Iowa DNR Tier One State Park Visitor Parking Study



PIR Ø MSA

NATURAL RESOURCES

November 10, 2021

Analyze | Engage | Inform | Recommend

Acknowledgments

With special thanks to:

The Iowa DNR staff who provided feedback to help define the final recommendations of this document.

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Executive Summary

Executive Summary

The State of Iowa House File 860 Section 21 - Visitor Parking at State Parks Study states: The department of natural resources shall conduct a study of the availability of visitor parking at state parks. The department shall identify any inadequacy in the availability of visitor parking at each state park during periods of high use. The department shall prepare a report which shall identify each state park that fails to provide adequate visitor parking and a recommendation to improve that state park to accommodate existing or expected visitor parking. The department shall submit the report to the governor and general assembly not later than December 10, 2021.

The RFP for the DNR Visitor Parking Study at Tier One Iowa State Parks was issued June 26, 2021 and an addendum was presented to those that submitted July 27, 2021. Notice of Intent to Award was presented to MSA July 30, 2021. A contract was executed August 5, 2021 and the Project Kickoff Meeting took place August 13, 2021. The available window for data collection with this study effort was August 13th to September 26th, which is at the tail end of peak recreation season. It is likely that the data collected may not reflect actual/typical usage during peak recreation months typically of June and July. Additionally, during the study window, schools were back in session, temperatures were cooler and beach conditions were not ideal. These aforementioned factors likely impacted the data collected resulting in reduced recreation traffic/visitation numbers.

Since the outbreak of COVID-19 of 2020 there has been a surge in outdoor recreation from running, cycling and hiking to camping and boating. Americans have taken up new outdoor activities in significant numbers across the country and this has impacted both national, state and local park systems. We have seen this in the state of Iowa as well, specifically with the state park system. Estimated visitation data shows an increase of visitation numbers of 115% since 2017, which equates to an increase of roughly 1.7 million visitors annually to state parks and recreation areas in Iowa.

The Iowa DNR Tier One State Park Visitor Parking Study examines 52 day-use visitor parking lots in 24 state parks and recreation areas across the State of Iowa. Two methods were used to collect observation data for this study. The first was a physical survey of the visitor parking lots identified by the Iowa DNR in each designated state park or recreation area. In this element, MSA staff observed visitor parking lot activities at each identified lot one time each for four hours at within the window designated by the DNR. The window was identified as either Friday from noon to 4 pm, Saturday from 9 am to 1 pm or 11 am to 3 pm.

The second observation method was through the use of traffic cameras to record the traffic flow around each identified parking lot. These two methods were completed on different days to allow for two observation periods for each parking lot. Data was also collected through a survey completed by DNR park staff to establish thoughts and concerns regarding parking for a specific state parks and recreation areas as it relates to their own experiences. Estimated visitation data of state park and recreation area visitor counts were also used to establish the percent change between 2017-2020 to establish whether the park volume is increasing or decreasing.

This study establishes priority parking areas across the state of lowa that will be better served on a second phase of focused survey and analysis.

High Priorities

The designation of High Priority is based on staff experiences and feedback, observations, traffic flow and the level of visitor volume along with any increased visitor activity over the last few years of available data. These parks and the associated lots are very popular destinations with a history of capacity and accommodation issues.

High Priority Sites for future analysis and evaluation:

- Big Creek State Park
- Clear Lake State Park
- Lake Macbride State Park
- Lake Manawa State Park
- Ledges State Park
- Maquoketa Caves State Park
- Marble Beach State Recreation Area

Moderate Priorities

The designation of Moderate Priority is based on staff experiences and feedback, observations, traffic flow and the level of visitor volume along with any increased visitor activity over the last few years of available data. These parks and the associated lots are popular destinations but have parking capacity that handles the visitor parking needs on a regular basis but cannot meet the needs of high use events such as special events, rentals, etc. Moderate Priority Sites should be further evaluated as a future phase behind high priority sites.

Moderate Priority Sites for future analysis and evaluation:

- Backbone State Park
- Emerson Bay State Recreation Area
- Green Valley State Park
- Lewis and Clark State Park
- McIntosh Woods State Park
- Mini-Wakan State Park
- Palisades-Kepler State Park
- Prairie Rose State Park
- Wilson Island State Recreation Area

Low Priorities

Low Priority designations were lots in parks at popular destinations but through observation, data collection and staff feedback it was determined that these lots have enough parking capacity for daily traffic flows and visitor needs. Some of the Low Priority lots do have peak time parking issues and some should be reevaluated at a future date during those peak times to determine the need and what future mitigation/strategy might need to be implemented to accommodate these peak times of visitor traffic volume.

Low Priority Sites for future analysis and evaluation:

- Brushy Creek State Recreation Area
- George Wyth State Park
- Lake Anita State Park
- Lake Darling State Park
- Pikes Peak State Park
- Pleasant Creek State Recreation Area
- Rock Creek State Park
- Walnut Woods State Park

Future studies are recommended. The data collection portion of this next future phase of analysis should be conducted during the peak season for state park visitor activity, beginning the Friday prior to Memorial Day and ending Labor Day. This next phase of analysis and study should evaluate both park facilities and their associated parking areas. A holistic state park analysis approach should be considered including but not limited to: evaluated facility/amenity capacities, space/needs assessments, staffing resources, and a public engagement process to better establish standards and recommendations for parking areas that fail to provide adequate visitor parking.

Recommendations for Parking Expansion and Improvements:

- » Start with organization and efficiency, painting lot lines etc. prior to adding capacity.
- Evaluate proper signage to distinguish proper use i.e. boat trailer parking, ADA accessible etc.
- » Consider the capacity of nearby facilities that can be safely accommodated.
- Evaluate if there is enough wayfinding signage to direct traffic to any nearby overflow lots.
- » Evaluate if lot capacity should be built to accommodate holiday or special event parking.
- » Ensure there is proper ADA accessible parking spaces.
- » Consider using a standard of per acre of surface water per boat trailer parking space to ensure natural resources are not over utilized.
- » Consider developing DNR specific parking capacity standards based on park facility type and size to ensure facilities are properly utilized.

Visitation Estimates Show

Visited State Park and Rec Areas in 2020 More Visitors to State Parks and Rec Areas Since 2017

Visitor Increase:

Introduction



Purpose & Study Area

Purpose of the Parking Study

The first impression visitors have when visiting a state park or recreation area in Iowa is ease and access of parking. This can set the tone for their entire experience. The DNR State Park Visitor Parking Study is intended to identify any inadequacy in the availability of visitor parking at the identified tier one state parks and recreation areas during periods of high use. The study is intended to identify which of these state parks or recreation areas fail to provide adequate visitor parking and include a recommendation to improve that state park to accommodate existing or expected visitor parking.

Study Area

The study area consists of 24 Tier One state parks and recreation areas throughout the State of Iowa that contain identified visitor parking areas assigned for observation and analysis for this study.

Backbone State Park Big Creek State Park Brushy Creek State Rec Area Clear Lake State Park Emerson Bay State Rec Area George Wyth State Park Green Valley State Park Lake Anita State Park Lake Darling State Park Lake Macbride State Park Lake Manawa State Park Ledges State Park Lewis and Clark State Park Maquoketa Caves State Park Marble Beach State Rec Area McIntosh Woods State Park Mini-Wakan State Park Palisades-Kepler State Park Pikes Peak State Park Pleasant Creek State Rec Area Prairie Rose State Park Rock Creek State Park Walnut Woods State Park Wilson Island State Rec Area



Park Observations & DNR Staff Feedback



Observation Methodology

Methodology of Visitor Parking Observations

The window to collect data for this study was August 13th to September 26th, which is at the tail end of peak recreation season and may not reflect actual/typical use during peak recreation months typically of June and July. With schools back in session for most of this window and cooler temperatures outside prime beach conditions, the data collected may not reflect peak recreation traffic/visitation numbers.

Two methods were used to collect observation data for this study. The first was a physical survey of the visitor parking lots identified by the Iowa DNR in each designated state park or recreation area. In this element, MSA staff observed visitor parking lot activities at each identified lot one time each for four hours at the window designated by the DNR staff. The window was identified as either Friday from noon to 4 pm, Saturday from 9 am to 1 pm or 11 am to 3 pm, or Sunday from 9 am to 1 pm or 11 am to 3 pm.

The second observation method was through the use of traffic cameras to record traffic flows either Friday, Saturday or Sunday. In this element, 52 visitor lots were monitored with a traffic camera once for 12 hours of data collection.

Along with the visitor parking count data collected from the traffic cameras and physical observations, GIS was also used to map the current visitor lots, determine existing physical space, condition, material and track information such as the priority of the visitor lots at each identified state park.

In this section there are three datasets for each page as follows:

Physical Observation:

Data from the physical survey was collected during the window identified by the Iowa DNR. In this dataset Overall Physical Parking Observations designates the what the observer saw during their visit either; more than enough parking available, adequate parking available, or not enough parking available. It also contains estimated capacity of the existing lot, parking material and over all parking condition. Overall parking lot condition is rated on a sliding scale poor, fair and good.

Poor Condition: surface shows signs of severe distress (i.e. potholes, cracking, uneven surface, subbase at surface, rutting etc.)

Fair Condition: surface shows signs of moderate distress (i.e. few to no potholes, little to no cracking, even surface)

Good Condition: surface shows signs of little to no distress (i.e. no potholes, no cracking, even surface)

Traffic Camera Data:

Traffic cameras were used to collect traffic flow data during the window identified by the Iowa DNR on a day separate from the physical observation.

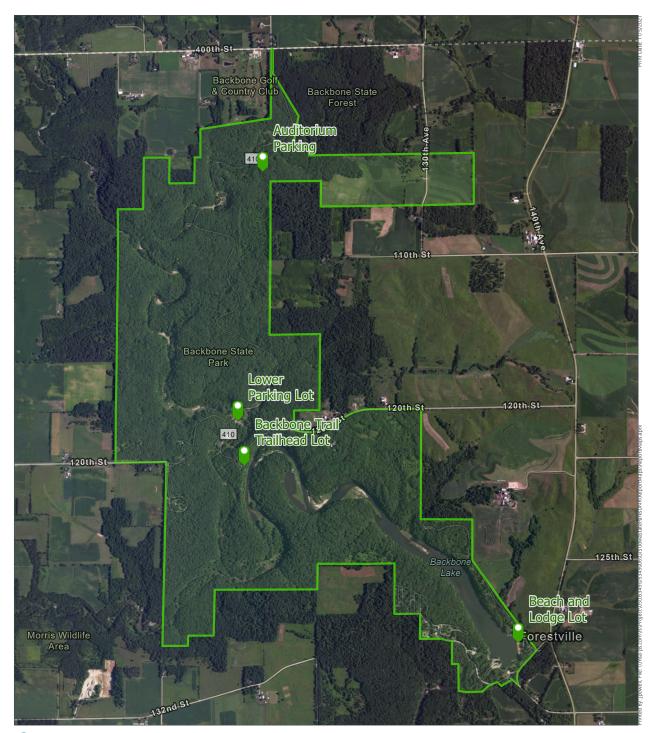
DNR Staff:

DNR Comments on Current Issues -issues provided prior to physical observations, camera counts or the DNR Staff Survey.

DNR Staff Survey Comments -comments extracted from the DNR Staff Survey that related to an individual lot when possible or parking perceptions in general of a particular state park or recreational area.

Backbone State Park

Visitor Volume Increase 270% 2017-2020



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Iowa DNR MSA Field Observation ESRI Imagery

0 500 1,000 Feet

Data Sources:

LEGEND

Studied Parking Lot Locations



□ State Park & Rec Area Boundaries

BACKBONE STATE PARK OVERVIEW MAP

Auditorium Parking Lot

Physical Observation

MSA Staff observed parking activities on Friday August 27th 2021 from 12pm-4pm.

Note: This auditorium was not reserved the day of the Physical Observation.

Vehicle Count

Hour 1: 0	Hour 3: 0
Hour 2: 0	Hour 4: 0

Estimated Capacity 26

Overall Physical Parking Observations Adequate Parking Available

Parking Material Grass/Gravel

Overall Parking Lot Condition Fair

Observation Comments: Rained, no ADA accessible parking spaces.

Traffic Camera Data

7:00 7:30 8:00 8:30 9:00 9:30 9:30

2

1 0

Cameras were setup to observe parking area traffic volumes on Saturday September 4th 2021 from 7am-7pm. 8 7 6 5 4 3

> 11:00 11:30 12:00 12:30

> > Incoming

13:30 14:00 14:30 15:00 15:30

Outgoing

13:00

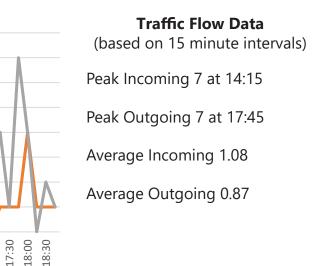
16:00 16:30

17:00



DNR Staff Survey Comments:

The Auditorium Lot, which hosts large events (religious services, weddings, celebrations) doesn't have many spaces and often times requires shuttling.



Backbone State Park continued

Backbone Trail Trailhead Parking Lot

Physical Observation

MSA Staff observed parking activities on Friday August 27th 2021 from 12pm-4pm.

Vehicle Count

Hour 1: 4	Hour 3: 1
Hour 2: 2	Hour 4: 1

Estimated Capacity 31

Overall Parking Observations Adequate Parking Available

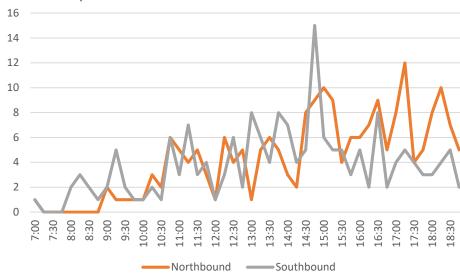
Parking Material Gravel

Overall Parking Lot Condition Fair

Observer Comments: Rained, no ADA accessible parking spaces.

Traffic Camera Data

Cameras were setup to observe parking area traffic volumes on Saturday September 4th 2021 from 7am-7pm.





DNR Comments on Current Issues:

Small, limited parking for a very popular trailhead that attracts a wide variety of visitors. Can fill up at peak times when weather is in favor and visitors begin to park along roadway.

DNR Staff Survey Comments:

None.

Traffic Flow Data

(based on 15 minute intervals)

Peak Northbound 12 at 17:15

Peak Southbound 15 at 14:45

Average Northbound 4.27

Average Southbound 3.77

Beach and Lodge Parking Lot

Physical Observation

MSA Staff observed parking activities on Friday August 27th 2021 from 12pm-4pm.

Vehicle Counts

Hour 1: 2	Hour 3: 4
Hour 2: 3	Hour 4: 6

Estimated Capacity 110

Overall Parking Observations Adequate Parking Available

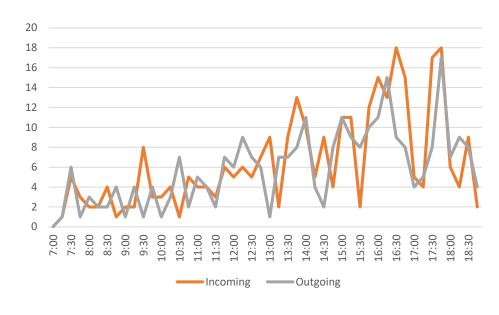
Parking Material Grass/Gravel

Overall Parking Lot Condition Fair

Observer Comments: Rained, ADA accessible parking spaces.

Traffic Camera Data

Cameras were setup to observe parking area traffic volumes on Saturday September 4th 2021 from 7am-7pm.





DNR Comments on Current Issues:

Busy for day use beach /concessionaire. Not enough parking when there is a large rental event at the lodge during a peak beach use time

DNR Staff Survey Comments: None.

Traffic Flow Data

(based on 15 minute intervals)

Peak Incoming 18 at 16:30

Peak Outgoing 17 at 17:45

Average Incoming 13.43

Average Outgoing Every 10.97

Note: This lodge was not reserved the day of the Traffic Camera Observation.

Backbone State Park continued

Lower Parking Lot

Physical Observation

MSA Staff observed parking activities on Friday August 27th 2021 from 12pm-4pm.

Vehicle Counts

Hour 1: 0	Hour 3: 4
Hour 2: 0	Hour 4: 4

Estimated Capacity 7

Overall Parking Observations Adequate Parking Available

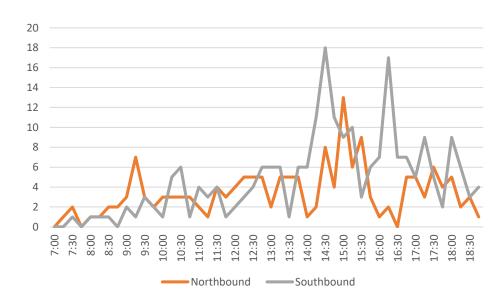
Parking Material Gravel

Overall Parking Lot Condition Fair

Observer Comments: Rained, ADA accessible parking spaces.

Traffic Camera Data

Cameras were setup to observe parking area traffic volumes on Saturday September 4th 2021 from 7am-7pm.





DNR Comments on Current Issues: Can get full and visitors park in grass.

DNR Staff Survey Comments: None.

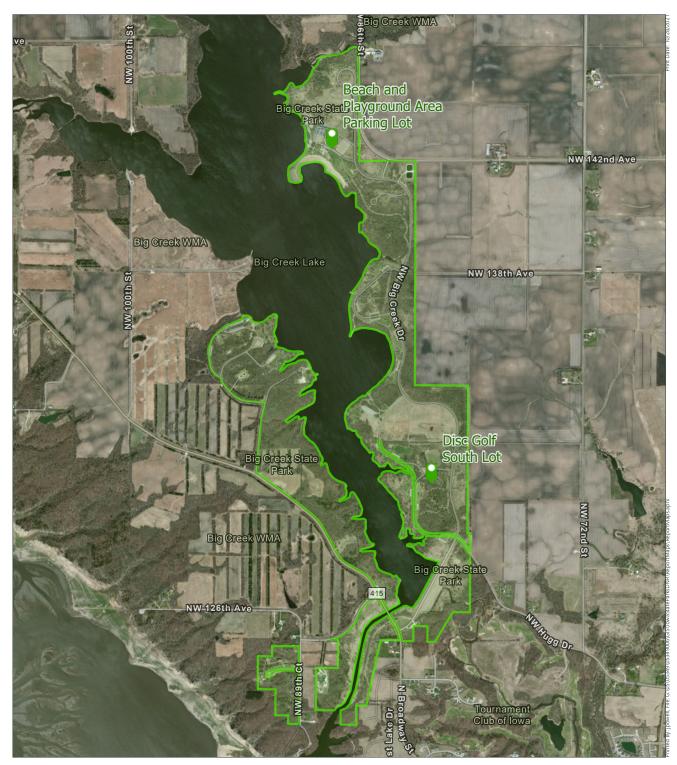
Traffic Flow Data		
(based on 15 minute intervals)		
Peak Northbound 13 at 15:00		
Peak Northbound 13 at 15:00		
Peak Southbound 18 at 14:30		
Average Northbound 3.43		
5		

Average Southbound 4.70



Big Creek State Park

Visitor Volume Increase 123% 2017-2020





Data Sources: Iowa DNR MSA Field Observation ESRI Imagery

0 500 1,000 Feet

LEGEND
Studied Parking Lot Locations

State Park & Rec Area Boundaries

BIG CREEK STATE PARK OVERVIEW MAP

Beach and Playground Area Parking Lot

Physical Observation

MSA Staff observed parking activities on Saturday August 28th 2021 from 9am-1pm.

Vehicle Count

Hour 1: 24	Hour 3: 79
Hour 2: 53	Hour 4: 124

Estimated Capacity 431

Overall Parking Observations More than Enough Parking Available

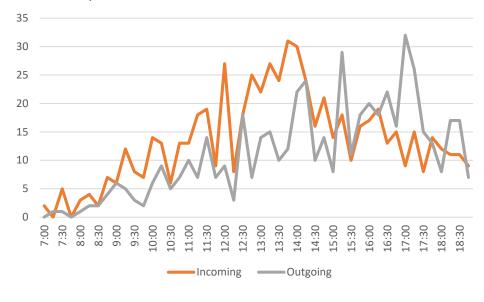
Parking Material Asphalt

Overall Parking Lot Condition Fair but needs restriped.

Observer Comments: Can barely see pavement striping for parking spaces.

Traffic Camera Data

Cameras were setup to observe parking area traffic volumes on Saturday August 14th 2021 from 7am-7pm.





DNR Comments on Current Issues:

Lot fills with users for beach, mixed traffic for boat ramp parking, perpendicular, parallel, traffic flow to and from beach.

DNR Staff Survey Comments:

Parking lots are cracked/deteriorating, potholes, confusing parking lines.

Traffic Flow Data

(based on 15 minute intervals)

Peak Incoming 31 at 13:45

Peak Outgoing 32 at 17:00

Average Incoming 3.43

Average Outgoing 10.97

Big Creek State Park continued

Disc Golf South Parking Lot

Physical Observation

MSA Staff observed parking activities on Saturday August 28th 2021 from 9am-1pm.

Vehicle Count

Hour 1: 3	Hour 3: 11
Hour 2: 7	Hour 4: 6

Estimated Capacity 11

Overall Parking Observations Not Enough Parking Available

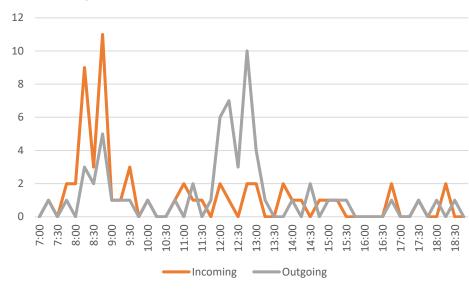
Parking Material Asphalt

Overall Parking Lot Condition Good but needs restriped.

Observer Comments: Can barely see pavement striping for parking spaces.

Traffic Camera Data

Cameras were setup to observe parking area traffic volumes on Saturday August 14th 2021 from 7am-7pm.





DNR Comments on Current Issues: Gets completely full sometimes when there are tournaments and other special events.

DNR Staff Survey Comments: None.

Traffic Flow Data (based on 15 minute intervals)

Peak Incoming 11 at 8:45

Peak Outgoing 10 at 12:45

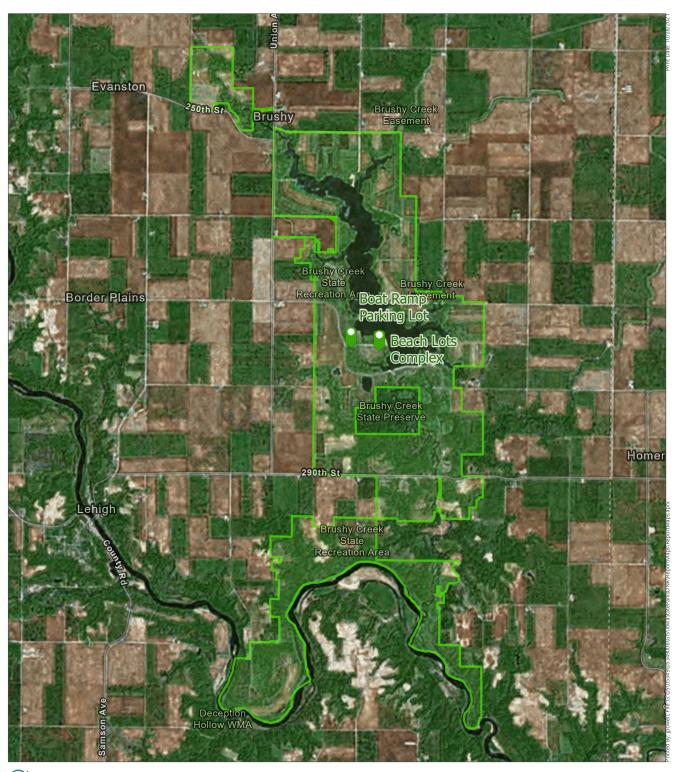
Average Incoming 1.20

Average Outgoing 1.27



Brushy Creek State Rec Area

Visitor Volume Increase 114% 2017-2020

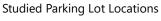


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Data Sources: Iowa DNR MSA Field Observation ESRI Imagery

0 500,000 Feet

LEGEND





🔲 State Park & Rec Area Boundaries

BRUSHY CREEK STATE RECREATION AREA OVERVIEW MAP

N

Beach Lots Complex Parking Lot

Physical Observation

MSA Staff observed parking activities on Sunday September 19th 2021 from 9am-1pm.

Vehicle Count

Hour 1: 0	Hour 3: 14
Hour 2: 5	Hour 4: 7

Estimated Capacity 120

Overall Parking Observations Adequate Parking Available

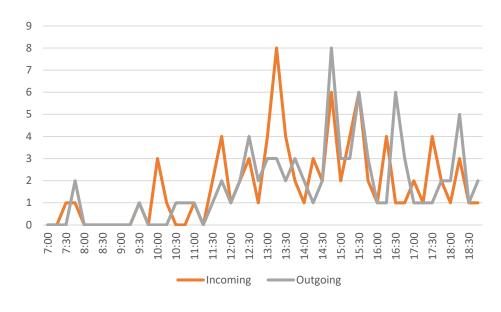
Parking Material Concrete

Overall Parking Lot Condition Good

Observer Comments: Parking spaces well defined.

Traffic Camera Data

Cameras were setup to observe parking area traffic volumes on Saturday August 14th 2021 from 7am-7pm.





DNR Comments on Current Issues: Busy on weekends.

DNR Staff Survey Comments: None.

Traffic Flow Data

(based on 15 minute intervals)

Peak Incoming 8 at 13:15

Peak Outgoing 8 at 14:45

Average Incoming 1.81

Average Outgoing 1.72

Brushy Creek State Rec Area continued

Boat Ramp Parking Lot

Physical Observation

MSA Staff observed parking activities on Sunday September 19th 2021 from 9am-1pm.

Vehicle Count

Hour 1: 6	Hour 3: 5
Hour 2: 7	Hour 4: 4

Estimated Capacity 70

Overall Parking Observations More than Enough Parking Available

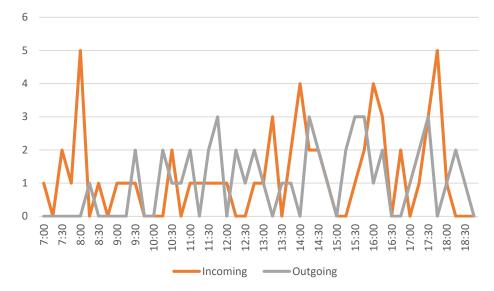
Parking Material Asphalt

Overall Parking Lot Condition Poor

Observer Comments: Weeds growing in cracks and rock piles in back of lot.

Traffic Camera Data

Cameras were setup to observe parking area traffic volumes on Saturday August 14th 2021 from 7am-7pm.





DNR Comments on Current Issues:

Boat & Trailer Parking is uphill in separate location from ramp and ADA lot. Some park trailers at lower lot to avoid hiking up trail to parking lot.

DNR Staff Survey Comments:

None.

Traffic Flow Data

(based on 15 minute intervals)

Peak Incoming 5 at 17:45

Peak Outgoing 3 at 15:30

Average Incoming 1.20

Average Outgoing 1.02



Clear Lake State Park

Visitor Volume Increase 102% 2017-2020



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Data Sources: Iowa DNR MSA Field Observation ESRI Imagery Studied Parking Lot Locations

LEGEND

500

State Park & Rec Area Boundaries

CLEAR LAKE STATE PARK OVERVIEW MAP

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N

Beach and Lodge Parking Lot

Physical Observation

MSA Staff observed parking activities on Saturday September 25th 2021 from 9am-1pm.

Vehicle Count

Hour 1: 0	Hour 3: 1
Hour 2: 2	Hour 4: 4

Estimated Capacity 60

Overall Parking Observations Adequate Parking Available

Parking Material Concrete and Gravel

Overall Parking Lot Condition Good

Observer Comments:

This lot did not seem busy with people. There is also an unmarked gravel overflow lot.

Traffic Camera Data

Cameras were setup to observe parking area traffic volumes on Saturday September 11th 2021 from 7am-7pm.

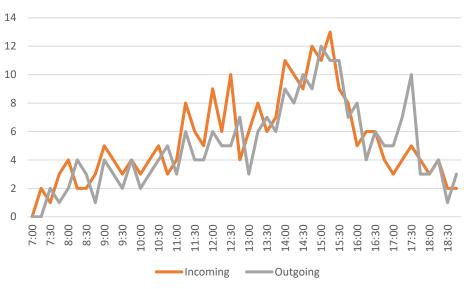


DNR Comments on Current Issues:

When lodge is reserved for a large event, and beach is busy at the same time, there is not enough parking and visitors begin to park in grass median in the center. There are especially some issues on Independence Day Weekend and when a large event is taking place.

DNR Staff Survey Comments:

4th of July weekend parking is always a problem as well as hot weekends during June-August.



Traffic Flow Data (based on 15 minute intervals) Peak Incoming 13 at 15:15

Peak Outgoing 12 at 15:00

Average Incoming 5.37

Average Outgoing 4.95

Emerson Bay State Rec Area

Visitor Volume Increase 112% 2017-2020



Data Sources: Iowa DNR MSA Field Observation ESRI Imagery LEGEND

Studied Parking Lot Locations

State Park & Rec Area Boundaries

EMERSON BAY STATE RECREATION AREA OVERVIEW MAP

N

0

Beach Area Parking Lot

Physical Observation

MSA Staff observed parking activities on Friday September 3rd, 2021 from 12pm-4pm.

Vehicle Count

Hour 1: 8	Hour 3: 3
Hour 2: 3	Hour 4: 2

Estimated Capacity 26

Overall Parking Observations More than Enough Parking Available

Parking Material Asphalt

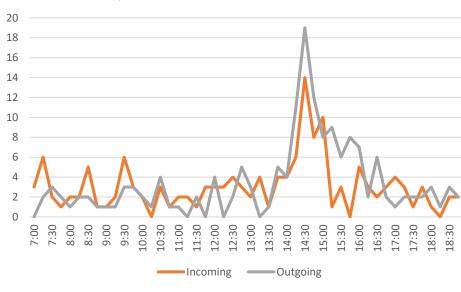
Overall Parking Lot Condition Fair

Observer Comments: Cloudy and rained for some of observation

time.

Traffic Camera Data

Cameras were setup to observe parking area traffic volumes on Saturday September 11th 2021 from 7am-7pm.





DNR Comments on Current Issues: Holiday weekends vehicles park clear into mowed area etc.

DNR Staff Survey Comments:

Not enough space for boat ramp parking or campground extra vehicle parking. On the weekends we get complaints there is no where to park.

Traffic Flow Data (based on 15 minute intervals) Peak Incoming 14 at 14:30 Peak Outgoing 19 at 14:30

Average Incoming 3.06

Average Outgoing 3.37

Emerson Bay State Rec Area continue

Boat Ramp Area Parking Lot

Physical Observation

MSA Staff observed parking activities on Friday September 3rd, 2021 from 12pm-4pm.

Vehicle Count

Hour 1: 0	Hour 3: 0
Hour 2: 0	Hour 4: 1

Estimated Capacity 48

Overall Parking Observations More than Enough Parking Available

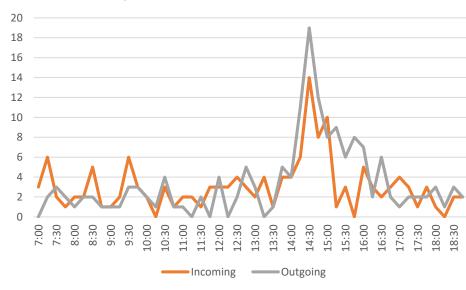
Parking Material Asphalt

Overall Parking Lot Condition Fair

Observer Comments: Cloudy and rained for some of observation time.

Traffic Camera Data

Cameras were setup to observe parking area traffic volumes on Saturday September 11th 2021 from 7am-7pm.





DNR Comments on Current Issues: Holiday weekends vehicles park clear into mowed area etc.

DNR Staff Survey Comments: None.

Traffic Flow Data (based on 15 minute intervals)

Peak Incoming 14 at 14:30

Peak Outgoing 19 at 14:30

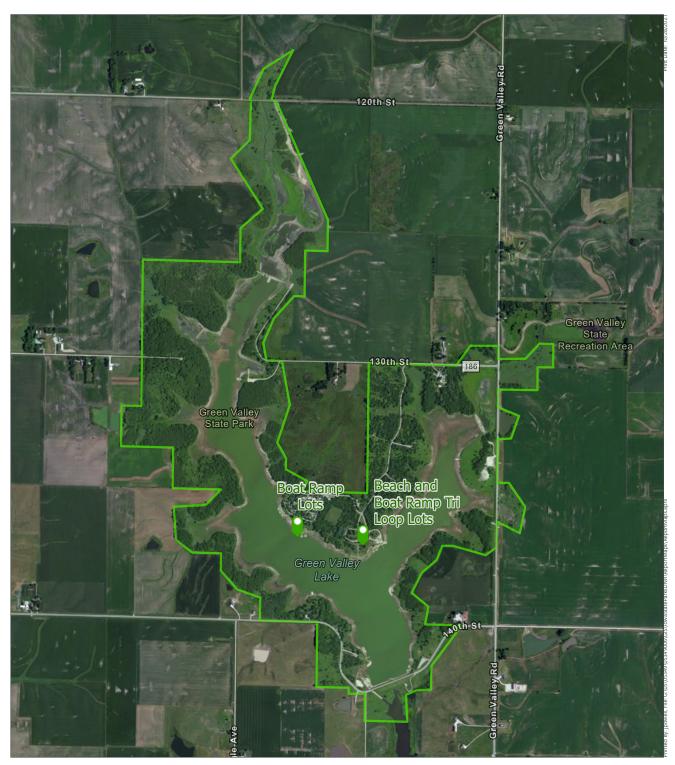
Average Incoming 3.06

Average Outgoing 3.37



George Wyth State Park

Visitor Volume Increase 120% 2017-2020





Data Sources: Iowa DNR MSA Field Observation ESRI Imagery

500 1,000 Feet

LEGEND

Studied Parking Lot Locations



🗖 State Park & Rec Area Boundaries

GREEN VALLEY STATE PARK OVERVIEW MAP

N

Picnic Area Parking Lot

Physical Observation

MSA Staff observed parking activities on Saturday September 25th 2021 from 11am-3pm.

Vehicle Count

Hour 1: 0	Hour 3: 0
Hour 2: 1	Hour 4: 0

Estimated Capacity 31

Overall Parking Observations More than Enough Parking Available

Parking Material Asphalt

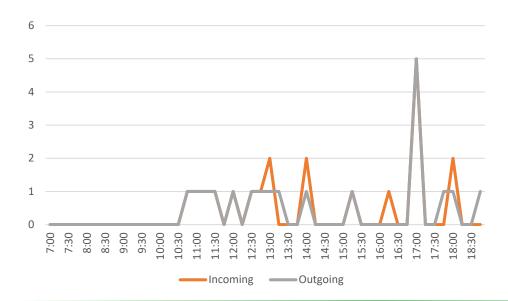
Overall Parking Lot Condition Good

Observer Comments:

Parking spaces are not striped out with paint, but there are wheel stops along the perimeter.

Traffic Camera Data

Cameras were setup to observe parking area traffic volumes on Saturday August 28th 2021 from 7am-7pm.





DNR Comments on Current Issues: One of many picnicking areas used for large group gatherings on the weekends

DNR Staff Survey Comments:

None.

Traffic Flow Data (based on 15 minute intervals)

Peak Incoming 5 at 17:00

Peak Outgoing 5 at 17:00

Average Incoming 0.41

Average Outgoing 0.39

George Wyth State Park continued

Brinker Lake Boat Ramp Parking Lot

Physical Observation

MSA Staff observed parking activities on Saturday September 25th 2021 from 11am-3pm.

Vehicle Counts

Hour 1: 15	Hour 3: 3
Hour 2: 11	Hour 4: 3

Estimated Capacity 68

Overall Parking Observations Adequate Parking Available

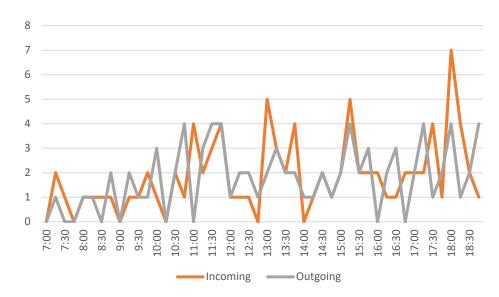
Parking Material Asphalt/Grass

Overall Parking Lot Condition Good

Observer Comments: Some people parking on grass even though there is available space.

Traffic Camera Data

Cameras were setup to observe parking area traffic volumes on Saturday August 28th 2021 from 7am-7pm.



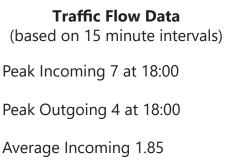


DNR Comments on Current Issues:

This is an extremely popular boat ramp and trailers line up down the road and wait up to two hours to get to their boat in the ramp and have a parking space open up. Currently requires staff on the ground patrolling and controlling parking lot all day Saturdays.

DNR Staff Survey Comments:

Parking at Brinker Lake complaints.



Average Outgoing 1.77

Boat Ramp/Shelter/Pier Parking Lot

Physical Observation

MSA Staff observed parking activities on Saturday September 25th 2021 from 11am-3pm.

Vehicle Count

Hour 1: 17	Hour 3: 12
Hour 2: 16	Hour 4: 11

Estimated Capacity 91

Overall Parking Observations More than Enough Parking Available

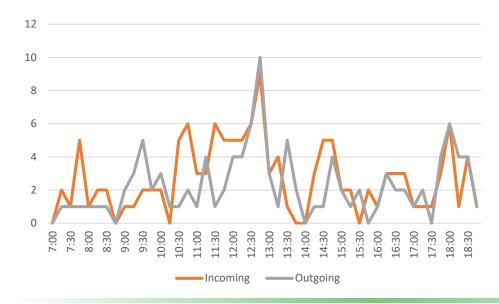
Parking Material Asphalt

Overall Parking Lot Condition Good

Observer Comments: None.

Traffic Camera Data

Cameras were setup to observe parking area traffic volumes on Saturday August 28th 2021 from 7am-7pm.





DNR Comments on Current Issues:

Shared use and mixed vehicle parking. This area gets boat traffic, shelter rentals, day use picnickers and shoreline fishing traffic.

DNR Staff Survey Comments:

None.

Traffic Flow Data (based on 15 minute intervals)

Peak Incoming 9 at 12:45

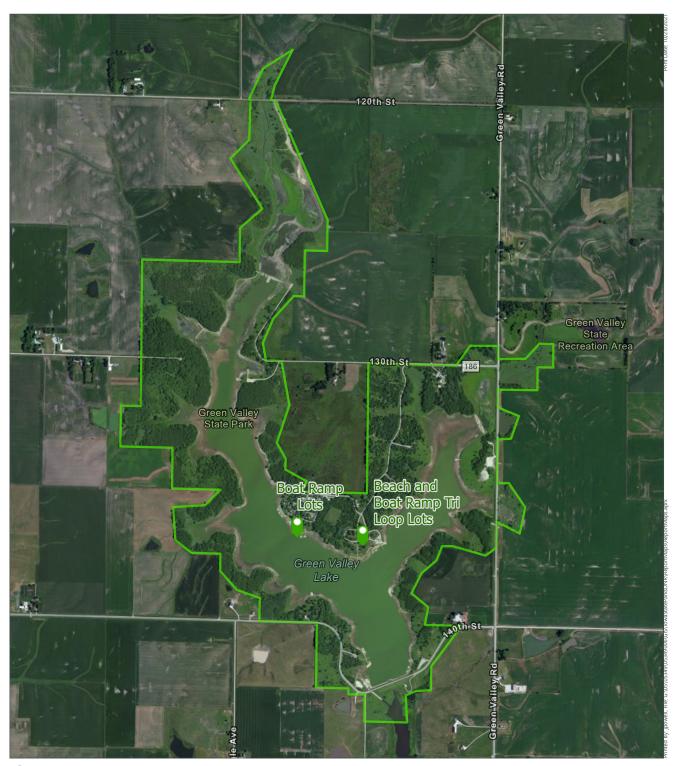
Peak Outgoing 10 at 12:45

Average Incoming 2.68

Average Outgoing 2.27

Green Valley State Park

Visitor Volume Increase 111% 2017-2020





Data Sources: Iowa DNR MSA Field Observation

500 1,000 Feet

ESRI Imagery

LEGEND

Studied Parking Lot Locations



🔲 State Park & Rec Area Boundaries

GREEN VALLEY STATE PARK OVERVIEW MAP

N

Beach and Boat Ramp Tri Loop Lots

Physical Observation

MSA Staff observed parking activities on Sunday September 12th 2021 from 11am-3pm.

Vehicle Counts

Hour 1: 9	Hour 3: 3
Hour 2: 16	Hour 4: 4

Estimated Capacity 16

Overall Parking Observations Not Enough Parking Available

Parking Material Asphalt/Gravel

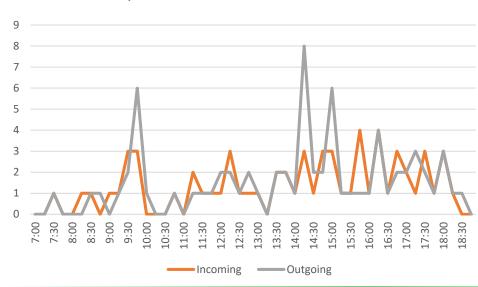
Overall Parking Lot Condition Good

Observer Comments:

Main boat parking is defined with paint markings, but smaller gravel area is not. On the first and second hour the boat ramp parking was to capacity and exceeding.

Traffic Camera Data

Cameras were setup to observe parking area traffic volumes on Saturday September 18th 2021 from 7am-7pm.





DNR Comments on Current Issues:

Shared parking for busy boat ramp and also beach area. Somewhat of a parking complex. Have submitted for funds for more truck and trailer parking.

DNR Staff Survey Comments:

We host many fishing tournaments in a summer, 30+. These tournaments bring 20 plus boats and many times more. There is only 10 spots to park, so they are parking anywhere they can fit, which is typically grass, and is often times illegal.

Traffic Flow Data

(based on 15 minute intervals)

Peak Incoming 4 at 16:15

Peak Outgoing 8 at 14:15

Average Incoming 1.33

Average Outgoing 1.50

Green Valley State Park continued

Boat Ramp Lots Parking Lot

Physical Observation

MSA Staff observed parking activities on Sunday September 12th 2021 from 11am-3pm.

Vehicle Counts

Hour 1: 1	Hour 3: 0
Hour 2: 0	Hour 4: 0

Estimated Capacity 6

Overall Parking Observations Adequate Parking Available

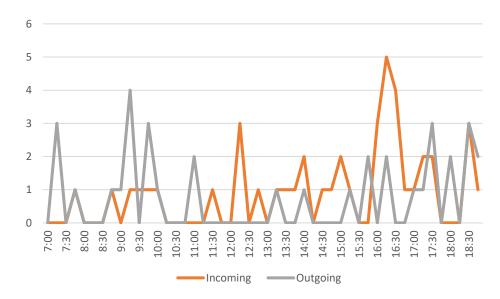
Parking Material Asphalt/Gravel

Overall Parking Lot Condition Good

Observer Comments: None

Traffic Camera Data

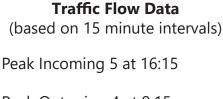
Cameras were setup to observe parking area traffic volumes on Saturday September 18th 2021 from 7am-7pm.





DNR Comments on Current Issues: Virtually no parking available at this boat ramp.

DNR Staff Survey Comments: None.



Peak Outgoing 4 at 9:15

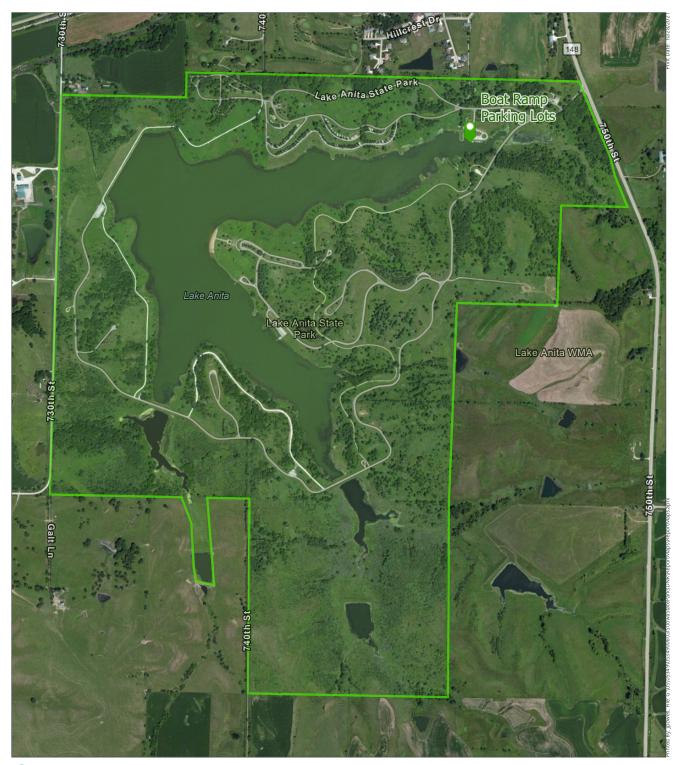
Average Incoming 0.89

Average Outgoing 0.72



Lake Anita State Park

Visitor Volume Decrease 13% 2017-2020





Data Sources: Iowa DNR MSA Field Observatio ESRI Imagery

500

1,000 Feet

LEGEND

Studied Parking Lot Locations



State Park & Rec Area Boundaries

LAKE ANITA STATE PARK OVERVIEW MAP

• •

Boat Ramp Parking Lots

Physical Observation

MSA Staff observed parking activities on Sunday September 12th 2021 from 11am-3pm.

Vehicle Counts

Hour 1: 3	Hour 3: 2
Hour 2: 3	Hour 4: 0

Estimated Capacity 27

Overall Parking Observations More than Enough Parking Available

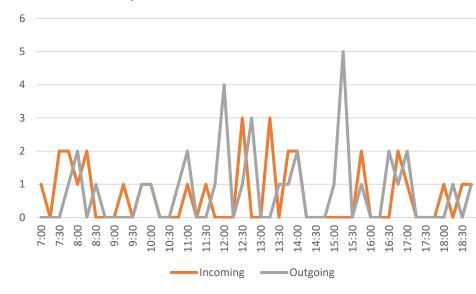
Parking Material Gravel

Overall Parking Lot Condition Good

Observer Comments: None.

Traffic Camera Data

Cameras were setup to observe parking area traffic volumes on Saturday September 18th 2021 from 7am-7pm.





DNR Comments on Current Issues: Busiest. Handles regular usage. Too small for tournaments, holiday weekends and such.

DNR Staff Survey Comments:

None.

Traffic Flow Data (based on 15 minute intervals)

Peak Incoming 3 at 13:15

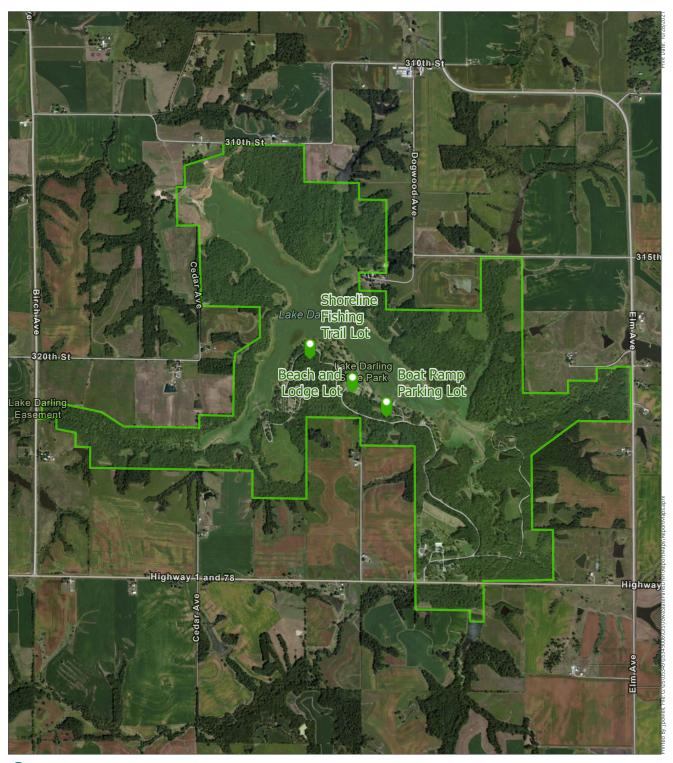
Peak Outgoing 5 at 15:15

Average Incoming 0.64

Average Outgoing 0.75

Lake Darling State Park

Visitor Volume Increase 101% 2017-2020





Data Sources: Iowa DNR MSA Field Observation ESRI Imagery

500 1,000 Feet

LEGEND

Studied Parking Lot Locations



State Park & Rec Area Boundaries

LAKE DARLING STATE PARK OVERVIEW MAP

Shoreline Fishing Trail Parking Lot

Physical Observation

MSA Staff observed parking activities on Sunday September 19th 2021 from 11am-3pm.

Vehicle Counts

Hour 1: 1	Hour 3: 0
Hour 2: 1	Hour 4: 0

Estimated Capacity 15

Overall Parking Observations More than Enough Parking Available

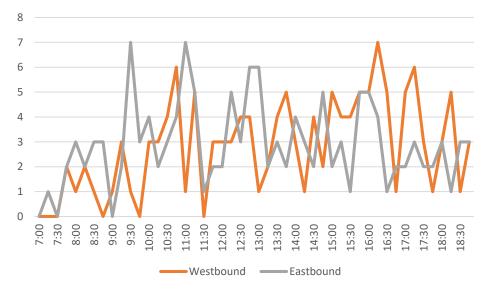
Parking Material Grass/Gravel

Overall Parking Lot Condition Fair

Observer Comments: Observed one family having a picnic in the grass in this area.

Traffic Camera Data

Cameras were setup to observe parking area traffic volumes on Saturday August 28th 2021 from 7am-7pm.





DNR Comments on Current Issues: Lots of people park for shoreline fishing and ice fishing, park in grass.

DNR Staff Survey Comments: None.

Traffic Flow Data (based on 15 minute intervals)

Peak Incoming 7 at 16:15

Peak Outgoing 7 at 11:00

Average Incoming 2.81

Average Outgoing 2.89

Lake Darling State Park continued

Boat Ramp Parking Lot

Physical Observation

MSA Staff observed parking activities on Sunday September 19th 2021 from 11am-3pm.

Vehicle Counts

Hour 1: 3	Hour 3: 7
Hour 2: 4	Hour 4: 7

Estimated Capacity 95

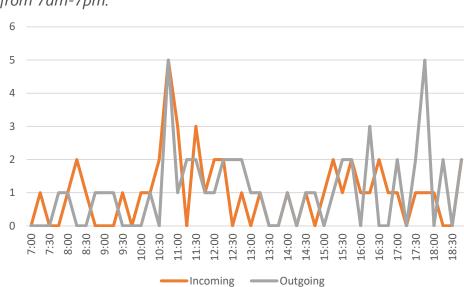
Overall Parking Observations More than Enough Parking Available

Parking Material Concrete

Overall Parking Lot Condition Good

Observer Comments: None.

Traffic Camera Data



Cameras were setup to observe parking area traffic volumes on Saturday August 28th 2021 from 7am-7pm.



DNR Comments on Current Issues:

Mixed vehicle parking for trucks and trailers for boat ramp, shelter and also shoreline fishermen and trail walkers

DNR Staff Survey Comments: None.

Traffic Flow Data (based on 15 minute intervals)

Peak Incoming 5 at 10:45

Peak Outgoing 5 at 10:45

Average Incoming 0.97

Average Outgoing 1.04

Beach and Lodge Parking Lot

Physical Observation

MSA Staff observed parking activities on Sunday September 19th 2021 from 11am-3pm. Note: This lodge was not reserved the day of the Physical Observation.

Vehicle Counts

Hour 1: 0	Hour 3: 3
Hour 2: 4	Hour 4: 2

Estimated Capacity 130

Overall Parking Observations More than Enough Parking Available

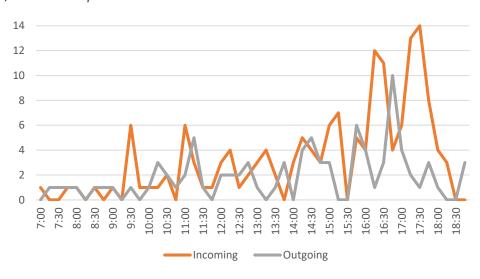
Parking Material Concrete

Overall Parking Lot Condition Good

Observer Comments: None.

Traffic Camera Data

Cameras were setup to observe parking area traffic volumes on Saturday August 28th 2021 from 7am-7pm.





DNR Comments on Current Issues:

Lodge is highly popular for wedding and large events, parking is shared with the beach visitors, hikers, and picnickers as well.

DNR Staff Survey Comments: None.

Traffic Flow Data

(based on 15 minute intervals)

Peak Incoming 14 at 17:30

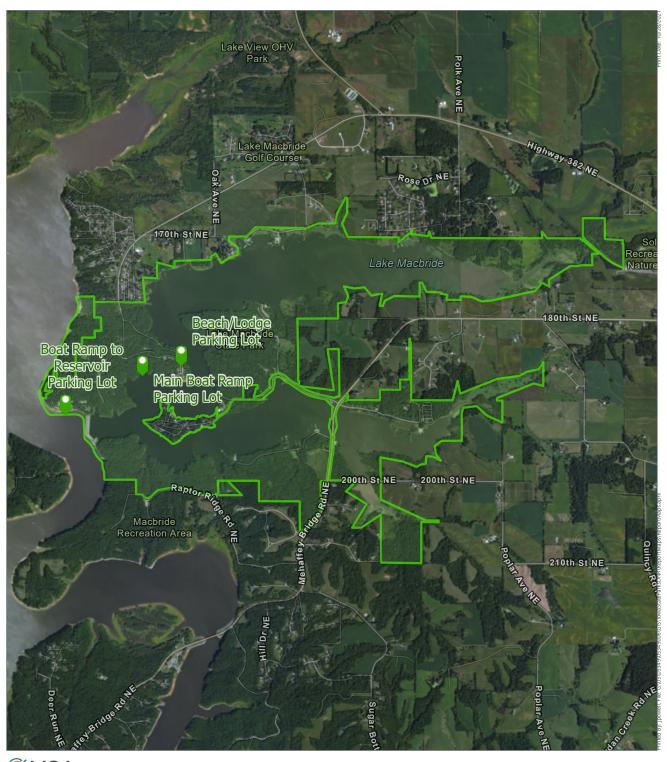
Peak Outgoing 10 at 16:45

Average Incoming 3.29

Average Outgoing 1.87

Lake Macbride State Park

Visitor Volume Decrease 10% 2017-2020



∭ MSA

LEGEND

Studied Parking Lot Locations



State Park & Rec Area Boundaries

LAKE MACBRIDE STATE PARK LAKE MACBRIDE STATE PARK OVERVIEW

0 500 1,000 Feet

Data Sources: Iowa DNR MSA Field Obser ESRI Imagery

Beach/Lodge Parking Lot

Physical Observation

MSA Staff observed parking activities on Sunday August 22nd 2021 from 11am-3pm.

Note: This lodge was not reserved the day of the Physical Observation.

Vehicle Counts

Hour 1: 50	Hour 3: 127
Hour 2: 107	Hour 4: 155

Estimated Capacity 240

Overall Parking Observations More than Enough Parking Available

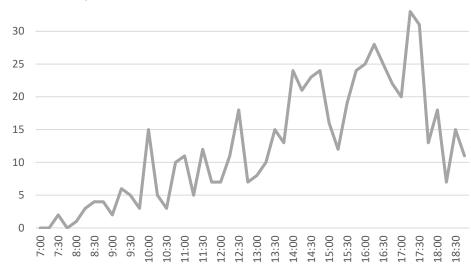
Parking Material Asphalt

Overall Parking Lot Condition Good

Observer Comments: None.

Traffic Camera Data

Cameras were setup to observe parking area traffic volumes on Saturday August 28th 2021 from 7am-7pm.





DNR Comments on Current Issues:

Beach lot has 240 spaces; we have to turn away traffic on hot weekends from June 1 to July 4th holiday as beach lot, lodge lot, main ramp lot and Coralville are all full, as well as full at picnic area parking spots. Days with lodge reservations are especially quick to fill up.

DNR Staff Survey Comments:

At MacBride we run into conflicts with rentals at the Lodge and beach users overwhelming the parking area. No place to park for the beach on hot busy weekends in the summer.

> **Traffic Flow Data** (based on 15 minute intervals)

Peak Outgoing One-way 33 at 17:15

Average Outgoing 12.45

Note: This lodge was not reserved the day of the Traffic Camera Observation.

Lake Macbride State Park continued

Main Boat Ramp Parking Lot

Physical Observation

MSA Staff observed parking activities on Sunday August 22nd 2021 from 11am-3pm.

Vehicle Counts

Hour 1: 50	Hour 3: 127
Hour 2: 107	Hour 4: 155

Estimated Capacity 28

Overall Parking Observations Adequate Parking Available

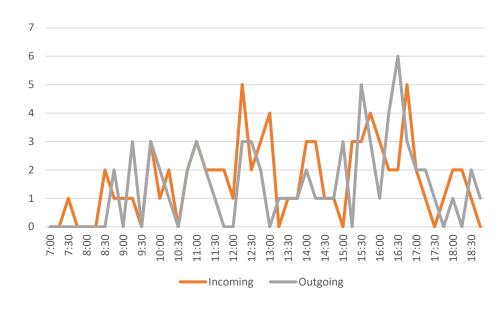
Parking Material Asphalt

Overall Parking Lot Condition Good

Observer Comments: None.

Traffic Camera Data

Cameras were setup to observe parking area traffic volumes on Saturday August 28th 2021 from 7am-7pm.

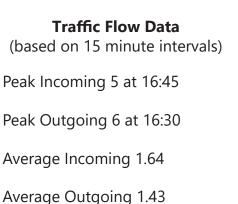




DNR Comments on Current Issues: Boat Ramp to Lake Macbride is busy.

DNR Staff Survey Comments:

Beach Parking During High use, User Conflicts -Kayakers in Boat Trailer spots at Ramps, specifically at the main boat ramp.



Boat Ramp to Reservoir Parking Lot

Physical Observation

MSA Staff observed parking activities on Sunday August 22nd 2021 from 11am-3pm.

Vehicle Counts

Hour 1: 30	Hour 3: 49
Hour 2: 42	Hour 4: 50

Estimated Capacity 82

Overall Parking Observations More than Enough Parking Available

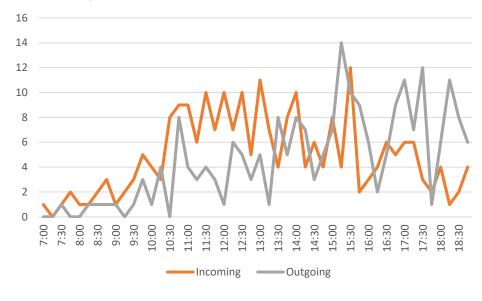
Parking Material Asphalt

Overall Parking Lot Condition Good

Observer Comments: None.

Traffic Camera Data

Cameras were setup to observe parking area traffic volumes on Saturday August 28th 2021 from 7am-7pm.





DNR Comments on Current Issues: Reservoir parking is the only free ramp onto Coralville Lake, making it popular.

DNR Staff Survey Comments:

No place for boat trailers to park at the ramps in spring due to all of the single vehicles bringing in kayaks.

Traffic Flow Data (based on 15 minute intervals) Peak Incoming 12 at 15:30 Peak Outgoing 14 at 15:15 Average Incoming 4.91

Average Outgoing 4.52

Lake Manawa State Park

Visitor Volume Increase 210% 2017-2020





Iowa DNR MSA Field Observation ESRI Imagery

1,000 Feet

500

Data Sources

LEGEND

Studied Parking Lot Locations



State Park & Rec Area Boundaries

LAKE MANAWA STATE PARK OVERVIEW MAP

R

Beach/Playground/Shelter Parking Lot

Physical Observation

MSA Staff observed parking activities on Sunday August 29th 2021 from 9am-1pm.

Vehicle Counts

Hour 1: 3	Hour 3: 11
Hour 2: 2	Hour 4: 26

Estimated Capacity 442

Overall Parking Observations More than Enough Parking Available

Parking Material Asphalt

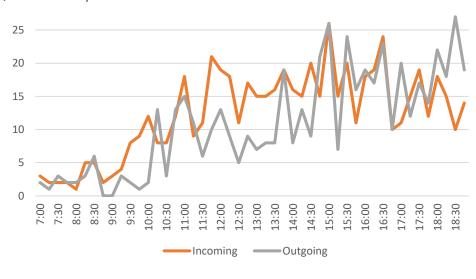
Overall Parking Lot Condition Fair

Observer Comments:

Half visitors for beach area and half for playground. Ruts and potholes only near entrance not within parking lot.

Traffic Camera Data

Cameras were setup to observe parking area traffic volumes on Friday August 20th 2021 from 7am-7pm.





DNR Comments on Current Issues:

This lot serves an extremely busy beach, concessionaire that offers paddling opportunities, a large attraction playground and a nearby shelter that sees frequent rentals and walk-in use. There are multiples entrances into the parking lot that are currently all two way traffic.

DNR Staff Survey Comments: None.

Traffic Flow Data (based on 15 minute intervals) Peak Incoming 26 at 15:00 Peak Outgoing 27 at 18:30 Average Incoming 12.45 Average Outgoing 10.79

Lake Manawa State Park continued

West Boat Ramp Parking Lot

Physical Observation

MSA Staff observed parking activities on Sunday August 29th 2021 from 9am-1pm.

Vehicle Counts

Hour 1: 2	Hour 3: 2
Hour 2: 3	Hour 4: 4

Estimated Capacity 22

Overall Parking Observations Adequate Parking Available

Parking Material Asphalt

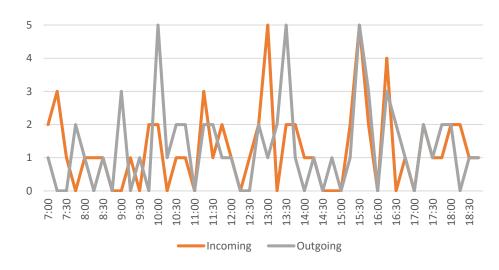
Overall Parking Lot Condition Poor

Observer Comments:

Approx 30-40% subbase exposed below asphalt. Ruts, potholes, or ponding areas in surface.

Traffic Camera Data

Cameras were setup to observe parking area traffic volumes on Friday August 20th 2021 from 7am-7pm.





DNR Comments on Current Issues:

Popular for boaters as it is along a busy road and area is also used to access shoreline fishing, fishing jetties, etc.

DNR Staff Survey Comments: None.

Traffic Flow Data

(based on 15 minute intervals)

Peak Incoming 5 at 15:30

Peak Outgoing 5 at 15:30

Average Incoming 1.27

Average Outgoing 1.29

Boy Scout Island Parking Lot

Physical Observation

MSA Staff observed parking activities on Sunday August 29th 2021 from 9am-1pm.

Vehicle Counts

Hour 1: 2	Hour 3: 2
Hour 2: 2	Hour 4: 2

Estimated Capacity 42

Overall Parking Observations Adequate Parking Available

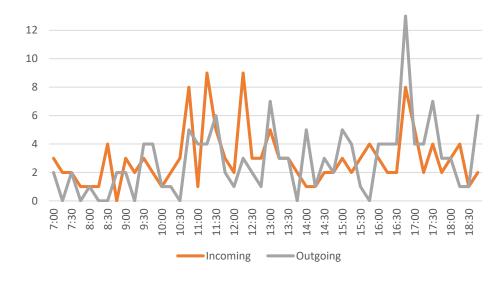
Parking Material Asphalt

Overall Parking Lot Condition Fair

Observer Comments: Ruts, potholes, or ponding areas in surface.

Traffic Camera Data

Cameras were setup to observe parking area traffic volumes on Friday August 20th 2021 from 7am-7pm.





DNR Comments on Current Issues: Very busy day use area for picnicking and shoreline fishing and fishing off the pier.

DNR Staff Survey Comments: None.

Traffic Flow Data (based on 15 minute intervals)

Peak Incoming 9 at 11:15

Peak Outgoing 13 at 16:45

Average Incoming 2.95

Average Outgoing 2.81

Lake Manawa State Park Continued

Boat Ramp NE of beach Parking Lot

Physical Observation

MSA Staff observed parking activities on Sunday August 29th 2021 from 9am-1pm.

Vehicle Counts

Hour 1: 2	Hour 3: 2
Hour 2: 3	Hour 4: 4

Estimated Capacity 69

Overall Parking Observations Adequate Parking Available

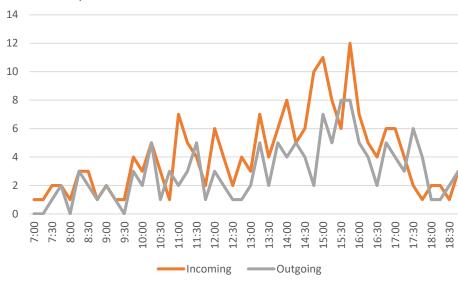
Parking Material Asphalt

Overall Parking Lot Condition Fair

MSA Observer Comments: None.

Traffic Camera Data

Cameras were setup to observe parking area traffic volumes on Friday August 20th 2021 from 7am-7pm.





DNR Comments on Current Issues: Very busy on weekends, especially holiday weekends.

DNR Staff Survey Comments: None.

Traffic Flow Data

(based on 15 minute intervals)

Peak Incoming 12 at 15:45

Peak Outgoing 8 at 15:45

Average Incoming 4.10

Average Outgoing 2.93

North Boat Ramp Parking Lot

Physical Observation

MSA Staff observed parking activities on Sunday August 29th 2021 from 9am-1pm.

Vehicle Counts

Hour 1: 1	Hour 3: 4
Hour 2: 1	Hour 4: 0

Estimated Capacity 52

Overall Parking Observations Adequate Parking Available

Parking Material Asphalt

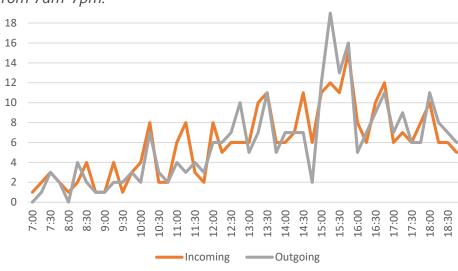
Overall Parking Lot Condition Poor

Observer Comments:

Two ADA accessible parking spots. There are 3 other lots nearby with lots of parking spaces. 30% of surface worn down to subbase rock, ruts, potholes, or ponding areas in surface.

Traffic Camera Data

Cameras were setup to observe parking area traffic volumes on Friday August 20th 2021 from 7am-7pm.





DNR Comments on Current Issues:

North is busy because it is shortest drive to get to. Shared parking between shelters and boat trailers, not marked.

DNR Staff Survey Comments:

Boat ramp parking is a common complaint.

Traffic Flow Data (based on 15 minute intervals)

Peak Incoming 15 at 15:45

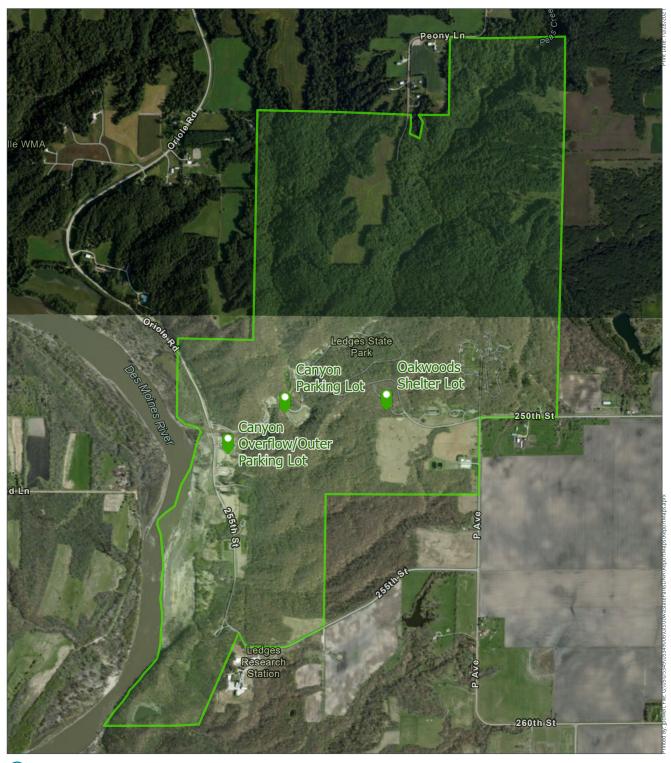
Peak Outgoing 19 at 15:15

Average Incoming 5.97

Average Outgoing 5.85

Ledges State Park

Visitor Volume Increase 132% 2017-2020



∭MSA

Data Sources: Iowa DNR MSA Field Observation ESRI Imagery

1,000 Feet

LEGEND

Studied Parking Lot Locations



🔲 State Park & Rec Area Boundaries

LEDGES STATE PARK OVERVIEW MAP

N

Canyon Overflow/Outer Parking Lot

Physical Observation

MSA Staff observed parking activities on Sunday September 12th 2021 from 11am-3pm.

Vehicle Counts

Hour 1: 5	Hour 3: 6
Hour 2: 7	Hour 4: 7

Estimated Capacity 50

Overall Parking Observations More than Enough Parking Available

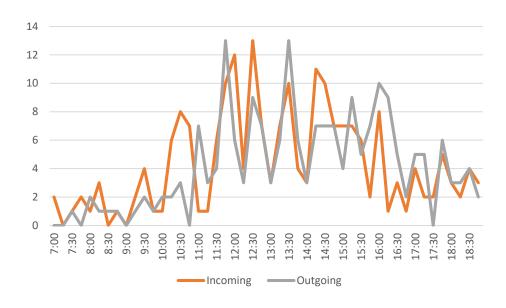
Parking Material Asphalt

Overall Parking Lot Condition Poor

Observer Comments: Not a busy day and was never filled.

Traffic Camera Data

Cameras were setup to observe parking area traffic volumes on Saturday August 14th 2021 from 7am-7pm.





DNR Comments on Current Issues: None.

DNR Staff Survey Comments: None.

Traffic Flow Data (based on 15 minute intervals)

Peak Incoming 13 at 12:30

Peak Outgoing 13 at 13:30

Average Incoming 4.33

Average Outgoing 4.16

Ledges State Park continued

Oakwoods Shelter Parking Lot

Physical Observation

MSA Staff observed parking activities on Sunday September 12th 2021 from 11am-3pm.

Vehicle Counts

Hour 1: 6	Hour 3: 10
Hour 2: 11	Hour 4: 12

Estimated Capacity 45

Overall Parking Observations Adequate Parking Available

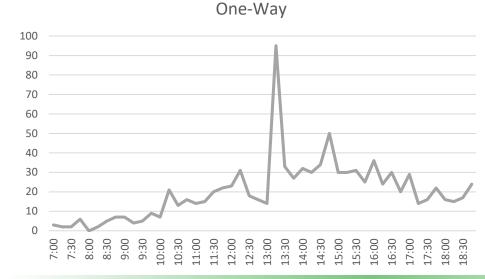
Parking Material Mix of cement for accessible parking and then gravel

Overall Parking Lot Condition Fair

Observer Comments: Mix of cement for accessible parking and then gravel.

Traffic Camera Data

Cameras were setup to observe parking area traffic volumes on Saturday August 14th 2021 from 7am-7pm.





DNR Comments on Current Issues: Fills up, block roads off, park in different directions.

DNR Staff Survey Comments:

Oakwoods just has 6 paved parking spots and the rest is gravel.

Traffic Flow Data

(based on 15 minute intervals)

Peak One-Way 95 at 13:15

Average One-Way Traffic 20.04

Canyon Parking Lot

Physical Observation

MSA Staff observed parking activities on Sunday September 12th 2021 from 11am-3pm.

Vehicle Counts

Hour 1: 9	Hour 3: 15
Hour 2: 11	Hour 4: 15

Estimated Capacity 14

Overall Parking Observations Not Enough Parking Available

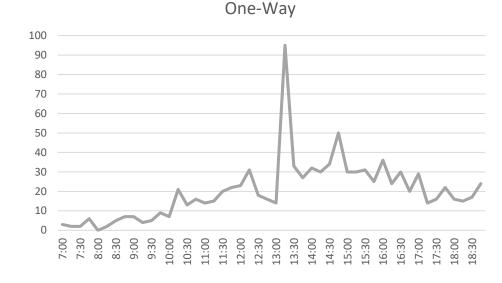
Parking Material Asphalt

Overall Parking Lot Condition Fair

Observer Comments: Adding a ADA accessible spot would be good

Traffic Camera Data

Cameras were setup to observe parking area traffic volumes on Saturday August 14th 2021 from 7am-7pm.





DNR Comments on Current Issues: None.

DNR Staff Survey Comments:

Our main attraction is the canyon drive which has about 70 parking spots. Park staff has written many warnings and issued citations for parking illegally in the canyon the last few summers.

Traffic Flow Data (based on 15 minute intervals)

Peak One-Way 95 at 13:15

Average One-Way Traffic 20.04

Lewis and Clark State Park

Visitor Volume Decrease 12% 2017-2020



Data Sources: Iowa DNR MSA Field Observation ESRI Imagery

500

LEGEND
Studied Parking Lot Locations

State Park & Rec Area Boundaries

LEWIS AND CLARK STATE PARK OVERVIEW MAP

N

North Boat Ramp Parking Lot

Physical Observation

MSA Staff observed parking activities on Friday August 27th 2021 from 12pm-4pm.

Vehicle Counts

Hour 1: 2	Hour 3: 2
Hour 2: 2	Hour 4: 2

Estimated Capacity 27

Overall Parking Observations Adequate Parking Available

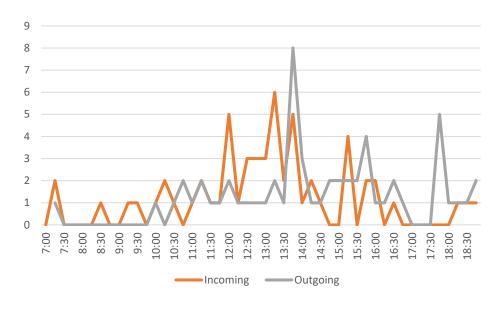
Parking Material Asphalt

Overall Parking Lot Condition Good

Observer Comments: 6 extended spots, approx. 21 regular spots. Light rain.

Traffic Camera Data

Cameras were setup to observe parking area traffic volumes on Friday August 20th 2021 from 7am-7pm.





DNR Comments on Current Issues:

When the boat ramp is full boaters will back onto the grass surrounding the boat ramp or park in the overflow parking at the Visitors center (in designated spots or parallel parking in nose-in spots).

DNR Staff Survey Comments:

None.

Traffic Flow Data (based on 15 minute intervals)

Peak Incoming 6 at 13:15

Peak Outgoing 8 at 13:45

Average Incoming 1.20

Average Outgoing 1.25

Lewis and Clark State Park continued

Lodge Parking Lot

Physical Observation

MSA Staff observed parking activities on Friday August 27th 2021 from 12pm-4pm. Note: The Lodge was not reserved the day of the Physical Observation.

Vehicle Counts

Hour 1: 0	Hour 3: 2
Hour 2: 4	Hour 4: 1

Estimated Capacity 16

Overall Parking Observations Adequate Parking Available

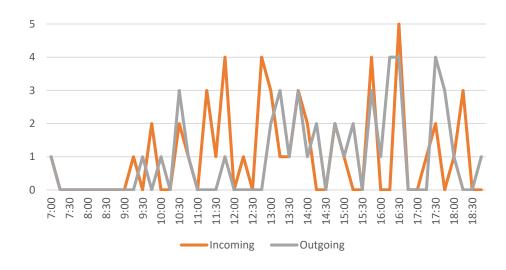
Parking Material Asphalt/Gravel

Overall Parking Lot Condition Good

MSA Observer Comments: None.

Traffic Camera Data

Cameras were setup to observe parking area traffic volumes on Friday August 20th 2021 from 7am-7pm.





DNR Comments on Current Issues:

Does not accommodate day use traffic when rental occurs at the same time.

DNR Staff Survey Comments:

On a weekend when we have rentals at the Lodge and Banquet room we will get complaints from renters about lack of parking. When the boat ramp is full boaters will park at the Visitors Center/ Banquet Room lot, causing a lack of parking for renters.

Traffic Flow Data

(based on 15 minute intervals)

Peak Incoming 5 at 16:30

Peak Outgoing 4 at 16:30

Average Incoming 1.02

Average Outgoing 0.95

Note: The Lodge was not reserved the day of the Traffic Camera Observation.

Visitor Center Parking Lot

Physical Observation

MSA Staff observed parking activities on Friday August 27th 2021 from 12pm-4pm.

Note: Visitor Center was not reserved the day of the Physical Observation.

Vehicle Counts

Hour 1: 3	Hour 3: 4
Hour 2: 3	Hour 4: 3

Estimated Capacity 44

Overall Parking Observations Adequate Parking Available

Parking Material Asphalt

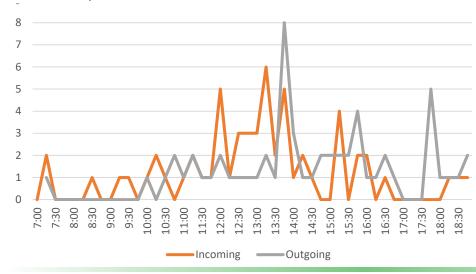
Overall Parking Lot Condition Good

Observer Comments:

36 regular spaces, 8 extended spaces, 6 ADA spaces. Light rain day of observation.

Traffic Camera Data

Cameras were setup to observe parking area traffic volumes on Friday August 20th 2021 from 7am-7pm.





DNR Comments on Current Issues:

Overflow from the boat ramp parking at the Visitors Center can cause problems when the Banquet room is rented. Have had renters complain about the lack of parking when they have large groups.

DNR Staff Survey Comments:

None.

Traffic Flow Data

(based on 15 minute intervals)

Peak Incoming 6 at 13:15

Peak Outgoing 8 at 13:45

Average Incoming 1.20

Average Outgoing 1.25

Note: Visitor Center was not reserved the day of the Traffic Camera Observation.

Maquoketa Caves State Park

Visitor Volume Decrease 46% 2017-2020



Data Sources: Iowa DNR MSA Field Observation ESRI Imagery

LEGEND

Studied Parking Lot Locations



1,000 Feet

500

State Park & Rec Area Boundaries

MAQUOKETA CAVES STATE PARK OVERVIEW MAP

N

Playground/Shelter/Additional Cave/Trail Use Parking Lot

Physical Observation

MSA Staff observed parking activities on Sunday August 29th 2021 from 11am-3pm.

Vehicle Counts

Hour 1: 14	Hour 3: 13
Hour 2: 20	Hour 4: 12

Estimated Capacity 76

Overall Parking Observations Adequate Parking Available

Parking Material Concrete

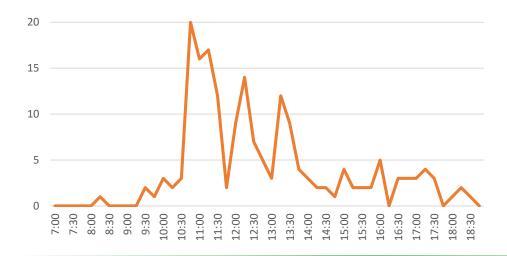
Overall Parking Lot Condition Good

Observer Comments:

Minimal ADA accessible parking, not identified well, especially near shelter/restrooms. Only one ADA accessible space in next parking lot down.

Traffic Camera Data

Cameras were setup to observe parking area traffic volumes on Saturday September 4th 2021 from 7am-7pm.





DNR Comments on Current Issues:

This area becomes completely full, with playground visitors, but also those walking down to the trailhead. Staff had to take this shelter out of the reservation system due to a shortage of parking for potential shelter customers.

DNR Staff Survey Comments:

Parking is full on weekends early morning to late afternoon. No parking available and many waiting for a spot to open.

Traffic Flow Data (based on 15 minute intervals)

Peak Incoming 20 at 10:45

Average Incoming 3.85

Maquoketa Caves State Park continued

Trailhead to Caves Parking Lot

Physical Observation

MSA Staff observed parking activities on Sunday August 29th 2021 from 11am-3pm.

Vehicle Counts

Hour 1: 48	Hour 3: 46
Hour 2: 48	Hour 4: 47

Estimated Capacity 48

Overall Parking Observations Not Enough Parking Available

Parking Material Concrete

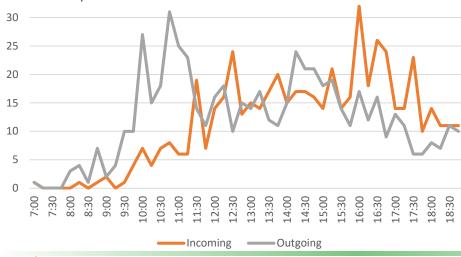
Overall Parking Lot Condition Good

Observer Comments:

Parking lot completely full with cars continually driving by looking for openings. Always "full" one or two spots may open up when people leave but people willing to wait for spots in this area as well. 50 spots total, 2 ADA accessible, all 48 others generally filled.

Traffic Camera Data

Cameras were setup to observe parking area traffic volumes on Saturday September 4th 2021 from 7am-7pm.





DNR Comments on Current Issues:

Extremely busy on weekends with popular trails to caves. Parking is on both sides of the road and children and families cross. Visitors attempt to park along roadways. With a through road entering and leaving the park, it is not possible to completely limit traffic into the park and close off when at capacity. Staff is currently spending all day Saturday and part of Sunday doing traffic control

DNR Staff Survey Comments:

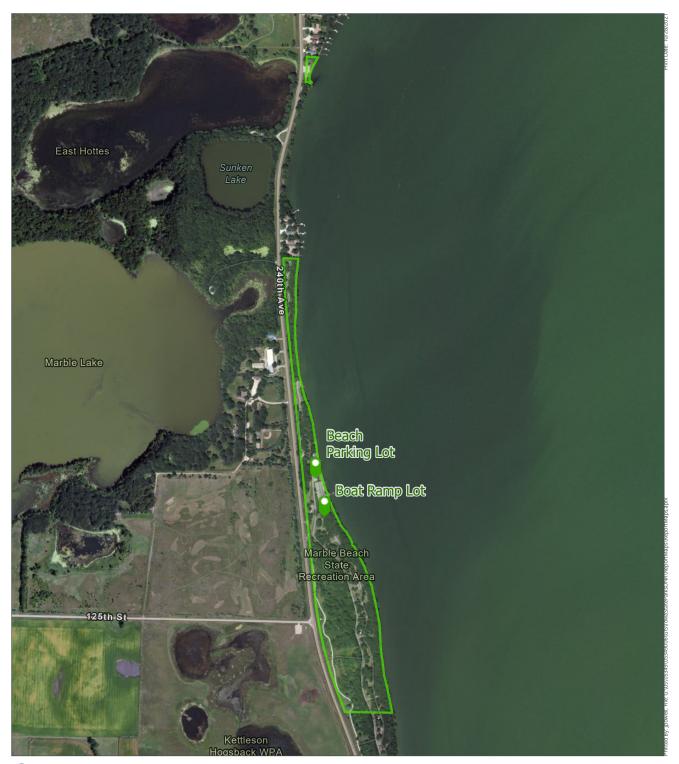
Parking is full on weekends early morning to late afternoon. No parking available and many waiting for a spot to open.

Traffic Flow Data (based on 15 minute intervals) Peak Incoming 32 at 16:00 Peak Outgoing 31 at 10:45 Average Incoming 11.35 Average Outgoing 12.25



Marble Beach State Rec Area

Visitor Volume Increase 112% 2017-2020



∭MSA

Data Sources: Iowa DNR MSA Field Observation ESRI Imagery

500

1,000 Feet

1

LEGEND

Studied Parking Lot Locations



🔲 State Park & Rec Area Boundaries

MARBLE BEACH STATE RECREATION AREA OVERVIEW MAP

N

Boat Ramp Parking Lot

Physical Observation

MSA Staff observed parking activities on Sunday September 5th 2021 from 9am-1pm.

Vehicle Counts

Hour 1: 19	Hour 3: 25
Hour 2: 22	Hour 4: 31

Estimated Capacity 16

Overall Parking Observations Not Enough Parking Available

Parking Material Concrete

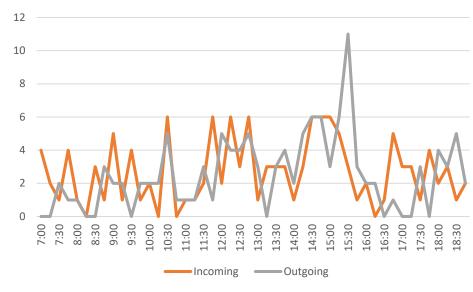
Overall Parking Lot Condition Good

Observer Comments:

Visitors started to park on the entrance road and grassy areas. Not enough parking.

Traffic Camera Data

Cameras were setup to observe parking area traffic volumes on Saturday September 11th 2021 from 7am-7pm.





DNR Comments on Current Issues: Too many trailers, not enough parking lot

DNR Staff Survey Comments: Small boat ramp parking area.

Traffic Flow Data

(based on 15 minute intervals)

Peak Incoming 6 at 14:45

Peak Outgoing 11 at 15:30

Average Incoming 2.70

Average Outgoing 2.52

Marble Beach State Rec Area continued

Beach Parking Lot

Physical Observation

MSA Staff observed parking activities on Sunday September 5th 2021 from 9am-1pm.

Vehicle Counts

Hour 1: 4 RV's	Hour 3: 4 RV's
Hour 2: 4 RV's	Hour 4: 4 RV's

Estimated Capacity 18 (cars/trucks)

Overall Parking Observations Not Enough Parking Available

Parking Material Gravel

Overall Parking Lot Condition Fair

Observer Comments:

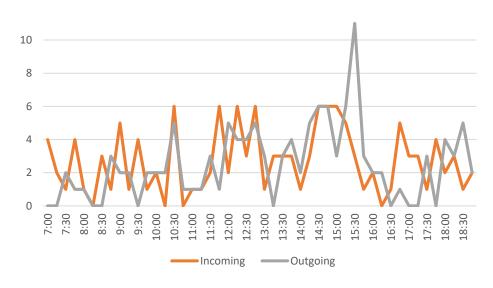


DNR Comments on Current Issues: Not enough beach parking, have issues with people pulling into campsites and along campground road.

DNR Staff Survey Comments: None.

Traffic Camera Data

Cameras were setup to observe parking area traffic volumes on Saturday September 11th 2021 from 7am-7pm.



Traffic Flow Data

(based on 15 minute intervals)

Peak Incoming 6 at 14:45

Peak Outgoing 11 at 15:30

Average Incoming 2.70

Average Outgoing 2.52



McIntosh Woods State Park

Visitor Volume Decrease 23% 2017-2020



Data Sources: Iowa DNR MSA Field Observation ESRI Imagery

500

Studied Parking Lot Locations

1

State Park & Rec Area Boundaries

MCINTOSH WOODS STATE PARK OVERVIEW MAP

N

McIntosh Woods Boat Ramp Parking Lot

Physical Observation

MSA Staff observed parking activities on Saturday September 25th 2021 from 9am-1pm.

Vehicle Count

Hour 1: 25	Hour 3: 22
Hour 2: 27	Hour 4: 20

Estimated Capacity 100

Overall Parking Observations Not Enough Parking Available

Parking Material Asphalt

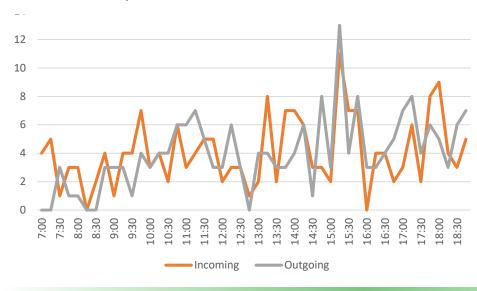
Overall Parking Lot Condition Good

Observer Comments:

Busy for a brisk morning, overflow parking is marked before even reaching the lot.

Traffic Camera Data

Cameras were setup to observe parking area traffic volumes on Saturday September 11th 2021 from 7am-7pm.





DNR Comments on Current Issues:

Limited space for boat trailer parking, park in grass, etc currently.

DNR Staff Survey Comments:

Mainly the complaints come from the 4th of July weekend when parking is always a problem.

Traffic Flow Data (based on 15 minute intervals)

Peak Incoming 11 at 15:15

Peak Outgoing 13 at 15:15

Average Incoming 4.04

Average Outgoing 3.97

Mini-Wakan State Park

Visitor Volume Increase 112% 2017-2020



Image: State Park & Rec Area Boundaries Image: State Park & Rec Area Boundaries Image: State Park & Rec Area Boundaries

MINI-WAKAN STATE PARK OVERVIEW MAP

Beach and Lodge Parking Lot

Physical Observation

MSA Staff observed parking activities on September 4th 2021 from 9am-1pm. Note: The Lodge was not reserved the day of the Physical Observation.

Vehicle Counts

	Hour 1: 15	Hour 3: 20
	Hour 2: 17	Hour 4: 11

Estimated Capacity 13

Overall Parking Observations Not Enough Parking Available

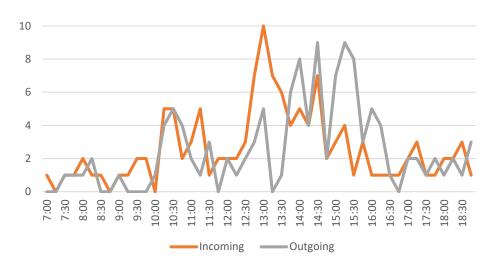
Parking Material Concrete

Overall Parking Lot Condition Good

Observer Comments: Many visitors park in the grass, not enough room.

Traffic Camera Data

Cameras were setup to observe parking area traffic volumes on Saturday September 11th 2021 from 7am-7pm.





DNR Comments on Current Issues: Not enough parking for both facilities, shared parking, cars and trailer parking.

DNR Staff Survey Comments:

No boat trailer parking at all.

Traffic Flow Data

(based on 15 minute intervals)

Peak Incoming 10 at 13:00

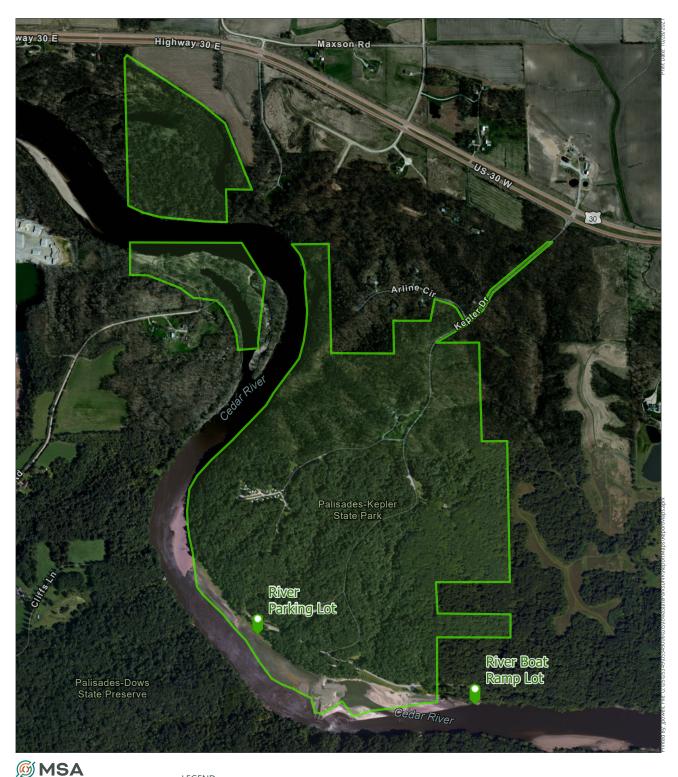
Peak Outgoing 9 at 14:30

Average Incoming 2.60

Average Outgoing 2.50

Palisades-Kepler State Park

Visitor Volume Decrease 32% 2017-2020



Data Sources: Iowa DNR MSA Field Observation ESRI Imagery

LEGEND

Studied Parking Lot Locations



1,000 Feet

500

State Park & Rec Area Boundaries

PALISADES-KEPLER STATE PARK OVERVIEW MAP

N

River Parking Parking Lot

Physical Observation

MSA Staff observed parking activities on Saturday August 21st 2021 from 11am-3pm.

Vehicle Counts

Hour 1: 0	Hour 3: 1
Hour 2: 1	Hour 4: 3

Estimated Capacity 15

Overall Parking Observations More than Enough Parking Available

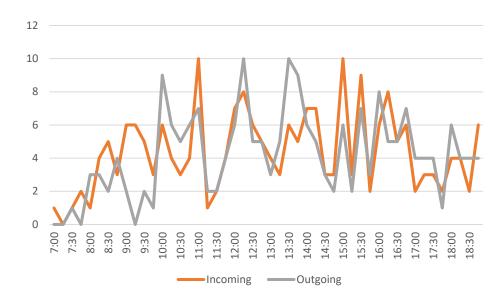
Parking Material Gravel

Overall Parking Lot Condition Good

Observer Comments: None.

Traffic Camera Data

Cameras were setup to observe parking area traffic volumes on Saturday August 28th 2021 from 7am-7pm.





DNR Comments on Current Issues: Turn around areas are tight- congestion in parking area on busy day. Currently park nose in but also parallel.

DNR Staff Survey Comments: None.

Traffic Flow Data (based on 15 minute intervals)

Peak Incoming 10 at 11:00

Peak Outgoing 10 at 12:15

Average Incoming 4.37

Average Outgoing 4.20

Palisades-Kepler State Park continued

River Boat Ramp Parking Lot

Physical Observation

MSA Staff observed parking activities on Saturday August 21st 2021 from 11am-3pm.

Vehicle Counts

Hour 1: 1	Hour 3: 2
Hour 2: 1	Hour 4: 2

Estimated Capacity 15

Overall Parking Observations More than Enough Parking Available

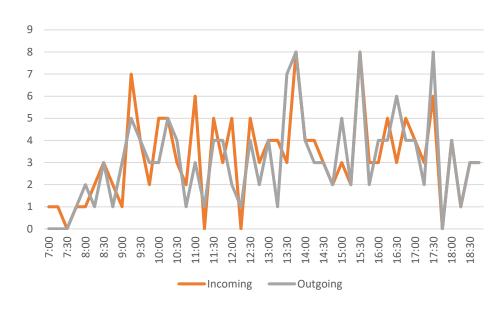
Parking Material Asphalt

Overall Parking Lot Condition Good

Observer Comments: None.

Traffic Camera Data

Cameras were setup to observe parking area traffic volumes on Saturday August 28th 2021 from 7am-7pm.





DNR Comments on Current Issues: Only river access on that stretch of the river for a long ways - can get very busy. Mostly boat traffic and trailers.

DNR Staff Survey Comments: None.

Traffic Flow Data (based on 15 minute intervals)

Peak Incoming 8 at 13:45

Peak Outgoing 8 at 13:45

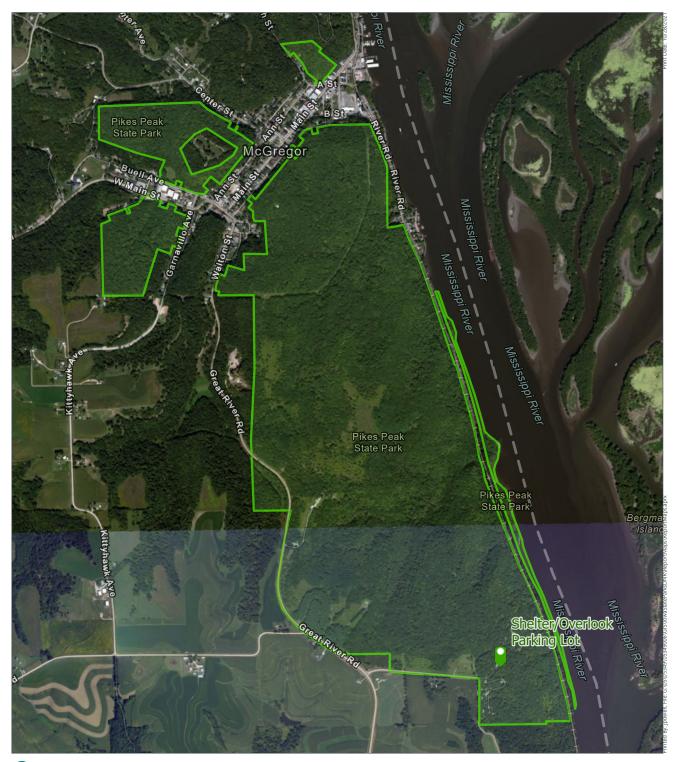
Average Incoming 3.22

Average Outgoing 3.10



Pikes Peak State Park

Visitor Volume Increase 121% 2017-2020





1,000 Feet

LEGEND

Studied Parking Lot Locations



State Park & Rec Area Boundaries

PIKES PEAK STATE PARK OVERVIEW MAP

N

Shelter/Overlook Parking Lot

Physical Observation

MSA Staff observed parking activities on Saturday August 21st 2021 from 11am-3pm.

Vehicle Counts

Hour 1: 21	Hour 3: 22
Hour 2: 30	Hour 4: 36

Estimated Capacity 90

Overall Parking Observations More than Enough Parking Available

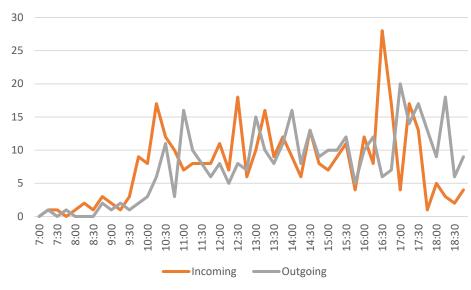
Parking Material Asphalt

Overall Parking Lot Condition Fair

Observer Comments: Low hanging trees on northwest corner of lot.

Traffic Camera Data

Cameras were setup to observe parking area traffic volumes on Saturday September 4th 2021 from 7am-7pm.





DNR Comments on Current Issues:

This popular reservable shelter shares parking with both popular overlooks and the trailhead. Especially during leaf peeper season or when shelter is reserved for a rental, there is limited parking.

DNR Staff Survey Comments:

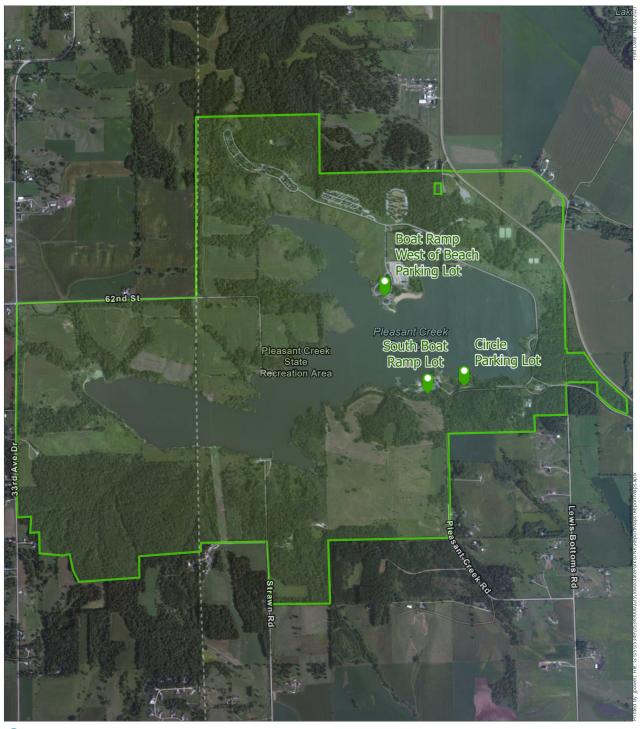
During the October weekends our main parking lot will fill up and visitors will complain there isn't enough parking.

> **Traffic Flow Data** (based on 15 minute intervals) Peak Incoming 28 at 16:30 Peak Outgoing 20 at 17:00

Average Incoming 7.75

Average Outgoing 7.68

Pleasant Creek State Recreation Area Visitor Volume Increase 177% 2017-2020



∕**∭MSA**

Data Sources: Iowa DNR MSA Field Observation ESRI Imagery

1,000 Feet

LEGEND

Studied Parking Lot Locations



🔲 State Park & Rec Area Boundaries

PLEASANT CREEK STATE RECREATION AREA OVERVIEW MAP

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R

South Boat Ramp Parking Lot

Physical Observation

MSA Staff observed parking activities on Sunday September 12th 2021 from 9am-1pm.

Vehicle Counts

Hour 1: 17	Hour 3: 22
Hour 2: 18	Hour 4: 19

Estimated Capacity 60

Overall Parking Observations More than Enough Parking Available

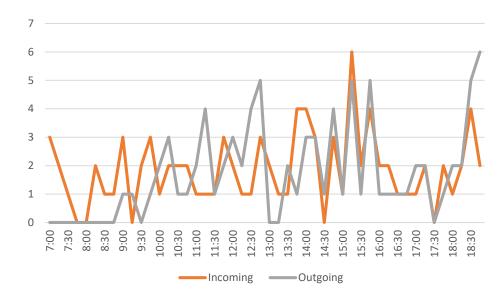
Parking Material Concrete

Overall Parking Lot Condition Good

Observer Comments: None.

Traffic Camera Data

Cameras were setup to observe parking area traffic volumes on Saturday September 4th 2021 from 7am-7pm.





DNR Comments on Current Issues:

Busy - Handicap fishing jetty and shoreline fishing - single vehicle parking and trailer parking as well.

DNR Staff Survey Comments:

During peak use times, some lots fill up. Mornings on weekends and sometimes around noon.

Traffic Flow Data (based on 15 minute intervals)

Peak Incoming 6 at 15:15

Peak Outgoing 6 at 18:45

Average Incoming 1.85

Average Outgoing 1.72

Pleasant Creek State Rec Area continued

Circle Parking Lot

Physical Observation

MSA Staff observed parking activities on Sunday September 12th 2021 from 9am-1pm.

Vehicle Counts

Hour 1: 2	Hour 3: 1
Hour 2: 2	Hour 4: 4

Estimated Capacity 16

Overall Parking Observations Adequate Parking Available

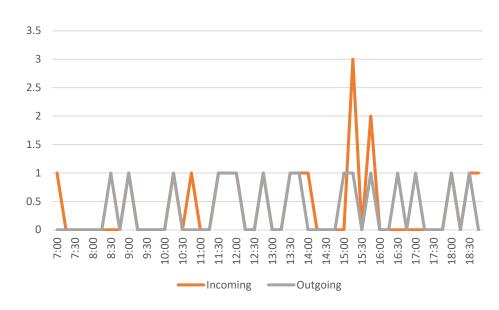
Parking Material Asphalt

Overall Parking Lot Condition Good

Observer Comments: None.

Traffic Camera Data

Cameras were setup to observe parking area traffic volumes on Saturday September 4th 2021 from 7am-7pm.





DNR Comments on Current Issues: Parking for shoreline fishing and paddling - kayaks input here.

DNR Staff Survey Comments: None.

Traffic Flow Data (based on 15 minute intervals)

Peak Incoming 3 at 15:15

Peak Outgoing 1 at 15:15

Average Incoming 0.39

Average Outgoing 0.33

Boat Ramp West of Beach Parking Lot

Physical Observation

MSA Staff observed parking activities on Sunday September 12th 2021 from 9am-1pm.

Vehicle Counts

Hour 1: 3	Hour 3: 1
Hour 2: 2	Hour 4: 1

Estimated Capacity 430

Overall Parking Observations More than Enough Parking Available

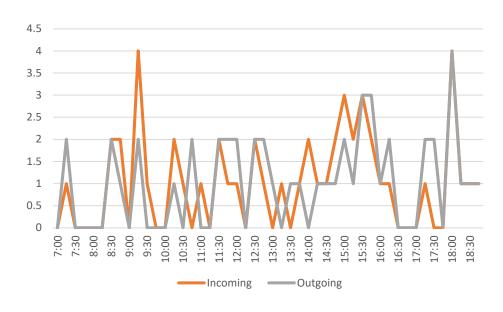
Parking Material Concrete

Overall Parking Lot Condition Fair

Observer Comments: None.

Traffic Camera Data

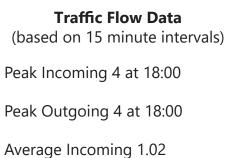
Cameras were setup to observe parking area traffic volumes on Saturday September 4th 2021 from 7am-7pm.





DNR Comments on Current Issues: Busy and mixed vehicle traffic.

DNR Staff Survey Comments: None.



Average Outgoing 1.02

Prairie Rose State Park

Visitor Volume Decrease 19% 2017-2020





Data Sources: Iowa DNR MSA Field Observation ESRI Imagery

1,000 Feet

500

LEGEND

Studied Parking Lot Locations



State Park & Rec Area Boundaries

PRAIRIE ROSE STATE PARK OVERVIEW MAP

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N

North Boat Ramp Parking Lot

MSA Staff observed parking activities on Sunday September 19th 2021 from 11am-3pm.

Physical Observation

Hour 1: 2	Hour 3: 0
Hour 2: 1	Hour 4: 0

Estimated Capacity 10

Overall Parking Observations Adequate Parking Available

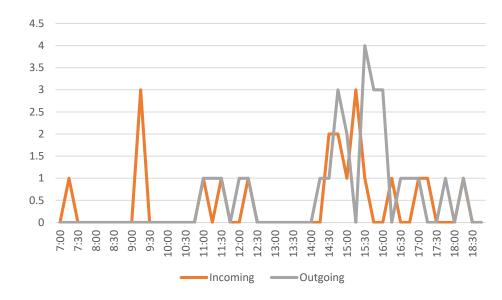
Parking Material Gravel

Overall Parking Lot Condition Good

Observer Comments: Not busy at all today.

Traffic Camera Data

Cameras were setup to observe parking area traffic volumes on Saturday September 18th 2021 from 7am-7pm.





DNR Comments on Current Issues:

Less Steep incline so more popular with boaters but very limited parking, north shelter parking lot is just beyond it and only has circle turnaround for parking, no method to parking during large event such as wedding, etc.

DNR Staff Survey Comments:

Visitor complaints heard are not large enough, not enough space, difficulty maneuvering, tight turns and corners.

> **Traffic Flow Data** (based on 15 minute intervals)

Peak Incoming 3 at 15:15

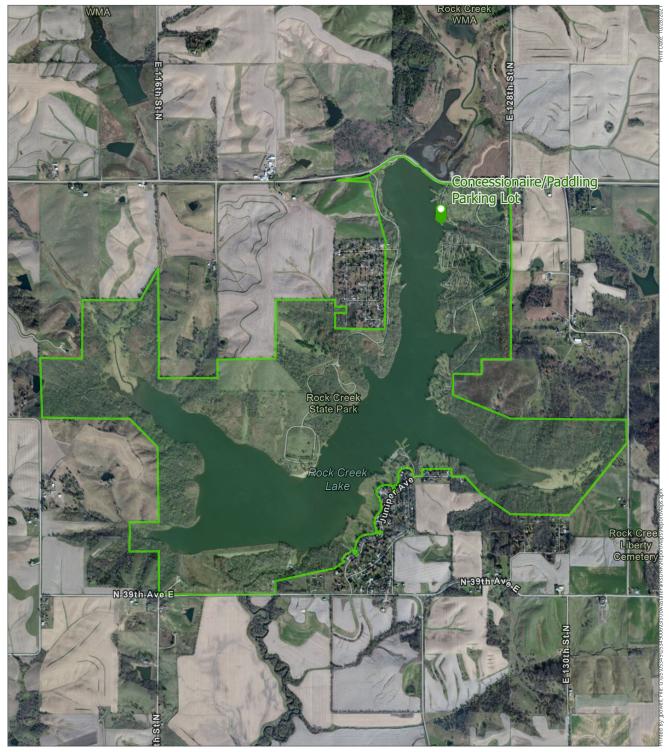
Peak Outgoing 4 at 15:30

Average Incoming 0.41

Average Outgoing 0.56

Rock Creek State Park

Visitor Volume Decrease 54% 2017-2020



MSA





LEGEND

Studied Parking Lot Locations



State Park & Rec Area Boundaries

ROCK CREEK STATE PARK OVERVIEW MAP

Concessionaire/Paddling Parking Lot

Physical Observation

MSA Staff observed parking activities on Saturday September 18th 2021 from 11am-3pm.

Vehicle Counts

Hour 1: 3	Hour 3: 8
Hour 2: 8	Hour 4: 6

Estimated Capacity 15

Overall Parking Observations Not Enough Parking Available

Parking Material Asphalt

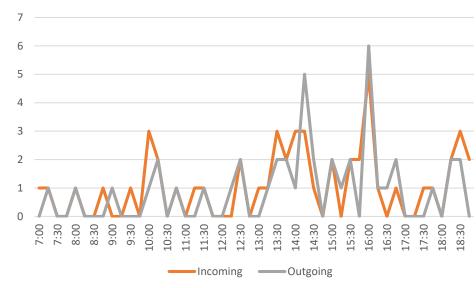
Overall Parking Lot Condition Fair

Observer Comments: Parking spaces are not defined, unsure where to

park.

Traffic Camera Data

Cameras were setup to observe parking area traffic volumes on Saturday September 25th 2021 from 7am-7pm.





DNR Comments on Current Issues: Concessionaire has high use and not really any designated parking area.

DNR Staff Survey Comments: None.

Traffic Flow Data (based on 15 minute intervals)

Peak Incoming 5 at 16:00

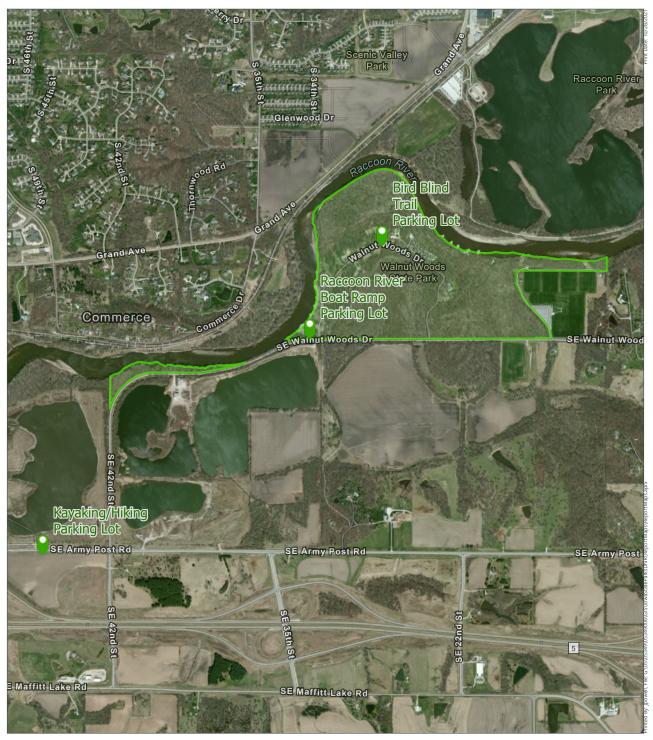
Peak Outgoing 6 at 16:00

Average Incoming 1.06

Average Outgoing 0.91

Walnut Woods State Park

Visitor Volume Increase 248% 2017-2020



MSA

Data Sources: Iowa DNR MSA Field Observatio ESRI Imagery



LEGEND

Studied Parking Lot Locations



🗖 State Park & Rec Area Boundaries

WALNUT WOODS STATE PARK OVERVIEW MAP

Bird Blind Trail Parking Lot

Physical Observation

MSA Staff observed parking activities on Saturday September 4th 2021 from 11am-3pm.

Vehicle Counts

Hour 1: 0	Hour 3: 4
Hour 2: 2	Hour 4: 12

Estimated Capacity 13

Overall Parking Observations Adequate Parking Available

Parking Material Loop is asphalt, parking along asphalt is gravel

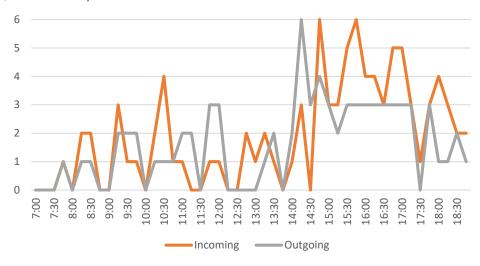
Overall Parking Lot Condition Good

Observer Comments:

Assumed parallel parking space of 22 ft in length. Last hour there were people taking wedding photos, that's why use was significantly more crowded.

Traffic Camera Data

Cameras were setup to observe parking area traffic volumes on Saturday August 14th 2021 from 7am-7pm.





DNR Comments on Current Issues:

Popular among birders, fill up, pull along roadway in grass, no nose in parking.

DNR Staff Survey Comments:

None.

Traffic Flow Data (based on 15 minute intervals)

Peak Incoming 6 at 14:15

Peak Outgoing 6 at 14:45

Average Incoming 1.91

Average Outgoing 1.60

Walnut Woods State Park continued

Purple Martin Lake Water Resource Area Parking Lot

Physical Observation

MSA Staff observed parking activities on September 4th 2021 from 11am-3pm.

Vehicle Counts

Hour 1: 2	Hour 3: 3
Hour 2: 2	Hour 4: 2

Estimated Capacity 17

Overall Parking Observations More than Enough Parking Available

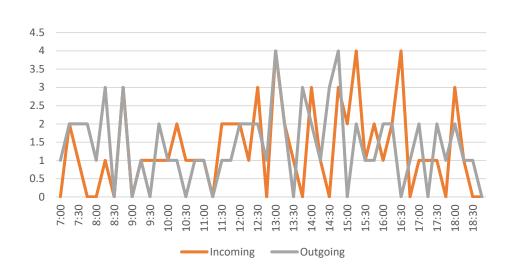
Parking Material Gravel Parking/Concrete Drive

Overall Parking Lot Condition Fair

Observer Comments: Assumed parking width of 9 ft.

Traffic Camera Data

Cameras were setup to observe parking area traffic volumes on August 14th 2021 from 7am-7pm.





DNR Comments on Current Issues: Small parking lot experiencing high levels of dayuse from kayakers and hikers.

DNR Staff Survey Comments: None.

Traffic Flow Data

(based on 15 minute intervals)

Peak Incoming 4 at 13:00

Peak Outgoing 4 at 13:00

Average Incoming 1.31

Average Outgoing 1.39

Lodge Parking Lot (not observed)

Physical Observation

MSA Staff observed parking activities on Friday September 24th 2021 from 12pm-4pm.

Vehicle Counts

Hour 1: N/A	Hour 3: N/A
Hour 2: N/A	Hour 4: N/A

Estimated Capacity 17

Overall Parking Observations Adequate Parking Available

Parking Material Concrete

Overall Parking Lot Condition Good

Observer Comments:

Vehicles were not in lot at time of photo but some did use lot later that day. Lodge capacity is 75 so that should be considered in future assessments/actions. Not observed but cataloged in this study as requested by DNR staff.

DNR Comments on Current Issues:

Not enough parking, not big enough to turn around in, when in use.

DNR Staff Survey Comments:

None.



Walnut Woods State Park continued

Raccoon River Boat Ramp Parking Lot

Physical Observation

MSA Staff observed parking activities on Friday September 24th 2021 from 12pm-4pm.

Vehicle Counts

Hour 1:	0	Hour 3: 1
Hour 2:	1	Hour 4: 2

Estimated Capacity 17

Overall Parking Observations Adequate Parking Available

Parking Material Concrete

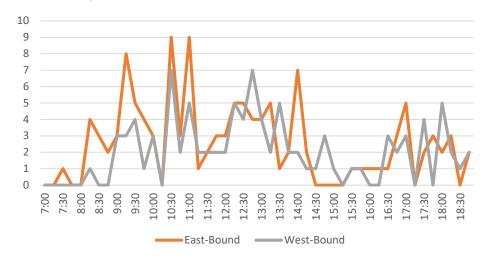
Overall Parking Lot Condition Good

Observer Comments:

Parking well defined in some areas but faded in others. Water level pretty low probably deterring boating activities. Also windy and rainy last half of observation window.

Traffic Camera Data

Cameras were setup to observe parking area traffic volumes on Saturday August 14th 2021 from 7am-7pm.





DNR Comments on Current Issues: Limited boat and trailer parking.

DNR Staff Survey Comments:

None.

Traffic Flow Data (based on 15 minute intervals)

Peak Incoming 9 at 10:30

Peak Outgoing 7 at 10:30

Average Incoming 2.56

Average Outgoing 2.04



Wilson Island State Rec Area

Visitor Volume Not Comparable Due to Flooding



Data Sources: Iowa DNR MSA Field Obs ESRI Imagery

LEGEND

Studied Parking Lot Locations



1,000 Feet

500

State Park & Rec Area Boundaries

WILSON ISLAND STATE **RECREATION AREA OVERVIEW MAP**

N

Boat Ramp Parking Lot

Physical Observation

MSA Staff observed parking activities on Saturday August 28th 2021 from 11am-3pm.

Vehicle Counts

Hour 1: 3	Hour 3: 6
Hour 2: 3	Hour 4: 6

Estimated Capacity 6

Overall Parking Observations Not Enough Parking Available

Parking Material Asphalt and Sand

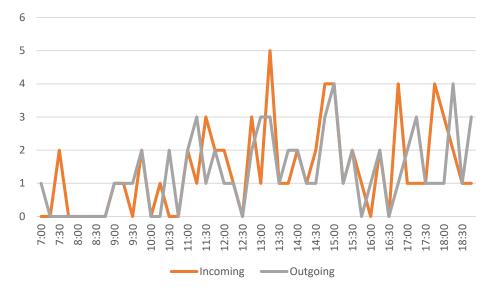
Overall Parking Lot Condition Fair

Observer Comments:

Some visitors park in a nearby parking lot due to low number of spaces at boat ramp.

Traffic Camera Data

Cameras were setup to observe parking area traffic volumes on Friday August 20th 2021 from 7am-7pm.





DNR Comments on Current Issues: Visitors park here for boating on Missouri River, picnicking, walking and shoreline fishing

DNR Staff Survey Comments: None.

Traffic Flow Data (based on 15 minute intervals)

Peak Incoming 5 at 13:15

Peak Outgoing 4 at 15:00

Average Incoming 1.37

Average Outgoing 1.31

Analysis & Recommendations



Analysis & Recommendations Methodology

Methodology of Analysis & Recommendations

Data was collected through two methods, the first was a physical survey of the visitor parking lots identified by the lowa DNR in each designated state park and the second observation method was through the use of traffic cameras to record the traffic flow around each identified parking lot. These two methods were completed on different days to allow for two observation periods for each parking lot. Data was also collected through a survey completed by DNR park staff to establish thoughts and concerns regarding parking for a specific state park or recreation area as it relates to their own experiences. Historic visitor data of state park estimated visitor counts were also used to establish the percentage difference between 2017-2020 to establish is the park volume is increasing or decreasing.

Recommendations and priorities were established based on estimated historic park visitor volumes, observed parking needs and DNR staff feedback on parking issues in each designated state park and state recreation area.



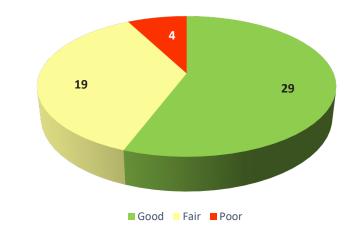
Mapped Analysis of Studied Parking Lots

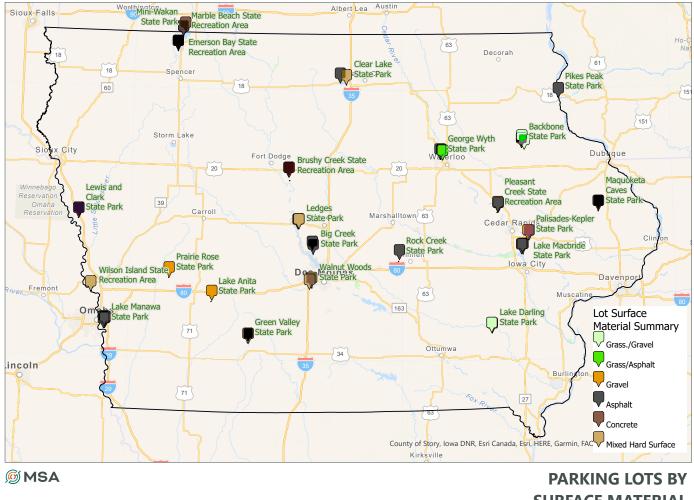


Parking Lot Condition

Parking lot condition can help to understand any barriers to parking capacity in the form of eroded parking areas, potholes etc., which prevent visitors from using the lot to its full intended purpose. Of the 52 lots studied only four (4) fall under poor condition status and should be reviewed for these reasons.

Comparison of Lots by Parking Lot Condition





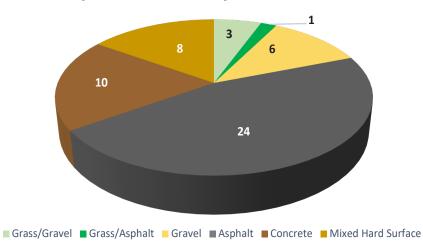
Printed By: jpowell, File: C\Users\powell\Desktop\WorkingGIS\owaStateParksDNR/ParkingInventory_Publishing\ParkingInventor

SURFACE MATERIAL

Surface Material

Parking lot material can be the difference between a lot used efficiently with organized parking spaces, to visitors taking up areas designed for multiple vehicles. Paved lots with well defined parking spaces will allow for more capacity and orderly parking as well as parking type i.e. vehicles with trailers vs. single vehicle parking. Of the 42 paved lots, 25 had clearly defined parking space lines.

Comparison of Lots By Surface Material



Mapped Analysis of Studied Parking Lots

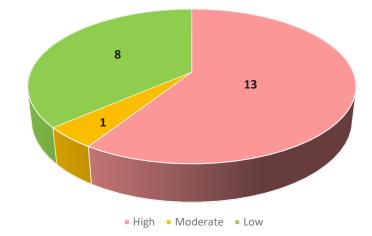


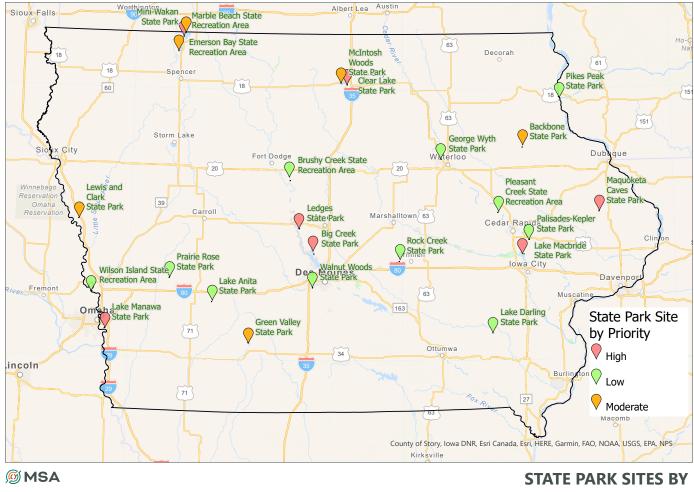
Print Date: 11/5/2021

Boat Ramp Parking Lots

Boat access and parking is hugely important to any state park with a lake or accessible body of water. These lots are popular most of the year and accommodate daily flow along with peak flows and special events. Of the 22 lots studied with boat ramp access, 13 were classified as high priority because of the congestion and popularity of these areas.

Comparison of Boat Ramp Lots by Priority



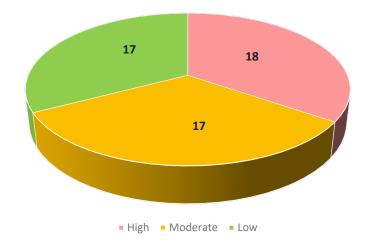


FUTURE STUDY PRIORITY

Parking Lot Priority

Parking lot priority was determined on a lot by lot basis based on feedback from staff and the data and observations collected. Α little over a third of the lots analyzed in this study were classified as high priority. The map above illustrates the priorities across the state to help visualize the areas with the greatest need to address visitor parking capacity.

Comparison of Lots by Priority



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High Priorities

High Priorities

The designation of High Priority is based on staff experiences and feedback, observations, traffic flow and the level of visitor volume along with any increased visitor activity over the last few years of available data. These parks and the associated lots are very popular destinations with a history of capacity and accommodation issues. The issues section on the table to the right, as with DNR Comments on current issues on individual park pages, are reasons these lots were prioritized over other lots in same park.

Next Steps

Future studies of these High Priority Sites are recommended. The data collection portion of this next future phase of analysis should be conducted during the peak season for state park visitor activity, starting at the beginning of June and ending with the return to school around the middle of August. This next phase of analysis and study should evaluate both park facilities and their associated parking areas. A holistic state park analysis approach should be considered including but not limited to: facility/ amenity capacities, space/needs assessments, staffing resources, and a public engagement process to better establish standards and recommendations for parking areas that fail to provide adequate visitor parking.

High Priority Sites for future analysis and evaluation:

- Big Creek State Park
- Clear Lake State Park
- Lake Macbride State Park
- Lake Manawa State Park
- Ledges State Park
- Maquoketa Caves State Park
- Marble Beach State Recreation Area

Park/Rec Area	Visitor Lot	Issue
Big Creek	Beach and Playground Area Parking Lot	Lots are cracked/deteriorating, confusing parking lines.
DIG CI CCK	Disc Golf South Parking Lot	Lot fills up regularly.
Clear Lake	Beach and Lodge Parking Lot	When lodge is reserved for a large even, and beach is busy at the same time there is not enough parking and visitors begin to park in grass median in the center. There are especially some issues on Independence Day Weekend and when a large event is taking place, such as a car show.
	Beach/Lodge Parking Lot	Lot fills up weekends June 1st to July 4th.
Lake Macbride	Boat Ramp to Reservoir Parking Lot	Single Vehicles bringing kayaks sometimes occupy boat trailer parking.
	Main Boat Ramp Parking Lot	Beach parking overflow during high use and kayakers parking in trailer spots.
	Beach/Playground/Shelter Parking Lot	Extremely busy beach, concessionaire and playground area.
	Boat Ramp NE of Beach Parking Lot	Very busy on weekends.
Lake Manawa	Boy Scout Island Parking Lot	Busy lot used for picnicking and shoreline fishing and off pier.
	North Boat Ramp Parking Lot	Shared parking between shelters and boat trailers, not marked.
	West Boat Ramp Parking Lot	Busy and popular with boaters, shoreline/jetty fishing.
	Canyon Overflow Parking Lot	Canyon Overflow doesn't get used much and floods frequently.
Ledges	Canyon Parking Lot	Cannot put parking barriers/bumpers on due to flooding, there is extra parking at end of canyon road, park in grass, overflow doesn't get used much, floods frequently, can't be used due to that.
	Oakwoods Shelter Parking Lot	Fills up, block roads off, park in different directions.
	Playground/Shelter/Additional Cave/Trail Use Parking Lot	Parking is full on weekends early morning to later afternoon. With playground and trailhead visitors.
Maquoketa Caves	Trailhead to Caves Parking Lot	Extremely busy on weekends with popular trails to caves. Parking is on both sides of the road and children and families cross. Visitors attempt to park along roadways. With a through road entering and leaving the park, it is not possible to completely limit traffic into the park and close off when at capacity. Staff is currently spending all day Saturday and part of Sunday doing traffic control.
Marble Beach	Beach Parking Lot	Not enough beach parking and many times RVs park in lot as a campsite.
	Boat Ramp Parking Lot	Too many trailers and not enough parking lot.

Moderate Priorities

Moderate Priorities

The designation of Moderate Priority is based on staff experiences and feedback, observations, traffic flow and the level of visitor volume along with any increased visitor activity over the last few years of available data. These parks and the associated lots are popular destinations but have parking capacity that handles the visitor parking needs on a regular basis but cannot meet the needs of high use events such as weddings, bass tournaments, etc. The issues section on the table to the right, as with DNR Comments on current issues on individual park pages, are reasons these lots were prioritized over other lots in same park. Moderate Priority Sites should be further evaluated as a future phase behind high priority sites.

Next Steps

Future studies of these Moderate Priority Sites are recommended. The data collection portion of the next phase of analysis should be conducted during the peak season for state park visitor activity, starting at the beginning of June and ending with the return to school around the middle of August. This next phase of analysis and study should evaluate both park facilities and their associated parking areas. A holistic state park analysis approach should be considered including but not limited to: facility/ amenity capacities, space/needs assessments, staffing resources, and a public engagement process to better establish standards and recommendations for parking areas that fail to provide adequate visitor parking.

Moderate Priority Sites for future analysis and evaluation:

- Backbone State Park
- Emerson Bay State Recreation Area
- Green Valley State Park
- Lewis and Clark State Park
- McIntosh Woods State Park
- Mini-Wakan State Park
- Palisades-Kepler State Park
- Prairie Rose State Park
- Wilson Island State Recreation Area

Park/Rec Area	Visitor Lot	Issue
	Auditorium Parking Lot	This lot hosts large events and doesn't have many spaces and often requires shuttling.
Backbone	Beach and Lodge Parking Lot	Busy use of beach/concessionaire. Not enough parking when there is a large rental event at the lodge during peak beach use time.
	Mini-Beach Area Parking Lot	Can get full and visitors park in the grass.
	Trailhead Parking Lot	This lot is small and limited for a very popular trailhead.
Emerson Bay	Beach Area Parking Lot	Not enough general/campground extra vehicle parking.
Enterson bay	Boat Ramp Area Parking Lot	Not enough boat ramp parking.
	Beach and Boat Ramp Tri Loop Lots	Not enough trailer/vehicle parking.
Green Valley	Boat Ramp Parking Lot	Not enough parking at the ramp.
	Lodge Parking Lot	Does not accommodate day use traffic when rental occurs at same time.
Lewis and Clark	North Boat Ramp Parking Lot	When the boat ramp is full boaters will back into the grass or in the overflow parking at the Visitor Center.
	Visitor Center Parking Lot	Overflow from boat ramp parking at the Visitors Center can cause problems when banquet room is rented.
McIntosh Woods	Boat Ramp Parking Lot	Limited space for boat trailer parking, park in grass etc. currently.
Mini-Wakan	Beach and Lodge Parking Lot	Not enough parking for beach or lodge. No boat trailer parking at all.
	River Boat Ramp Parking Lot	Only river access on this stretch of river for a long ways and can get very busy.
Palisades-Kepler	River Parking Lot	Congestion in parking area. Parking is not organized, nose in and parallel.
Prairie Rose	North Boat Ramp Parking Lot	Not large enough, not enough space, difficulty maneuvering, tight turns and corners. Clearly marked parking spaces- often we run out of parking quickly due to people parking inefficiently. Paved parking- parking becomes a big issue in the winter months for ice fishermen and other winter park users due to mud/snow, not enough footing, etc.
Wilson Island	Boat Ramp Parking Lot	Lot fills up with visitors for boating on Missouri River, picnicking, walking and shoreline fishing.

Low Priorities

Low Priorities

Low Priority designations were lots in parks at popular destinations but through observation, data collection and staff feedback it was determined that these lots have enough parking capacity for daily traffic flows and visitor needs. The issues section on the table to the right, as with DNR Comments on current issues on individual park pages, are reasons these lots were prioritized over other lots in same park. Some of the Low Priority lots do have peak time parking issues and some should be reevaluated at a future date during those peak times to determine the need and what future mitigation/strategy might need to be implemented to accommodate these peak times of visitor traffic volume. Clearly defined parking spaces can help organize the existing lots in these areas where applicable, to add capacity through efficiency and organization for special events and peak times rather than adding more parking spaces/larger lots.

Next Steps

Future studies of these Low Priority Sites should be considered in future efforts. The data collection portion for future analysis should be conducted during the peak season for state park visitor activity, starting at the beginning of June and ending with the return to school around the middle of August. This next phase of analysis and study should evaluate both park facilities and their associated parking areas. A holistic state park analysis approach should be considered including but not limited to: facility/ amenity capacities, space/needs assessments, staffing resources, and a public engagement process to better establish standards and recommendations for parking areas that fail to provide adequate visitor parking.

Low Priority Sites for future analysis and evaluation:

- Brushy Creek State Recreation Area
- George Wyth State Park
- Lake Anita State Park
- Lake Darling State Park
- Pikes Peak State Park
- Pleasant Creek State Recreation Area
- Rock Creek State Park
- Walnut Woods State Park

Park/Rec Area	Visitor Lot	Issue
	Beach Lots Complex Parking Lot	Busy on weekends.
Brushy Creek	Boat Ramp Parking Lot	Boat & Trailer Parking is uphill in separate location from ramp and ADA lot. Some park trailers at lower lot to avoid hiking up trail to parking lot.
	Boat Ramp/Shelter/Pier Parking Lot	Lot gets full at peak times with boat traffic, shelter rentals, day use picnickers and shoreline fishing.
George Wyth	Brinker Lake Boat Ramp	Boat ramp fills up and requires staff on the ground patrolling and controlling parking for full days and some weekends.
	Picnic Area Parking Lot	Picnic area used for large group gatherings on the weekends.
Lake Anita	Boat Ramp Parking Lot	Handles regular usage but too small for tournaments, holidays/ weekends.
	Beach and Lodge Parking Lot	Lodge is highly popular for large events, parking is shared with the beach visitors, hikers and picnickers as well. Lot fills up during large events.
Lake Darling	Boat Ramp Parking Lot	Mixed vehicle parking for trucks and trailers for boat ramp, shelter, shoreline fishing and trail walkers.
	Shoreline Fishing Trail Parking Lot	Lots of people park for shoreline fishing and ice fishing, parked in grass and get stuck.
Pikes Peak	Shelter/Overlook Parking Lot	This popular reservable shelter shares parking with both popular overlooks and the trailhead. Especially during leaf season or when shelter is reserved for a rental, there is limited parking.
	Boat Ramp West Parking Lot	Busy mixed vehicle traffic.
Pleasant Creek	Circle Parking Lot	Parking for shoreline fishing and paddling - kayaks input here.
Pleasant Creek	South Boat Ramp Parking Lot	Busy fishing jetty, shoreline fishing and single vehicle parking and trailer parking as well. More parking for boat trailers and kayak trailers needed.
Rock Creek	Concessionaire/Paddling Parking Lot	Concessionaire has high use and not really any designated parking area.
	Bird Blind Trail Parking Lot	Popular among birders, fills up, pull along roadway in grass. Parallel parking only.
	Kayaking/Hiking Parking Lot	Small parking lot experiencing high levels of day-use from kayakers and hikers.
Walnut Woods	Lodge Parking Lot (Not Observed)	Very popular lodge for reservations but not enough parking and not big enough to turn around in, when in use.
	Raccoon River Boat Ramp Parking Lot	Limited boat and trailer parking.

Conclusion



Summary of Findings

Recommendations for Parking Expansion and Improvements:

- » Start with organization and efficiency, painting lot lines etc. prior to adding capacity.
- Evaluate proper signage to distinguish proper use i.e. boat trailer parking, ADA accessible etc.
- » Consider the capacity of nearby facilities that can be safely accommodated.
- Evaluate if there is enough wayfinding signage to direct traffic to any nearby overflow lots.
- Evaluate if lot capacity should be built to accommodate holiday or special event parking.
- Sensure there is proper ADA accessible parking spaces.
- » Consider using a standard of per acre of surface water per boat trailer parking space to ensure natural resources are not over utilized.
- » Consider developing DNR specific parking capacity standards based on park facility type and size to ensure facilities are properly utilized.

lowa DNR Tier One State Park Visitor Parking Study 11-10-2021

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