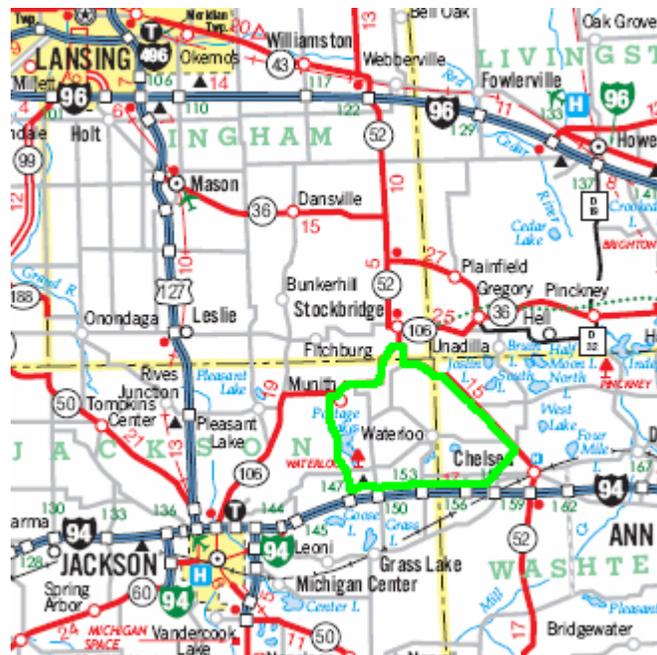


SUPPORTING ANALYSIS

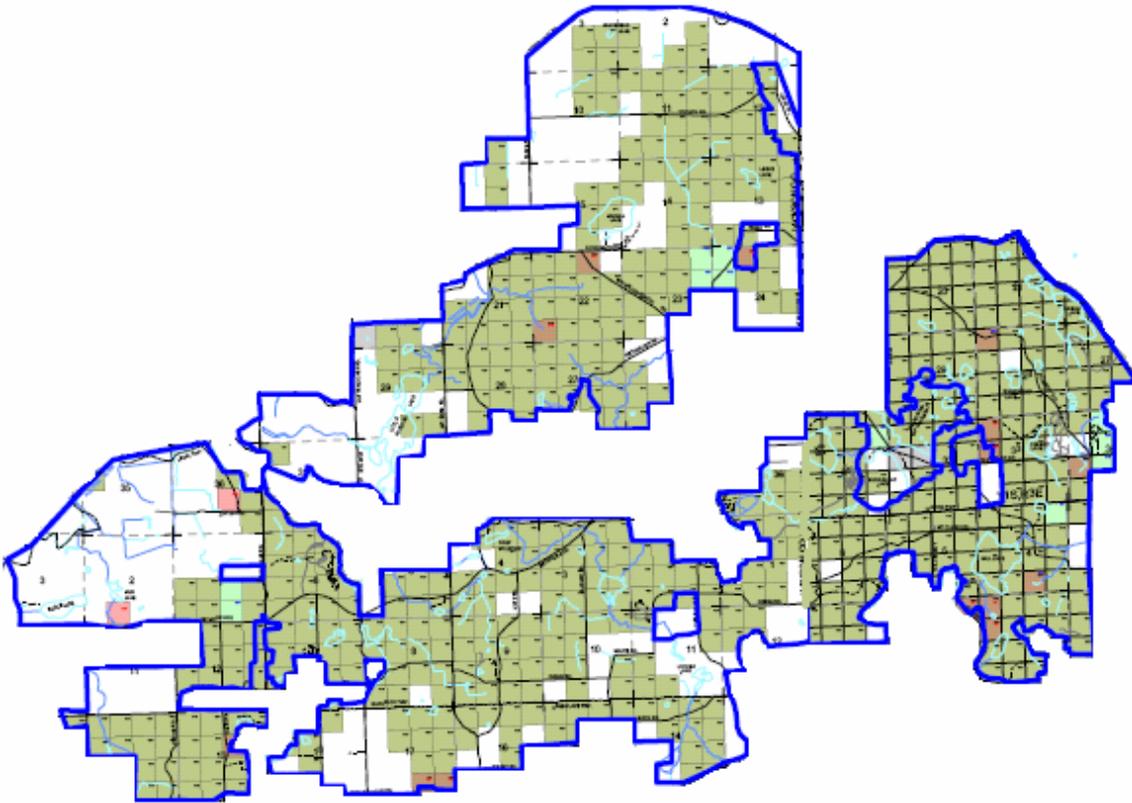
Waterloo Recreation Area

Park Setting

LOCATION AND SURROUNDING COMMUNITY Waterloo Recreation Area is located in the northeast corner of Jackson County and the northwest corner of Washtenaw County, approximately at latitude 42 ° 30", longitude 84 ° 20". It spans six townships; Henrietta, Leoni, Waterloo, Grass Lake, Lyndon, and Sylvan. The Recreation Area is confined on the north and east by M-52 and on the south by I-94. The western boundary is somewhat to the east of M-106. Waterloo Recreation Area can be accessed easily coming from the east and west by Interstate 94. There are a variety of exits on I-94 allowing access to Waterloo; exits 147 (Race Road), 150 (Mount Hope), 153 (Cedar Lake), 156 (Kalmbach Road), 157 (Pierce Road), and 159 (M-52). From the north M-52 is a convenient access road. Waterloo Recreation Area is adjacent to Pinckney Recreation Area on its northeast border. M-52 is the dividing line between the two Recreation Areas.



Waterloo Recreation Area



Demographics

Jackson County was reported to have a population of 158,422 in the 2000 census, a 5.8% increase since 1990. The population density in Jackson County is 224.2 people per square mile. Washtenaw County reported a population double that of Jackson County with 322,895 in the 2000 census, a 14.1% increase since 1990. The population density in Washtenaw County is 454.8 people per square mile. Both county populations exceed the state average of 175 people per square mile by a large margin, particularly Washtenaw County which reflects the growth surrounding Ann Arbor.

JACKSON COUNTY ECONOMIC CHARACTERISTICS	Number	%
EMPLOYMENT STATUS		
Population 16 years and over	7,630,645	100
In labor force	4,926,463	64.6
Civilian labor force	4,922,453	64.5
Employed	4,637,461	60.8
Unemployed	284,992	3.7
Percent of civilian labor force	5.8	(X)
Armed Forces	4,010	0.1
Not in labor force	2,704,182	35.4
Employed civilian population 16 years and over	4,637,461	100

OCCUPATION

Management, professional, and related occupations	1,459,767	31.5
Service occupations	687,336	14.8
Sales and office occupations	1,187,015	25.6
Farming, fishing, and forestry occupations	21,120	0.5
Construction, extraction, and maintenance occupations	425,291	9.2
Production, transportation, and material moving occupations	856,932	18.5

INDUSTRY

Agriculture, forestry, fishing and hunting, and mining	49,496	1.1
Construction	278,079	6
Manufacturing	1,045,651	22.5
Wholesale trade	151,656	3.3
Retail trade	550,918	11.9
Transportation and warehousing, and utilities	191,799	4.1
Information	98,887	2.1
Finance, insurance, real estate, and rental and leasing	246,633	5.3
Professional, scientific, management, administrative, and waste management services	371,119	8
Arts, entertainment, recreation, accommodation and food services	351,229	7.6
Other services (except public administration)	212,868	4.6
Public administration	167,731	3.6

CLASS OF WORKER

Private wage and salary workers	3,852,698	83.1
Government workers	528,201	11.4
Self-employed workers in own not incorporated business	243,300	5.2
Unpaid family workers	13,262	0.3

INCOME IN 1999

Households	3,788,780	100
Less than \$10,000	313,905	8.3
\$10,000 to \$14,999	219,133	5.8
\$15,000 to \$24,999	469,100	12.4
\$25,000 to \$34,999	470,419	12.4
\$35,000 to \$49,999	624,326	16.5
\$50,000 to \$74,999	778,755	20.6
\$75,000 to \$99,999	432,681	11.4
\$100,000 to \$149,999	324,966	8.6
\$150,000 to \$199,999	79,291	2.1
\$200,000 or more	76,204	2
Median household income (dollars)	44,667	(X)

WASHTENAW COUNTY ECONOMIC CHARACTERISTICS**EMPLOYMENT STATUS**

Population 16 years and over	259,162	100
In labor force	179,279	69.2
Civilian labor force	179,189	69.1
Employed	172,373	66.5
Unemployed	6,816	2.6
Percent of civilian labor force	3.8	(X)
Armed Forces	90	0
Not in labor force	79,883	30.8

OCCUPATION

Management, professional, and related occupations	83,275	48.3
Service occupations	23,115	13.4
Sales and office occupations	38,976	22.6
Farming, fishing, and forestry occupations	507	0.3
Construction, extraction, and maintenance occupations	9,702	5.6
Production, transportation, and material moving occupations	16,798	9.7

INDUSTRY

Agriculture, forestry, fishing and hunting, and mining	1,047	0.6
Construction	6,762	3.9
Manufacturing	26,637	15.5
Wholesale trade	3,361	1.9
Retail trade	17,284	10
Transportation and warehousing, and utilities	5,834	3.4
Information	5,385	3.1
Finance, insurance, real estate, and rental and leasing	7,682	4.5
Professional, scientific, management, administrative, and waste management services	18,707	10.9
Educational, health and social services	56,181	32.6
Arts, entertainment, recreation, accommodation and food services	13,276	7.7
Other services (except public administration)	5,833	3.4
Public administration	4,384	2.5

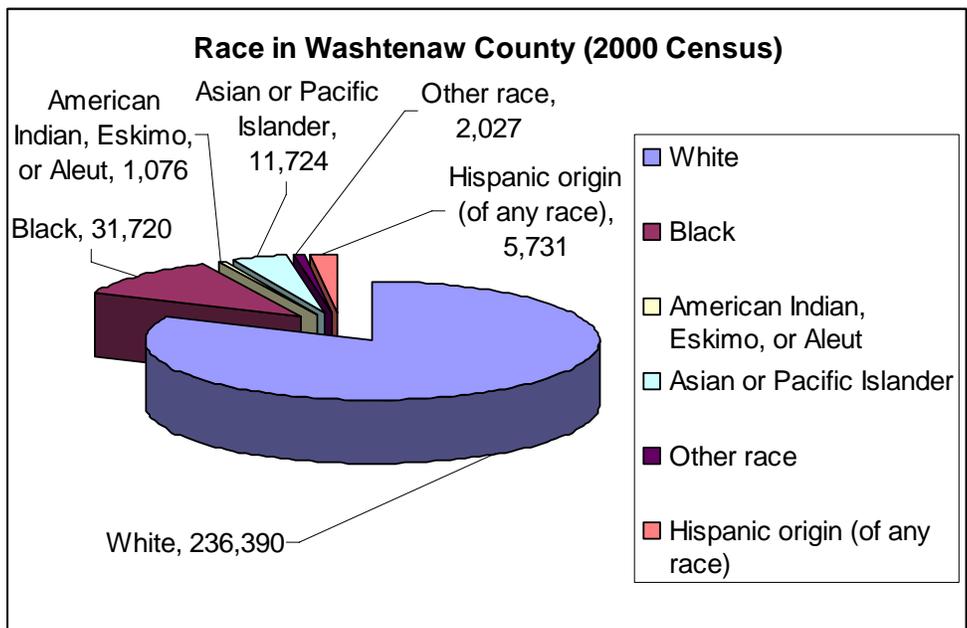
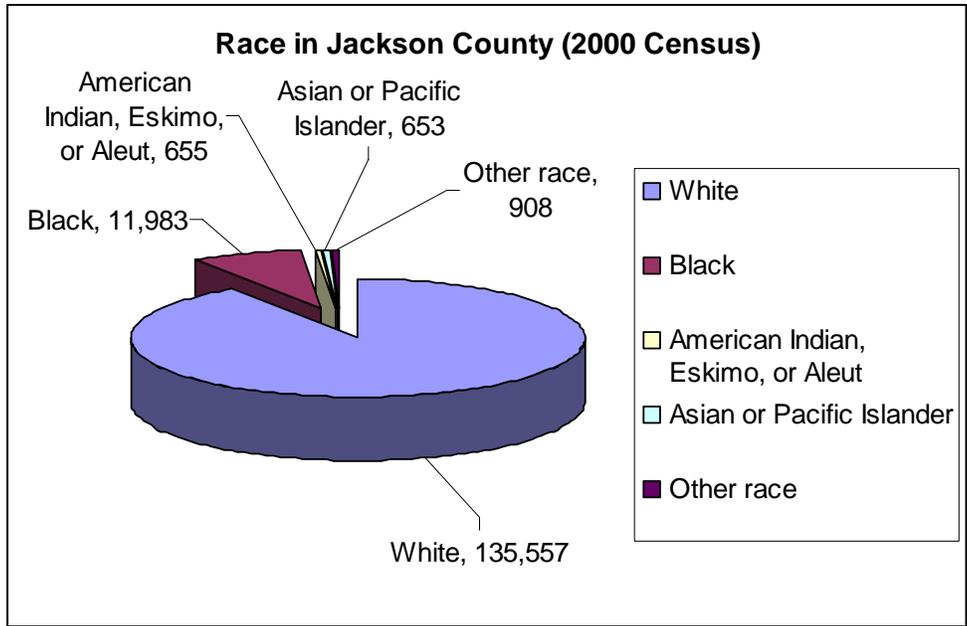
CLASS OF WORKER

Private wage and salary workers	132,125	76.7
Government workers	30,995	18
Self-employed workers in own not incorporated business	8,772	5.1
Unpaid family workers	481	0.3

INCOME IN 1999

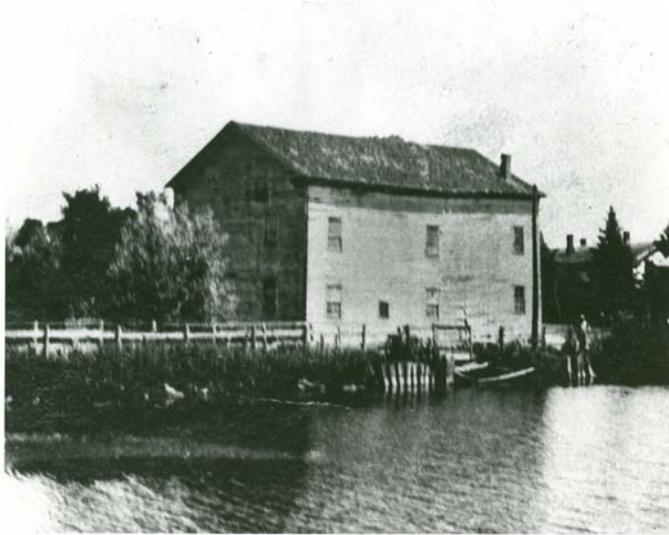
Households	125,465	100
Less than \$10,000	9,960	7.9
\$10,000 to \$14,999	5,715	4.6
\$15,000 to \$24,999	12,388	9.9
\$25,000 to \$34,999	13,577	10.8
\$35,000 to \$49,999	18,493	14.7
\$50,000 to \$74,999	24,139	19.2
\$75,000 to \$99,999	16,365	13
\$100,000 to \$149,999	15,960	12.7
\$150,000 to \$199,999	4,467	3.6
\$200,000 or more	4,401	3.5
Median household income (dollars)	51,990	(X)

*(x) denotes less than 1%



GENERAL HISTORY OF WATERLOO RECREATION AREA

The Sauk Tribe, a tribe of Native Americans, was the first known inhabitants of the area known today as Waterloo Recreation Area. The modern history of Waterloo Recreation Area can be traced back to the 19th century. The first settler, Richard Shaw, arrived in 1834 and established residence on 40 acres of land granted to him by the National Government. In 1836 two more settlers were granted acreage as well. These three homesteads would later become the town of Trist. In 1837 another settler, Ralph Updike began buying land and water rights on Trist Creek.



The Trist Mill, Built by Ralph Updike in 1844

By 1844, Updike had initiated the construction of a mill, which spurred development for the rest of Trist. Shortly after the Mill was completed a blacksmith shop, two general stores, and a buggy shop were erected. Trist was mainly inhabited by German farmers, drawn to the area by the dependable water supply and abundant land. Children attended a school on the corner of Mt. Hope and Seymour Road. In 1924 the Trist Mill closed for good, an indication that life for the town of Trist was nearing its end. A concise record of the history, inhabitants, and building

structures in the town of Trist can be found in “Historical Background, Townsite of Trist. Waterloo Recreation Area, November 1967.” located in the Division Office.

In 1933, due to a large number of failed farms, the Federal Resettlement Administration began to purchase these tracts of failed farm land for recreational use. By 1936 11,998 acres had been purchased and the land was turned over to the National Park Service. Early on, Civilian Conservation Corps (CCC) forces supplied a large amount of labor in the park, but were soon replaced by WPA workers.

The National Parks Service developed the Portage Lake day use area and several fish rearing ponds and duck ponds. Extensive vegetation was planted as well, for the purpose of reforestation and wildlife food/shelter. Sylvan Pond was created by the WPA using a dam, in order to create a trout pond.

During the National Park Service’s administration three outdoor centers were completed; Mill Lake, Cassidy Lake, and Cedar Lake. These camps were established to provide underprivileged youth with a social outdoor experience.

Mill Lake, the first Outdoor Center to be built, was completed in 1936. The original occupants of Mill Lake were a group of boys from the Detroit Public School System. Mill Lake Outdoor Center remains the most intact example of a WPA Outdoor Center in the Michigan State Park System, with 15 of the 16 original buildings remaining. Since the operation of the camp was discontinued by Michigan United Conservation Club (MUCC) significant degradation has taken place. Renovations to the site have kept historical significance in mind when routine maintenance is needed. For more on Mill Lake refer to [Buildings and Structures](#) section on page **XX**.

Construction on Cassidy Lake Group Camp began in September 1936 in cooperation with the National Youth Administration as a year-round vocational school for boys. Cassidy Lake was rushed to temporary completion for the first group of campers by 1937. Each month the boys attending Cassidy Lake were required to work 70 hours and earned wage of \$29.96. Cassidy Lake Group Camp was established

specifically to teach inner city youth a skilled trade. As an aspect of their training the boys received education on their selected vocation. The youths were selected on an economic need basis.

In 1942 the vocational school was abandoned, at which point the Michigan Department of Corrections took over. Inmates from other Michigan prisons were housed here. The Camp is still used by the Department of Corrections today as a work camp. This is the first example in Michigan of many such camps administered by the Department of Corrections in Michigan State Parks.

A third group camp, Cedar Lake Outdoor Center, was completed in 1940. This outdoor center consisted of three camp units around a central cluster of administration buildings. Cedar Lake has not maintained as much structural integrity as Mill Lake, although it is still valuable historically. Units B and C were altered when some original buildings were removed and new buildings were erected. Unit A and the administrative area retain their historical integrity. The MUCC now leases and maintains Cedar Lake.

In 1943 the National Parks Service leased indefinitely the 12,000 acres known as Waterloo Recreational Demonstration Area to the state of Michigan, when it was given its present day name, Waterloo Recreation Area. Information on the lease agreement between the National Parks Service and the Michigan Department of Natural Resources can be found in the [Land Ownership Issues](#) on page **XX**.

The fact that the State of Michigan was now responsible for Waterloo did not mean it would stop growing, especially in terms of land area. Since the time Waterloo was transferred to state control, it has grown by approximately 8,000 acres.

Today, Waterloo Recreation Area is the largest park in the Lower Peninsula consisting of more than 20,000 acres. The Recreation Area now has two modern campgrounds, a rustic campground, and an equestrian campground. Also swimming beaches, several picnic sites, eight boat launches, 12 miles of interpretive trails, 47 miles of hiking trails, three rustic cabins, numerous equestrian trails, and the Gerald E. Eddy Discovery Center.

Land Ownership Issues

These funding sources have been used for acquisition of land in Waterloo Recreation Area:

Former National Park Service Land leased to the State of Michigan

Public Law 594, 77th congress 2nd session, titled “An Act to Authorize the Disposition of Recreational Demonstration Projects” was passed June 6, 1942. The relevant part of this law states that the Secretary of the Interior is authorized to “convey or lease to the States any or all of the recreational demonstration projects, lands, improvements and equipment...”

The conditions in the lease between the National Parks Service and the Michigan Department of Natural Resources are:

1. "The lease provides for the immediate transfer of control of approximately 8,500 acres of the Waterloo Area designated as units III, IV, and V. Units I and II, involving approximately 3,800 acres, are to be transferred to the State and administered as State Parks at such time as the money is available..."
2. "The lease is perpetual and remains in force and effect until terminated by either party upon thirty days written notice to the other."
3. "The area is to be used exclusively for public park, recreational, and conservation purposes."
4. "The state will endeavor to acquire when practicable, approximately 5,000 acres in Units III, IV, and V and approximately 1,000 acres in Units I and II."
5. "The state may permit controlled hunting on the property, but agrees to maintain a flexible system of refuges on Units III and IV to protect sandhill cranes and other waterfowl and agrees to restore marsh conditions on these units where practicable."
6. "The United States Government is relieved from maintenance and operation of the property and from any loss, expense or liability arising during the term of this lease."
7. "The State also agrees to accept by deed the responsibility for the protection, maintenance, and operation of Yankee Springs Area as soon as funds are available."
8. "Our eventual acceptance of responsibility for Units I and II of Waterloo Area involves: (1) Operation of these units as state parks, (2) continuation of present permit system and rental rates for group camps, until such time as the State accepts control of Yankee Springs Area, and (3) continuation of a permit system with the NYA for rental of the Cassidy Lake group camp facilities as long as needed by the NYA in the war industries training program."

The Lower section of the map shows sections III, IV, and V.

Michigan Natural Resource Trust Fund (MNRTF)

The MNRTF has provided financial assistance to protect natural resources and open space, purchase lands for outdoor recreation, and acquire land for its environmental importance or scenic beauty. The Fund's Board of Trustees and the Grants Administration Division of the DNR administer the program. Only state and local governments may apply to the fund to acquire property. Annual revenue from oil, gas, and mineral leasing supports the fund.

There are eleven evaluation criteria for grant funding: the protection and use of significant natural resources, use of inland waters, population served, economic benefits, hunting, fishing and other wildlife-related values, need for proposal, capability of applicant, site and project quality, special initiatives of the Fund board, financial need of the applicant, and local match contribution. Development projects have a minimum grant amount of \$15,000 and a maximum of \$500,000. There is neither a minimum nor a

maximum amount on land acquisition grants. Since 1976, the Fund has purchased more than 135,000 acres of land in Michigan.

*Information obtained from *The Trust for Public Land* (www.tpl.org/)

Pittman-Robertson

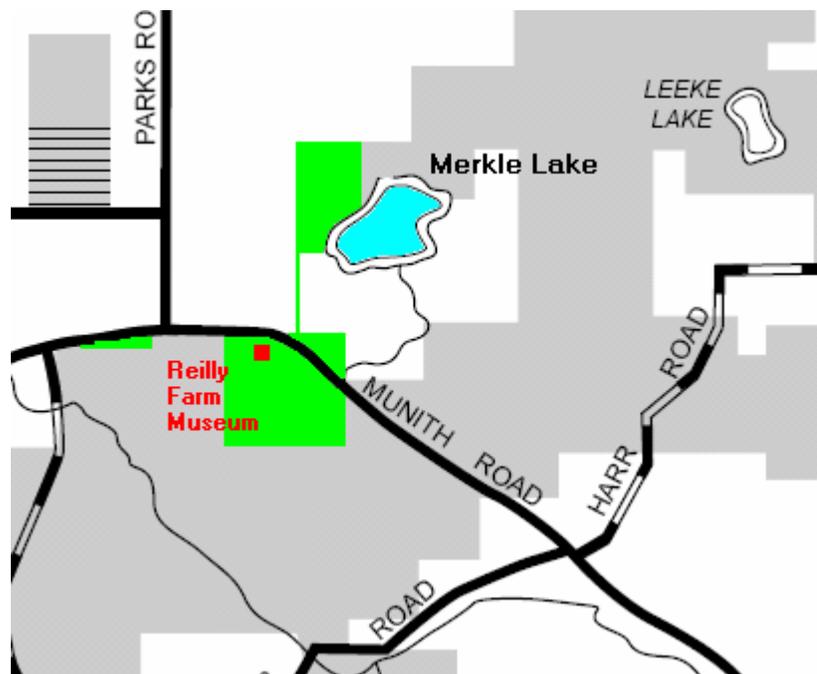
The Federal Aid in Wildlife Restoration Act, popularly known as the Pittman-Robertson Act, was approved by Congress on September 2, 1937.

The purpose of this Act was to provide funding for the selection, restoration, rehabilitation and improvement of wildlife habitat and wildlife management research.

Funds are derived from an 11 percent Federal excise tax on sporting arms, ammunition, and archery equipment, and a 10 percent tax on handguns. Each state's apportionment of funds is determined by a formula which considers the total area of the state and the number of licensed hunters in the state.

*Information obtained from U.S. Fish and Wildlife Service, Wildlife and Sport Fish Restoration Programs Division of Federal Assistance (federalasst.fws.gov)

In the late 1950's the state acquired over 260 acres of land in the north section of the Portage Marsh area. These three tracts are known as the Reilly Property Purchase. The northernmost tract is 76.79 acres with 1,185 feet of frontage on Merkle Lake. This land also includes a right-of-way from Munith Road. The second parcel of land has 160 acres and lies on the north and south side of Munith Road. This parcel is important because it includes the original residence of the Reilly family. The three acres occupied by the Reilly farmhouse are now leased by the Waterloo Area Historical Society. The old farmhouse has been restored and functions as a historical museum today. A third parcel of 25 acres lies on the south edge of Munith Road and is west of tract two. The land totals 261.79 acres.



The Reilly property purchase is important because it demonstrates a land administration/ownership issue that is still a concern today. Resources used to purchase the Reilly property came from the Pittman-Robertson Fund, a source of funding specifically dedicated to game and habitat restoration. The Parks and Recreation Division (PRD) purchased the Reilly property using this fund, which means the Wildlife Division has a stake in the management of this property. PRD responsibilities encompass the overall administration of the property: posting, fencing, road maintenance, enforcement of park rules, and trespass issues. However, the Wildlife Division is responsible for all game management including planting, cutting, and burning. These shared responsibilities are outlined in a memorandum of understanding between The Parks and Recreation Division and the Wildlife Division. For specifics on the agreement between PRD and Wildlife Division see Appendix ?? The Reilly Purchase is not the only land that has been purchased with Federal funds. Throughout Waterloo RA other lands have been purchased using this source.

Special Legislation

Public Act 27, 1944, appropriated \$5,000,000.00 for acquisition of land for recreation facilities. \$1,500,000.00 was dedicated to purchasing lands in southeastern Michigan.

Public Act 50, 1944, appropriated \$632,500.00 for the purposes of purchasing land, construction of state parks, and repairing/remodeling the State Capitol and office buildings. Of the \$632,500.00, \$450,000.00 went to the Department of Conservation.

State Game Fund

Revenue from this fund is raised through a \$1.50 tax on deer hunting licenses.

Other sources available for future land acquisition include:

Dingell Johnson

The Federal Aid in Sport Fish Restoration Act, commonly referred to as the Dingell-Johnson act, was passed on August 9, 1950. It was modeled after the Pittman-Robertson Act to create a parallel program for management, conservation and restoration of fishery resources.

*Information obtained from U.S. Fish and Wildlife Service (federalasst.fws.gov)

Game and Fish Fund

The Game and Fish Protection Fund provides revenues for the operation of the Fish, Wildlife, and Law Enforcement programs. Management, research, enforcement of fishing and hunting laws and acquisition of lands to be used for hunting and fishing purposes are examples of uses of this fund.

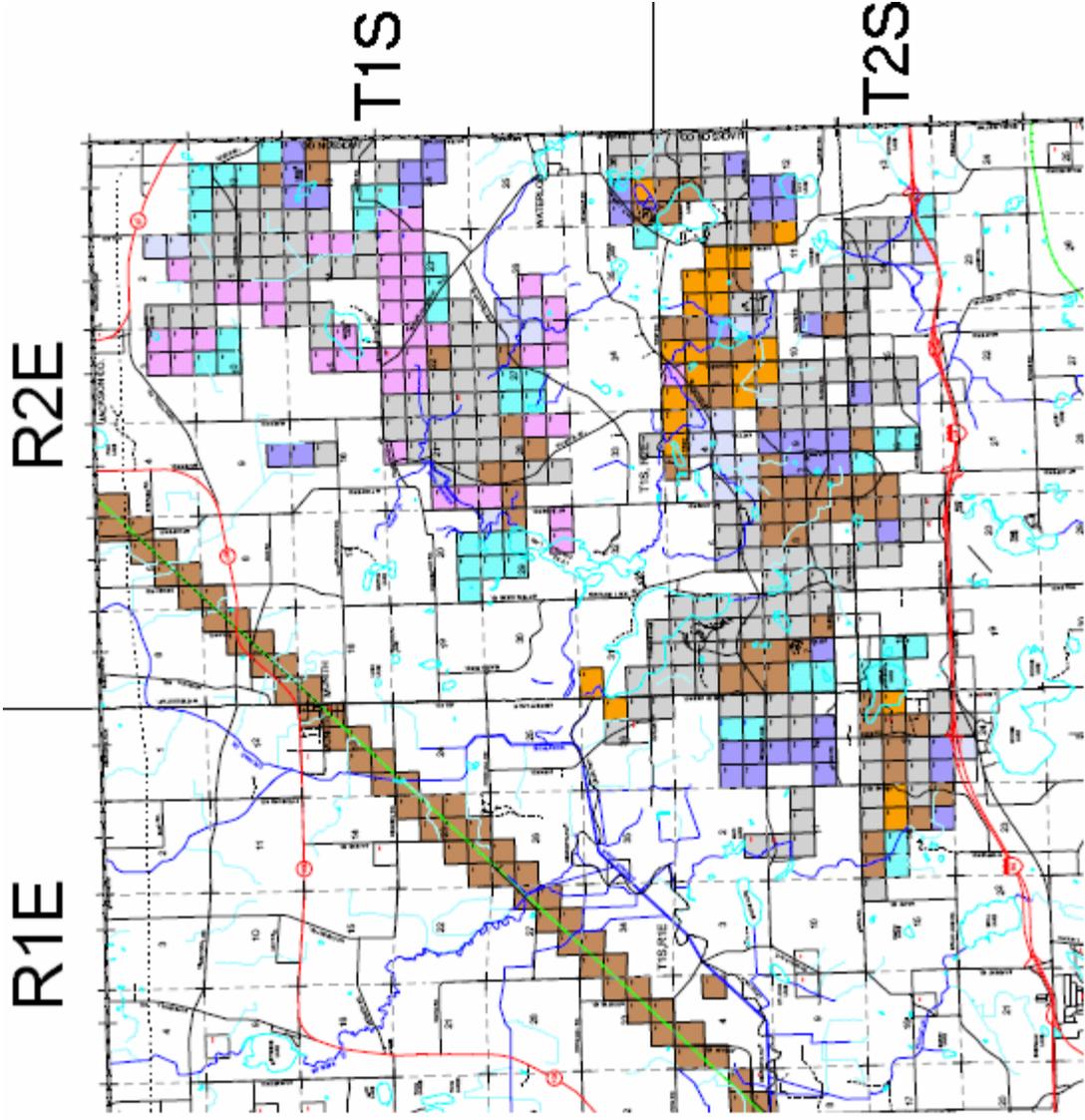
*Information obtained from (www.michigan.gov/dnr/0,1607,7-153-10366_10871-44016--,00.html)

Additional Sources

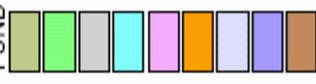
Land purchased with any of the following: Recreation Bond, Waterways, LEFF, Harbor Development Fund, Environmental Settlement Fund, General Fund, and Swamp Tax Fund, Gifts, and exchanges.

Jackson County

Land Acquisition Map

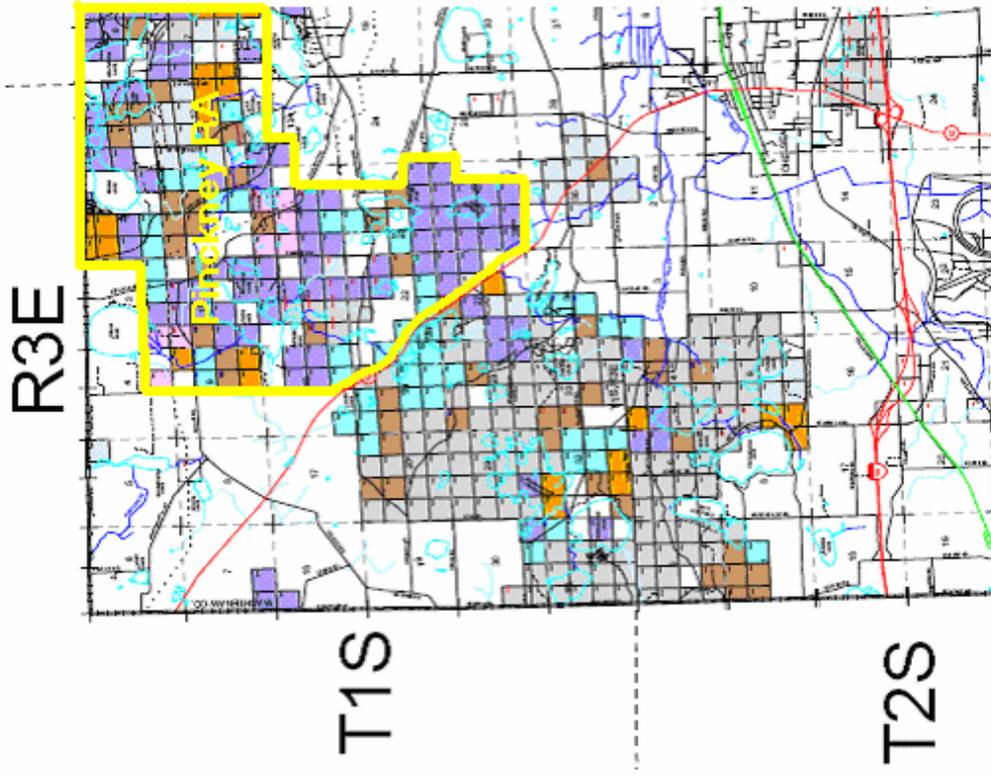


- FUND CATEGORY
- Dingell Johnson
 - Game And Fish
 - Gift
 - MNRTF
 - Pittman Robertson
 - Special Legislation
 - State Game Fund
 - Other Funds
 - Multiple Funds



Washtenaw County
Land Acquisition Map

FUND CATEGORY
Dingell Johnson
Game And Fish
Gift
MNRTF
Pittman Robertson
Special Legislation
State Game Fund
Other Funds
Multiple Funds



Relationship of Waterloo to Other Park Resources

Jackson County

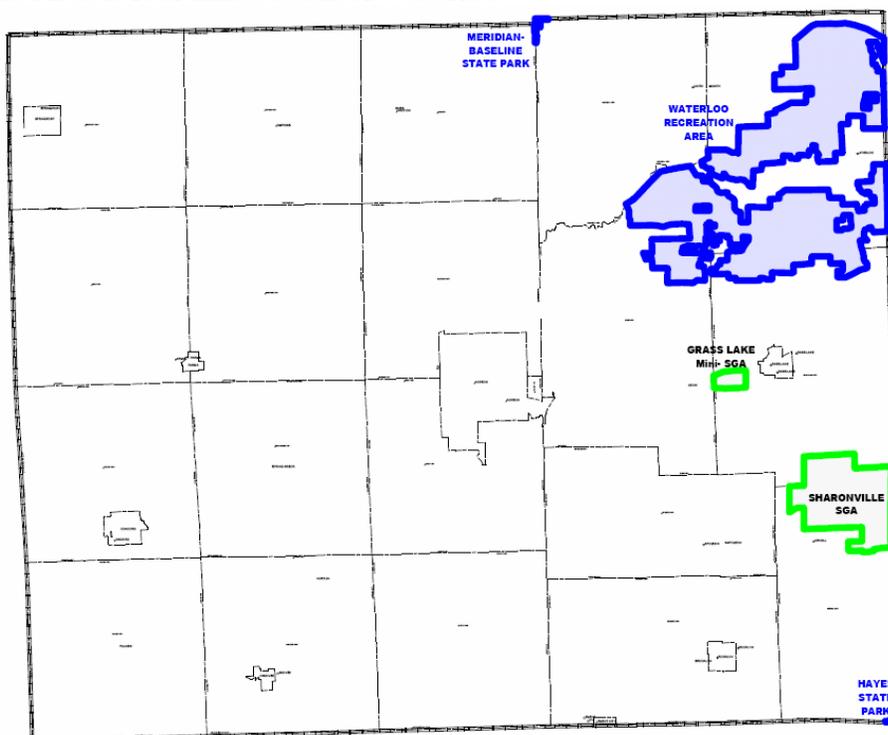
State Owned Resources in Jackson County

In Jackson County there are two State Parks and two State Game Areas in addition to Waterloo RA.

The Meridian-Baseline State Park designates the spot where all township, range, and section measurements begin for the entire state. It is located approximately four miles northwest of Waterloo RA on the northern boundary line of Jackson County. This Park is not accessible to the public but is being preserved because of its historical value.

Hayes State Park is ten miles south of Waterloo RA in the southeastern corner of Jackson County. W.J. Hayes State Park is popular because of its close proximity to Wampler's Lake. Other attractions near this site are the Michigan International Speedway, the Stage Coach Stop theme park, and a variety of craft and antique shows. Hayes State Park has 185 camp sites and has recently been made handicapped accessible. Activities include a playground, swimming, fishing, boating, picnicking, and metal detecting.

Grass Lake State Game Area is two miles south of Waterloo RA and Sharonville State Game Area is four miles south of Waterloo.



County Owned Resources in Jackson County

County Parks and their significant features:

- Cascade Falls Park: man-made illuminated waterfall, paddle boat rental, miniature golf, tennis courts, shelter (by reservation), fishing, Cascades Short Course and driving range, Cascades 18-hole Championship Golf Course
- Clear Lake County Park: swimming area, shelter
- Clark Lake County Park: swimming, boat launch, picnic area
- Gillett's Lake County Park: swimming, picnic area, baseball diamond
- Grass Lake County Park: swimming, picnic area, boat launch
- Haehnle Audubon Sanctuary: nature viewing
- Horton Mill Pond County Park: playground, picnic area
- Lime Lake County Park: swimming, boat launch
- Little Wolf Lake County Park: swimming, playground, picnic area
- Minard Mills County Park: baseball diamond, picnic area, playground
- Pleasant Lake County Park and Campground: 69 modern campsites, swimming, biking, fishing, 18 hole golf course located within a half mile
- Portage Lake County Park: swimming, boat launch picnic area
- Round Lake County Park: boat launch, picnic area, potable water pump
- Swains Lake County Park and Campground: 56 modern campsites, boat launch, picnic area, playground, horse shoe pits, basketball court, swimming area, biking, fishing, volleyball, baseball diamond, 18 hole golf course across the street
- Vandercook Lake County Park: swimming, baseball diamond, boat launch, picnic area
- Vineyard Lake County Park: swimming, boat launch, playground

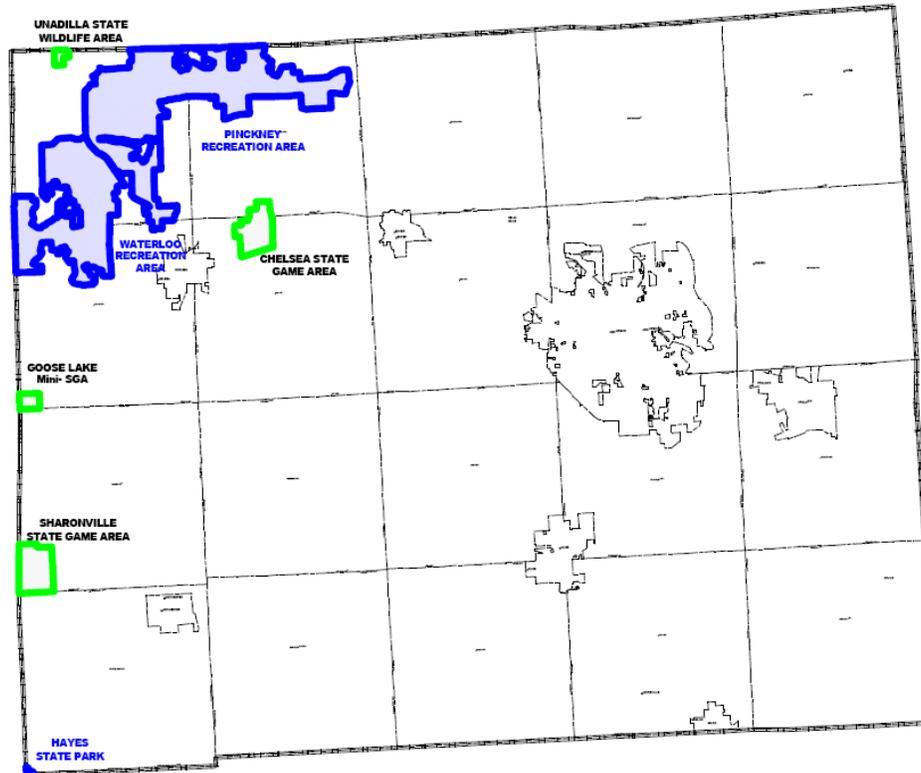
Washtenaw County

State Owned Resources in Washtenaw County

State recreational resources in Washtenaw County include four State Game Areas, Pinckney RA, and Hayes State Park, in addition to Waterloo RA.

Waterloo Recreation Area is closely tied to Pinckney Recreation Area, due to the fact that the parks are adjacent to one another. The main trail system, known as the Waterloo-Pinckney Hiking Trail, is common to both Recreations Areas and spans 29 miles through both parks. Similar activities are common to both Recreation Areas, such as camping, hiking, biking, horse riding, camping, fishing, and hunting.

The State Game Areas in Washtenaw County are Unadilla, half a mile to the northeast; Chelsea State Game Area, two miles to the east; Goose Lake, two miles south; and Sharonville State Game Area, six miles south.



County Owned Resources in Washtenaw County:

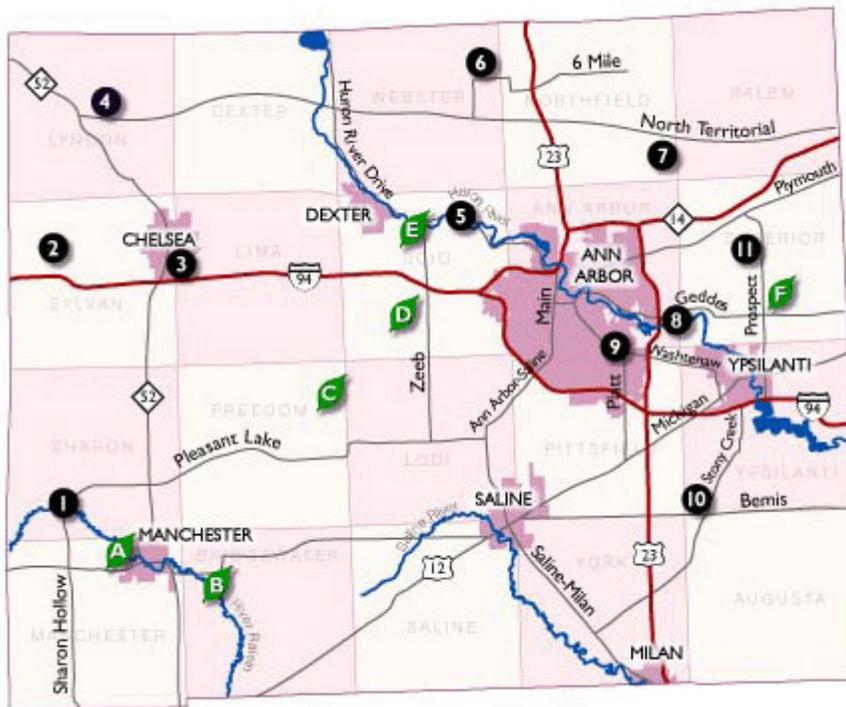
Partially due to the high population density of Washtenaw, County owned resources are in competition with State owned resources. What the county parks lack in size they make up in number, with 12 parks and 6 nature preserves. Waterloo can offer a relatively large contiguous piece of land compared to County parks. Many parks share similar activities such as swimming, hiking, fishing, and picnicking. Both State and County have historical resources within their parks. Two County owned facilities offer water parks. Camping is one staple of State owned resources that the County cannot compete with. Hunting is also a standout feature of Waterloo when compared to county parks.

County Parks and their significant features:

- Sharon Mills Park (1): Sharon Mill is a historic building built in 1835, formerly owned by Henry Ford in the 1930's
- Cavanaugh Lake Park (2): lakeside picnic area, no swimming
- Pierce Lake Golf Course and Park (3): 18 holes, with pro shop and picnic pavilion
- Park Lyndon (4): trail system that ties into the Waterloo-Pinckney Trail
- Osborne Mill Park (5): maintained as a natural area, no services
- Independence Lake Park (6): a feature similar to a water park called a "Spray Zone", boat rental, and swimming beach.
- Northfield Park (7): roadside park with restroom and playground
- Parker Mill Park (8): Parker Mill was is a historical building built in 1873, scenic fishing setting where Fleming Creek joins the Huron River

- County Farm Park (9): community garden
- Meri Lou Murray County Recreation Center (9): swimming pool, gymnasium, workout facilities
- Rolling Hills Park and Water Park (10): water park, trail system, sledding, 18 hole disc golf, fishing
- Superior Center (11): 1 acre, picnic pavilion

There are also six county nature preserves, which are similar to Primitive Zones in Waterloo RA. These are: Leonard Preserve (A), Ervin-Stucki Preserve (B), Brauer Preserve (C), DeVine Preserve (D), Burns-Stokes Preserve (E), and LeFurge Woods Preserve (F).



* Map obtained from eWashtenaw (www.ewashtenaw.org)

Current Land Use

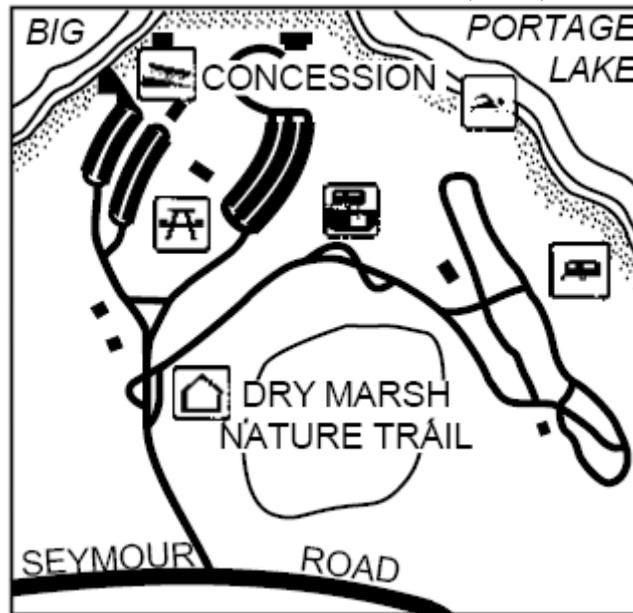
Waterloo Recreation Area is a multi-use park with a variety of recreational opportunities including camping, picnicking, metal detecting, fishing, hunting, snowmobiling, hiking, mountain biking, and horseback riding. One of the most important features of Waterloo is its untarnished natural state in a region that is swiftly being developed into urban communities. Thus, development has been restricted and concentrated into a few areas of the park.

In 2002-2003 over 7 million dollars were invested into Waterloo RA for infrastructure improvements. This included expanding the Eddy Center (including new displays), and a complete renovation of Portage Lake and Sugarloaf Campgrounds and

day use areas. Most of the funding for these improvements came from the “Clean Michigan Initiative.”

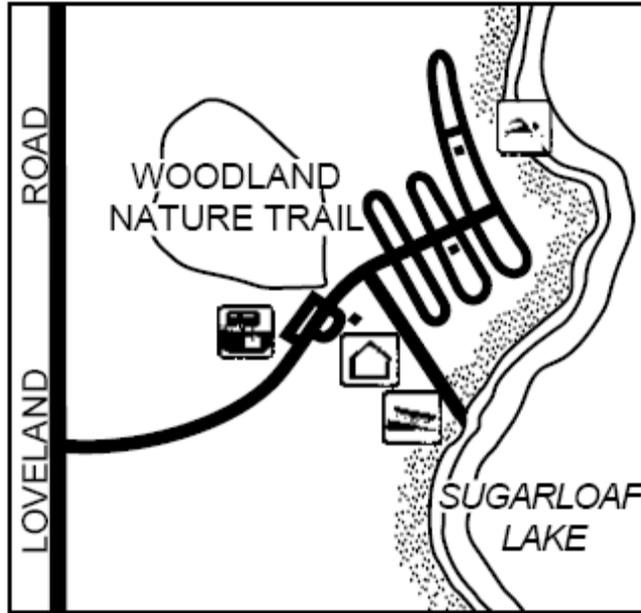
Portage Lake

Located on the western side of the park, the Portage Lake Unit offers modern camping amenities including electrical service, two restroom facilities, four drinking water access sites, seven handicap accessible campsites, a sanitation station, and dumpsters for trash removal. There are 136 sites at Portage Lake, seven of which are handicap accessible. It also includes a swimming beach with a concession/restroom building. For those interested in fishing there is a modern boat launch and fishing pier that complies with the Americans with Disabilities Act (ADA).



Sugarloaf Lake Campground

Sugarloaf Lake Campground is a modern campground located in the southeastern section of Waterloo, just off Loveland Road. It has 164 campsites, of which 10 are handicap accessible. There is one restroom to service the campground and seven sites to access drinking water. Also included are a playground, boat launch, swimming beach, sanitation station, dumpsters, and a campground office.



Equestrian Campground

Closely located to Sugarloaf Lake Campground, the equestrian campground offers easy access to a multitude of trails running through the park. There are 25 rustic camping sites.

Gerald E. Eddy Discovery Center

Situated with a view of Mill Lake, the Gerald E. Eddy Discovery Center provides educational and interpretive services for park visitors. Many nature trails have their origin at the Eddy Center. More detailed information is provided in the Education and Interpretation Section.

Cedar Lake Group Camp

Cedar Lake Group Camp is leased by the Michigan United Conservation Clubs (MUCC). Many of the original cabins are still in use for the outdoor education program.

Mill Lake ODC

Mill Lake is not in use, but has historical importance as one of the original developments under the National Park Service administration in Waterloo.

Green Lake ODC

Camping at Green Lake is rustic, with 25 sites and a small boat launch into Green Lake.

Trail Resources

Seven trails originate at the Eddy center and range from less than one mile to over five miles. These trails are open to hiking and cross county skiing only.

- Old Field Trail – (.8 Mile)
- Lowland Trail – (1.1miles)

- Spring Pond Trail – (1 mile)
- Bog Trail – (1.5 miles)
- Oak Woods Trail – (1.3 miles)
- Lakeview Trail – (3.6 miles)
- Hickory Hills Trail - (5.3 miles)

Waterloo RA also contains twelve miles of bridle trails originating from the equestrian campground, and five miles of mountain biking trails that can be accessed from Katz and Glenn Roads. The Waterloo-Pinckney trail can also be accessed at the Waterloo trail head located at the Portage Lake boat launch area. This trail also ties into the Potawatami trail.

Projected Land Cover (1980 – 2040)

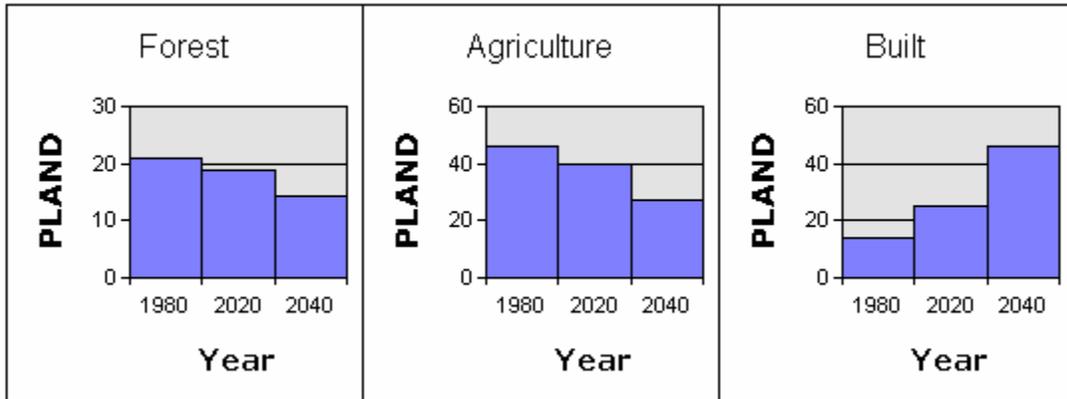
Both Jackson and Washtenaw counties will be experiencing rapid urban development over the next 20 years. As such, agricultural and forested land will be quickly developed as urban areas, concentrated around the Jackson and Ann Arbor/greater Detroit area.

Currently forest cover makes up less than 20% of land cover in Jackson and Washtenaw Counties, and agricultural land covers about 40%. Urban built environment covers approximately 25% of all land.

It is projected that by the year 2040 nearly half of all land in Jackson and Washtenaw Counties will be covered with building structures. As a result forests and agricultural lands will suffer the greatest losses.

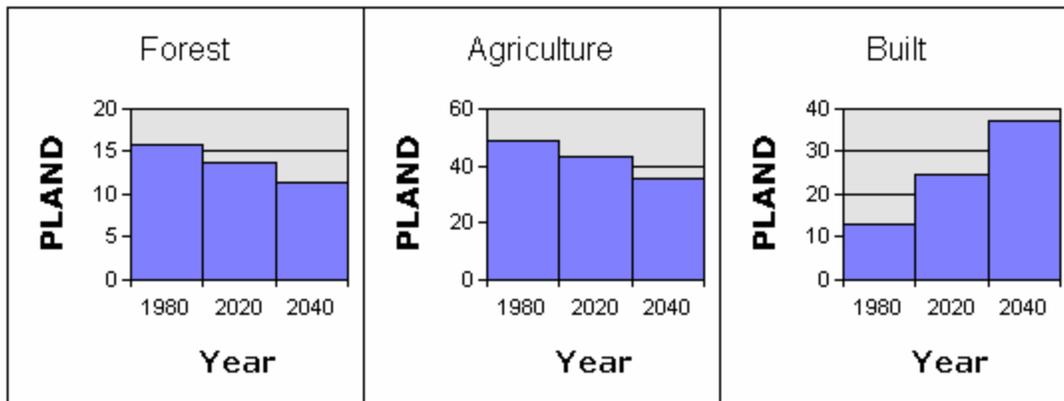
For this reason it is important to maintain state parks in areas where they may be the only natural landscape available for recreational purposes.

Jackson County: Wetland, Forest and Built Environment as a Percentage of Land Area



*Graphs found at <http://www.cevl.msu.edu/pages/lulc/peopleland.htm>

Washtenaw County: Wetland, Forest and Built Environment as a Percentage of Land Area

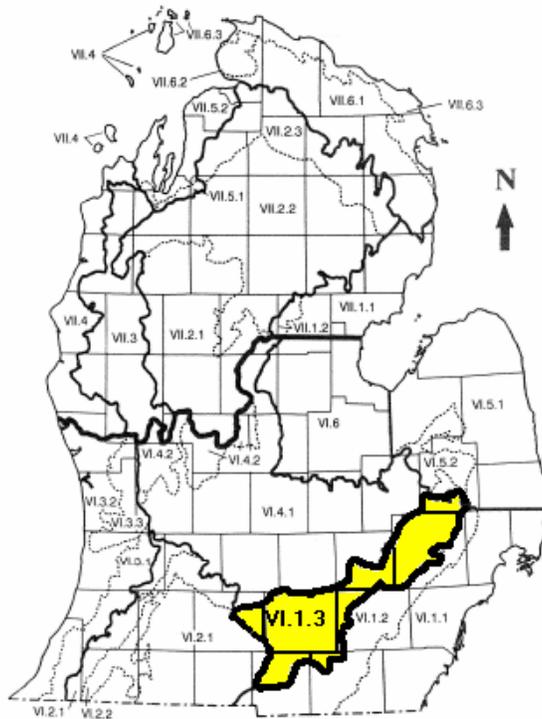


*Graphs found at <http://www.cevl.msu.edu/pages/lulc/peopleland.htm>

Natural Resources of Section VI.1.3

Information contained in the “Natural Resources of Section VI.1.3” component comes from:

Regional Landscape of Michigan and Wisconsin, A Working Map and Classification. Dennis Albert. September 20, 1995.



Map excerpted from Michigan Natural Features Inventory (MNFI) Report, page 22

Waterloo Recreation Area is located in section 6, subsection 1.3, known as the Jackson Interlobate; coarse textured end moraine, outwash, and ice contact topography; oak savannah and oak-hickory forest, hardwood swamps, prairie fens, and bogs.

WATER RESOURCES

Many kettle lakes and ponds can be found on the outwash, end moraines, and ice contact areas. Extensive wetlands surround many of the lakes and occupy entire ice-block depressions. Both marl and peat deposits were extensively mined in the past. The headwaters of many major rivers originate in the extensive wetlands. These are the Huron, Grand, Kalamazoo, and St. Joseph Rivers.

CLIMATE

Growing season is 140 to 150 days. Danger of late spring frosts is great due to numerous lowland depressions, including outwash and kettle lakes. Average snowfall is 40 to 50 inches. Annual precipitation is 30 to 32 inches. Extreme minimum temperatures range from -22° F to -28° F.

GEOLOGY AND TOPOGRAPHY

The underlying Mississippian and Pennsylvanian bedrock, primarily sandstone, is locally exposed at the surface in the southwestern end of the subsection. Drift thickness is generally less than 100 feet. In the northeastern part bedrock is overlain by 250 to 300 feet of glacial drift.

There are broad expanses of outwash sands that surround sandy and gravelly end moraines and ground moraines. End and ground moraines remain as island-like hills surrounded by flat outwash. Larger linear segments of end moraine, broken by only narrow outwash channels are typically located along the margins of the subsection.

The Jackson Interlobate region includes areas of ice contact topography. Kettle lakes, kames, eskers, and segments of outwash channels are predominant features of the ice contact areas. At the west edge the topography is more gentle; broad coarse textured ridges are surrounded by deposits of outwash land.

SOILS

Soils found in the moraine areas of the park are either well drained or excessively drained. In the outwash regions drainage ranges from excessively well drained to poorly drained. Ice contact areas are excessively well drained on upland kames and eskers, and are poorly drained in the kettles and outwash channels. Sandy loam is the most prevalent soil type in the moraine ridges, while sand is most prevalent on the outwash plains. The glacial drift that forms the moraine ridges is made up of local limestone bedrock. Illuviation is responsible for the clay rich horizon in many of the soils on the moraines, providing a good water holding capacity. Ice contact areas contain sand and gravel.

Natural Resources of Waterloo Recreation Area

JACKSON COUNTY CLIMATE		
MONTH	AVG. MIN TEMP	AVG. MAX TEMP.
January	15F./-9C..	29F./-2C.
July	61F./16C.	83F./28C.
PRECIPITATION	RAINFALL	SNOWFALL
Average Annual	29in./74cm.	39in./99cm.
GROWING SEASON	DAYS ABOVE 90F/32C	DAYS BELOW
152	13	10
Source: NOAA Climate Summary, 1995		

WASHTENAW COUNTY CLIMATE		
MONTH	AVG. MIN TEMP	AVG. MAX TEMP.
January	17F/-8C	31F/-1C
July	52F/17C	84F/29C
PRECIPITATION	RAINFALL	SNOWFALL
Average Annual	30in./76cm	36in./91cm.
GROWING SEASON	DAYS ABOVE 90F/32C	DAYS BELOW 0F/-18C
174	11	6
Source: NOAA Climate Summary, 1995		

Due to the Waterloo RA’s southern location in the Jackson Interlobate Region, the climate data for the Jackson/Washtenaw County will vary slightly from the averages recorded for region VI.1.3.

WATER RESOURCES

Lakes and ponds are scattered throughout the entire park, ranging in size from a few acres to over 500 acres. Many of these lakes are spring fed. The depth of these lakes is as varied as their size, with depths anywhere from two feet to forty feet. The irregular depth and shape of the lakes is largely due to the irregular topography left from prehistoric glaciers. Because of the glacial originations of most of these lakes, their bottoms are formed mainly of sand, gravel, marl, or muck. Shores are marshy in places with zones of pond lily, arrowhead, cat-tails, reeds, marsh grasses, and shrubs such as dogwood, elderberry, buttonbush, and willows. Occasionally tamarack is found in the flat swamps which represent former lake beds. Water is satisfactory for bathing, but not for drinking, according to the State Health Department.

Lakes found within Waterloo RA:

Big Portage Lake: 531 acres, 40' deep
Cassidy Lake – 46 acres, 12' deep
Cavanaugh Lake – 217 acres, 20' deep
Cedar Lake – 76 acres, 27' deep
Clear Lake – 137 acres, 34' deep
Crooked Lake – 113 acres, 20' deep
Doyle Lake – 18 acres, 14' deep
Green Lake – 150 acres, 13' deep
Hankard Lake – 7 acres, 8' deep
Little Portage Lake – 174 acres, 21' deep
Long Lake – 150 acres, 30' deep
Merkle Lake – 94 acres, 12' deep
Mill Lake – 163 acres, 24' deep
Mud lake – 92 acres, 7' deep
Sugarloaf Lake – 205 acres, 20' deep
Walsh Lake – 15 acres, 21' deep
Welch Lake – 106 acres, 20' deep

Information on water resources was obtained from "State of Michigan Environmental Assessment – Waterloo RA"

GEOLOGY AND TOPOGRAPHY

Waterloo Recreation Area exhibits the complex and irregular topography characteristic of the Interlobate Region, with portions of steep sloped end moraine and road outwash channels overlain with pitted ice contact topography, as demonstrated by the numerous kames, eskers, lakes and ponds scattered throughout the Recreation Area. High points of the park include Sugarloaf Hill (1108 feet), Pondlilly Lookout (1050 feet), and Sackrider Hill (1050 feet). The major moraine deposits extend along a line from Green Lake to Sackrider Hill. Land to the south of this line is composed of flood plains and some low hills. To the north lie extensive swamps. Dispersed throughout the swamp region are islands of high ground covered with oak and hickory.

*information on geology and topography was obtained from "State of Michigan Environmental Assessment – Waterloo RA"

SOILS

Within Waterloo RA there are several soil types. Usually each soil boundary encloses an association of soils rather than one definite soil. The association is made up of one dominant soil.

Bellefontaine: This soil type has a loamy surface layer over sandy clay loam or clay loam. Runoff is slow in the flat areas and rapid in the more sloping areas.

Coloma: Well drained soils with a sandy surface layer over alternate layers of sand and loamy sand or light sandy loam, over sand. Low dunes, lake plains, and moraines. Droughty and susceptible to erosion.

Hillsdale: The Hillsdale series consists of gentle sloping to steep, well drained soils on all plains and moraines. These soils are formed in sandy loam fill. Permeability is moderate. The available water capacity is moderate and fertility is medium. Surface runoff is slow to rapid.

Carlisle: The Carlisle series consists of black to very dark brown, well decomposed organic soils. The soils have formed in mixed woody and fibrous materials under a swamp-timber type of vegetation. The organic soil materials are generally more than 42 inches thick. The Carlisle soils occur in old lakebeds and in drainage ways, but the most extensive areas are in closed depressions in the uplands. A few areas occur in bottom lands, outwash plains, and in old glacial valleys.

Houghton: The Houghton series consists of organic soils that have formed from fibrous plant remains deposited in wet depressions. In the uppermost few inches, the sedges and grasses from which these soils formed are partly or completely decomposed. They are successively less decomposed at increasing depths. These soils occur mainly in marshy areas, some of which are bordered by lakes. They differ from Carlisle, which has formed mainly from woody plants rather than from fibrous materials. The thickness of organic deposits ranges from five to twenty feet. The degree of decomposition varies, in a few areas the surface is somewhat woody.

Rifle: The Rifle series consists of organic soils mainly formed from slightly decomposed woody plants including tamarack, red maple, elm, and white birch. The soils are similar to Carlisle and Houghton soils, but the surface layer on the surface layer of the Carlisle soils consist of much more decomposed muck and the Houghton soils have formed mainly from fibrous plant remains.

* Information on soil was obtained from "State of Michigan Environmental Assessment – Waterloo RA"

FLORA – PRESETTLEMENT

Originally, two types of oak forest covered the landscape of Waterloo Recreation Area, dry and dry-mesic. These oak forests are typical of, and primarily located, in southern Michigan. The dominant trees are white oak and black oak. Other trees common to these areas are hickory and red maple. Species including basswood and American ash were more common of the dry-mesic forest, while black cherry and sassafras were more common in the dryer forest. Ground flora in the dry-mesic forest was abundant with species of doll's eyes (*Actaea alba*), spotted coral root (*Corallorhiza maculata*), yellow violet (*Viola pubescens*), and sedges such as *Carex albursina* and *Carex convolute*.

Black oak barrens, also known as savannahs, developed on the edges between ice contact and outwash plain. Oak barrens were distinguished by scattered trees, usually black and white oak. Shrubs covered the rest of the terrain, characterized as dry sand prairie. Black oak barrens can now be found southwest of Portage Lake, as well as to the south and to the west of the Portage Lake Swamp Complex.

Kettle depressions, formed by receding glaciers, contained small lakes, ponds, marshes, shrub swamp, hardwood swamp, and mixed conifer swamp. Shrub swamps were inhabited by sedges that graded into dogwood, willow, and buttonbush. Conifer swamps were dominated by tamarack. Hardwood swamps contained elm, ash, and maple.

FLORA – CURRENT LANDCOVER

In the past, fire was an important natural process. Without the presence of fire, there has been no way to keep the growth of the forest in check. For this reason the barrens, marshes, and fens have made a gradual shift to a forested community. Light

demanding oak trees require an open canopy to develop, and will eventually be replaced by shade tolerant species such as sugar maple and red maple.

Human intervention has greatly affected the flora in Waterloo Recreation Area. Excluding steep ice contact slopes, land in the RA specifically, and in southern Michigan generally, has been cleared for farming or construction in the past. This process has been detrimental to indigenous species and allowed a foothold for invasive species in Waterloo RA.

Wetlands have fared the best. Wetlands and wetland communities still occur in several of their original locations. These include emergent marshes, southern wet meadow, prairie fen, conifer swamp, and deciduous swamp. Due to drainage ditches, dikes, dams, and succession caused by fire suppression, the abundance, distribution, and composition of these wetland communities has been altered. Wet prairie communities have transformed into southern shrub swamp, southern wet meadow, or hardwood swamps. Furthermore, this change has allowed non-native plants invade.

Even though all of the upland forests in Waterloo RA were once cut, mature dry southern forests have developed on ice contact hills, where it was impractical for agricultural use.

A dry southern forest occurrence extends west to southwest from Crooked Lake to Mt. Hope road. Dry southern forest intermixes with dry-mesic southern forest in a narrow band, less than half a mile wide. This band is continuous for over six miles. Mature portions are split up by younger second growth and wetland pockets.

Smaller patches of dry mesic southern forest extend throughout the Waterloo RA in less hilly areas bordering wetlands. Patches of dense black locust are often on the edges of both dry and dry-mesic southern forest.

The remaining level upland is old agricultural land that is now old field. Many of these fields are filling in with autumn olive, and are dominated by other non-native plants. These include spotted knapweed, white sweet clover, timothy grass, Kentucky bluegrass, and quack grass.

Many of the wetland pockets in kettle depressions have developed a ring around their outer edge of emergent aquatics or inundated shrub swamp and an interior of southern shrub swamp or tamarack swamp. However, some wetland pockets contain southern sedge meadow that is dominated by large-leaved sedges.

Wetlands around lakes and along streams are often a variety of relict conifer (tamarack) swamp, southern swamp, southern wet meadow, emergent marsh, prairie fen, and southern shrub swamp. Bog also exists around Little Cedar Lake and west of Welch Lake. Portage Lake, aside from several drainage ditches, is an intact wetland system.

Special Concern, State Threatened, or State Endangered Species

Spike-rush (*Eleocharis caribaea*)

Horsetail spike-rush (*Eleocharis equisitoides*)

Wild-rice (*Zizania aquatica* var. *aquatica*)

Prairie dropseed (*Sporobolus heterolepi*)

Sedge (*Carex seorsa*)

Clinton's bulrush (*Scirpus clintoni*)

Tall nut-rush (*Scleria triglomerata*)

*list taken from Inventory and Management Recommendations for Pinckney and Waterloo State Recreation Areas' Natural Communities, Rare Plants, and Rare Wildlife

FAUNA

Common Fauna:

Animal populations in Waterloo RA are typical of the region. Common animals include: deer, rabbit, fox, raccoon, opossum, squirrels, and coyotes. Avian species include swans, snow and blue geese, Canada geese, mallards, black ducks, blue wing teal, wood ducks, bitterns, great blue herons, black terns, coot, egrets, pheasant, quail, ravens, crows, red winged blackbirds, and a number of songbird species. One bird of note is the sandhill crane, which attracts bird watchers from all across the nation to Waterloo RA. As many as 2,000 sandhill cranes have been spotted in a field at one time at Waterloo. Unfortunately, many domestic animals, such as dogs and cats, have been abandoned in the park and are now part of the habitat.

Special Concern, State Threatened, State Endangered, and Federally Endangered:

American bittern (*Botaurus lentiginosus*)

Black rat snake (*Elaphe obsoleta*)

Blanchard's cricket frog (*Acris crepitans blanchardii*)

Blanding's turtle (*Emydoidea blandingii*)

Cerulean warbler (*Dendroica cerulean*)

Common moorhen (*Gallinula chloropus*)

Dickcissel Spiza (*Americana*)

Eastern box turtle (*Terrepene Carolina*)

Eastern massasauga (*Sistrurus catenatus*)

Great-blue heron rookery

Henslow's sparrow (*Ammodramus henslowii*)

Hooded warbler (*Wilsonia citrine*)

Indiana bat (*Myotis sodalist*)

King rail (*Rallus elagans*)

Least bittern (*Ixobrychus exilis*)

Spotted turtle (*Clemmy guttata*)

Tamarack tree cricket (*Oecanthus laricis*)

*list taken from Inventory and Management Recommendations for Pinckney and Waterloo State Recreation Areas' Natural Communities, Rare Plants, and Rare Wildlife

Historic/Cultural Resources

PHYSICAL ENVIRONMENT

The physical environment was shaped by two major human forces in the past. The first force to change the landscape of the Waterloo RA region was Native Americans, who used fires to clear large sections of land. Later, farmers would use these same techniques to clear land for their crops, but also had the use of better technology such as saws, animals, and eventually machinery to clear vegetation and plow the soil. Areas with the oldest tree growth are those too steep to be used for farming or structure building, and consequently were never cleared.

CULTURAL ENVIRONMENT

For in depth information on the history surrounding the area of Waterloo Recreation Area, please refer to the ["General History of Waterloo RA"](#) on page **XX**.

ARCHAEOLOGICAL RESOURCES

Remnants of the past are abundant in Waterloo RA. The locations of 22 archeological sites are known, and many more lay undiscovered. In an effort to preserve the integrity of these sites many of the locations are kept confidential. Preserving archeological sites is the reason for the limited amount of metal detecting areas within Waterloo RA. Historical artifacts can be found all over the park. For example, in 1989 a scatter of exposed materials were recovered in a high traffic area of the park due to erosion from foot traffic. It is important that people are not able to remove these types of important artifacts from Waterloo RA.

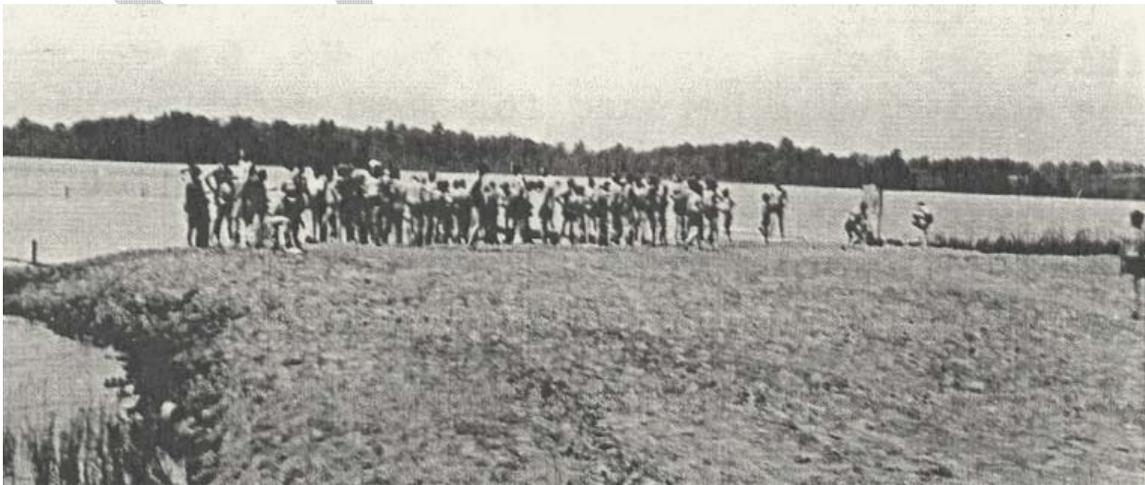
Because of the vast amount of private in-holdings inside Waterloo RA, some historical sites may actually be on private property, but are still considered part of Waterloo RA's historic resources. Fruit trees are often used as an indicator that there may have been a farmstead located on a particular piece of land.

Scattered throughout the park are many small family cemeteries. Some of these cemeteries have been moved, while others remain in their original locations. As well as cemeteries, traces of Indian burial mounds have been noted in various surveys conducted in the park.

One cemetery of note is known as Hatt, Glover, Richards, or Harvey Cemetery. It is not maintained, but is in relatively good condition. Five original limestone grave markers remain, only one retains most of its information including a date of death, 1904. Four original trees have survived as well. A wire fence still surrounds the cemetery site. Given the size of the cemetery, it would seem that many graves were unmarked or have lost their headstones.

BUILDINGS AND STRUCTURES

Mill Lake, originally designed as a work camp, was later revised and constructed as a youth camp. Work started on February 7, 1936 and was hurried to temporary completion by July 1, in order to house the first group of campers. During July 1936, 200 children between the ages of 8 and 14 occupied Mill Lake.



The first group of campers at Mill Lake. July, 1936.

Mill Lake was outfitted with a dining hall equipped to serve 160 people, and a first aid building. These structures were the only two wired for electricity. Other structures included an administrative office, Museum/Crafts shop, Laundry, latrine, a warehouse, a three car garage, personnel quarters, a boathouse, a pump house, eight tent-cot cabins for campers, and two troop houses (for meetings and camp training).

Cedar Lake Group Camp was completed in 1940, and consisted of a central core of community buildings and three separate camp groups. The central group included a dining hall, help quarters, wash house/laundry/latrine building, craft shop, maintenance building, staff quarters, infirmary, and administration building. The three camp groups consist of a number of cabins with room for four to eight campers and a two-person cabin to house the counselors. These buildings have had needed maintenance performed on them but retain much of their historical integrity. The exteriors of these buildings were made of rough sawed wood or board and batten. Their roofs were shingled with wood shingles and their foundations were either concrete or stone.

Construction on Cassidy Lake as a year round vocational school for boys was started in September, 1936. One interesting building in the complex was a remodeled barn used as a dormitory. The barn was intended only for temporary use as the construction of Cassidy Lake was rushed in order to open in time for the summer of 1937. The basement of this barn served as a workshop, tool room and warehouse. A farmhouse was used as a combined dining hall, recreation room, and administrative offices while the dining hall and administrative building were under construction. There were 16 cabins, which were occupied by eight boys and one counselor. A dining hall was erected to serve 160 people, as well as a craft shop, staff quarters, first aid building, and a help quarters (caretaker, cook quarters). The NPS also beautified Cassidy lake by constructing a dike and two levees in order to raise the water level by two feet.

Camp Waterloo is currently leased by the Department of Corrections as a low security prison. It is not in use and is currently in a state of decay. In the 1930's a CCC camp was built on the site. During World War II it was a military police training facility and then a German POW camp.

As previously noted, the area where Waterloo RA now stands was once inhabited mainly by farmsteads. As a result many traces from these historic days are still intact. A survey conducted by Misty Jackson on September 8, 1995 cited these locations as historic archaeological resources.

Sylvan Estates Country Club is the present site of the recreation area's headquarters. In fact, the original club house building is still in use. Some other elements of the club are still intact, as well. There was a pavilion nearby, now only a crumbling foundation, which offered a view of the "seven lakes", located in Pinckney RA. The trees have grown in so much that the view is now obstructed. Also, an original pump house remains but is currently in a state of decay.

The locations of twelve farmsteads are known. Farmstead 1, known as Bunn Farm, included a house and three or four outbuildings. The buildings on Farmstead 2 are known to be built of hand hewn lumber. One garage is still standing. Other buildings that once stood on Farmstead 2 were a barn, well house, corn crib, storage shed, and a house. Farmstead 3 is known to have been built at least 60 years ago. One of the two remaining buildings on Farmstead 4 was removed some years ago. An apple tree was found near this site, and it is evident that some fields were man-made around the farmstead. It is possible that this site is actually made up of two adjacent farmsteads. The only remnants of Farmstead 5 are the foundation of an old barn and a clearing that is now being re-vegetated. Little is known about Farmstead 6 and Farmstead 7. Farmstead 8 includes a stone foundation and a cistern. Farmstead 9 was homesteaded by original settlers to the area. Recently torn down, Farmstead 10 was a centennial farm. Farmstead 11 still contains large foundation stones and a cistern. Walnut trees and former fields of the farmstead are still apparent. It is unknown if any original foundations are preserved from Farmstead 12, although a peach and walnut tree are still in existence.

Four historic dam locations have also been recorded. Locations are on Sylvan, Portage, Mud, and Sugarloaf Lakes. An airport, built circa 1940, is currently a hay field. A foundation is still present.

Three church camps were located in the area. The first was built circa 1950; the second was a Jewish called "Camp Ma-Hi-Ya." Foundations of both camps still remain in tact. The third camp was known as the "Michigan Baptist Assembly Camp."

HISTORIC LANDSCAPE

Sackrider Hill is the second highest point in Waterloo RA (1050 feet). Atop the hill stands a cross. It has been the subject of some controversy because having a religious symbol on State owned lands is prohibited, but since the cross has become a historic land marker it has remained on top of the hill. The present cross was built around 1950, but supposedly there was an older cross before that.

Local tradition claims there was a fort on Pond Lily Hill where soldiers were massacred by Indians. This is the second highest point in the park (1050 feet).

Education and Interpretation

Situated with a view of Mill Lake, the Gerald E. Eddy Discovery Center provides educational and interpretive services for all. Here visitors can learn about the geology and habitats that are located within the park. There is a large interactive map in the Center's main room that illustrates the trails and campgrounds situated throughout the recreation area. Facing the lake is a bird observatory with outdoor speakers that enables visitors to hear the birds from inside the center. There are also exhibits that represent habitats found in the park including hardwood swamp, bog, beech-maple forest, and fen. The main room also has a large display of arrowheads that were donated to the Discovery Center. The Geology room is intended for children, with features that include a "Fossil Graveyard", "Ice Cave", "Weather Report", and a "Mad Scientist Lab." Additionally, the Eddy center utilizes an auditorium for educational films and a classroom for hands on work.

Recreational Resources

Waterloo Recreation Area offers a diverse array of recreational opportunities with both day-use activities and camping. Following are the recreational features of this park:

Gerald E. Eddy Visitor Center

Exhibits include interactive displays, multi-image slide shows, and other nature programs to orient visitors to Michigan's unique cultural and natural features.

Hunting

Waterloo Recreation Area is open to hunting for all species following regular State Regulations between September 15 and March 31. This park boasts excellent deer and turkey hunting, with prevalent numbers of both species. Rabbit and squirrel can be found to a lesser degree throughout the park. In addition, there are areas throughout the park with populations of pheasant, quail, grouse and woodcock. Hiking and equestrian trails are within the open hunting areas. The area surrounding Mill and Cedar Lake, the area surround Portage Lake Campground, and private properties are all closed to hunting. The park is also open to trapping.

Wildlife Viewing Area

The Haehnle Audubon Sanctuary occupies nearly 1000 acres of former farmland. The main attraction here is the fall migration of sandhill cranes. Up to 3,000 of these birds have been sighted at one time.

Playgrounds

Play areas offer a variety of playground equipment for children. Playgrounds are available at the Portage Lake day-use area and the Sugarloaf Campground. Both are Handicap accessible.

Portage Lake Beach House

The Beach House provides a changing area for swimmers. The beach house is available at the Portage Lake beach area. This facility is ADA accessible.

Swimming Beaches

There is a public beach at Big Portage Lake and a "campers only" swimming beach at Sugarloaf Campground.

Fishing

Fishing piers can be found at Big Portage Lake and Crooked Lake. Only Big Portage Lake has an ADA accessible fishing pier. Any of the publicly accessible lakes in Waterloo RA may be fished. Bass, panfish, bluegill, pike and other fish typical of the region inhabit the lakes of Waterloo RA.

Big Portage Lake Picnic Area

A picnic site is located at Big Portage Lake and has picnic tables, grills, potable water, toilet facilities, and two picnic shelters which can be reserved ahead of time. Hours for operation are 8:00 a.m. to 10:00 p.m. The Big Portage Lake picnic area is ADA accessible.

Crooked Lake and Mud Lake Picnic Areas

Smaller picnic sites are located at Crooked Lake and Mud Lake. Sites at both locations come equipped with picnic tables and grills.

Hiking

Waterloo contains a labyrinth of hiking trails, including the Waterloo-Pinckney Trail. Many of the trails originate at the Eddy Center, range from less than one mile to over five miles.

Equestrian Trails

Three different trail options depending on the desired length of your trip. Total trail length is 15 miles.



Mountain Biking

With access on Katz and Glenn Roads, the five mile biking trail provides a scenic and challenging trail for riders of all skill levels.

Boat Launch Sites

Public boat launch sites are located at Big Portage Lake, Cedar Lake, Green Lake, Crooked Lake, Mill Lake, Mud Lake, the Winnewana Impoundment, and Walsh

Lake. There is a boat launch at Sugarloaf Campground that is limited to camper use only.

These lakes can be accessed by foot across State land: Clear Lake, Doyle Lake, Cassidy Lake, Little Portage Lake, and Merkle Lake.

Big Portage Lake Concession/Store

During the summer a concession store is open at Big Portage Lake Beach. Items for sale include firewood, groceries, and souvenirs.

Cross Country Ski

All cross county ski trails originate at the Eddy Center. These trails are un-groomed.

Metal Detecting

Any items found must be checked by the park staff and may be held for further investigation. Areas open to metal detecting are very restricted.

Park Use Statistics and Economic Impacts

Economic Impacts: Michigan State University (Dr. Dan Stynes) developed an economic analysis model known as “MGM2”. This model is an update of the MGM model developed by Dr. Ken Hornback for the National Park System in 1995. The purpose of the updated MGM2 model is to estimate the impact of park visitor spending on the local economy. These economic impacts are reflected in terms of sales, income, employment, and value added.

This analysis tool relies on three primary factors in the common equation:

Economic Impact of Tourism Spending = Number of Tourists (x) Average Spending per Visitor (x) Multiplier (to estimate extended effects of direct spending).

For our purposes of conducting a very basic review of impacts, we have utilized the “MGM2-Short Form” version of the program, which simplifies the extent of analysis required for input, and utilizes more generalized multipliers for spending outputs. For the non economist, this provides an excellent tool for establishing a baseline assessment of the economic impacts of our parks.

Following are the relative economic impacts (based on 2005 data) of Waterloo RA to the economy of Jackson/Washtenaw County: ([“MGM2-Short Form”](#) for Algonac)

DIRECT ECONOMIC EFFECTS TO THE COMMUNITY

- Direct spending attributable to Waterloo RA visitors totaled \$18,552,000, of which \$1,062,000 came from Day-Use, and \$17,490,280 from Camping.
- Jobs totaled 583, with 33 related to Day-Use activity and 550 to Camping. (Note...jobs are not full-time equivalent. They include part-time and seasonal positions.)

- Personal Income total is \$6,309,000, with \$361,230 associated with Day-Use of the park and \$5,948,170 associated with Camping.
- Value added (total income plus business taxes) totaled \$9,526,000. Day-Use accounted for \$545,350 and Camping accounted for \$8,980,170.

TOTAL ECONOMIC EFFECTS TO THE COMMUNITY (NOTE...this reflects ‘Direct Effects’ plus the ‘Secondary Effects’ of visitor spending on the local economy. Secondary Effects (sometimes called ‘Multiplier Effects’) capture economic activity that results from the re-circulation of money spent by the park visitors in the community.

- Total spending = \$24,527,000 (32.2% over direct spending)
- Jobs = 682 (16.78% over direct job impacts)
- Personal Income = \$8,299,000 (31.54% over direct spending)
- Value added = \$13,207,000 (38.64% over direct value added)

NOTE....for purposes of updating economic values, the Consumer Price Index (CPI) is often used to adjust values over time. Through the following link, [<http://www.bls.gov/home.htm>] a CPI Inflation Calculator is located in the category of “Inflation and Consumer Spending”.