

# Environmental Assessment

## Makoshika State Park Yurt Project



March 2, 2021



*Montana Fish,  
Wildlife & Parks*

Environmental Assessment  
**MEPA, NEPA, MCA 23-1-110 CHECKLIST**

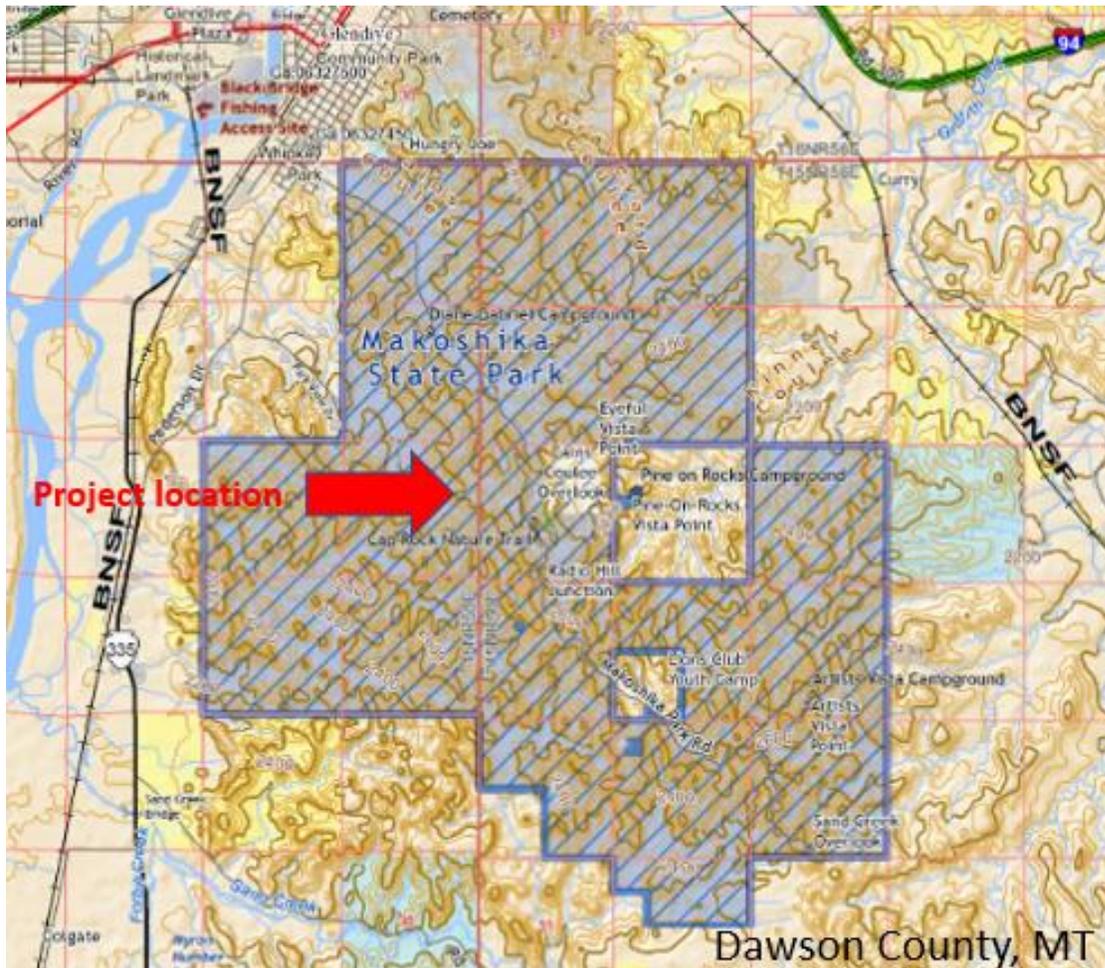
**PART I. PROPOSED ACTION DESCRIPTION**

1. **Type of proposed state action:** Construction and installation of a 20 ft diameter yurt with a 8 ft deck at campsite 21, a 30 ft trail to connect the yurt to the parking lot, and an expansion of the existing parking area. There will also be about 100 ft of gravel added to the road and a gate will be installed at the entrance to the campsite. A \$25,000 grant was secured by the Montana State Parks Foundation (Foundation) for the yurt project. The Foundation also provided \$5,000 and Montana Fish, Wildlife & Parks provided \$5,000. The proposed action will create an alternative camping experience in Makoshika State Park above the switchback in a rustic setting. The yurt will provide a high quality camping option with a great view for visitors. This alternative form of camping will attract a new demographic of campers and will increase campsite revenue.
  
2. **Agency authority for the proposed action: Montana Fish, Wildlife & Parks**  
Montana Fish, Wildlife & Parks through its Parks Division has the authority to develop outdoor recreational resources in the state per 23-2-101 Montana Code Annotated (MCA): *“for the purposes of conserving the scenic, historic, archaeological, scientific, and recreational resources of the state and providing their use and enjoyment, thereby contributing to the cultural, recreational and economic life of the people and their health.”*  
Statute 23-1-110 MCA and Administrative Rules of Montana (ARM) 12.2.433 guide public involvement and comment for the improvements at state parks, which this document provides. ARM 12.8.602 required the Department to consider the wishes of the public, the capacity of the site for the development, environmental impacts, long-range maintenance, protection of natural features and impacts on tourism as these elements relate to development or improvement to state parks. This document describes the proposed project in relation to this rule.
  
3. **Anticipated Schedule:**  
Estimated Commencement Date: April 1,2021  
Estimated Completion Date: May 15, 2021  
Current Status of Project Design (% complete): 25%
  
4. **Location affected by proposed action (county, range and township – included map):** T 15N R55E Sec. 18

# Project Area in Makoshika State Park



# Makoshika State Park Location



**5. Project size -- estimate the number of acres that would be directly affected that are currently:**

	<u>Acres</u>		<u>Acres</u>
(a) Developed:		(d) Floodplain	<u>0</u>
Residential	<u>0</u>		
Industrial	<u>0</u>	(e) Productive:	
(existing shop area)		Irrigated cropland	<u>0</u>
(b) Open Space/ Woodlands/Recreation	<u>.30</u>	Dry cropland	<u>0</u>
(c) Wetlands/Riparian Areas	<u>0</u>	Forestry	<u>0</u>
		Rangeland	<u>0</u>
		Other	<u>    </u>

**6. Permits, Funding & Overlapping Jurisdiction.**

(a) **Permits:** Contractor will be responsible for all required permits for this project.

(b) **Funding:**  
Montana State Parks Foundation     \$30,000  
Montana Fish, Wildlife & Parks     \$5,000

**7. Narrative summary of the proposed action:**

Makoshika State Park was designated a state park in 1953 and is Montana’s largest state park with a total of 11,501 acres. In 2020 Makoshika State Park received 128,288 visitors. The park has many amenities including a campground, visitor center, 11 designated trails, pavilion, archery area, 200-seat amphitheater, and a PDGA disc golf course. In 2017 Makoshika State Park was voted by the public as the USA Today’s number one attraction in the state of Montana.

The state park is known for paleontology as nine species of dinosaur fossils have been found in the park. The park visitor center also has a planetology lab where many fossils are stored and the park staff work annually with the famed Museum of the Rockies staff.

Currently, there is only one non-traditional camping option in the park, and none above the switchback. This yurt will provide an alternative option for visitors that want to stay in the park but may want a few more amenities than traditional campsites offer. This is also a great option for people that do not have access to their own camping gear. This new camping opportunity will help to diversify the campers in the park. The yurt and its furnishings will be a great alternative for those that do not have the ability or the gear to sleep on the ground in a tent. By installing the yurt on an existing campsite, there will be an increase in revenue for that site. A 30 ft trail will connect the parking lot and latrines to the yurt site, increasing ease of use for visitors. Gravel will be added to the existing road to deter erosion as more vehicle traffic is expected. Additionally, a gate will be added to the entrance road in order to give visitors more privacy.

**Proposed Action:** Install a new 20 ft diameter yurt with a 8 ft deck at campsite 21. Create a 30 ft trail from parking area to yurt. Add gravel to existing road, enlarge the parking area, and install a gate.

**Need for the Action:** Makoshika State Park needs additional options for people interested in staying overnight in the park. The yurt will have amenities that are not found at our traditional campsites and will encourage a new demographic of campers to visit.

**Objectives for the Action(s):** The objective for this project is to provide an alternative camping option for the public, as directed by the Montana Office of Tourism.

**8. Description and analysis of reasonable alternatives:**

**Alternative A: No Action**

If no action is taken, we will still lack an alternative camping option above the switchback, and some campers might be deterred from staying in the park.

**Alternative B: Proposed Action**

The project will provide a different option to campers that wish to stay in the park overnight. It will also increase revenue for the park.

**Alternative C: Maintain Campsite 21**

Enhance parking and trail at site 21. Without the yurt, the site will remain a traditional campsite and will not provide an alternative camping option for the public.

**9. Evaluation and listing of mitigation, stipulation, or other control measures enforceable by the agency or another government agency:**

Montana Fish, Wildlife & Parks will complete the project and will be responsible for all required permits.

**PART II. ENVIRONMENTAL REVIEW CHECKLIST**

**Evaluation of the impacts of the Proposed Action including secondary and cumulative impacts on the Physical and Human Environment.**

**A. PHYSICAL ENVIRONMENT**

1. <u>LAND RESOURCES</u> Will the proposed action result in:	IMPACT					
	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index
a. Soil instability or changes in geologic substructure?		X				
b. Disruption, displacement, erosion, compaction, moisture loss, or over-covering of soil, which would reduce productivity or fertility?		X				
c. Destruction, covering or modification of any unique geologic or physical features?		X				
d. Changes in siltation, deposition or erosion patterns that may modify the channel of a river or stream or the bed or shore of a lake?		X				
e. Exposure of people or property to earthquakes, landslides, ground failure, or other natural hazard?		X				

2. <u>AIR</u> Will the proposed action result in:	IMPACT *					
	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index
a. Emission of air pollutants or deterioration of ambient air quality? (Also see 13 (c).)		X				
b. Creation of objectionable odors?		X				
c. Alteration of air movement, moisture, or temperature patterns or any change in climate, either locally or regionally?		X				
d. Adverse effects on vegetation, including crops, due to increased emissions of pollutants?		X				

3. <u>WATER</u> Will the proposed action result in:	IMPACT					
	Unknown	None	Minor	Potentially Significant	Can Impact Be Mitigated	Comment Index
a. Discharge into surface water or any alteration of surface water quality including but not limited to temperature, dissolved oxygen or turbidity?		X				
b. Changes in drainage patterns or the rate and amount of surface runoff?			X			3b
c. Alteration of the course or magnitude of floodwater or other flows?		X				
d. Changes in the amount of surface water in any water body or creation of a new water body?		X				
e. Exposure of people or property to water related hazards such as flooding?		X				
f. Changes in the quality of groundwater?		X				
g. Changes in the quantity of groundwater?		X				
h. Increase in risk of contamination of surface or groundwater?		X				
i. Effects on any existing water right or reservation?		X				
j. Effects on other water users as a result of any alteration in surface or groundwater quality?		X				
k. Effects on other users as a result of any alteration in surface or groundwater quantity?		X				

3b. The yurt will redirect water runoff in a different pattern.

<b>4. <u>VEGETATION</u></b> Will the proposed action result in?	<b>IMPACT</b>					
	<b>Unknown</b>	<b>None</b>	<b>Minor</b>	<b>Potentially Significant</b>	<b>Can Impact Be Mitigated</b>	<b>Comment Index</b>
a. Changes in the diversity, productivity or abundance of plant species (including trees, shrubs, grass, crops, and aquatic plants)?		X				
b. Alteration of a plant community?		X				
c. Adverse effects on any unique, rare, threatened, or endangered species?		X				
d. Reduction in acreage or productivity of any agricultural land?		X				
e. Establishment or spread of noxious weeds?		X				
f. For P-R/D-J, will the project affect wetlands, or prime and unique farmland?		X				
g. Other:						

<b>5. <u>FISH/WILDLIFE</u></b> Will the proposed action result in:	<b>IMPACT</b>					
	<b>Unknown</b>	<b>None</b>	<b>Minor</b>	<b>Potentially Significant</b>	<b>Can Impact Be Mitigated</b>	<b>Comment Index</b>
a. Deterioration of critical fish or wildlife habitat?		X				
b. Changes in the diversity or abundance of game animals or bird species?		X				
c. Changes in the diversity or abundance of nongame species?		X				
d. Introduction of new species into an area?		X				
e. Creation of a barrier to the migration or movement of animals?		X				
f. Adverse effects on any unique, rare, threatened, or endangered species?		X				
g. Increase in conditions that stress wildlife populations or limit abundance (including harassment, legal or illegal harvest or other human activity)?		X				

5. FWP Wildlife Biologist, Melissa Foster, was contacted and she does not have any concerns about adding a yurt to campsite 21.

**B. HUMAN ENVIRONMENT**

<b>6. <u>NOISE/ELECTRICAL EFFECTS</u></b> <b>Will the proposed action result in:</b>	<b>IMPACT</b>					
	<b>Unknown</b>	<b>None</b>	<b>Minor</b>	<b>Potentially Significant</b>	<b>Can Impact Be Mitigated</b>	<b>Comment Index</b>
a. Increases in existing noise levels?			X			6a
b. Exposure of people to sever or nuisance noise levels?		X				
c. Creation of electrostatic or electromagnetic effects that could be detrimental to human health or property?		X				
d. Interference with radio or television reception and operation?		X				

6a. The yurt will get more use from families and groups.

<b>7. <u>LAND USE</u></b> <b>Will the proposed action result in:</b>	<b>IMPACT</b>					
	<b>Unknown</b>	<b>None</b>	<b>Minor</b>	<b>Potentially Significant</b>	<b>Can Impact Be Mitigated</b>	<b>Comment Index</b>
a. Alteration of or interference with the productivity or profitability of the existing land use of an area?		X				
b. Conflicted with a designated natural area or area of unusual scientific or educational importance?		X				
c. Conflict with any existing land use whose presence would constrain or potentially prohibit the proposed action?		X				
d. Adverse effects on or relocation of residences?		X				

No negative impacts.

<b>8. <u>RISK/HEALTH HAZARDS</u></b> <b>Will the proposed action result in:</b>	<b>IMPACT</b>					
	<b>Unknown</b>	<b>None</b>	<b>Minor</b>	<b>Potentially Significant</b>	<b>Can Impact Be Mitigated</b>	<b>Comment Index</b>
a. Risk of an explosion or release of hazardous substances (including, but not limited to oil, pesticides, chemicals, or radiation) in the event of an accident or other forms of disruption?		X				
b. Affect an existing emergency response or emergency evacuation plan, or create a need for a new plan?		X				
c. Creation of any human health hazard or potential hazard?		X				

<b>9. <u>COMMUNITY IMPACT</u></b> <b>Will the proposed action result in:</b>	<b>IMPACT</b>					
	<b>Unknown</b>	<b>None</b>	<b>Minor</b>	<b>Potentially Significant</b>	<b>Can Impact Be Mitigated</b>	<b>Comment Index</b>
a. Alteration of the location, distribution, density, or growth rate of the human population of an area?		X				
b. Alteration of the social structure of a community?		X				
c. Alteration of the level or distribution of employment or community or personal income?		X				
d. Changes in industrial or commercial activity?		X				
e. Increased traffic hazards or effects on existing transportation facilities or patterns of movement of people and goods?		X				

<b>10. <u>PUBLIC SERVICES/TAXES/UTILITIES</u></b> <b>Will the proposed action result in:</b>	<b>IMPACT</b>					
	<b>Unknown</b>	<b>None</b>	<b>Minor</b>	<b>Potentially Significant</b>	<b>Can Impact Be Mitigated</b>	<b>Comment Index</b>
a. Will the proposed action have an effect upon or result in a need for new or altered governmental services in any of the following areas: fire or police protection, schools, parks/recreational facilities, roads or other public maintenance, water supply, sewer or septic systems, solid waste disposal, health, or other governmental services? If any, specify:		X				
b. Will the proposed action have an effect upon the local or state tax base and revenues?		X				
c. Will the proposed action result in a need for new facilities or substantial alterations of any of the following utilities: electric power, natural gas, other fuel supply or distribution systems, or communications?		X				
d. Will the proposed action result in increased use of any energy source?		X				
e. Define projected revenue sources			X			10e
f. Define projected maintenance costs.			X			10f

10e. The yurt may increase park revenue because the site is expected to be busier than the standard campsite it replaces.

10f. The cost to maintain the yurt is \$1150 annually. There will be no added cost of electricity because the yurt will use solar panels.

<b>11. <u>AESTHETICS/RECREATION</u></b> <b>Will the proposed action result in:</b>	<b>IMPACT</b>					
	<b>Unknown</b>	<b>None</b>	<b>Minor</b>	<b>Potentially Significant</b>	<b>Can Impact Be Mitigated</b>	<b>Comment Index</b>
a. Alteration of any scenic vista or creation of an aesthetically offensive site or effect that is open to public view?		X				
b. Alteration of the aesthetic character of a community or neighborhood?		X				
c. Alteration of the quality or quantity of recreational/tourism opportunities and settings? (Attach Tourism Report.)			X			11c

11c. The quality of the camping experience is increased with added amenities.

<b>12. <u>CULTURAL/HISTORICAL RESOURCES</u></b>	<b>IMPACT</b>					
	<b>Unknown</b>	<b>None</b>	<b>Minor</b>	<b>Potentially Significant</b>	<b>Can Impact Be Mitigated</b>	<b>Comment Index</b>
<b>Will the proposed action result in:</b>						
a. Destruction or alteration of any site, structure or object of prehistoric historic, or paleontological importance?		X				
b. Physical change that would affect unique cultural values?		X				
c. Effects on existing religious or sacred uses of a site or area?		X				

12a. Makoshika is a popular area of paleontological resources and so there is the possibility of uncovering fossils. This project will be completely within areas disturbed in the past and so potential for uncovering of paleo resources is limited. There will be some minimal digging to stabilize the yurt and decking with footings. The current parking area will increase by 15 feet in length and 10 feet width for better traffic pattern for vehicles parking at the current campsite 21. If any paleo resources are uncovered, the Montana FWP will be required to stop immediately, and a qualified specialist will be called in to investigate and to take any needed action to either protect fossils in place or remove the fossils.

In accordance with the Montana Antiquities Act (22-3-421 to 22-3-442) and with FWPs

ARM rules (12.8.501 to 12.8.10):

Parks staff would work closely with the Montana State Park's Heritage Resource Program Manager and the Montana's State Historic Preservation Office (SHPO) on this project to ensure protection of historic resources in the park.

### **SIGNIFICANCE CRITERIA**

<b>13. <u>SUMMARY EVALUATION OF SIGNIFICANCE</u></b>	<b>IMPACT</b>					
	<b>Unknown</b>	<b>None</b>	<b>Minor</b>	<b>Potentially Significant</b>	<b>Can Impact Be Mitigated</b>	<b>Comment Index</b>
<b>Will the proposed action, considered as a whole:</b>						
a. Have impacts that are individually limited, but cumulatively considerable? (A project or program may result in impacts on two or more separate resources that create a significant effect when considered together or in total.)		X				
b. Involve potential risks or adverse effects, which are uncertain but extremely hazardous if they were to occur?		X				
c. Potentially conflict with the substantive requirements of any local, state, or federal law, regulation, standard or formal plan?		X				
d. Establish a precedent or likelihood that future actions with significant environmental impacts will be proposed?		X				
e. Generate substantial debate or controversy about the nature of the impacts that would be created?		X				

### **PART III. NARRATIVE EVALUATION AND COMMENT**

Makoshika State Park is an important paleo and archeological site not only for the state of Montana but also the United States. The state park is a very important part of Montana tourism. Out of the 56 Montana State Parks, Makoshika State Park is listed number eight in visitation with 128,288 visitors taking in the park in 2020. The new yurt project would have a positive impact on visitor satisfaction as it adds an alternative camping option above the switchback. The new yurt is expected to be very popular and could help increase revenue.

The proposed project will be in an existing campsite and the impacts to the physical and human environments will be minimal. The new yurt will be located in the current campsite 21. Based on this analysis, an Environmental Assessment is the appropriate level of analysis and an Environmental Impact Statement is not required.

### **PART IV. PUBLIC PARTICIPATION**

#### **1. Public involvement:**

The public will be notified in the following manners to comment on this current EA, the proposed action and alternatives:

- Two public notices in each of these papers: Glendive Ranger Review, Helena Independent Record and Miles City Star
- One statewide press release
- Public notice on the Montana Fish Wildlife & Parks website:  
<https://fwp.mt.gov/news/public-notice>

Copies of this environmental assessment will be distributed to the neighboring landowners and interested parties to ensure their knowledge of the proposed project.

This level of public notice and participation is appropriate for a project of this scope having limited impacts, many of which can be mitigated.

#### **2. Duration of comment period:**

The public comment period for this project will extend for (21) twenty one days. The comment period for this project is 9 days shorter than typical comment periods because the project is located within a previously disturbed area, has limited impacts and has a tight construction window. Written comments will be accepted from March 2, 2021 through March 23, 2021 and can be mailed or emailed to the addresses below:

Brian Burky, Region 7 Parks Manager, PO Box 1630, Miles City, MT 59301  
[Brian.Burky@mt.gov](mailto:Brian.Burky@mt.gov)

## **PART V. EA PREPARATION**

- 1. Based on the significance criteria evaluated in this EA, is an EIS required? (YES/NO)?** No

**If an EIS is not required, explain why the EA is the appropriate level of analysis for this proposed action.**

Based on an evaluation of impacts to the physical and human environment under MEPA, this environmental review revealed no significant negative impacts from the proposed action; therefore an EIS is not necessary and an environmental assessment is the appropriate level of analysis in determining the significance of impacts.

- 2. Person(s) responsible for preparing the EA:**

Alexis Shannon, Montana State Parks Americorps Member  
Sydney Raftery, Montana State Parks Americorps Member  
Brian Burky, Region 7 Manager, Montana State Parks

- 3. List of agencies or offices consulted during preparation of the EA:**

Montana Fish, Wildlife & Parks, Design and Construction Bureau  
Shelter Design Yurts based out of Missoula, MT  
Montana Office of Tourism – Department of Commerce  
Montana State Parks Foundation

**APPENDIX A**  
23-1-110 MCA  
PROJECT QUALIFICATION CHECKLIST

**Date: 02/05/2021**

**Person Reviewing: Chris Dantic**

**Project Location: Makoshika State Park**

**Description of Proposed Work:**

The following checklist is intended to be a guide for determining whether a proposed development or improvement is of enough significance to fall under 23-1-110 rules. (Please check  all that apply and comment as necessary.)

- A. New roadway or trail built over undisturbed land?  
Comments: *No. A 30 ft trail will be constructed on disturbed land.*
- B. New building construction (buildings <100 sf and vault latrines exempt)?  
Comments: *Yes, installation of new yurt. 20 ft diameter with a 8 ft deck.*
- C. Any excavation of 20 c.y. or greater?  
Comments:
- D. New parking lots built over undisturbed land or expansion of existing lot that increases parking capacity by 25% or more?  
Comments:
- E. Any new shoreline alteration that exceeds a doublewide boat ramp or handicapped fishing station?  
Comments:
- F. Any new construction into lakes, reservoirs, or streams?  
Comments:
- G. Any new construction in an area with National Registry quality cultural artifacts (as determined by State Historical Preservation Office)?  
Comments:

- H. Any new above ground utility lines?  
Comments:
  
- I. Any increase or decrease in campsites of 25% or more of an existing number of campsites?  
Comments:
  
- J. Proposed project significantly changes the existing features or use pattern; including effects of a series of individual projects?  
Comments:

If any of the above are checked, 23-1-110 MCA rules apply to this proposed work and should be documented on the MEPA/HB495 CHECKLIST. Refer to MEPA/HB495 Cross Reference Summary for further assistance.

Appendix B  
Tourism Report

**MONTANA ENVIRONMENTAL POLICY ACT (MEPA)/HB652 (Bond Bill)**

The Montana Department of Fish, Wildlife & Parks have initiated the review process as mandated by HB652 (Bond Bill) and the Montana Environmental Policy Act in its consideration of the project described below. As part of the review process, input and comments have been solicited Helena, MT 59601

**Project Name:** Makoshika State Park Yurt

**Project Location:** Makoshika State Park, Dawson County.

**Project Description:** Currently, there is only one non-traditional camping option in the park, and none above the switchback. This yurt will provide an alternative option for visitors that want to stay in the park but may want a few more amenities than traditional campsites offer. This is a great option for people that do not have access to their own camping gear. This new camping opportunity will help to diversify the campers in the park. The yurt, and its furnishings, will be a great alternative for those that do not have the ability to sleep on the ground. By installing the yurt on the existing campsite, there likely will be an increase in revenue for that site. A 30 ft trail will connect the parking lot and latrines to the yurt site, increasing ease of use for visitors. Gravel will be added to the existing road to deter erosion as more vehicle traffic is expected. Additionally, a gate will be added to the entrance road to the campsite in order to give visitors more privacy.

1. Would this site development project have an impact on the tourism economy?  
NO **YES** If YES, briefly describe:

Yes, as described, this project has the potential to positively impact the tourism and recreation industry economy. We are assuming the agency has determined it has necessary funding for the on-going operations and maintenance once this project is completed. Makoshika State Park is a critical asset for both non-resident and resident visitors.

Over 125,000 annual visitors come to Makoshika to experience incredible badlands scenery and recreational opportunities. It is imperative visitors are provided with alternative options for camping in the park.

2. Does this impending improvement alter the quality or quantity of recreation/tourism opportunities and settings?  
NO **YES** If YES, briefly describe:

Yes, as described, the project has the potential to improve quality and quantity of tourism and recreational opportunities as well as maintain important safety and security

infrastructure for visitors. We are assuming the agency has determined it has necessary funding for the on-going operations and maintenance once this project is complete.

Signature Jan Stoddard \_\_\_\_\_ Date: 02/18/2021