

**RECREATION RESOURCES  
INTERIM REPORT**

**LUDINGTON PUMPED STORAGE  
HYDROELECTRIC PROJECT  
(FERC NO. 2680)**



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## TABLE OF CONTENTS

<b>1</b>	<b>INTRODUCTION.....</b>	<b>1</b>
<b>2</b>	<b>STUDY AREA.....</b>	<b>3</b>
<b>3</b>	<b>METHODS .....</b>	<b>6</b>
3.1	Recreation Site and Facility Inventory and Condition Assessment.....	6
3.1.1	Study Preparation.....	6
3.1.2	Field Work .....	6
3.2	Recreation Use Study.....	11
3.2.1	Study Preparation.....	11
3.2.2	Field Work .....	12
3.3	Variance from Study Plan .....	16
3.4	Recreation Use Perception Survey.....	17
3.4.1	Study Preparation.....	17
3.4.2	Field Work .....	17
3.5	Data Entry and Analysis .....	17
3.5.1	Data Entry .....	17
3.5.2	Data Analysis .....	17
<b>4</b>	<b>RESULTS .....</b>	<b>20</b>
4.1	Recreation Site and Facility Inventory and Condition Assessment.....	20
4.2	Recreation Use .....	27
4.3	Recreation Use by Activity .....	28
4.4	Recreational User Survey .....	29
4.5	Information from Local Recreation Departments and Municipalities.....	29
4.6	Michigan Statewide Comprehensive Outdoor Recreation Plan.....	30
<b>5</b>	<b>DISCUSSION .....</b>	<b>33</b>
5.1	Recreation Site and Facility Inventory and Condition Assessment.....	33
5.2	Recreation Use .....	33
<b>6</b>	<b>2016 STUDY EFFORTS .....</b>	<b>34</b>
6.1	Plans for 2016 .....	34
6.2	Modification to the Study Plan .....	34
6.3	Schedule.....	34
<b>7</b>	<b>LITERATURE CITED .....</b>	<b>35</b>

**LIST OF TABLES**

Table 2-1: Public Recreation Sites and Access Areas Where Recreation Use Counts and User Surveys Were Conducted..... 5

Table 3.1-1: Name, Ownership and Management of Recreation Sites in the Project Boundary.. 11

Table 3.2-1: Recreation Use Spot Count Survey Dates at Each Recreation Site in 2015 ..... 13

Table 3.2-2: Recreation Use Calibration Count Survey Dates at Each Recreation Site in 2015.. 14

Table 3.2-3: Recreation Use Spot and Calibration Count Totals at Each Recreation Site in 2015 ..... 15

Table 4.2-1: Estimated Use at the LPSP Recreation Sites; Annual Total Use for 2015 and by Season ..... 27

Table 4.3-1: Recreation Use by Activity Type based on Spot Counts and Calibration Counts in 2015..... 28

Table 4.5-1: Open Space Plans and other Regional Plans Reviewed ..... 29

Table 4.5-2: Summary of Project-Related Recreation Acknowledgements and Recommendations from Open Space Plans and Regional Plans ..... 30

**LIST OF FIGURES**

Figure 2-1 Recreation Resources Study Area..... 4  
Figure 3.1-1 Recreation Site Inventory and Assessment Form ..... 7  
Figure 4.1-1. Reservoir Overlook ..... 21  
Figure 4.1-2. Lake Michigan Overlook ..... 22  
Figure 4.1-3. Mason County Day Use/Picnic Area ..... 23  
Figure 4.1-4. Mason County Campground ..... 24  
Figure 4.1-5. Hull Field ..... 25  
Figure 4.1-6. Pigeon Lake North Pier..... 26

**LIST OF APPENDICES**

- APPENDIX A – STANDARD SPOT COUNT FORM
- APPENDIX B – STANDARD CALIBRATION COUNT FORM
- APPENDIX C – RECREATION USER PERCEPTION SURVEY
- APPENDIX D – QUESTIONNAIRE SENT TO OPEN SPACE COMMITTEES

## **LIST OF ABBREVIATIONS**

ADA	Americans with Disabilities Act
DTEE	DTE Electric Company
FERC	Federal Energy Regulatory Commission
GPS	Global Positioning System
ILP	Integrated Licensing Process
LPSP	Ludington Pumped Storage Project
LWCF	Land and Water Conservation Fund
MW	Megawatt
NGO	Non-governmental organization
NOI	Notice of Intent
PAD	Pre-Application Document
PSP	Proposed Study Plan
RSP	Revised Study Plan
SCORP	Statewide Comprehensive Outdoor Recreation Plan
SPD	Study Plan Determination

## 1 INTRODUCTION

Consumers Energy Company (Consumers Energy) and DTE Electric Company (DTEE), co-Licensees of the Ludington Pumped Storage Project (FERC No. 2680), are in the process of relicensing the existing 1,785 megawatt (MW)<sup>1</sup> Ludington Pumped Storage Project (LPSP or Project) with the Federal Energy Regulatory Commission (FERC). The Project is located along the Lake Michigan shoreline, in the townships of Pere Marquette and Summit in Mason County, Michigan and in Port Sheldon in Ottawa County, Michigan. The Ottawa County portion of the Project is limited to a 1.8 acre satellite recreation site (established as part of the Settlement Agreement approved by Commission Order on January 23, 1996 (74 FERC ¶ 61,055)). The Project's current license expires on June 30, 2019 and the Licensees are seeking a new license to continue to operate the Project.

The Licensees submitted a Pre-Application Document (PAD) and Notice of Intent (NOI) to FERC on January 21, 2014. The filing of these documents initiated the relicensing process for the Project under FERC's regulations governing the Integrated Licensing Process (ILP). On July 7, 2014, the Licensee submitted the Proposed Study Plan (PSP) document. The PSP contained the Licensees' proposed studies, responses to stakeholder study requests and a schedule for conducting the site tour and study plan meeting. As proposed by FERC, the site tour was held on July 30, 2014. The ILP-required study plan meeting was held on July 31, 2014. The purpose of the study plan meeting was to review and comment on the Licensees' PSP, to review and answer questions related to stakeholder study plan requests and to attempt to resolve any outstanding issues with respect to the PSP document. The Licensees filed a Revised Study Plan (RSP) on November 3, 2014 with FERC addressing stakeholder comments.

On December 1, 2014, FERC issued its Study Plan Determination (SPD) in which many of the studies were approved or approved with FERC modifications.

Included in the RSP was Study 4-Recreation Resources. FERC's SPD dated December 1, 2014, requested the following modification be made to Study 4.

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<sup>1</sup> On May 7, 2012, FERC issued an Order Amending License to upgrade and overhaul all six pump-turbine/motor generating units at the Project, one unit at a time over the years 2013 through 2019. The proposed overhaul will increase the authorized installed capacity of the Project from the current 1,657.5 MW to 1,785 MW.

- Revise Figure 4 to show the areas that are available and unavailable to the public, and include the acreage for these areas.

As stated in the RSP, the purpose of the study was to compile existing data and develop additional information to support a new FERC license application for continued operation of the Project. The primary goals of the study were to:

- Develop an inventory and condition assessment of the existing Project recreation facilities;
- Estimate the existing level of daytime and nighttime recreational use occurring at the Project;
- Develop a survey/questionnaire and administer the survey to Project recreational users to gather their perceptions and input on level of use, condition and adequacy, and potential enhancements of Project recreation facilities;
- Project future daytime and nighttime Project recreational use; and
- Identify the entities that operate and maintain the existing Project recreation sites and facilities.

## **2 STUDY AREA**

The study area included lands and waters located within the Project boundary for the LPSP that are utilized for public access and/or recreation, including the small satellite recreation area located in Port Sheldon.

The focus of the use and user survey were the public use and recreation areas located throughout the Project, which are located wholly within the FERC Project boundary. The six recreation sites that the study focused on are owned by the Licensees as Project recreation sites pursuant to the Project's FERC-approved recreation plan.<sup>2</sup>

Figure 2-1 illustrates the study area within the Project boundary, as well as the location of the recreation sites that were surveyed for recreational use. Table 2-1 lists the recreation sites and access areas where use counts and recreation surveys were conducted.

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<sup>2</sup> The current recreation plan lists five sites and includes the Hull Field as part of the Mason County Campground.



**Legend**

- Recreation Site
- Project Boundary
- Non-Project Land
- County Boundary

Note: Project Boundary will be updated upon receipt of electronic files to reflect lands removed/to be removed from boundary.  
 Sources: ESRI, MIGDL, Consumers Energy Company

CONSUMERS ENERGY COMPANY  
 &  
 DTE ELECTRIC COMPANY

LUDINGTON PUMPED  
 STORAGE PROJECT  
 Recreation Resources  
 Study Area

**FIGURE 2.0-1**

**Table 2-1: Public Recreation Sites and Access Areas Where Recreation Use Counts and User Surveys Were Conducted**

Site ID	Site Name/Access Areas	Spot Counts	Calibration Counts	User Surveys
1	Reservoir Overlook	✓	✓	✓
2	Lake Michigan Overlook	✓	✓	✓
3	Mason County Day Use/Picnic Area	✓	✓	✓
4	Mason County Campground	✓	N/A	✓
5	Hull Field	✓	✓	✓
6	Pigeon Lake North Pier	✓	✓	✓

### **3 METHODS**

#### **3.1 Recreation Site and Facility Inventory and Condition Assessment**

##### **3.1.1 Study Preparation**

Prior to initiation of field inventory activities, existing information on the number and location of public recreation facilities at the Project was reviewed. Data reviewed included previously filed FERC Form 80s.

##### **3.1.2 Field Work**

Field work associated with the recreation site and facility inventory, and condition assessment was conducted on May 31, 2015. Field conditions during the inventory were mostly cloudy, cool and windy with temperatures in the low 40s. Ground conditions were mostly dry with no remaining snow cover. Field equipment used for the inventory and site condition assessment were a Trimble Juno Global Positioning System (GPS) unit and a digital camera to record the location and condition of the various recreation sites.

Inventory site visits were conducted by vehicle and on foot. Site inventories and assessments were documented in the field using the previously developed standardized recreation site inventory and assessment form (Figure 3.1-1)<sup>3</sup>. Information that was gathered during the inventory included whether the site was accessible by vehicle or foot; who owned and managed each site; the number and types of amenities available at the site; if the site provided any universally accessible facilities (generally consistent with the Americans with Disabilities Act (ADA)); if there was the potential for site expansion; the amount of available parking at the site; observed recreation activities; available services; general site condition; and the general aesthetics of the site.

Table 3.1-1 provides a list of the recreation sites that were evaluated as part of this study, including a summary of site ownership and management.

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<sup>3</sup> The standardized survey form was also included as Figure 5 in the RSP.

**Ludington Pumped Storage Project  
Recreation Site Inventory and Assessment Form**

Inspector: \_\_\_\_\_ Date: \_\_\_\_\_ Time: \_\_\_\_\_ Photo No: \_\_\_\_\_  
 Project: \_\_\_\_\_ Site Name/Code: \_\_\_\_\_ Weather: \_\_\_\_\_

---

**Facilities provided:**

Campground \_\_\_\_\_ Picnic Area \_\_\_\_\_ Day Use/Overlook \_\_\_\_\_ Informal \_\_\_\_\_ Launch \_\_\_\_\_ Trail \_\_\_\_\_  
 Angler Access \_\_\_\_\_ Other \_\_\_\_\_

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**Access:**

\_\_\_\_\_ Water access  
 \_\_\_\_\_ Paved access \_\_\_\_\_ # of lanes  
 \_\_\_\_\_ Unpaved access (conventional motor vehicle) \_\_\_\_\_ # of lanes  
 \_\_\_\_\_ Unpaved access (4WD vehicle) \_\_\_\_\_ # of lanes  
 \_\_\_\_\_ ORV access (ATV) \_\_\_\_\_ width  
 \_\_\_\_\_ Foot access \_\_\_\_\_ width

**Ownership/Management**

	Licensees	Federal	State	County	Local	Private	Other
Ownership	_____	_____	_____	_____	_____	_____	_____
Management	_____	_____	_____	_____	_____	_____	_____

**Operations:**

Staffed \_\_\_\_\_ Private \_\_\_\_\_ Seasonal \_\_\_\_\_ Commercial \_\_\_\_\_ Fee \_\_\_\_\_ Open/Closed \_\_\_\_\_

**General Area:**

Associated with other facilities or activities: \_\_\_\_\_  
 Potential/need for expansion/enhancement: \_\_\_\_\_  
 Topography: \_\_\_\_\_ Ground/canopy cover: \_\_\_\_\_  
 Erosion/Soils: \_\_\_\_\_ Compaction: \_\_\_\_\_  
 Approximate Shoreline Footage: \_\_\_\_\_ Vandalism: \_\_\_\_\_  
 ADA compliant/Obstacles \_\_\_\_\_

**Sanitation Facilities: (Yes/No)**

	# of Units Unisex	# of Units Women	# of Units Men	Notes (ADA, etc)
Flush	_____	_____	_____	_____
Composting	_____	_____	_____	_____
Vault	_____	_____	_____	_____
Pit	_____	_____	_____	_____
Portable	_____	_____	_____	_____
Wilderness	_____	_____	_____	_____

**Site Facilities:**

#	Type	Repairs	Material Code	Other Info
_____	Picnic Tables	_____	_____	_____
_____	Grills	_____	_____	_____
_____	Firepit/ring	_____	_____	_____
_____	Trails (specify use)	_____	_____	Length? _____
_____	Shelter	_____	_____	_____
_____	Potable Water	_____	_____	_____
_____	Dumping Station	_____	_____	_____
_____	Boardwalk	_____	_____	_____
_____	Angler Platforms	_____	_____	_____
_____	Playground	_____	_____	_____
_____	Showers	_____	_____	_____
_____	Benches	_____	_____	_____
_____	Interpretive Display:	_____	_____	_____
_____	Store	_____	_____	_____
_____	Visitor Center	_____	_____	_____
_____	Bathhouse	_____	_____	_____
_____	Other: _____	_____	_____	_____

Material codes; (A) asphalt, (B) Brick, (C) concrete, (CG) compacted gravel, (CRS) crushed gravel, (FE) metal, (G) grass, (GTF) geo-tech fabric, (NS) native soil, (O) other/specify, (P/F) plastic/fiberglass, (RC) rock crib, (S) sand, (W) wood.

Activities observed:	# of Adults	# of Minors	Notes
Picnicking	_____	_____	_____
Camping	_____	_____	_____
Walking/hiking	_____	_____	_____
Disc Golf	_____	_____	_____
RC Aircraft	_____	_____	_____
Sightsee	_____	_____	_____
Fishing	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____

Parking Lots:	Surface Code	Dimensions/Notes
# ADA spaces _____	_____	_____
# standard spaces _____	_____	_____
# Vehicle & trailer spaces _____	_____	_____
# of vehicles in lot _____	Spaces delineated _____	Curbs _____

**Angler Access: (Yes/No)**

	Number	Dimensions	Material	ADA	Notes
Dock/Pier:	_____	_____	_____	_____	_____
Float:	_____	_____	_____	_____	_____
Boardwalk:	_____	_____	_____	_____	_____
Platforms:	_____	_____	_____	_____	_____
Other: _____	_____	_____	_____	_____	_____
Other: _____	_____	_____	_____	_____	_____

**Campground/Campsite:**

	RV sites	Cabin sites	Tent sites	Wilderness sites
# of Group Sites	_____	_____	_____	_____
# of single sites	_____	_____	_____	_____
Access (foot, orv, car, boat)	_____	_____	_____	_____
On-site parking	_____	_____	_____	_____
Water front	_____	_____	_____	_____
ADA compliant	_____	_____	_____	_____
Utilities	_____	_____	_____	_____
Store: _____	Visitor Center: _____	Office: _____	Other: _____	

\* (E) Electric, (S) Sanitation, (W) Water, (O) other (specify)

**Boat Launch Facilities:**

Hard surface \_\_\_\_\_ Gravel \_\_\_\_\_ Unimproved \_\_\_\_\_ Carry In \_\_\_\_\_ Launch/Load prep area: \_\_\_\_\_

Docks/Piers/Floats	Total Docks	Total Slips				
Material code:	#1 _____ #2 _____	#3 _____	#4 _____	#5 _____		
Dimensions:	#1 _____ #2 _____	#3 _____	#4 _____	#5 _____		
# of slips:	#1 _____ #2 _____	#3 _____	#4 _____	#5 _____		
ADA compliant:	#1 _____ #2 _____	#3 _____	#4 _____	#5 _____		

**Overlooks/Observation Decks:**

Covered: \_\_\_\_\_ Dimensions: \_\_\_\_\_ Material: \_\_\_\_\_ ADA: \_\_\_\_\_  
Notes: \_\_\_\_\_

**Site Aesthetics:**

Viewshed from site: \_\_\_\_\_

1 – No noticeable development	4 – Six (6) to ten (10) buildings in view
2 – Very limited primitive development	5 – Ten (10) or more buildings in view
3 – Five (5) or less buildings in view	6 – Highly developed

Nature of abutting development/land use: \_\_\_\_\_

Audio perceptions from site: \_\_\_\_\_

Evidence of use at site: \_\_\_\_\_

\*(C) Compaction, (E) Erosion, (G) Garbage, (GD) Ground disturbance, (HW) Human waste, (UI) Unauthorized improvements, (V) Vandalism, (VR) Vegetation removal, (O) Other (Specify)

Evidence of Overcrowding: \_\_\_\_\_

\*(A) Anecdotal information, (FA) facility/amenity @ capacity, (I) Improper parking, (S) Signage, (SD) site degradation, (U) Unauthorized sites, (W) Waiting lines, (O) Other (Specify)

Notes: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_

**Sketch:**

**Table 3.1-1: Name, Ownership and Management of Recreation Sites in the Project Boundary**

<b>Recreation Site Name</b>	<b>Site Ownership</b>	<b>Site Management</b>
Reservoir Overlook	Consumers Energy and DTEE	Consumers Energy and DTEE
Lake Michigan Overlook	Consumers Energy and DTEE	Consumers Energy and DTEE
Mason County Day Use/Picnic Area	Consumers Energy and DTEE	Mason County
Mason County Campground	Consumers Energy and DTEE	Mason County
Hull Field	Consumers Energy and DTEE	Mason County
Pigeon Lake North Pier	Consumers Energy and DTEE	Consumers Energy and DTEE

### **3.2 Recreation Use Study**

#### **3.2.1 Study Preparation**

The Licensees undertook a number of activities in preparation for the numerous components of the study which included use counts (spot counts and calibration counts) and user surveys (Recreation User Perception Survey).

Recreation use count (spot counts and calibration counts) dates were determined prior to initiation of field work. Survey days included both weekdays and weekend days between April 2015 and October 2015, as well as certain holidays. All survey days were randomly selected and survey routes were completed on a rotating basis at different times of day to account for time-of-day use patterns.

The Licensees reviewed readily available municipal and non-governmental organization (NGO) recreation plans for information regarding recreation use within the Project boundary. On October 22, 2015, in an effort to collect further information about recreation use of the Project, the Licensees contacted recreation departments or recreation/open space committees in the towns that have them, and obtained the latest versions of any recreation or open space plans adopted by the towns.

### **3.2.2 Field Work**

The recreation use study occurred between April and October 2015. The exact dates varied based on operation of the sites. Pigeon Lake North Pier has set operating dates between April 15 to October 15, while the Mason County Campground typically operates between Memorial Day (late May) and October 15. The remaining sites are generally open from the beginning of April until the end of October depending on snow fall. The study spanned three seasons to capture different types of recreational use that occurred in spring, summer, and fall. All of the recreation sites are gated and/or closed during the winter months and are not maintained between November and March. A combination of spot counts and calibration counts were used to estimate recreational use at the Project over the course of the study. For the Mason County Campground, actual capacity data collected by Mason County were used to develop use estimates for this site.

#### *Spot Counts*

Spot counts are short duration counts, which provide a snapshot of use at each recreation site. They consist of travel to the site; counting the number of vehicles and users observed at the site; and noting the recreational activity that was being pursued. This information is used in estimating site use and site utilization (percent capacity). Spot counts were scheduled to be conducted on four (4) days per month: two (2) randomly selected weekdays and two (2) randomly selected weekend days. April and October counts were to be pro-rated based on the opening and closings of the individual recreation facilities. For months containing Memorial Day, July 4th, Labor Day, and Columbus Day, an additional spot count was scheduled to be conducted during the holiday weekend. Table 3.2-1 provides a list of spot count dates conducted at each of the recreation sites.<sup>4</sup> Spot count information was documented on a standard form which can be found in Appendix A.

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<sup>4</sup> Section 3.3 describes the variance from the study plan.

**Table 3.2-1: Recreation Use Spot Count Survey Dates at Each Recreation Site in 2015**

Site	Spot Count – Survey Dates for Each Month in 2015						
	Apr	May	Jun	Jul	Aug	Sep	Oct <sup>1</sup>
Reservoir Overlook	21,25	6,10,24, 29,31	6,8,23	15,19,26, 27	1,20,30,	3,6,12, 19	4,10,18, 28,30
Lake Michigan Overlook	21,25	6,10,24, 29,31	6,8,23	15,19,26, 27	1,20,30,	3,6,12, 19	4,10,18, 28,30
Mason County Day Use/Picnic Area	21,25	6,10,24, 29,31	6,8,23	15,19,26, 27	1,20,30,	3,6,12, 19	4,10,18, 28,30
Mason County Campground	21,25	6,10,24, 29,31	6,8,23	15,19,26, 27	1,20,30,	3,6,12, 19	4,10,18, 28,30
Hull Field	21,25	6,10,24, 29,31	6,8,23	15,19,26, 27	1,20,30,	3,6,12, 19	4,10,18, 28,30
Pigeon Lake North Pier	22,25	6,10,24, 29,31	6,8,23, 28	5,19,20, 26,27	1,5,20,23	3,6,12, 17,19	4,10,13

<sup>1</sup> Pigeon Lake North Pier closed on October 15<sup>th</sup>, all other sites remained open until the end of the month.

### *Calibration Counts*

Calibration counts are used to estimate the average number of individuals per vehicle, length of stay at a site and to determine the type of recreation use individuals were participating in. In contrast to a spot count, which is a snapshot, calibration counts consist of visiting a site for approximately a two-hour period. As shown in Table 2.0-1, calibration counts were conducted at all of the surveyed recreation sites.

Calibration counts were planned to be conducted on four (4) days per month: two (2) randomly selected weekdays and two (2) randomly selected weekend days. April and October counts were to be pro-rated based on the opening and closings of the individual recreation facilities. For months containing Memorial Day, July 4th, Labor Day, and Columbus Day, an additional

calibration count was scheduled during the holiday weekend. The time of day each site was visited varied. Table 3.2-2 provides a list of calibration count dates conducted at each of the recreation sites. Table 3.2-3 summarizes the total number of spot counts and calibrations conducted at each of the recreation sites.<sup>5</sup> Calibration count data was recorded on a standardized sheet that can be found as part of Appendix B.

**Table 3.2-2: Recreation Use Calibration Count Survey Dates at Each Recreation Site in 2015**

Site	Calibration Count – Survey Dates for Each Month in 2015						
	Apr	May	Jun	Jul	Aug	Sep	Oct <sup>1</sup>
Reservoir Overlook	26,29	8,12,17, 23,30	5,21,25, 27	18,21	4,5,15,16	5,9,26, 27,29	3,12,24, 29,31
Lake Michigan Overlook	26,29	8,12,17, 23,30	5,21,25, 27	18,21	4,5,15,16	5,9,26, 27,29	3,12,24, 29,31
Mason County Day Use/Picnic Area	26,29	8,12,17, 23,30	5,21,25, 27	18,21	4,5,15,16	5,9,26, 27,29	3,12,24, 29,31
Mason County Campground	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Hull Field	26, 29	8,12,17, 23,30	5,21,25, 27	18,21	4,5,15,16	5,9,26, 27,29	3,12,24, 29,31
Pigeon Lake North Pier	26,29	8,11,17, 23,30	5,21,25, 27	2,4,11,18, 21	4,5,8,16	5,9,20, 27,29	7,11,12

<sup>1</sup> Pigeon Lake North Pier closed on October 15<sup>th</sup>, all other sites remained open until the end of the month.

<sup>5</sup> Section 3.3 describes the variance from the study plan.

**Table 3.2-3: Recreation Use Spot and Calibration Count Totals at Each Recreation Site in 2015**

Site	Number of Spot Counts	Number of Calibration Counts
Reservoir Overlook	26	27
Lake Michigan Overlook	26	27
Mason County Day Use/Picnic Area	26	27
Mason County Campground	26	N/A
Hull Field	26	27
Pigeon Lake North Pier	28	28

*Actual Use Records*

Actual use records were utilized, where available, to aid in estimating and characterizing recreation use at certain recreation sites. Mason County currently charges a fee for campground use resulting in readily available registration records for the campground. Campground registration data assumed 3 persons per site, for individual campsites, to develop use estimates. In addition, Mason County keeps a record of the days that the picnic pavilion is rented and provided this information to aid in estimating use at the Mason County Day Use/Picnic Area.

The Licensees will attempt to contact the Mason County Disc Golf Organization and the Twisted Sticks to obtain dates of events that may have been held at the Mason County Day Use Area (Disc Golf Course) and Hull Field during the study.

*Open-Space Planning Information*

In order to obtain additional information on open-space and recreational planning initiatives in the Project area, the Licensees contacted the recreation department or recreation/open space committees in Pere Marquette Charter Township, Ludington, Port Sheldon, Olive Township, Summit Township, Mason County and Ottawa County. The Licensees initially obtained information on recreation and open space plans during the preparation of the PSP and the RSP.

The Licensees contacted the towns or committees by email on October 22, 2015 and by telephone on January 8, 2016 to obtain the latest versions of any recreation or open space plans adopted by the towns.

### **3.3 Variance from Study Plan**

The Recreational Resources Revised Study Plan required that a survey of users be completed from mid-April to mid-October, 2015. Four (4) spot counts (equally split between weekdays and weekend days) and four (4) calibration counts (equally split between weekdays and weekends) were planned to be conducted each month, although April and October counts were to be pro-rated based on the opening and closings of the individual recreation facilities. An additional spot count and an additional calibration count were to be conducted during months with three-day holiday weekends (Memorial Day, July 4<sup>th</sup>, Labor Day, and Columbus Day). Due to unforeseen circumstances the data for four spot counts (June 28, July 5, August 3, and September 17, 2015) and three calibration counts (July 2, July 4, and July 11, 2015) at Hull Air Field, Lake Michigan Overlook, Mason County Day Use-Picnic Area and the Upper Reservoir Observation Platform were not received for data entry. This data represents a small portion of the total counts that were completed per site through the season. However, in order to ensure that use is fully captured, a 1.5 multiplier was applied to the seasonal average daily use for both weekend and weekdays, which was used as a substitute for the missing survey dates when calculating total use at each of the four recreation sites that had missing data. The 1.5 multiplier is consistent with the observed relationship between recorded campground use over the 4<sup>th</sup> of July weekend and average recorded summer campground use, which indicates that a 1.5 multiplier should fully capture the higher level of use that might have occurred on July 5 at the other sites. To be certain recreation use was not underestimated on the June 28, August 3, and September 17 dates, the 1.5 multiplier was applied to those dates as well. Recreation use was not adjusted at the Mason County Campground, for which use records were available and used to estimate site use, or at the Pigeon Lake North Pier, which was not affected by the missing data.

### **3.4 Recreation Use Perception Survey**

#### **3.4.1 Study Preparation**

A Recreation User Perception Survey was utilized as part of this study. The survey is provided in Appendix C. The survey was used to gather information about who is using the sites, what recreation activities they are participating in at the site, and their views on existing Project recreation facilities and opportunities provided at the site. The survey was developed and reviewed as part of the study plan development process, and a draft survey was included in the draft and revised study plans. The survey was finalized in late 2014, prior to the initiation of the 2015 field season.

#### **3.4.2 Field Work**

The Recreation User Perception Survey was administered during calibration counts at all recreation sites and access areas listed in Table 2.0-1. If an individual had already participated in the survey, they were thanked and additional data was not collected.

The user perception survey was designed to gain information about who (resident and visitor) was using the recreation sites, whether they were participating as part of a group, what activities they planned to participate in, and their overall satisfaction with the site.

### **3.5 Data Entry and Analysis**

#### **3.5.1 Data Entry**

Data collected as part of the study was entered into Excel spreadsheets and sorted by recreation site and survey date. Upon completion of data entry, all data was reviewed by a second individual to verify that data was entered correctly.

#### **3.5.2 Data Analysis**

##### **3.5.2.1 Recreation Use**

Project recreation use is derived from the recreation site use estimates that were developed for each recreation site, as described in the sub-section that follows. Overall Project use is presented in terms of the total number of recreation days spent at the Project. Consistent with FERC's

definition, a recreation day was defined as each visit by a person to the Project for recreational purposes during any portion of a 24-hour period.

Recreation use estimates for each recreation site were developed based on use data obtained via spot counts, calibration counts, and recreation user surveys. Where applicable, recreation use estimates also incorporated Mason County records of registrations. The count data included average persons per party by season, number of recreationists observed, number of vehicles observed, and any non-recreational use observed.

Use estimates, in terms of recreation days, were developed for each type of survey day (weekday and weekend day) during each season; when totaled the weekday and weekend use figures provided a total use estimate for each season and for the year, 2015. Seasonal use was calculated by multiplying each day type by the number of that type of day per season. Recreation seasons were defined as follows:

- Spring: April 1 through May 22, 2015
- Summer: Memorial Day weekend (May 23) through Labor Day weekend (September 7), 2015, and
- Fall: September 8 through October 31, 2015

The Licensees obtained records from Mason County on recreation use associated with camping at Mason County Campground. Site use estimates for the campsites are based on recorded utilized capacity combined with an assumption of three (3) people per campsite, based on observed use.

For the majority of the recreation sites, spot count data served as the foundation for the use estimates. If non-recreational vehicles, such as Consumers security trucks and staff, were noted at a site, these vehicles were removed from the count so that the calculations would provide a clearer picture of recreational use. At each site, vehicle counts from each day surveyed were combined with seasonal observed persons per vehicle counts, determined from calibrations, to yield an estimated number of people per count. The spot counts also included counts of individuals observed. The larger of actual number of persons observed or the estimated number of persons based on vehicle counts was used for that day's estimate of use for the point-in-time

estimates. The point-in-time estimate was combined with a seasonal daily turnover rate, based on the estimated length of time at each site as obtained from the user surveys and the length of the recreation day, to provide an estimate of the site's total daily use.

### **3.5.2.2 Recreation User Survey**

[To be added in final report]

## **4 RESULTS**

### **4.1 Recreation Site and Facility Inventory and Condition Assessment**

The Licensees conducted the recreation site and facility inventory and condition assessment in May 2015. The following sites were identified within the Project boundary: Mason County Campground (including Hull Field), Mason County Day Use/Picnic Area, Reservoir Overlook, Lake Michigan Overlook, and Pigeon Lake North Pier (Table 3.1-1). Of these sites, three are recreation sites that are owned and managed by the Licensees and the remaining two are owned by the Licensees and managed by Mason County. The Licensees own a parcel of approximately 37 acres of undeveloped Project land outside of the reservoir fence line that is also open to the public.

The recreation sites located within the Project boundary were found to provide a variety of recreational opportunities for the public, including fishing, camping, picnicking, walking, disc golfing, flying model aircraft, and sightseeing.

All of the recreation sites within the Project boundary were found to be meeting their intended function and were in good condition.

At each recreation site, a standard recreational site/facility inventory and condition assessment form was completed, photos were taken and a GPS point was recorded for all FERC approved amenities.

## Site 1: Reservoir Overlook

This site is located within the Project boundary at the northern end of the reservoir. The overlook is owned and managed by the Licensees.

### Site Inventory

Recreational facilities at this site include 83 vehicle parking spaces, two (2) portable toilets (including 1 ADA), a pagoda shelter, and nine (9) benches along a footpath to the pagoda.

### Availability to Public

This site is open to the public seasonally (generally April-October) for day use recreation between dawn and dusk. The site is not maintained for winter recreation use.

### Site Condition Assessment

The site appears to see moderate use. No compaction or erosion related to recreation use was noted during the site visit. Overall the site is currently functioning as intended.

**Figure 4.1-1. Reservoir Overlook**



View of Pagoda shelter from foot path

## Site 2: Lake Michigan Overlook

This site is located within the Project boundary just north of the power plant on the eastern shore of Lake Michigan. The overlook is owned and managed by the Licensees.

### Site Inventory

Recreational facilities at this site include 34 vehicle parking spaces, 2 portable toilets (1 ADA, both shared with the Reservoir Overlook site), a footbridge over Lakeshore Drive, and multiple interpretive displays and panels.

### Availability to Public

This site is open to the public seasonally (generally April-October) for day use recreation between dawn and dusk. The site is not maintained for winter recreation use.

### Site Condition Assessment

The site appears to see minimal use. There was a minimal amount of compaction noted during the site visit. No compaction or erosion related to recreation use was noted during the site visit. Overall the site is currently functioning as intended.

**Figure 4.1-2. Lake Michigan Overlook**



View of Interpretive Displays at Site

### **Site 3: Mason County Day Use/Picnic Area**

This site is located at the northwestern corner of the Project boundary. The day use/picnic area is owned by the Licensees and managed by Mason County.

#### Site Inventory

Recreational facilities at this site include 62 vehicle parking spaces (50 inside the gate, 12 outside the gate), a picnic pavilion (34 tables), restrooms (ADA), a 72 goal disc golf course, and a playground.

#### Availability to Public

This site is open to the public seasonally (generally April-October) for day use recreation between dawn and dusk. Parking is available outside the gate for users after the gate is locked. The site is not maintained for winter recreation use.

#### Site Condition Assessment

The site appears to see moderate use. There was minor erosion and ground disturbance noted during the site visit. Trails for the disc golf course are compacted due to heavy use. Overall the site is currently functioning as intended.

**Figure 4.1-3. Mason County Day Use/Picnic Area**



View of Picnic Pavilion

#### Site 4: Mason County Campground

This site is located at the northern edge of the Project boundary. The campground is owned by the Licensees and managed by Mason County.

##### Site Inventory

Recreational facilities at this site include 2 ADA parking spaces (1 at gatehouse and 1 at bath house), restroom/shower house (ADA), campground with 56 campsites, 4 cabins, picnic area with shelter (8 tables), playground, 3 benches, a foot path to Hull Field, and an interpretive display.

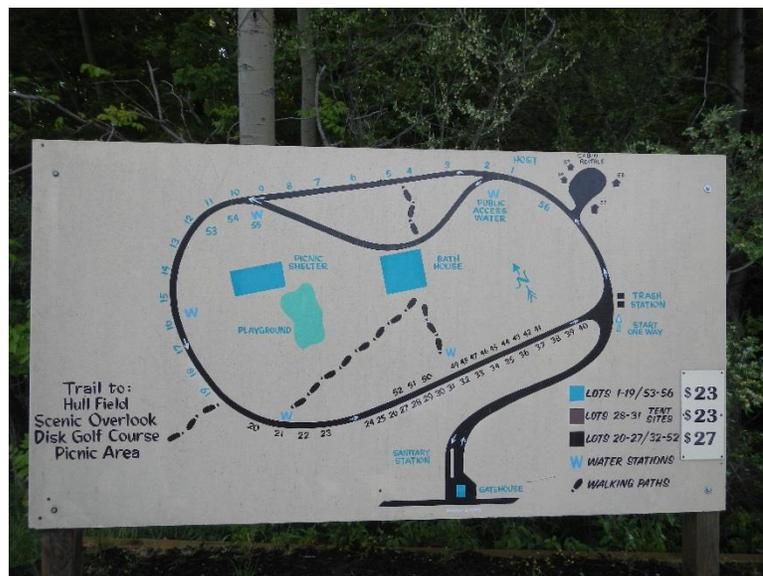
##### Availability to Public

This site is open to the public seasonally (generally Memorial Day Weekend-Labor Day Weekend). The site is not maintained for winter recreation use.

##### Site Condition Assessment

The site appears to see moderate use. There was compaction and ground disturbance noted during the site visit. Trails to the playground and to Hull Field were compacted due to heavy use. Overall the site is currently functioning as intended.

**Figure 4.1-4. Mason County Campground**



Map of Campground

## Site 5: Hull Field

This site is located at the northern edge of the Project boundary adjacent to the Mason County Campground. The Hull Field is owned by the Licensees, managed by Mason County and operated by the Twisted Sticks Radio Control Club through a lease with Mason County, for flying radio control model aircraft. The club has a primary interest in sport flying and the public is invited to watch at any time.

### Site Inventory

Recreational facilities at this site include approximately 18 vehicle parking spaces, a portable toilet, 2 benches, 5 picnic tables, a pavilion shelter, 14 airplane platforms, a large mowed field and a footpath to Mason County Campground.

### Availability to Public

The field is open to the public to view flying at the field. To fly aircraft pilots must possess a current Academy of Model Aeronautics card and join the club. The site is not maintained for winter recreation use.

### Site Condition Assessment

The site appears to see minimal use. No compaction or erosion related to recreation use was noted during the site visit. Overall the site is currently functioning as intended.

**Figure 4.1-5. Hull Field**



View of Plane Platforms and Pavilion

## Site 6: Pigeon Lake North Pier

This site is located 70 miles south of the Ludington Pumped Storage reservoir. This is a satellite Project recreation facility. The pier is owned and managed by the Licensees.

### Site Inventory

Recreational facilities at this site include 18 vehicle parking spaces, two (2) fishing platforms, eight (8) benches, and a boardwalk. Fishing platforms have benches, rod rests along the railing, and ADA accessible rod rests.

### Availability to Public

This site is open to the public seasonally (April 15-October 15). The site is not maintained for winter recreation use.

### Site Condition Assessment

The site appears to see moderate to heavy use. Bottles, trash and carvings in the wooden benches were all noted during the site visit. No compaction or erosion related to recreation use was noted during the site visit. Overall the site is currently functioning as intended.

**Figure 4.1-6. Pigeon Lake North Pier**



View of benches on fishing platform

## 4.2 Recreation Use

The recreation use and user survey results yielded a significant amount of data. In total 158 spot counts and 136 calibration counts were made at the 6 recreation and access sites included in the study throughout the course of the recreation study season. Recreation use was estimated based on use data collected via spot counts, calibration counts, and available use records. Based on data collection between April 2015 and October 2015, the total annual recreation use of surveyed recreation and access sites in 2015 Project-wide was estimated to be 49,876 recreation days. Table 4.2-1 provides a breakdown of Project-wide estimated use, by season. As shown, approximately 37,731 days of the recreation use occurred during the summer with 75.6% of the recreation days. Approximately 9,745 days of the use was in the fall (19.5%). Recreation use was lowest in spring (4.8%).<sup>6</sup>

**Table 4.2-1: Estimated Use at the LPSP Recreation Sites; Annual Total Use for 2015 and by Season**

Recreation Site	Estimated Annual Use (2015)	Estimated Spring Use	Estimated Summer Use	Estimated Fall Use
Reservoir Overlook	6,064	159	4,739	1,166
Lake Michigan Overlook	8,675	445	5,922	2,308
Mason County Day Use/Picnic Area	14,044	497	10,577	2,970
Mason County Campground	13,667	447	10,693	2,527
Hull Field	1,047	0	941	106
Pigeon Lake North Pier	6,379	852	4,859	668
<b>Total</b>	<b>49,876</b>	<b>2,400</b>	<b>37,731</b>	<b>9,745</b>

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<sup>6</sup> Figures shown do not sum to 100 percent because of rounding.

### 4.3 Recreation Use by Activity

Based on observations of recreation use made during spot counts and calibration counts, the most popular recreation activity type at the LPSP is disc golf, followed by camping and walking/jogging/hiking. Table 4.3-1 summarizes the estimated use in each activity type Project-wide. As shown, an estimated 13,667 recreations days, or 27% of the total number of recreation days at the Project were spent participating in camping.

Disc golf accounted for the second most frequent recreational use with an additional 13,531 recreation days, or 27% of the total number of recreation days at the Project, based on the observed patterns of use at the Project. As discussed in the following section, much of the use in this category was observed to occur at the Mason County Day Use/Picnic Area. The next most popular recreation uses of the Project include sightseeing (21%), walking/jogging/hiking (19%), remote control aircraft (1.6%), fishing (1.4%), and picnicking (1%). Uses that accounted for less than 1% of total recreation use at the Project include riding bikes, photography, and “other”.

**Table 4.3-1: Recreation Use by Activity Type based on Spot Counts and Calibration Counts in 2015**

Recreation Activity	Estimated Use (Recreation Days)	Percent (%) of Recreation Use
Camping	13,667	27.4%
Disc Golf	13,531	27.1%
Sightseeing	10,621	21.3%
Walking/Hiking/Jogging	9,332	18.7%
RC Aircraft	800	1.6%
Fishing	702	1.4%
Picnicking	516	1.0%
Bike riding	416	0.8%
Other Recreation Activity	146	0.3%
Photography	146	0.3%
<b>Total</b>	<b>49,877</b>	<b>100.0%</b>

#### 4.4 Recreational User Survey

A total of 171 recreation user surveys were collected during calibration counts. [Results of the user surveys will be provided in the final report]

#### 4.5 Information from Local Recreation Departments and Municipalities

The Licensees reviewed existing local plans, ordinances, and guidelines that may affect the use of and/or management of lands inside the Project boundary. Table 4.5-1 lists the Open Space and Recreation Plans for the communities in the Project area. A summary of the Project-related recreation acknowledgments and recommendations from these plans are detailed in Table 4.5-2. The Licensees contacted these entities to make sure the plans reviewed for this study were the most recently published versions.

**Table 4.5-1: Open Space Plans and other Regional Plans Reviewed**

Municipality	Open Space and Recreation Plans Reviewed
Pere Marquette Charter Township	Pere Marquette Charter Township Parks, Recreation & Open Space Plan 2015-2019
Ludington	City of Ludington Community Recreation Plan January 2016 to December 2021
Mason County	2013-2014 Mason County Master Plan Update 2013-2017 Mason County Five-Year Recreation Plan
Ottawa County	Ottawa County Parks, Recreation & Open Space Plan 2016
Port Sheldon Township	Port Sheldon Township Community Park, Recreation, Open Space and Greenway Plan 2016
Olive Township	Olive Township 2009 Master Plan
Summit Township	None available

**Table 4.5-2: Summary of Project-Related Recreation Acknowledgements and Recommendations from Open Space Plans and Regional Plans**

Municipality	Project-Related Recreation Acknowledgements	Project Related Recreation Recommendations
Pere Marquette Charter Township	Mason County Campground and Picnic Area Hull Field	No recommendations made.
Ludington	No discussion of Project Recreation Sites.	N/A
Mason County	Mason County Campground and Picnic Area Hull Field	Improve campsites at the campground – acquire land, continue to improve accessibility, enhance recreational programs and facilities.
Ottawa County	Pigeon Lake North Pier	Long-range vision for Greenway trail opportunities which should include a continuous trail from Pigeon Creek Park west to Lake Michigan.
Port Sheldon Township	No discussion of Project Recreation Sites.	N/A
Olive Township	No discussion of Project Recreation Sites.	N/A
Summit Township	N/A	N/A

#### 4.6 Michigan Statewide Comprehensive Outdoor Recreation Plan

The Statewide Comprehensive Outdoor Recreation Plan (SCORP) is a strategic planning document prepared by the state that is used over a five year period to determine eligibility for

Land and Water Conservation Fund (LWCF) funding apportionment to fulfill the state's recreational needs. The SCORP also allows states to fulfill National Park Service goals.

Michigan's SCORP is a five-year strategic plan that shapes investment by the state and local communities in priority outdoor recreation infrastructure and programming. It is designed to evaluate ongoing and emerging outdoor recreation trends, needs, and issues, as well as establish priority strategies for achieving outdoor recreation goals (PSCI, 2012).

### **Supply of Outdoor Recreation**

Michigan has over 100 State Park and Recreation Areas which include 142 campgrounds and over 850 miles of trails. These State Parks and Recreation Areas offer a range of activities from camping, hunting and fishing to disc golf and whitewater paddling. Michigan also has four State Forests which are managed for resource protection, natural resource based economic activity and recreation. There are state game areas, which provide hunting opportunities in the southern portion of the state and over 1,100 public water access sites throughout the state with access to lakes, rivers and streams for boaters and anglers. Every community in Michigan is within 50 miles of a State Park or Recreation Area. The state is also home to thousands of community playgrounds, parks, greenways, trails, nature preserves, and beaches.

### **Recreation Trends**

In a survey conducted for the development of the SCORP, participants identified the top outdoor recreation activities in Michigan based on the level of participation. Biking topped the list as the most participated in activity. This was followed in order of most participation by camping, fishing, walking, hiking, play outdoor games/sports, hunting or trapping, swimming, boating and finally visit playgrounds. Walking outdoors was identified as the most important outdoor activity to twenty-nine (29) percent of users. Thirty-three (33) percent of all survey respondents said their participation in outdoor recreation has increased in the last five years.

State Parks experienced an increase in day use during the period between 2007 and 2011 with the greatest increase in 2011 due to the implementation of a program which made it easier for

residents to visit the parks on a regular basis. In contrast, camping at State Parks saw a decrease over the same time period.

### **Goals and Objectives**

The overarching goal for the 2013-2017 SCORP is to protect and manage Michigan's diverse and abundant natural assets to meet the fun, relaxation, and health needs of Michigan's residents and visitors, and the economic development needs of the state and local communities. To meet this goal, the following objectives were reported:

- Improve the collaboration and cooperation between all outdoor recreation providers to ensure that Michigan's recreation system meets the needs and desires of its residents and visitors, and that users are made aware of opportunities throughout Michigan's outdoor recreation system.
- Ensure the maintenance and continuous improvement of outdoor recreation facilities.
- Improve access to and connectivity between recreational opportunities.
- Integrate the provision of outdoor recreation with economic development plans and activities to advance economic prosperity.
- Market outdoor recreation opportunities and their associated amenities to ensure that residents and visitors alike are aware of all opportunities and communities are realizing the economic benefits associated with those opportunities.
- Contribute to the protection of Michigan's high-quality natural resources and help residents and visitors gain appreciation of those resources through interpretation and programming.

## **5 DISCUSSION**

### **5.1 Recreation Site and Facility Inventory and Condition Assessment**

The recreation site and facility inventory and condition assessment for the LPSP identified six (6) recreation sites that are located within the FERC Project boundary. Three (3) of the recreation sites that provide access to the Project are operated by the Licensees. The remaining sites included in the inventory are managed by Mason County and opened to the public.

Recreation sites located at the Project were found to provide a wide array of recreational opportunities for the public, including disc golfing, fishing, bike riding, picnicking, sightseeing, birding, camping and remote control aircraft flying.

All recreation sites within the Project boundary were found to be meeting their intended function.

### **5.2 Recreation Use**

Based on use counts and registrations, the Licensees estimated total recreational use of the LPSP to be 49,876 recreation days in 2015. Use was highest in the summer (75.6%), followed by the fall (19.5%), and spring (4.8%)<sup>7</sup>. The most popular recreation sites at the Project were the Mason County Day Use/Picnic Area (14,044 recreation days) and the Mason County Campground (13,667 recreation days). The most popular recreation activity at the Project was camping (27%), followed by disc golf (27%) and sightseeing (21%).

Recreation use at each of the recreation sites included in the survey was also analyzed. At the Mason County Day Use/Picnic Area, where recreation use was highest, the most popular activity was disc golf, followed by walking/hiking/jogging and picnicking. At the Mason County Campground, camping was, as would be expected, the most popular activity.

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<sup>7</sup> Figures shown do not sum to 100 percent because of rounding.

## **6 2016 STUDY EFFORTS**

### **6.1 Plans for 2016**

Analysis of the collected data is to be completed, along with a final study report containing additional information specified in Section 6.5 of the study plan. This will include projections of future recreation use and results from the recreation user perception survey. Based on the data and information collected, the Licensees are not proposing any additional study needs for 2016.

### **6.2 Modification to the Study Plan**

The Licensees are not proposing any modifications to the study plan other than those described above to address the small handful of days of lost data. Remaining 2016 efforts will be completed in accordance with the recreation study plan.

### **6.3 Schedule**

Analysis of collected data will be completed in the first quarter of 2016. The final report will be completed during the second quarter of 2016.

## 7 LITERATURE CITED

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**APPENDIX A – STANDARD SPOT COUNT FORM**





**APPENDIX B – STANDARD CALIBRATION FORM**



## **APPENDIX C – RECREATION USER PERCEPTION SURVEY**

**Recreation User Perception Survey  
Ludington Pumped Storage Project**

Interviewer: \_\_\_\_\_ Date/Time: \_\_\_\_\_ Rec Site: \_\_\_\_\_

Weather: \_\_\_\_\_ Air Temp: \_\_\_\_\_ Declined Survey: \_\_\_\_\_

Good Afternoon. My name is \_\_\_\_\_ and I am conducting a recreation user survey of visitors to the Ludington Pumped Storage Project area for Consumers Electric and DTE. We are surveying users for their views on the public recreation sites and facilities associated with the Project. Your responses will provide CE and DTE with user perceptions with Project facilities. Responses from this survey will remain anonymous. Would you mind answering a few questions?

1. Have you participated in this survey effort before?

Yes \_\_\_\_\_ Thank you for your time. We are only interviewing each person once with this survey.

No \_\_\_\_\_ Continue with Survey

2. How many in your group, including yourself? \_\_\_\_\_

3. Have you ever visited the Ludington Pumped Storage Project area before? Yes \_\_\_ No \_\_\_

4. What is your Zip Code? \_\_\_\_\_ or Country of Residency? \_\_\_\_\_

5. What is your primary reason for this visit today?

Biking     Birding     Camping     Disc Golf     Dog Walking

Driving for Pleasure     Educational Programs     Fishing from Boat

Fishing from Shore/Pier     Flying RC Aircraft     Hiking     Hunting

Nature Observation     Orienteering     Other: \_\_\_\_\_    Photography

Picnicking     Running     Sightseeing     Skiing     Snowshoeing     Walking

6. During your visit today what is your perception of the amount of use occurring at this site?

1	2	3	4	5
Not Crowded		Somewhat Crowded		Extremely Crowded

7. Please rate the following amenities at this location.

	Excellent		Fair		Poor
Facility Condition	1	2	3	4	5
Variety of Amenities	1	2	3	4	5
Parking	1	2	3	4	5
Accessibility	1	2	3	4	5
Overall Quality	1	2	3	4	5

Please explain any poor ratings.

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8. What, if anything, enhanced your recreation experience today? \_\_\_\_\_

9. What, if anything, detracted from your recreation experience today? \_\_\_\_\_

10. Does this recreation facility serve your interests? Yes\_\_\_\_ No\_\_\_\_

If not why? \_\_\_\_\_

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11. Do you have any additional comments regarding recreation opportunities associated with the Ludington Pumped Storage Project? \_\_\_\_\_

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Thank you for your time and input.

**APPENDIX D – QUESTIONNAIRE SENT TO OPEN SPACE  
COMMITTEES**

## Seiders, Heather

---

**From:** Seiders, Heather  
**Sent:** Friday, October 23, 2015 9:35 AM  
**To:** 'stdwkelly@gmail.com'  
**Cc:** Hayen, Rita; Whelpley, Angela M. (Augusta,ME-US) (anile@trcsolutions.com); 'David C. Mcintosh'; Richard D. Castle  
**Subject:** Summit Recreation or Master Plan

Tracking:	Recipient	Delivery	Read
	'stdwkelly@gmail.com'		
	Hayen, Rita	Delivered: 10/23/2015 9:35 AM	Read: 10/23/2015 11:06 AM
	Whelpley, Angela M. (Augusta,ME-US) (anile@trcsolutions.com)		
	'David C. Mcintosh'		
	Richard D. Castle		
	Whelpley, Angela	Delivered: 10/23/2015 9:35 AM	Read: 10/23/2015 9:39 AM

Good morning,

As you may know, Consumers Energy and DTE Electric are relicensing the Ludington Project (FERC No. 2680) and are currently conducting studies as part of the FERC relicensing process for the Project. TRC is the recreation consultant for the Licensees and we are conducting a study to identify the amount of recreational use at the Ludington Project recreation facilities. As part of the study, we are reviewing available recreation plans for information regarding recreation use within the Project boundary and immediate vicinity. We would like to know if Summit Township has a Recreation Plan or Master Plan that we can review as part of our study. If so, can you tell us how to obtain a copy?

Angela Whelpley is available during the next week to discuss the current plans you have on file. Please let her know if mornings or afternoons work best for you. We look forward to hearing from you.

Thank you.

*Heather Seiders*

on behalf of:

Angela Whelpley

Angela M. Whelpley  
Environmental Specialist  
Civil Designer



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## Seiders, Heather

---

**From:** Seiders, Heather  
**Sent:** Friday, October 23, 2015 9:28 AM  
**To:** 'info@portsheldontwp.org'  
**Cc:** Hayen, Rita; Whelpley, Angela M. (Augusta,ME-US) (anile@trcsolutions.com); 'David C. Mcintosh'; Richard D. Castle  
**Subject:** Parks and Recreation Plan

Tracking:	Recipient	Delivery	Read
	'info@portsheldontwp.org'		
	Hayen, Rita	Delivered: 10/23/2015 9:28 AM	
	Whelpley, Angela M. (Augusta,ME-US) (anile@trcsolutions.com)		
	'David C. Mcintosh'		
	Richard D. Castle		
	Whelpley, Angela	Delivered: 10/23/2015 9:28 AM	Read: 10/23/2015 9:39 AM

Good morning,

As you may know, Consumers Energy and DTE Electric are relicensing the Ludington Project (FERC No. 2680) and are currently conducting studies as part of the FERC relicensing process for the Project. TRC is the recreation consultant for the Licensees and we are conducting a study to identify the amount of recreational use at the Ludington Project recreation facilities. As part of the study, we are reviewing available recreation plans for information regarding recreation use within the Project boundary and immediate vicinity. We would like to know if your Parks and Recreation Plan has been completed. If so, can you tell us how to obtain a copy?

Angela Whelpley is available during the next week to discuss the current plans you have on file. Please let her know if mornings or afternoons work best for you. We look forward to hearing from you.

Thank you.

*Heather Seiders*

on behalf of:

Angela Whelpley

Angela M. Whelpley  
Environmental Specialist  
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## Seiders, Heather

---

**From:** Seiders, Heather  
**Sent:** Thursday, October 22, 2015 3:42 PM  
**To:** 'parksmgr@pmtwp.org'  
**Cc:** Hayen, Rita; Whelpley, Angela M. (Augusta,ME-US) (anile@trcsolutions.com); 'David C. Mcintosh'; Richard D. Castle  
**Subject:** Pere Marquette Charter Township Parks, Recreation and Open Space Plan

Tracking:	Recipient	Delivery	Read
	'parksmgr@pmtwp.org'		
	Hayen, Rita	Delivered: 10/22/2015 3:43 PM	Read: 10/22/2015 3:43 PM
	Whelpley, Angela M. (Augusta,ME-US) (anile@trcsolutions.com)		
	'David C. Mcintosh'		
	Richard D. Castle		
	Whelpley, Angela	Delivered: 10/22/2015 3:43 PM	Read: 10/22/2015 3:46 PM

Good afternoon,

As you may know, Consumers Energy and DTE Electric are relicensing the Ludington Project (FERC No. 2680) and are currently conducting studies as part of the FERC relicensing process for the Project. TRC is the recreation consultant for the Licensees and we are conducting a study to identify the amount of recreational use at the Ludington Project recreation facilities. As part of the study, we are reviewing available recreation plans for information regarding recreation use within the Project boundary and immediate vicinity. We would like to confirm that we are utilizing your current recreation and open space plan. The plan that we have is the Pere Marquette Charter Township Parks, Recreation and Open Space Plan. Angela Whelpley is available during the next week to discuss the current plans you have on file. Please let her know if mornings or afternoons work best for you. We look forward to hearing from you.

Thank you.

*Heather Seiders*

on behalf of:

Angela Whelpley

Angela M. Whelpley  
Environmental Specialist  
Civil Designer



14 Gabriel Drive, Augusta, ME 04330  
T: 207.620.3830 | F: 207.621.8226 | C: 207.215.0308  
[awhelpley@trcsolutions.com](mailto:awhelpley@trcsolutions.com)

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## Seiders, Heather

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**From:** Seiders, Heather  
**Sent:** Thursday, October 22, 2015 3:57 PM  
**To:** 'ocparks@miottawa.org'  
**Cc:** Hayen, Rita; Whelpley, Angela M. (Augusta,ME-US) (anile@trcsolutions.com); 'David C. Mcintosh'; Richard D. Castle  
**Subject:** Parks, Recreation and Open Space Plan

Good afternoon,

As you may know, Consumers Energy and DTE Electric are relicensing the Ludington Project (FERC No. 2680) and are currently conducting studies as part of the FERC relicensing process for the Project. TRC is the recreation consultant for the Licensees and we are conducting a study to identify the amount of recreational use at the Ludington Project recreation facilities. As part of the study, we are reviewing available recreation plans for information regarding recreation use within the Project boundary and immediate vicinity. We would like to confirm that we are utilizing your current recreation and open space plan. The plan that we have is the Parks, Recreation and Open Space Plan for Ottawa County.

Angela Whelpley is available during the next week to discuss the current plans you have on file. Please let her know if mornings or afternoons work best for you. We look forward to hearing from you.

Thank you.

*Heather Seiders*

on behalf of:

Angela Whelpley

Angela M. Whelpley  
Environmental Specialist  
Civil Designer



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## Seiders, Heather

---

**From:** Seiders, Heather  
**Sent:** Friday, October 23, 2015 9:31 AM  
**To:** 'todd@olivetownship.com'  
**Cc:** Hayen, Rita; Whelpley, Angela M. (Augusta,ME-US) (anile@trcsolutions.com); 'David C. Mcintosh'; Richard D. Castle  
**Subject:** Olive Township Master Plan

Tracking:	Recipient	Delivery	Read
	'todd@olivetownship.com'		
	Hayen, Rita	Delivered: 10/23/2015 9:31 AM	Read: 10/23/2015 11:06 AM
	Whelpley, Angela M. (Augusta,ME-US) (anile@trcsolutions.com)		
	'David C. Mcintosh'		
	Richard D. Castle		
	Whelpley, Angela	Delivered: 10/23/2015 9:31 AM	Read: 10/23/2015 9:39 AM

Good afternoon,

As you may know, Consumers Energy and DTE Electric are relicensing the Ludington Project (FERC No. 2680) and are currently conducting studies as part of the FERC relicensing process for the Project. TRC is the recreation consultant for the Licensees and we are conducting a study to identify the amount of recreational use at the Ludington Project recreation facilities. As part of the study, we are reviewing available recreation plans for information regarding recreation use within the Project boundary and immediate vicinity. We would like to confirm that we are utilizing your current plan containing information on recreation. The plan that we have is the Olive Township Master Plan.

Angela Whelpley is available during the next week to discuss the current plans you have on file. Please let her know if mornings or afternoons work best for you. We look forward to hearing from you.

Thank you.

*Heather Seiders*

on behalf of:

Angela Whelpley

Angela M. Whelpley  
Environmental Specialist  
Civil Designer



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## Seiders, Heather

---

**From:** Seiders, Heather  
**Sent:** Thursday, October 22, 2015 3:54 PM  
**To:** 'jmriffle@masoncounty.net'  
**Cc:** Hayen, Rita; Whelpley, Angela M. (Augusta,ME-US) (anile@trcsolutions.com); 'David C. Mcintosh'; Richard D. Castle  
**Subject:** Mason County Recreation Plan

Tracking:	Recipient	Delivery	Read
	'jmriffle@masoncounty.net'		
	Hayen, Rita	Delivered: 10/22/2015 3:54 PM	Read: 10/22/2015 4:23 PM
	Whelpley, Angela M. (Augusta,ME-US) (anile@trcsolutions.com)		
	'David C. Mcintosh'		
	Richard D. Castle		
	Whelpley, Angela	Delivered: 10/22/2015 3:54 PM	Read: 10/22/2015 3:57 PM

Good afternoon,

As you may know, Consumers Energy and DTE Electric are relicensing the Ludington Project (FERC No. 2680) and are currently conducting studies as part of the FERC relicensing process for the Project. TRC is the recreation consultant for the Licensees and we are conducting a study to identify the amount of recreational use at the Ludington Project recreation facilities. As part of the study, we are reviewing available recreation plans for information regarding recreation use within the Project boundary and immediate vicinity. We would like to confirm that we are utilizing your current recreation plan. The plan that we have is the Mason County Recreation Plan.

Angela Whelpley is available during the next week to discuss the current plans you have on file. Please let her know if mornings or afternoons work best for you. We look forward to hearing from you.

Thank you.

*Heather Seiders*

on behalf of:

Angela Whelpley

Angela M. Whelpley  
Environmental Specialist  
Civil Designer



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## Seiders, Heather

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**From:** Seiders, Heather  
**Sent:** Thursday, October 22, 2015 3:52 PM  
**To:** 'cvansickle@ci.ludington.mi.us'  
**Cc:** Hayen, Rita; Whelpley, Angela M. (Augusta,ME-US) (anile@trcsolutions.com); 'David C. Mcintosh'; Richard D. Castle  
**Subject:** City of Ludington Community Recreation Plan

Tracking:	Recipient	Delivery	Read
	'cvansickle@ci.ludington.mi.us'		
	Hayen, Rita	Delivered: 10/22/2015 3:52 PM	Read: 10/22/2015 4:24 PM
	Whelpley, Angela M. (Augusta,ME-US) (anile@trcsolutions.com)		
	'David C. Mcintosh'		
	Richard D. Castle		
	Whelpley, Angela	Delivered: 10/22/2015 3:52 PM	Read: 10/22/2015 3:57 PM

Good afternoon,

As you may know, Consumers Energy and DTE Electric are relicensing the Ludington Project (FERC No. 2680) and are currently conducting studies as part of the FERC relicensing process for the Project. TRC is the recreation consultant for the Licensees and we are conducting a study to identify the amount of recreational use at the Ludington Project recreation facilities. As part of the study, we are reviewing available recreation and open space plans for information regarding recreation use within the Project boundary and immediate vicinity. We would like to confirm that we are utilizing your current recreation plan. The plan that we have is the City of Ludington Community Recreation Plan.

Angela Whelpley is available during the next week to discuss the current plans you have on file. Please let her know if mornings or afternoons work best for you. We look forward to hearing from you.

Thank you.

*Heather Seiders*

on behalf of:

Angela Whelpley

Angela M. Whelpley  
Environmental Specialist  
Civil Designer



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