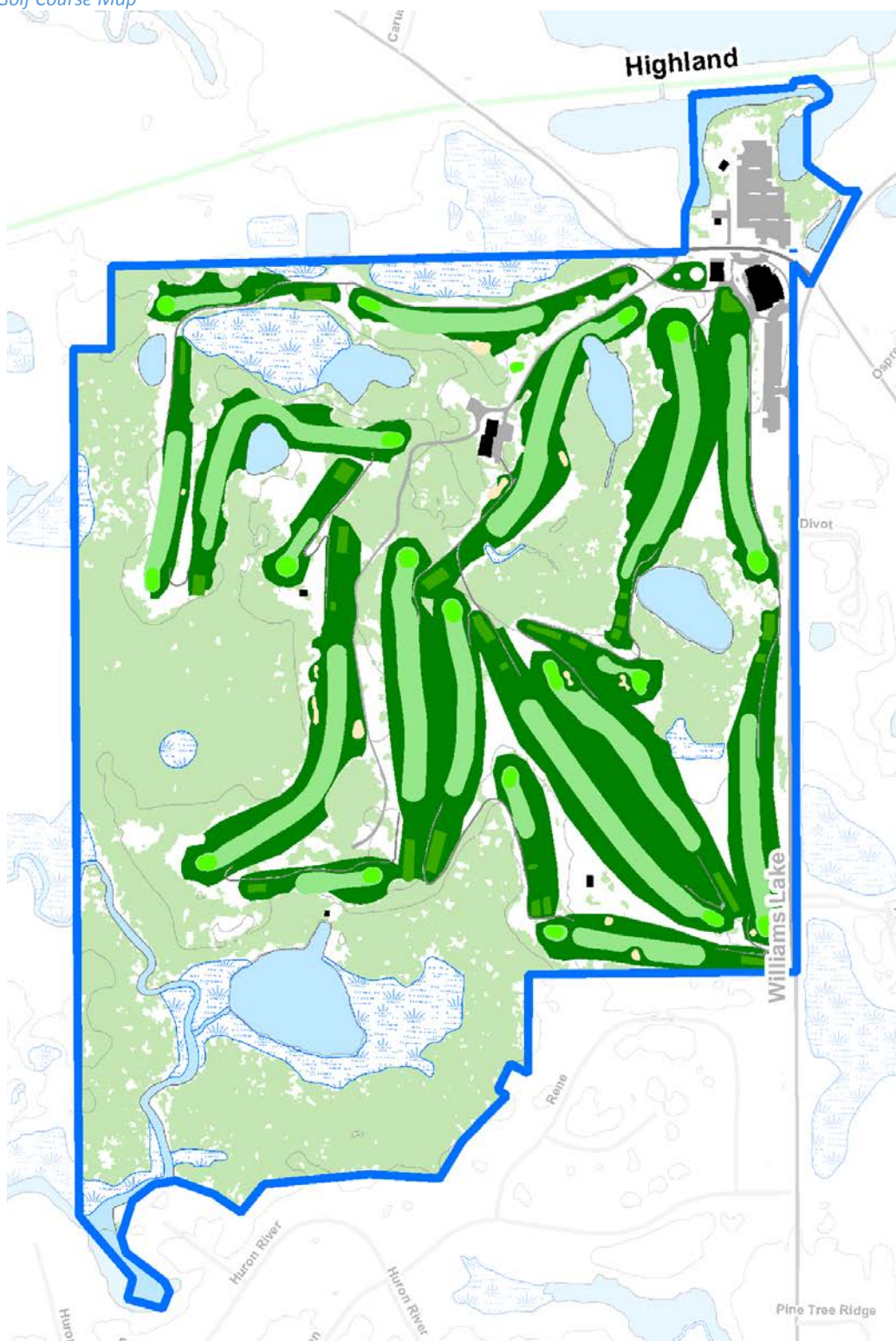
Note: Park boundary outline is approximate

1908 Plat Map (Geo A. Ogle and Co., 1908); 1947 Plat Map (W.S. McAlpine Map Company, 1947)



Note: Park boundary outline is approximate

Figure G: Golf Course Map



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Notes

¹ How the Census Bureau Measures Poverty: “Following the Office of Management and Budget's (OMB) Statistical Policy Directive 14, the Census Bureau uses a set of money income thresholds that vary by family size and composition to determine who is in poverty. If a family's total income is less than the family's threshold, then that family and every individual in it is considered in poverty. The official poverty thresholds do not vary geographically, but they are updated for inflation using Consumer Price Index (CPI-U). The official poverty definition uses money income before taxes and does not include capital gains or noncash benefits (such as public housing, Medicaid, and food stamps).” (U.S. Census Bureau, 2015)

² Ecoregion: An ecoregion (ecological region), sometimes called a bioregion, is an ecologically and geographically defined area that is smaller than an ecozone and larger than an ecosystem. Ecoregions cover relatively large areas of land or water, and contain characteristic, geographically distinct assemblages of natural communities and species.

³ Sub-subsection: Based on differences in climate, bedrock geology, glacial landform, and soils, the section, subsection, and sub-subsection levels of an ecoregion represent areas with distinctive natural conditions affecting species composition and productivity).

⁴ Ice-Contact Topography: This is a general term that refers to glacier-modified landscapes and includes many specific types of landforms, such as kames, eskers, moraines, kettles and outwash, among others.

⁵ Glacial Deposits: This refers to the rock and soil that is picked up and transported by glaciers as they create new landscapes and are eventually deposited by melting and retreating glaciers.

⁶ General Land Office: On April 25, 1812, by an Act of Congress the General Land Office was created within the Treasury Department. In creating the General Land Office, Congress combined the functions previously scattered among three Federal agencies—Treasury, War, and State. The Secretary of the Treasury had directed the survey and sale of public lands. Treasury also maintained records and accounts. The Secretary of War administered military bounties and bounty lands. Patents were issued by the Secretary of State. As of 1949, the General Land Office is part of the Bureau of Land Management within the Interior Department, which manages the archive of public land records (BLM).

⁷ See note 6.

⁸ Rural Property Inventories: During the Great Depression, the Michigan Department of Treasury collaborated with the Works Progress Administration to undertake an extensive survey of nearly all land parcels in the state (excluding Wayne County). The survey served two purposes: it provided jobs for unemployed engineers, land surveyors, and appraisers while giving the state a basis for assessing property taxes. The project started late in 1935 and continued until 1942 (Michigan Historical Center).