# Appendix A – Supporting Analysis

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A.1 PARK SETTING

Park Profile

Area: 4,947 acres
County: Livingston County
Townships: Genoa, Hamburg, Marion
Latitude: 42°30’24”N
Longitude: 83°51’34”W
Address: 6360 Chilson Road
Howell, MI 48843
Phone #: (810) 229-6566

Location & Community

Located 12 miles southwest of Howell, the county seat of Livingston County, Brighton Recreation Area offers year-round recreation within the park’s 4,947 acres. The park is located in a rural residential area within the “Detroit-Ann Arbor” Metropolitan Area. The City of Brighton, with 7,400 residents, is just northwest of the park. Brighton Recreation Area is easily accessed from I-96 to the north, US-23 to the east and M-36 to the south. The Great Lakes Central Railroad runs north-south through the center of the park.

Brighton Recreation Area provides a combination of high, irregular ranges of hills interspersed with a number of attractive lakes, wetland areas, and connecting streams. The area has over 39 miles of trails available for equestrian riding, mountain biking, and hiking. The park also has over 200 campsites at four locations, including modern, rustic and a horseman’s camp.
The U.S. Census Bureau estimates the 2010 population of Livingston County at 180,967, a 17% increase since 2000. The population density of the county is 320 people per square mile, far exceeding the state average of 175 people per square mile. Livingston County has consistently been ranked as the fastest growing county in the State since 2004 and the Southeast Michigan Council of Governments (SEMCOG) forecasts that this population growth will continue at a similar rate over the next thirty years. Livingston County has one of the highest median household incomes in the state. Brighton Recreation Area is also easily accessible to residents of the Detroit and Lansing regions, via I-96, making it an attractive recreation area for over 3 million Michigan residents.

### 2010 U.S. Census Data for Livingston County

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<tr>
<th>People QuickFacts</th>
<th>Livingston County</th>
<th>Michigan</th>
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<tr>
<td>Population, 2013 estimate</td>
<td>184,443</td>
<td>9,895,622</td>
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<td>Population, 2010 (April 1) estimates base</td>
<td>180,967</td>
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<td>Population, percent change, April 1, 2010 to July 1, 2013</td>
<td>1.9%</td>
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<td>Persons under 5 years, percent, 2013</td>
<td>5.1%</td>
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<td>Persons under 18 years, percent, 2013</td>
<td>23.7%</td>
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<td>Persons 65 years and over, percent, 2013</td>
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<td>Female persons, percent, 2013</td>
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<td>White alone, percent, 2013 (a)</td>
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<td>Black or African American alone, percent, 2013 (a)</td>
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<td>American Indian and Alaska Native alone, percent, 2013 (a)</td>
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<td>Asian alone, percent, 2013 (a)</td>
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<td>Two or More Races, percent, 2013</td>
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<td>White alone, not Hispanic or Latino, percent, 2013</td>
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<td>Foreign born persons, percent, 2008-2012</td>
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<td>Language other than English spoken at home, pct age 5+, 2008-2012</td>
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<td>High school graduate or higher, percent of persons age 25+, 2008-2012</td>
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<td>Bachelor's degree or higher, percent of persons age 25+, 2008-2012</td>
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<td>Veterans, 2008-2012</td>
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<td>Mean travel time to work (minutes), workers age 16+, 2008-2012</td>
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<td>Housing units, 2013</td>
<td>73,485</td>
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<td>Homeownership rate, 2008-2012</td>
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<td>Housing units in multi-unit structures, percent, 2008-2012</td>
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<td>Median value of owner-occupied housing units, 2008-2012</td>
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<td>Households, 2008-2012</td>
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<td>Persons per household, 2008-2012</td>
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<td>Per capita money income in past 12 months (2012 dollars), 2008-2012</td>
<td>$32,096</td>
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<td>Median household income, 2008-2012</td>
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<td>Persons below poverty level, percent, 2008-2012</td>
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**Business QuickFacts**

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<td>Nonemployer establishments, 2012</td>
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<td>Total number of firms, 2007</td>
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<td>Black-owned firms, percent, 2007</td>
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<tr>
<td>American Indian- and Alaska Native-owned firms, percent, 2007</td>
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<tr>
<td>Asian-owned firms, percent, 2007</td>
<td>1.5%</td>
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<td>Native Hawaiian and Other Pacific Islander-owned firms, percent, 2007</td>
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<td>Hispanic-owned firms, percent, 2007</td>
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<td>Women-owned firms, percent, 2007</td>
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<td>Manufacturers shipments, 2007 ($1000)</td>
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<td>Merchant wholesaler sales, 2007 ($1000)</td>
<td>1,293,290</td>
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<td>Retail sales, 2007 ($1000)</td>
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<td>Retail sales per capita, 2007</td>
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<td>Accommodation and food services sales, 2007 ($1000)</td>
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<td>Building permits, 2012</td>
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**Geography QuickFacts**

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<td>Land area in square miles, 2010</td>
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<tr>
<td>Persons per square mile, 2010</td>
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<td>174.8</td>
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(a) Includes persons reporting only one race.
(b) Hispanics may be of any race, so also are included in applicable race categories.
FN: Footnote on this item for this area in place of data
NA: Not available
D: Suppressed to avoid disclosure of confidential information
X: Not applicable
S: Suppressed; does not meet publication standards
Z: Value greater than zero but less than half unit of measure shown
F: Fewer than 100 firms
Source: US Census Bureau State & County QuickFacts
A.3 HISTORY OF BRIGHTON RECREATION AREA

Historically, Livingston County was known agriculturally for its livestock and grain production. Early settlers were attracted to the county because of the opportunity to receive 160 acres of free land from the federal government if they were veterans of the war of 1812. Upon surveying the land and consequently discovering that it was well suited for agricultural uses, the federal government decided to sell the land for $2-$3 per acre. Prior to white settlers, the Potawatomi and Saginaw Chippewa Indians inhabited the area.

The territory was originally part of Shiawassee and Washtenaw counties until 1833 when an act of the state legislature provided for the establishment of Livingston County.

Brighton Recreation Area was established in 1944 and was one of eleven state recreation areas developed in the 1940s in southeastern Michigan through appropriations by the State Legislature. The park has grown steadily in size since its establishment.

In 1952, Camp Brighton, a Department of Corrections Prison Camp was established at the recreation area. Camp Brighton was moved to a new location within the recreation area during 1961 and 1962 to make way for an impoundment. Due to public opposition, however, the impoundment was never constructed. The camp closed officially in 2007.

The preliminary master plan for the Brighton Recreation Area was developed in 1955 and included areas for camping, swimming, picnicking, horseback riding, and winter sports. A subsequent MDNR planning document, dated 1969, recommended that the major use emphasis at Brighton should be camping, complimenting Island Lake which was recommended to be exclusively day use.

In the 1950’s, the Forestry Division established an 80 acre tree nursery and a sign shop at the recreation area. The nursery produced seedlings to distribute to state lands for reforestation. Surplus seedlings were sold to private individuals. The sign shop produced wooden signs for all of the state parks and other state agencies. Prison labor was used at the sign shop. In the early 2000s, the sign shop closed and was consolidated to Hartwick Pines State Park. Seedling production still continues today at Brighton Recreation Area however the nursery has been converted into a Tree Improvement Center. The Tree Improvement Center grows seedling, mostly Jack Pine and Red Pine, to be planted on state land.

Today, Brighton Recreation Area amenities include camping, swimming, picnicking, hunting, fishing, hiking, horseback riding, snowmobiling, cross country skiing and mountain biking.
A.4 LAND OWNERSHIP & FUNDING SOURCES

The lands that comprise Brighton Recreation Area have been acquired by the State of Michigan through a variety of funding sources. Often, conditions attached to the original funding source or other details of the property transaction encumber the future use or disposition of the land.

Funding Source

The Funding Source Map identifies the varieties of sources used in acquiring land within Brighton Recreation Area. In areas where small, fragmented parcels were aggregated, multiple funding sources may have been utilized. The following outlines in more detail each funding source as associated with Brighton Recreation Area.

Special Legislation
Acquisitions for park purposes through this source are tied to specific funding established by the legislature.

- 19 parcels totaling 383 acres were acquired by special legislation.

State Game and Fish Protection Fund
Act 17, P.A. 1921 established a funding source for land purchased through hunting license fees. The primary purpose of this land is for hunting and fishing purposes and the development of other recreation facilities is restricted. 8 parcels totaling 148 acres were purchased with revenue from a $1.50 tax on deer hunting licenses.

Michigan Natural Resources Trust Fund (MNRTF)
The trust fund was established in 1976 to provide a source of funding for public acquisition of lands for resource protection and public outdoor recreation. Funding is derived from royalties on the sale and lease of state owned mineral rights. It is utilized for general program purposes.

- 7 parcels totaling 64 acres were purchased through the MNRTF between 1991 and 2009.

Pittman-Robertson Wildlife Restoration Act (PR).
Established in 1937, Pittman Robertson created an 11-percent excise tax on guns, ammunition, bows, arrows and other hunting-related equipment. That money is apportioned to state wildlife agencies based on the land area and the number of licensed hunters of each state. These funds are matched by the states with their hunting license fees to help pay for wildlife restoration, hunter education and research. The act also ensures that money from hunting and fishing license sales can only be used for fish and wildlife management and this Federally funded land has specific restrictions for use.

- 15 parcels totaling 437 acres were purchased with this fund.

Other Funds
Other funds used at Brighton Recreation Area include:

- 3,544 acres were purchased using 5/6 General Fund and 1/6 Game and Fish Fund
- Old Recreation Bond Fund, Act 257, P.A. State Park and Recreation Areas Cooperative Forestry Assistance Act 197.
- In total, 3,663 acres were purchased with these “other” funds.
Granted Easements

Brighton Recreation Area is impacted by both acquired and granted easements. A total of 23 easements have been granted since acquisition of the property. Highlighted easements granted include the following:

Livingston County Road Commission
• 2003 easement for the purposes of reconstructing Hamburg Road between Welle and Bauer Roads
• Bishop Lake Road reconstruction in 1951

Detroit Edison Company
• A number of easements were granted between 1945 and 1998 for the construction and maintenance of distribution lines, power lines, cables, poles to service park amenities and inholdings.

Consumers Power Company
• Granted in 1970 to construct and maintain a gas pipeline between Brady and Schafer Roads

Michigan Department of Transportation
• 1971 Chilson Road access

Panhandle Eastern Pipe Line
• Easement to construct and maintain a pipeline along the township boundary between R4E and R5E and Sections 31 and 36 granted in 1962.
Michigan Bell Telephone Company
• 1958 to construct and maintain telephone lines along Chilson and Mercer Roads.

Acquired Easements

An easement was acquired in 1958 to construct the Chilson Pond Dam.
A.5 RELATIONSHIP TO OTHER RECREATION RESOURCES

There are a variety of regional, county and local park providers and facilities in the immediate vicinity of Brighton Recreation Area. Please see the Recreational Resources Map.

**State Resources**

**Island Lake Recreation Area**
Located 12 miles east of Brighton Recreation Area, Island Lake is a 4,000-acre park located along the Huron River corridor. Island Lake is confined to the north by I-96 and to the west by US-23 and is easily accessible from both. The majority of the park is located in the southeastern corner of Livingston County, but a small section spreads west into Oakland County. The park offers a large variety of land and water recreational opportunities for visitors including a shooting/archery range, 19 miles of multi-use trails, fishing, swimming, canoeing/kayaking, biking, hunting, and wildlife viewing. The park is open year-round.

**Lakelands Trail State Park**
Located several miles south of Brighton Recreation Area, Lakelands Trail State Park is one of four linear state parks in the Michigan State Park system that have been converted from abandoned railroad corridors. This trail currently is completed between Stockbridge and Pinckney and passes through wooded areas and rolling farmland. It is approximately 13 miles long with a gravel surface. Lakelands is designed for hiking, bicycling, and wheelchair use on the north side and horseback riding on the south side of the trail. Cross-country skiing is popular in winter.

Source: [http://www.hamburg.mi.us/lakelands_trail_state_park/index.htm](http://www.hamburg.mi.us/lakelands_trail_state_park/index.htm)
Huron Clinton Metropolitan Authority Resources

Huron Meadows Metropark
Located 5 miles southeast of Brighton Recreation Area, this 1,540-acre park offers a wide variety of activities for outdoor enthusiasts. Located just south of Brighton, available activities include cross-country skiing, hiking, biking, golf and geocaching. Small lakes provide boating and fishing. There are three picnic areas that can also be rented for private functions. This park is open year-round. A metropark motor vehicle entry permit (which is different from the Recreation Passport) is required to enter the park.

Kensington Metropark
Located east of Brighton Recreation Area and adjacent to Island Lake Recreation Area, the 4,481-acre Kensington Metropark sprawls across wooded, hilly terrain, surrounds Kent Lake, and is home to an abundance of wildlife and waterfowl. The park offers a multitude of recreational year-round recreational opportunities including biking, swimming, cross-country skiing, boating, and picnicking. Kent Lake offers a variety of fun activities, including the Splash ‘n’ Blast water park. The park also offers a petting farm, nature center, and 18-hole golf course. A pedestrian/bicycle pathway that crosses beneath I-96 connects Kensington Metropark and Island Lake Recreation Area.

County Resources

Lutz Park
Located north of Brighton Recreation Area, this 320-acre Livingston County park offers picnicking, hiking, and nature viewing.

Municipal Resources

Manly W. Bennett Memorial Park
Located in Hamburg Township, the 384-acre park offers baseball diamonds, soccer fields, a model airplane runway/flying area, playgrounds, picnic areas, hiking and biking trails.

Mill Pond Park
Mill Pond Park is located in downtown Brighton. A walking trail includes paved areas and a wooden boardwalk that crosses Mill Pond. A gazebo is the site of free community performances in warmer months. The park also includes a fenced-in wooden playscape, public restrooms, drinking fountains, benches, covered picnic pavilion and numerous public sculptures.

Genoa Township Recreation Area
Located at the Township Hall, this park features 2 playgrounds, sled hill, walking path and 2 athletic fields.

The Southeastern Livingston County Recreation Authority (SELCRA) Resources

Meijer Skate Park
Located near downtown Brighton, Meijer Skate Park is the only supervised outdoor skateboarding and in-line skating park in Livingston County.
Private Resources

Jackal Golf Club
The par 71 Jackal course is located in Brighton and offers bent grass tees, fairways and greens, and state-of-the-art irrigation system.

Lakelands Golf & Country Club
Located in Brighton, the 18-hole course features tight fairways, elevated greens and challenging side-hill lies, and a PGA pro shop. The Club offers a banquet facility that can accommodate a maximum of 300 people open March – December. The Club is adjacent to Winans Lake, which is a non-motorized lake that offers members year-round water sports opportunities including fishing and swimming. The club maintains a supervised beach between Memorial Day and Labor Day.

Mount Brighton Ski Resort
The Mount Brighton Ski Resort features 26 trails on 130 acres, six lifts, night skiing and riding, as well as an 18-hole golf course. Mount Brighton is suited for ski enthusiasts of all abilities and ages. Lessons are available during open season.

Oak Point Country Club
Oak Pointe Country Club is a private club located in Livingston County. It offers two 18-hole golf courses, a clubhouse with a golf pro shop, a fitness center, formal and informal dining areas, several banquet rooms, four lighted tennis courts, a junior Olympic pool, a full-size driving range and beach access with a play park.
A.6 LEGAL MANDATES

For all park General Management Plans, all legal mandates are identified that serve to further guide the development of the General Management Plan and subsequent Action Plans. For our planning purposes, the term “Legal Mandates” refers to not only state law, but also the administrative tools of “Policy” and “Directive” of the Natural Resource Commission, the Department, and the Parks & Recreation Division. Examples include Wildlife Conservation Orders, Orders of the Director, and all other laws, commission orders, and rules or directives that apply to the park. Specific to Brighton Recreation Area, several legal mandates have been identified, which are listed below.

DNR Policies and Procedures – Series 26 - State-Owned Lands
- General principles established by the Department that guide the administration of authorities delegated to the Department by the Legislature and the Governor.
- 26.04-04 - Use Of State-Owned Lands Administered By The Michigan Department of Natural Resources (ISSUED: 02/01/2006). The NRC will manage state-owned lands in a manner that protects and enhances the public trust while providing for the use and enjoyment of those lands as outlined in the Natural Resources and Environmental Protection Act.

- Established to protect and promote the public health by establishing health code requirements and regulations that all public (including DNR) and private campgrounds must meet.
- Campground wastewater system must meet the construction permit, design, and operation requirements under Michigan's Public Health Code.

PA 451 OF 1994, PART 22 – CAMPGROUND WASTEWATER SYSTEMS
- These rules apply to all campground wastewater systems and regulates discharges to groundwater; administered by the Water Division, Groundwater Discharge Unit.

PA 451 of 1994, PART 31 – WATER RESOURCES PROTECTION
- Administered by the DEQ and part of the Natural Resources and Environmental Protection Act, this legislation defines specific rules for the regulation of permitted activities in a floodplain in Michigan.

PA 451 of 1994, PART 303 - WETLANDS PROTECTION (formerly Act No. 203, P.A. 1979 Wetland Protection Act)
- Administered by the DEQ and part of the Natural Resources and Environmental Protection Act, this legislation provides clarification and guidance on interpreting Part 303 by defining specific rules for the regulation of wetlands in Michigan.
- The law requires that persons planning to conduct certain activities in regulated wetlands apply for and receive a permit from the state before beginning the activity.
PA 451 OF 1994, PART 504 - STATE LAND USE RULES / LAND USE ORDERS OF THE DIRECTOR

- Administered by DNR Law Division.
- States that the department shall promulgate rules for the protection of the lands and property under its control against wrongful use or occupancy.
- Covers rules on state land relating to camping, motorized vehicle use, control of animals, trail use etc.
- Land Use Orders of the Director
  - 5.4 Watercraft use in certain state parks, prohibited conduct
    Order 5.4, a person shall not do the following:
    (1) Operate a vessel in excess of a slow, no-wake speed on any of the following described waters:
        (b) Brighton RA – Chilson Pond
  - 5.2 Possession or consumption of alcoholic beverages in certain state parks and recreation area, prohibited conduct
    Order 5.2, a person shall not do any of the following:
    (2) Possess or consume an alcoholic beverage within the following described locations from April 1 through September 30, without authorization of the park manager:
        (a) Brighton RA – Bishop Lake Day-Use Area
  - Special Local Watercraft Controls – Livingston County (Department of Natural Resources, Marine Safety Section)

Appleton Lake – WC – 47-01-001-Hours for high speed boating
On the waters of Appleton Lake, in sections 2 and 3, town 1 north, range 5 east, Hamburg Township, Livingston County, State of Michigan, it is unlawful between the hours of 6:30 p.m. to 10:00 a.m. of the following day to:
    (a) Operated a vessel at high speed
    (b) Have in tow, or shall otherwise assist in the propulsion of, a person on water skis, water sled, surfboard or other similar contrivance.

The hours should be 7:30 p.m. to 11:00 a.m. of the following day when Eastern Daylight Savings Time is in effect. “High speed boating” is defined to mean a speed at or above which a motorboat reaches a planing condition.

The boundaries of the area described immediately above shall be marked with signs and with buoys. All buoys must be places as provided in a permit issue by the Department of Natural Resources and be in conformance with the State Uniform Waterway Marking System.

Bishop Lake – R281.747.22 Slow—no wake speed
22. On the waters of Bishop Lake, Sections 3, 4, 9 and 10, T1N, R5E, Hamburg Township, Livingston County, it is unlawful for the operator of a vessel to exceed a slow—no wake speed
PA 451 OF 1994, PART 741 - STATE PARK SYSTEM - NATURAL RESOURCE AND ENVIRONMENTAL PROTECTION ACT
- Notable in this law is Section 324.74102, which identifies the duties of the DNR and reinforces those core values concerning preservation, protection and management cited above.

PA 35 of 2010, Part 741 ("Recreation Passport")
- This act amended the Michigan Motor Vehicle Code to provide for a State Park and State-operated public boating access site "Recreation Passport" that a Michigan resident may obtain by paying an additional fee when registering a motor vehicle.
- The Recreation Passport is required for entry into all PRD administered facilities and takes the place of the Motor Vehicle Permit (MVP).

PA 45 OF 2010 - NATURAL RESOURCE AND ENVIRONMENTAL PROTECTION ACT
- Amends the Natural Resources and Environmental Protection Act (PA 451 of 1994) to require the DNR to establish a plan for a statewide trail network that includes Michigan trailways, pack and saddle trailways, and other recreational use trailways, and to permit pack and saddle animals on designated trailways managed by the DNR.
A.7 NATURAL SYSTEMS AND NATURAL RESOURCES

Ecoregional Context

Brighton Recreation Area is located in ecoregion section 6, subsection 1.3, known as the Jackson Interlobate. This region is characterized by rolling hills and flat lake plains, most of which have been modified by agricultural and urban developments. The sub-subsection is also characterized by relatively steep end-moraine ridges surrounded by pitted outwash deposits. Kettle lakes and wetlands are common within the outwash.

According to the United States Geological Survey (USGS), Brighton Recreation Area features textured end moraine and ice-contact topography, oak savanna and hickory forests, hardwood swamps, prairie fens and bogs.


Climate

The growing season is 140 to 150 days. Late spring frosts often pose a danger due to numerous lowland depressions in the area. Annual snowfall is 40 to 50 inches and annual precipitation is 30 to 32 inches. Temperatures can be between -22 degrees to 110 degrees Fahrenheit.

Geology

The geology of the Brighton Recreation Area consists primarily of glacial end moraines of course textured till. Other parts of the area consist of glacial outwash deposits of sand and gravel. Bedrock is located approximately 250 to 300 feet below glacial drift.

Wildlife

Wildlife at Brighton Recreation Area includes water fowl and sandhill cranes.

Topography

The majority of the park consists of rolling hills. The most dramatic elevation changes occur through the northern and eastern sections of the recreation area where glacial moraines form rolling hills. The mid-section of the park is flat near wetlands and inland lakes.
Soils
The most prevalent soil type at Brighton Recreation Area is Boyer-Fox-Wasepi. Other soil types include Miami-Conover-Brookston and Spinks-Houghton-Boyer. Please see the Generalized Soil Data Map.

Natural Areas
There are currently no dedicated natural areas or other special conservation areas at Brighton Recreation Area.

Exemplary Natural Communities at Brighton Recreation Area:

Prairie fen are a wetland community dominated by sedges, grasses, and other graminoids that occurs on moderately alkaline organic soil and marl in the glacial interlobate region of Michigan’s southern lower peninsula. This community is present in several locations in the Recreation Area and is part of a large inter-connected wetland system. A community abstract is provided at http://mnfi.anr.msu.edu/abstracts/ecology/Prairie_fen.pdf.

Oak barrens are fire dependent savanna type dominated by oaks (5 and 60% canopy) and a predominately graminoid ground layer. Oak barrens are found on drouthy soils and occur typically on glacial outwash in southern Lower Michigan. An abstract is provided at http://mnfi.anr.msu.edu/abstracts/ecology/oak_barrens.pdf.

Rich tamarack swamp are groundwater-influenced, forested wetland dominated by tamarack (Larix laricina) that occurs on deep organic soils predominately in southern Lower Michigan. An abstract is provided at http://mnfi.anr.msu.edu/abstracts/ecology/Rich_tamarack_swamp.pdf.
### Rare Plants at Brighton Recreation Area:

<table>
<thead>
<tr>
<th>Scientific Name</th>
<th>Common Name</th>
<th>State Status</th>
<th>Federal Status</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Scirpus clintonii</em></td>
<td>Clinton’s bulrush</td>
<td>Special Concern</td>
<td></td>
</tr>
<tr>
<td><em>Carex richardsonii</em></td>
<td>Richardson’s Sedge</td>
<td>Special Concern</td>
<td></td>
</tr>
<tr>
<td><em>Celtis tenuifolia</em></td>
<td>Dwarf hackberry</td>
<td>Special Concern</td>
<td></td>
</tr>
<tr>
<td><em>Amorpha canescens</em></td>
<td>Leadplant</td>
<td>Special Concern</td>
<td></td>
</tr>
<tr>
<td><em>Drosera anglica</em></td>
<td>English sundew</td>
<td>Special Concern</td>
<td></td>
</tr>
<tr>
<td><em>Cypripedium candidum</em></td>
<td>White Lady Slipper</td>
<td>Threatened</td>
<td></td>
</tr>
<tr>
<td><em>Eleocharis equisetoides</em></td>
<td>Horsetail spike rush</td>
<td>Special Concern</td>
<td></td>
</tr>
</tbody>
</table>

### Rare Animals at Brighton Recreation Area:

<table>
<thead>
<tr>
<th>Scientific Name</th>
<th>Common Name</th>
<th>State Status</th>
<th>Federal Status</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Sistrurus catenatus</em></td>
<td>Eastern Massassauga Rattlesnake</td>
<td>Special Concern</td>
<td>Candidate</td>
</tr>
<tr>
<td><em>Dendroica cerulea</em></td>
<td>Cerulean Warbler</td>
<td>Threatened</td>
<td></td>
</tr>
<tr>
<td><em>Emydoidea blandingii</em></td>
<td>Blanding’s Turtle</td>
<td>Special Concern</td>
<td></td>
</tr>
<tr>
<td><em>Prosapia ignipectus</em></td>
<td>Red-legged spittlebug</td>
<td>Special Concern</td>
<td></td>
</tr>
<tr>
<td><em>Cistothorus palustris</em></td>
<td>Marsh wren</td>
<td>Special Concern</td>
<td></td>
</tr>
</tbody>
</table>

*(Michigan Natural Features Inventory, 2013)*
A.8  HISTORIC AND CULTURAL RESOURCES

No structures exist within the Brighton Recreation Area that are eligible to be listed on the national registry. Most of the structures that were eligible were removed or relocated after Camp Brighton closed in 2007.

There are a number of historic and pre-historic sites known to be scattered throughout Brighton Recreation Area. The remnants of abandoned farm fields can be seen, including old stone fences from former property boundaries.
A.9  EDUCATIONAL, INTERPRETATION AND EVENTS

Michigan State Park Explorer Program

- Summer program offered at 41 Michigan State Parks to campers and day visitors. The program arms participants with field gear (animal skins, bug boxes and hands-on materials) and a guide for informal hikes and other programs. These activities cater to each park's unique physical and cultural resources, targeting both children and adults.

**Michigan State Park Explorer Program**

**Brighton Recreation Area**

### Week of July 13-19 2014

<table>
<thead>
<tr>
<th>TUESDAY</th>
<th>WEDNESDAY</th>
<th>THURSDAY</th>
<th>FRIDAY</th>
<th>SATURDAY</th>
</tr>
</thead>
<tbody>
<tr>
<td>JULY 15</td>
<td>JULY 16</td>
<td>JULY 17</td>
<td>JULY 18</td>
<td>JULY 19</td>
</tr>
</tbody>
</table>
| **Let's Talk Turkey** 3:00 pm | **What is a Leaf?** 10:00 am  
Examine a leaf with Explorer Bob and find out why they are important to us. We will find leaves and discuss the various types.  
Meet at Explorer Cabin | **Afternoon Family Hike And Talk Coyotes** 2:00 pm  
Join Explorer Bob along seldom used trails and discover some of the park's ecosystem.  
Meet at the Swing Set at the Day Use Beach | **Hook, Line, & Sinker Fishing Frenzy** 4:00 pm  
Come reel and see the mammals of Michigan. Join us as we learn which mammals are carnivores.  
Meet at the Explorer Cabin. | **Family Bike Ride** 2:00 pm  
Come bike one of the parks back trails on a family friendly bike ride.  
Meet at the swing set/wooden eagle on the beach. |
| **Owls, Owls, Owls** 2:00 pm | **Bugs! Bugs! Bugs!** 2:00 pm  
Let's go and find some bugs. What type of insects live in our park? You will have a chance to collect bugs and study them. Can you name any of their body parts?  
Meet at the Explorer Cabin. | **Michigan Carnivores** 4:00 pm  
Learn to cast, bait a hook, and fish. Bait and limited number of poles will be available. Bring your own pole. Catch and release bluegill and bass.  
Meet at the fishing pier between the boat launch and beach. | **SELCRA Movie Night** | |
| **All programs start at the Explorer Cabin unless otherwise stated.** | **Meet at the Explorer Cabin.** | **Meet at the Swing Set at the Day Use Beach.** | **Meet at the Explorer Cabin wearing walking shoes.** | **Meet at the swing set/wooden eagle on the beach.** |

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**Events Held at Brighton Recreation Area**

- Native American Pow Wow
- Elite Endeavors Triathlon
- Tailwinds Mountain Bike Race
- Veteran’s Appreciation Picnic
- Low Brow Astronomy Club Night Sky event
- Michigan Orienteering Club Competition
- Hovercraft Racing
- Heart of Michigan dog show
- Michigamme dog show
- Grand Equestrians Charity Ride
- Brighton Trail Riders Distance Ride
- Running Lab Trail Running event
- SELCRA(SE Livingston Co Rec Agency) Family Campout
- SELCRA 5K race
- SELCRA Movie Night
- Harvest Festival and Dance
- 4th of July Bike Parade

A Recreation Passport is required for entry to all Michigan State Parks and Recreation Areas. Check “YES” when you renew your license plate.

Learn more at [www.michigan.gov/recreationpassport](http://www.michigan.gov/recreationpassport)

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Brighton Recreation Area
6360 Chilson Road
Howell, MI 48843
Telephone: 810 229 6565
A.10 RECREATION RESOURCES

Camping
- Bishop Lake Campground, 140-site modern campsites with electrical service and modern restrooms. The campground is divided into two main areas. The lower campground has 79 sites and the upper campground has 61 sites.
- The Appleton Lake Campground is a rustic campground on Appleton Lake consisting of 25 sites and vault toilets near the Bishop Lake beach entrance.
- Murray Lake Campground offers 25 rustic sites along Murray Lake off of Bauer Road. The campground is open weekends-only, Memorial Day through Labor Day.
- The Horseman’s campground offers 20 rustic campsites for equestrian use on the west side of Chilson Road.
**Cabins**
- Five rustic cabins are available within the park. Four are family-size cabins that sleep 8 people. One is a frontier cabin that sleeps 20 people.

**Trails**
- Equestrian Trails – There are 18 miles of equestrian trails in the recreation area. These trails are also open to cross country skiing in the winter. An equestrian staging area is provided, with a shade shelter, vault toilets and water pump.
- Kahchín Trail – The Kahchín Trail is 2 miles long. It is open to cross country skiing and hiking. It has modern restrooms and vault toilet access.
- Murray Lake Trail – This is a 9 mile mountain bike trail.
- Penosha Trail – This 5 mile trail is open to cross country skiing and hiking.
- Torn Shirt Mountain Bike Trail – The Trail is a 5.1 mile long mountain bike trail.
- Bishop Lake Trail – The park offers a 1 mile long barrier-free trail.
Riding Stables
- Brighton Recreation Area’s riding stables is located on 40 acres within the park boundary, just south of the park headquarters. The stables, which are privately run, offers trail rides (with direct access to the state park trails), lessons, boarding, summer camp and other activities. The stable is ADA accessible and offers a mechanical device that helps riders mount horses. The facility also includes a competition size outdoor arena.

Boat Rental
- Canoes, Kayaks, Paddleboats and Rowboats are available for rent. Rentals are available from May through September.

Geocaching
- There are over a dozen geocaches hidden in Brighton Recreation Area.

Watchable Wildlife
- Bird watching is a popular recreation activity at Brighton Recreation Area. 193 species of bird have been recorded in the park.

Pet-Friendly Area
- There is a pet-friendly section of shoreline available on Chilson Pond. For more information, please contact the park. Pets must be on a six foot leash and under an owner's immediate control at all times. All pet waste must be properly disposed of in trash receptacles.
Metal Detecting
- Metal detecting is considered a legitimate recreation activity, so long as no damage to cultural and natural resources occur, and no state statutes are violated. Designated metal detecting areas are available within this park (as shown in the map below); any items found must be reviewed by park staff.

Hunting
- Wildlife is abundant in the park, including waterfowl, and hunting is allowed during legal seasons. Safety zones prohibit hunting in high use areas and around occupied buildings. The map on the following page shows the safety zones within Brighton Recreation Area. Safety zones are all areas within 150 yards (450 feet) of an occupied building, house, cabin, or any barn or other building used in a farm operation. No person may hunt or discharge a firearm, crossbow or bow in a safety zone, or shoot at any wild animal or wild bird within a safety zone, without the written permission of the owner or occupant of such safety zone.

Swimming
- Bishop Lake beach has been totally remodeled and is now universally accessible. Features include a beach house, beach area, picnic shelters, and a sand volleyball court. Vending machines are available at the beach house. Swimming is available at the Bishop Lake day-use facility located off of Bishop Lake Road.
Fishing
- Shore fishing is available at all lakes where launches are located. An ADA fishing pier is accessible from the boat launch at Bishop Lake.

Boat Launches and Lake Access
- Boat launches are located on Chilson, Appleton, Bishop and Chenango lakes. An EZ Launch Accessible Transfer system is also available on Bishop Lake. This system allows park guests to easily transfer from a wheelchair to a canoe or kayak. There are numerous unimproved access points for small watercraft throughout the park.

Boat Access
- Other small watercrafts, including kayaks and float tubes, can be walked into Chilson, Appleton, Bishop and Chenango lakes.

Picnic Area
- There are two picnic areas, one at Bishop Lake which is ADA accessible, and one at Chilson Pond. Vending machines are located near the restroom facilities. Picnic tables and fire pits/grills are also available.
**Picnic Shelter**
- There are four picnic shelters available for reservation at Chilson Pond and two ADA shelters at the Bishop Lake day-use area. Shelters can be reserved up to one year in advance by calling 1-800-447-2757 or visiting www.midnrreservations.com.

**Playground**
- Limited playground equipment is provided at the modern campsite and Bishop Lake and Chilson Pond.

**Disc Golf**
- Brighton Recreation Area is in the process of constructing 30-hole disc golf course with 6 ADA accessible holes. The course is being designed as a challenge course.
A.11 ISSUES & CHALLENGES

- The Horseman’s campground lacks adequate access to potable water and also includes severe erosion issues on the road, making it difficult for visitors to use this campground.
- Minor trespass issues by residents living on park boundary and accessing the park via self-created trails. It is difficult to require these individuals to purchase a Recreation Passport.
- Erosion of the cabin roads
- Trails connecting to or crossing busy roads
- User-created trails
A.12 PARK USE STATISTICS AND ECONOMIC IMPACTS

**Park Use**

The total number of day-use visitors for 2012 was 569,427. The total number of campers was 74,098. Total revenues (Camping Fees) generated by the park in 2012 was $332,298.00

A characterization of park use is described as follows (based on 2012 MDNR-Park Attendance Statistics):

**Day-use**
- Summer Use Season – This is defined as the three-month period of June through August, when schools are not in session. This is the busiest season for the park, as 49% of all day-use takes place during these months.
- Fall Use Season – The fall season is defined by the months of September through November. An estimated 22% of all day-use takes places within this season.
- Winter Use Season – December through March marks a significant decline in park use, as only 12% of its day-use occurs during this time.
- Spring Use Season – April through May shows gradual increase in park use with day-use at 17%.

**Camping**
- Summer Use Season – This is the busiest season for the park, as 65% of all camping takes place during these months.
- Fall Use Season – An estimated 30% of all camping takes places within this season.
- Winter Use Season – Camping is closed from December through March so 0% of the park’s camping occurs during this time.
- Spring Use Season – April through May shows gradual increase in park use with camping at 5%.

**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:

\[
\text{Economic Impact of Tourism Spending} = \text{Number of Tourists} \times \text{Average Spending per Visitor} \times \text{Multiplier (to estimate extended effects of direct spending)}
\]

For purposes of conducting a very basic review of impacts, the General Management Plan utilizes 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 of Brighton Recreation Area to the economy of Livingston County.
**Direct Economic Effects to the Community**

- Direct spending attributable to Brighton RA visitors totaled $18,393,000 of which $220,210 came from day-use, and $18,172,620 from Camping.
- Jobs totaled 437, with 5 related to day-use activity and 431 to camping. (Note: jobs are not full-time equivalent. They include part-time and seasonal positions.)
- Personal Income total is $6,627,000 with $79,340 associated with day-use of the park and $6,547,470 associated with camping.
- Value added (total income plus business taxes) totaled $10,060,000. Day-use accounted for $120,440 and camping accounted for $9,939,160.

**Total Economic Effects to the Community**

‘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 = $28,435,000

Jobs = 575

Personal Income = $10,273,000

Value added = $16,267,000