

FINAL

ENVIRONMENTAL ASSESSMENT

Makoshika State Park Campground Expansion

(FWP-SEA-POR-R7-25-002)

05/19/2025



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Environmental Assessment

The Montana Department of Fish, Wildlife and Parks (FWP) has prepared this Draft Environmental Assessment (EA) in accordance with the requirements of the Montana Environmental Policy Act (MEPA). The purpose of an EA is to identify, analyze, and disclose the impacts of a proposed state action. This document may disclose impacts that have no required mitigation measures, or over which FWP, more broadly, has no regulatory authority.

Local governments and other state agencies may have authority over different resources and activities under separate regulations. FWP actions will only be approved if the proposed action complies with applicable regulations. FWP has a separate obligation to comply with any federal, state, or local laws and to obtain any other permits, licenses, or approvals required for any part of the proposed action.

This EA was prepared for the following action:

PROJECT NAME: Makoshika State Park Campground Expansion	
LOCATION: Makoshika State Park	COUNTY: Dawson
PROPERTY OWNERSHIP: <input type="checkbox"/> FEDERAL <input checked="" type="checkbox"/> STATE <input type="checkbox"/> COUNTY <input type="checkbox"/> PRIVATE	
EA PREPARER: Riley Bell, Brian Burky	DATE ISSUED: 02/25/2025

I. Compliance with the Montana Environmental Policy Act

Before a proposed *project* may be approved, environmental review must be conducted to identify and consider potential impacts of the proposed project on the human and physical environment affected by the project. The Montana Environmental Policy Act (MEPA) and its implementing rules and regulations require different levels of environmental review, depending on the proposed project, significance of potential impacts, and the review timeline. § 75-1-201, Montana Code Annotated (“MCA”), and the Administrative Rules of Montana (“ARM”) 12.2.430, General Requirements of the Environmental Review Process.

FWP must prepare an EA when:

- It is considering a “state-proposed project,” which is defined in § 75-1-220(8)(a) as:
 - (i) a project, program, or activity initiated and directly undertaken by a state agency;
 - (ii) ... a project or activity supported through a contract, grant, subsidy, loan, or other form of funding assistance from a state agency, either singly or in combination with one or more other state agencies; or
 - (iii) ... a project or activity authorized by a state agency acting in a land management capacity for a lease, easement, license, or other authorization to act.
- It is not clear without preparation of an EA whether the proposed project is a major one significantly affecting the quality of the human environment. ARM 12.2.430(3)(a));
- FWP has not otherwise implemented the interdisciplinary analysis and public review purposes listed in ARM 12.2.430(2) (a) and (d) through a similar planning and decision-making process (ARM 12.2.430(3)(b));
- Statutory requirements do not allow sufficient time for the FWP to prepare an EIS (ARM 12.2.430(3)(c));
- The project is not specifically excluded from MEPA review according to § 75-1-220(8)(b) or ARM 12.2.430(5); or
- As an alternative to preparing an EIS, prepare an EA whenever the project is one that might normally require an EIS, but effects which might otherwise be deemed significant appear to be mitigable below the level of significance through design, or enforceable controls or stipulations or both imposed by the agency or other government agencies. For an EA to suffice in this instance, the agency must determine that all the impacts of the proposed project have been accurately identified, that they will be mitigated below

the level of significance, and that no significant impact is likely to occur. The agency may not consider compensation for purposes of determining that impacts have been mitigated below the level of significance (ARM 12.2.430(4)).

MEPA is procedural; its intent is to ensure that impacts to the environment associated with a proposed project are fully considered and the public is informed of potential impacts resulting from the project.

II. Background and Description of Proposed Project

This section includes project background information and a detailed description of the proposed project including the responsible party, the type of proposed action and the anticipated schedule of the proposed project.

Name of Project: Makoshika State Park Campground Expansion

Makoshika State Park ("ma-KO-sh(ih)kuh"), hereafter "state park," is derived from the Lakota *Makosica*, meaning 'bad land' or 'land of bad spirits' is a state park located on the southeast side of Glendive in Dawson County, Montana. The state park encompasses badlands containing dinosaur fossils and rock from the Hell Creek Formation. It is the largest of Montana's state parks at more than 11,500 acres (45 km²). As Montana's largest state park, the badlands of Makoshika are set aside for visitors to explore and enjoy. In addition to the pine and juniper studded badland formations, the park also houses fossil remains. The visitor center at the park entrance houses a Triceratops and Tyrannosaurus Rex fossil along with other fossil remains and badland interpretive displays. Included within the park are scenic drives, hiking trails, 29 existing campsites two group picnic areas, two frisbee golf courses, a recently improved archery range, an outdoor amphitheater, and other infrastructure to support public access and recreation.

FWP is proposing to expand existing camping and recreational opportunities at the state park by adding up to 16 RV sites with electric hookups, 4 primitive hike / bike campsites and a day-use facilities in the Gunner's Ridge area (Figure 2, Figure 3) with a playground nearby (Figure 4). RVs and camp trailers cannot travel to the primitive campsites above the switchback because the road grade is too steep and large vehicle are not permitted. The campground would include a dedicated camp host site and public access to Gunners Ridge Trailhead. Hike and bike trails would connect the new campground to other amenities such as the park's visitor center, a separate primitive campground loop, picnic shelter, frisbee golf course and trailheads leading to backcountry hiking opportunities.

The proposed campground expansion would be located 0.5 miles southeast of the visitor center at Gunners Ridge (Figure 2). This location is the only area below the switchback that is both flat and large enough to accommodate a new campground loop. Historically, until 2008, the affected area was used as a public rifle range. The site is generally open, including reclaimed vegetation of sage brush and native grass species planted when the rifle range was relocated in 2008. Public access to the Gunners Ridge Trailhead is also at this location. The playground (Figure 4) will be located 1200 feet south of Gunners Ridge adjacent to the existing Buccaneer Day Use Area. The campground expansion project was initiated in response to numerous visitor and local public comments received and FWP's recognition of increased overnight visitation at the park. Public comments also identified the desire for access to electricity and water at the existing campground. The Gunners Ridge area is connected by trail and by road to the existing Canes Coulee Campground and to the visitors' center, each about ½ mile away from the proposed new campground and associated facilities.

Environmental Site Analysis:

The proposed new campground loop would be located at the site of a former shooting range; therefore, FWP, in consultation with Montana's Department of Environmental Quality (DEQ) determined site sampling for lead (Pb) is necessary to ensure a safe environment for camping and related recreational uses. The subject shooting range experienced light to moderate use for approximately 40 years until its closure and partial reclamation in 2008. No on-site environmental review was conducted at the time of shooting range closure.

The shooting range consisted of a shed and shooting bench located at the firing position. Targets were located to the northeast of the firing position at various distances to serve pistol, shotgun, and rifle shooters. In 2008, at the closure of the shooting range, all lead-shot/bullets and debris were removed from the firing position. The shed was razed and burned on site. The ash and top layer of soil was collected and disposed of according to applicable requirements. The shooting range targets were also removed in 2008, however the soil at the target locations was not scraped and removed. The historic locations of the shooting shed, bench, and closest targets (pistol/shotgun) are within the footprint of the proposed campground expansion. The historic locations of rifle targets are outside of the proposed campground footprint. Also, importantly, there is no surface water present on the affected site to impact lead distribution in the affected area.

Lead deposited in dust and soil from the historic shooting range can become a long-term source of lead exposure, which is especially concerning for children. Preschool-age children and fetuses are the most vulnerable segments of the population for exposure to lead. Therefore, prior to approval and implementation of the proposed project, and as its top priority, FWP will document and ensure the safety of the affected public who will use the campground. More specifically, FWP will adequately analyze and, as necessary, mitigate any potential public health threats associated with the potential for Pb exposure. Toward that end, FWP contacted a consultant (HydroSolutions) for guidance regarding investigation and recommendations for mitigating the potential for lead contamination at the affected site. In response, HydroSolutions recommended site sampling to determine next steps necessary to ensure the safety of the affected public and FWP personnel prior to project approval.

Initial laboratory analytical results from soil screening completed in July 2023 identified localized areas containing elevated concentrations of lead in soil (ranging from about 300 to 960 parts per million [ppm]; HydroSolutions Inc, 2023). As a result of the lead detected during the initial screening, a follow-up investigation was conducted to more fully characterize the extent and magnitude of lead impacts at the Site. HydroSolutions completed the follow-up investigation during September 2023, which involved the use of a handheld field portable x-ray fluorescence (handheld XRF) instrument as well as laboratory sampling to delineate the extent and magnitude of the lead impacts (HydroSolutions Inc, 2023b). As a result of this investigation, an approximately 17,500 square foot, 12- to 18-inch deep area at the Site was identified for soil removal based on EPA's 400 milligram per kilogram (mg/kg; or parts per million [ppm]) Regional Screening Level (RSL) for lead in residential soil that was in force at the time of the report (EPA, 2023; HydroSolutions Inc, 2023b). However, after the follow-up investigation was completed, EPA issued a revised, lower RSL of 200 ppm for lead in residential soil. Therefore, the approximate excavation area and estimated soil volume have been updated in this work plan to reflect the new RSL of 200 ppm. Assuming an average excavation depth of 15 inches over an area of approximately 37,500 square feet, the approximate anticipated excavation volume under the revised EPA RSL is 1,750 bank cubic yards.

Please see Attachment 1, Preliminary Lead-Impact Soil Removal Work Plan for a description of the lead sampling investigation, sampling results, and soil removal plan. This attachment includes project health and safety considerations.

The result of a TCLP analysis of soil from the most impacted area identified was below the hazardous waste threshold, indicating that lead impacted soils at the site are unlikely to be classified as hazardous waste for disposal purposes.

Under no circumstances would FWP approve the proposed project until the affected site has been adequately assessed and lead impacts mitigated to a level deemed safe for public use. Based on this information, including the areas identified as RSL exceedances, FWP will continue to consult with the Montana Department of Environmental Quality and/or other experts for guidance in determining a final cleanup standard for lead. FWP will also contact potential receiving landfills regarding their acceptance criteria for lead-impacted soils. Finally, FWP will consult with an industrial hygienist or other qualified lead-safety practitioner to determine what, if any, precautions would be required for workers during excavation and hauling of lead impacted soil. This information will be documented and made available to the public upon request and prior to allowing public use of the proposed campground expansion.

The anticipated project schedule includes survey and some design work to be initiated in late 2024. Design and construction are projected to begin in 2025 with facilities open to the public in 2026. This proposed project timeline is tentative because FWP must ensure its top priority—public health and safety—has been adequately analyzed and mitigated prior to project approval and public use.

Affected Area / Location of Proposed Project

- Legal Description
 - Latitude/Longitude: 47.085968 -104.697921
 - Section, Township, and Range: S01, T15N, R55E
 - Town/City, County, Montana: Glendive, Dawson County, Montana
- Location Map

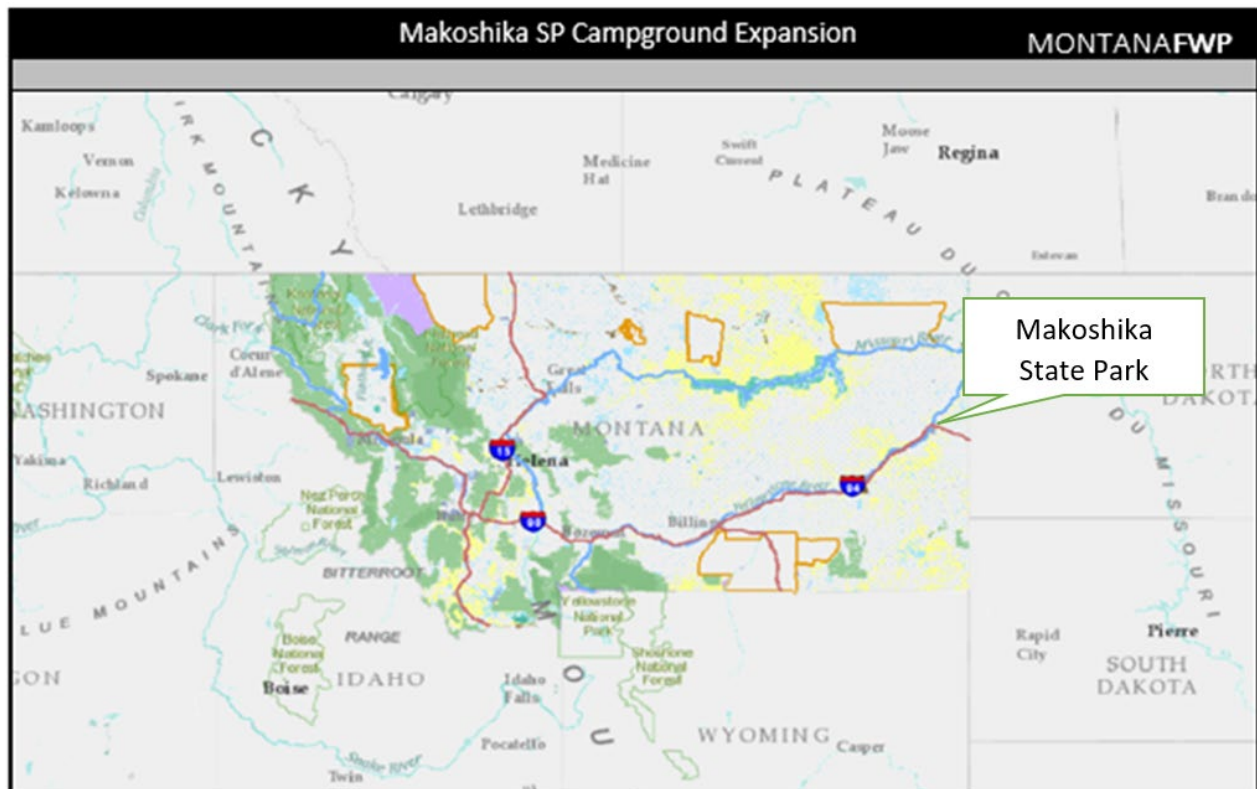


Figure 1. State of Montana map identifying location of Makoshika State Park.

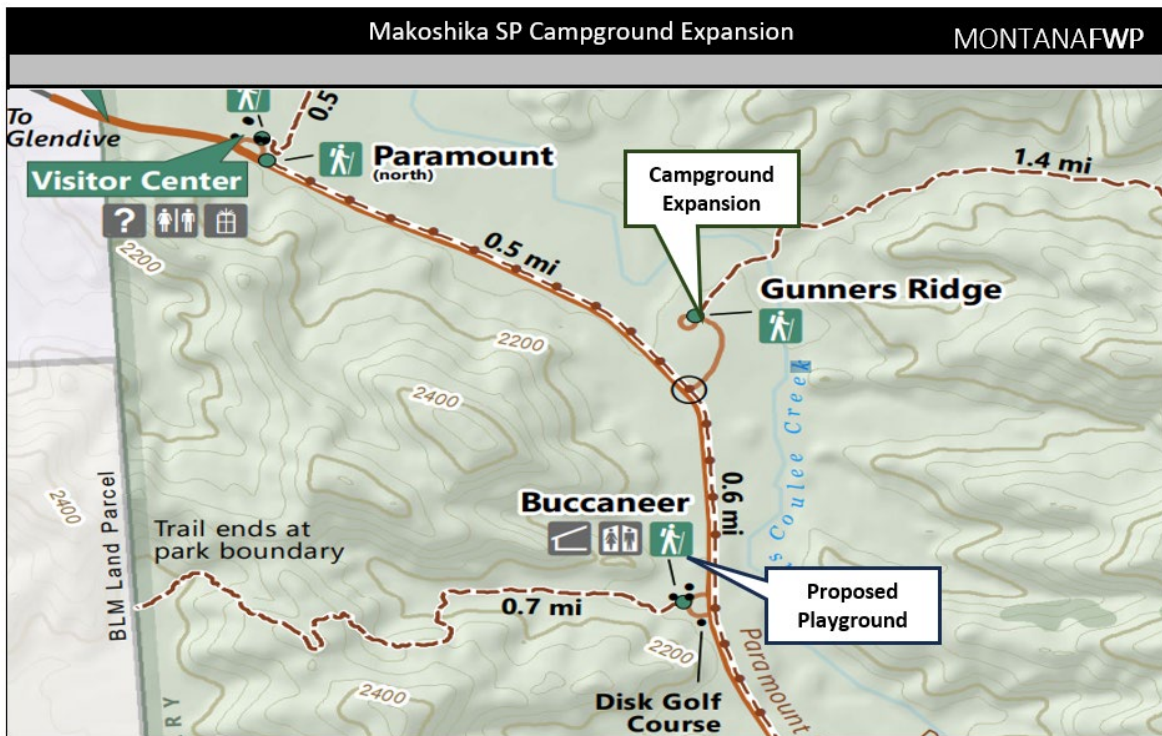


Figure 2. Map showing the location of the proposed campground expansion and playground within Makoshika State Park.

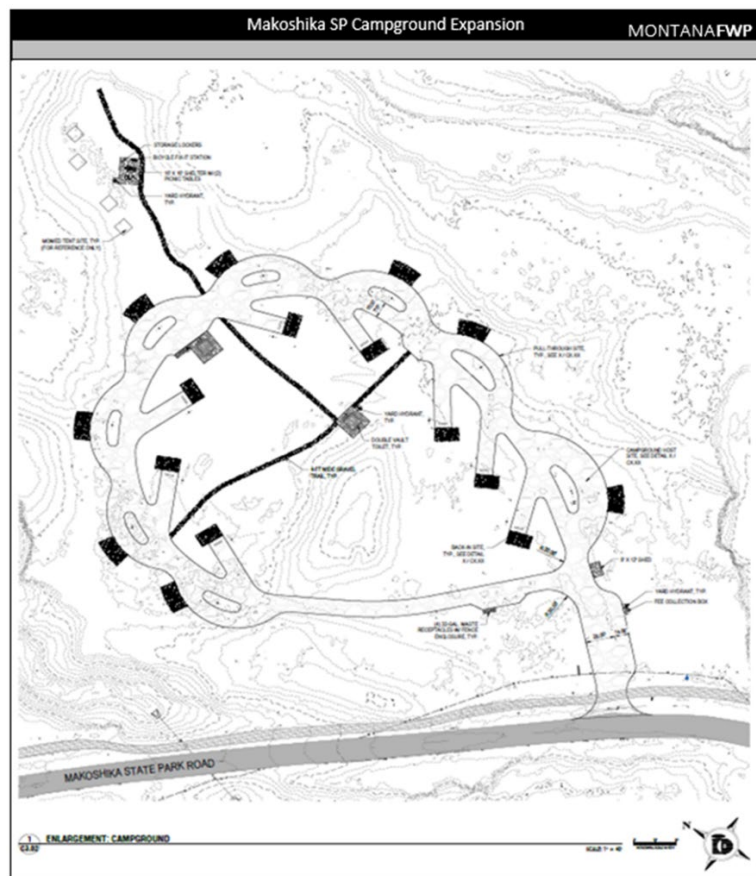


Figure 3. Draft concept plan of the proposed campground expansion within Makoshika State Park.

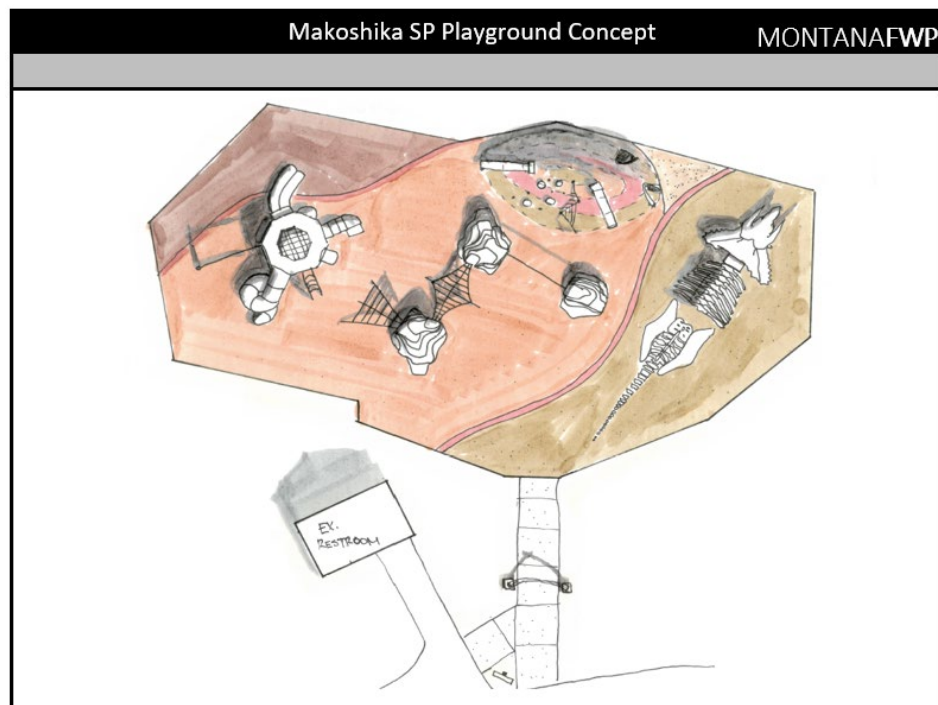


Figure 4. Illustration of the proposed 'dino- theme' Playground Concept for Makoshika State Park.

III. Purpose and Need (Benefits of Proposed Project)

The EA must include a description of the purpose and need or benefits of the proposed project. ARM 12.2.432(3)(b). Benefits of the proposed project refer to benefits to the resource, public, department, state, and/or other.

The purpose of the proposed project would be to expand existing camping and recreational opportunities at the state park by adding the following infrastructure and amenities (Figure 3, Figure 4):

- up to sixteen RV sites with electric hookups to accommodate park visitors requiring electricity for medical equipment, air conditioning and other needs,
- a dedicated camp-host site,
- four primitive hike/bike campsites,
- a day-use area with a playground,
- access to the Gunner's Ridge Trailhead, and
- hike/bike trails connecting the expanded campground to the park visitor center, a separate existing primitive campground loop, picnic shelters, a frisbee golf course and various trailheads leading to backcountry hiking opportunities.

In addition, because the proposed project would occur within the footprint of a former shooting range, FWP, in consultation with DEQ and/or industry consultants, would investigate and mitigate, as necessary, any potential lead hazards prior to project implementation and public use. All information regarding the lead investigation, any necessary mitigation activities, and resulting compliance status with public health and safety standards will be documented and made available to the public upon request. Please see Attachment 1, Preliminary Lead-Impact Soil Removal Work Plan for a description of the lead sampling investigation, sampling results, and soil removal plan. This attachment includes project health and safety considerations.

The proposed project would benefit park visitors and the local economy by safely and responsibly accommodating additional overnight and day use of the park.

If FWP prepared a cost/benefit analysis before completion of the EA, the EA must contain the cost/benefit analysis or a reference to it. ARM 12.2.432(3)(b).

	Yes*	No
Was a cost/benefit analysis prepared for the proposed project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

* If yes, a copy of the cost/benefit analysis prepared for the proposed project is included in Attachment A to this Draft EA

IV. Other Agency Regulatory Responsibilities

FWP must list any federal, state, and/or local agencies that have overlapping or additional jurisdiction, or environmental review responsibility for the proposed project, as well as permits, licenses, and other required authorizations. ARM 12.2.432(3)(c).

A list of other required local, state, and federal approvals, such as permits, certificates, and/or licenses from affected agencies is included in **Table 1** below. **Table 1** provides a summary of state requirements but does not necessarily represent a complete and comprehensive list of all permits, certificates, or approvals needed. Rather, **Table 1** lists the primary state agencies with regulatory responsibilities, the applicable regulation(s) and the purpose of the regulation(s). Agency decision-making is governed by state and federal laws, including statutes, rules, and regulations, that form the legal basis for the conditions the proposed project must meet to obtain necessary permits, certificates, licenses, or other approvals. Further, these laws set forth the conditions under which each agency could deny the necessary approvals.

Table 1: Federal, State, and/or Local Regulatory Responsibilities

Agency	Type of Authorization (permit, license, stipulation, other)	Purpose
Dawson County Sanitarian	Permit for septic system	Protect water quality of the state per The Sanitation Act MCA 76-4.
DEQ	Montana Pollutant Discharge Elimination System (MPDES) Construction Stormwater Permit	Development and Execution of Stormwater Pollution Prevention Plan
DEQ	Montana Hazardous Waste Act	MCA 75-10-401 (MHW). MHW gives DEQ the authority to control hazardous waste, including generation, transportation, treatment, storage, and disposal.
City of Glendive	'Will Serve' letter for use of City water	Certification that the City of Glendive will serve the new campground loop with municipal water
FWP	Noxious Weed Management Plan	Limit the spread of noxious weeds on state-owned lands

V. List of Mitigations, Stipulations

Mitigations, stipulations, and other *enforceable* controls required by FWP, or another agency, may be relied upon to limit potential impacts associated with a proposed Project. **Table 3** below lists and evaluates enforceable conditions FWP may rely on to limit potential impacts associated with the proposed Project. ARM 12.2.432(3)(g).

Table 2: Listing and Evaluation of Enforceable Mitigations Limiting Impacts

<i>Are enforceable controls limiting potential impacts of the proposed action? If not, no further evaluation is needed.</i>			Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
<i>If yes, are these controls being relied upon to limit impacts below the level of significance? If yes, list the enforceable control(s) below</i>			Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
Enforceable Control	Responsible Agency	Authority (Rule, Permit, Stipulation, Other)	Effect of Enforceable Control on Proposed Project	
Identification and protection of cultural resources	FWP Heritage Program, State Historic Preservation Office (SHPO)	Cultural assessment and inventory	In keeping with the Montana Antiquities Act all undertakings on state lands are assessed for their potential to affect cultural resources. This project would be evaluated according to the process for cultural resource inventory outlined in Administrative Rules 12.8.501-12.8.510, and in consultation with the State Historic Preservation Office and tribal historic preservation offices affiliated with each property in accordance with FWP's Tribal Consultation Guidelines.	
Montana Hazardous Waste Act	Montana Department of Environmental Quality	Montana Hazardous Waste Act MCA 75-10-401 (MHW).	Potential lead impact mitigation and disposal	

VI. Alternatives Considered

In addition to the proposed Project, and as required by MEPA, FWP analyzes the "No-Action" alternative in this EA. Under the "No Action" alternative, the proposed project would not occur. Therefore, no additional impacts to the physical environment or human population in the analysis area would occur. The "No Action" alternative forms the baseline from which the potential impacts of the proposed Project can be measured.

Alternative 1: No Action

Under the "No Action" alternative, the Makoshika State Park Campground Expansion project would not occur and no additional impacts to the physical environment or human population would occur. Additional campsites with expanded amenities would not be provided. With no additional capacity and the ongoing trend of increased use, this alternative would limit overnight visitation to the park. Reservations for RVs would continue to be difficult to schedule as only 15 campsites exist below the switchback and the road grade is too steep to permit large vehicles to access the 14 campsites above the switchback. Under this alternative, the local economy would see no benefit.

Alternative 2: Proposed Project

Under Alternative 2, the proposed project, FWP would expand camping and recreational opportunities at Makoshika State Park by adding 16 RV sites with electric hookups, 4 primitive hike / bike campsites, and a day-use area with playground. The campground would include a dedicated camp host site and access to Gunners Ridge Trailhead. Hike/bike trails would connect the new campground to other amenities such as the visitors center, a separate and distinct primitive campground, picnic shelter, a frisbee golf course and various trailheads leading to back country hiking opportunities. The campground expansion project was initiated in response to numerous visitor and local public comments and increased overnight visitation at the park. The proposed project is below the switchback and would be available to all visitors, including those with large campers. Public comments also identified the need for access to

electricity and water. This type of project would attract visitors to local businesses and thereby benefit the local economy.

	Yes*	No
Were any additional alternatives considered and dismissed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

* If yes, a list and description of the other alternatives considered, but not carried forward for detailed review, is included below

VII. Terms Used to Describe Potential Impacts on the Physical Environment and Human Population

The impacts analysis identifies and evaluates **direct**, **secondary**, and **cumulative impacts**.

- **Direct impacts** are those that occur at the same time and place as the action that triggers the effect.
- **Secondary impacts** “are further impacts to the human environment that may be stimulated or induced by or otherwise result from a direct impact of the action.” ARM 12.2.429(18).
- **Cumulative impacts** “means the collective impacts on the human environment of the proposed action when considered in conjunction with other past and present actions related to the proposed action by location or generic type. Related future actions must also be considered when these actions are under concurrent consideration by any state agency through pre-impact statement studies, separate impact statement evaluation, or permit processing procedures.” ARM 12.2.429(7).

Where impacts are expected to occur, the impact analysis estimates the **extent**, **duration**, **frequency**, and **severity** of the impact. The duration of an impact is quantified as follows:

- **Short-Term:** impacts that would not last longer than the proposed project.
- **Long-Term:** impacts that would remain or occur following the proposed project.

The severity of an impact is measured using the following:

- **No Impact:** there would be no change from current conditions.
- **Negligible:** an adverse or beneficial effect would occur but would be at the lowest levels of detection.
- **Minor:** the effect would be noticeable but would be relatively small and would not affect the function or integrity of the resource.
- **Moderate:** the effect would be easily identifiable and would change the function or integrity of the resource.
- **Major:** the effect would irretrievably alter the resource.

Some impacts may require mitigation. As defined in ARM 12.2.429, mitigation means:

- Avoiding an impact by not taking a certain action or parts of a project;
- Minimizing impacts by limiting the degree or magnitude of a project and its implementation;
- Rectifying an impact by repairing, rehabilitating, or restoring the affected environment; or

- Reducing or eliminating an impact over time by preservation and maintenance operations during the life of a project or the time period thereafter that an impact continues.

FWP may, as an alternative to preparing an EIS, prepare an EA whenever the action is one that might normally require an EIS, but effects which might otherwise be deemed significant appear to be mitigable below the level of significance through design, or enforceable controls or stipulations, or both, imposed by the agency or other government agencies. For an EA to suffice in this instance, the agency must determine that all the impacts of the proposed action have been accurately identified, that they will be mitigated below the level of significance, and that no significant impact is likely to occur. The agency may not consider compensation for purposes of determining that impacts have been mitigated below the level of significance. ARM 12.2.430(4).

A list of any mitigation strategies including, but not limited to, design, enforceable controls or stipulations, or both, as applicable to the proposed project is included in Table 2, **Section V** above.

FWP must analyze impacts to the physical and human environment for each alternative considered. The proposed project considered the following alternatives:

- Alternative 1: No Action
- Alternative 2: Proposed Project

VIII. General Setting of the Affected Environment

The analysis area for direct, secondary, and cumulative impacts on the physical environment and human population resources analyzed by this Draft EA includes Makoshika State Park and more broadly Dawson County. Dawson County covers approximately 2,383 square miles (6,170 km²), of which 2,372 square miles (6,140 km²) is land and 11 square miles (28km²) is water. Makoshika State Park encompasses approximately 11,000 acres or 17 square miles (45 km²).

Human Population:

As of 2021, an estimated 8,904 people lived in Dawson County. The 2021 population estimate reflects an almost 2% decrease in population since the year 2000 (Montana.gov; January 25, 2021).

Population 2000	Population 2021	Annual Growth Rate, 2000-2021	Area in Miles, excluding large water bodies	Population Density
9,050	8,904	-0.20%	2372	3.75

Economics:

In 2021, the median per capita income in the United States was \$37,522, and the median household income was \$70,784. In Montana, median per capita income was somewhat lower, at \$34,423, with a median household income of \$60,560. For comparison, in 2021, the median per capita income in Dawson County was \$31,966 and the median household income was \$57,684.

Land Ownership:

The federal government owns 27,276,000 acres (29% of Montana), state government owns 5,196,000 acres (5.6% of Montana), and private entities own 60,682,000 acres. For comparison, in Dawson County the federal government owns 180,000 acres (11% of Dawson County), state government owns 98,000 acres (6.4% of Dawson County), and private

entities own 1,240,000 acres. Again, Makoshika State Park constitutes the largest of Montana's state parks at more than 11,000 acres (45 km²), all within Dawson County.

Agriculture:

Montana supports a large agricultural economy and Dawson County is no different. In 2017, there were an estimated 27,048 farms and ranches across Montana. The most common agricultural activities of these farms and ranches include raising beef cattle, growing forage (hay) for cattle, and growing grain crops (wheat, oats, barley). Sheep, hogs, and dairy cattle were also raised in smaller numbers. In Dawson County, as with much of Montana, cattle ranching represents the largest proportion of agricultural production, as detailed below (*from nass.usda.gov/mt (USDA, NASS, Mountain Region 2021)*).

Number of Cattle	Cattle Density	Cattle / Person
35,500	14.96	3.99

Recreation:

Outdoor recreation and tourism are major components of Montana's economy, particularly in the mountainous western part of the state. Western Montana is nationally renowned for its high-quality fishing, hunting, camping, hiking, river floating, skiing, snowmobiling, wildlife viewing, and sightseeing opportunities. Glacier and Yellowstone National Parks, Flathead Lake, and other public lands attract large numbers of people to Montana every year. Many of these outdoor activities are made possible by public ownership of large tracts of mountainous habitat and additional access provided by private landowners. While the majority of outdoor recreation occurs in the western part of the state, Dawson County and Makoshika State Park experience significant visitation and hold claim to the largest of Montana's state parks.

IX. Cumulative Impacts Analysis

For the purposes of MEPA, "cumulative impact" means the collective impacts on the human environment of the proposed action when considered in conjunction with other past and present actions related to the proposed action by location or generic type. Related future actions must also be considered when these actions are under concurrent consideration by any state agency through pre-impact statement studies, separate impact statement evaluation, or permit processing procedures. ARM 12.2.429(7).

Under the "No Action" alternative, the proposed project would not occur. Therefore, no additional cumulative impacts to the physical or human environment in the analysis area would occur. The "No Action" alternative forms the baseline from which the potential impacts of the proposed Project can be measured. For the purposes of the proposed project, the cumulative impacts analysis below applies to all resources analyzed under Alternative 2, Proposed Action/Project (Section XI.A and B).

No significant adverse cumulative impacts would be expected because of the proposed project. Under the proposed action, cumulative impacts would occur. The sections below identify past, present, and related future actions (i.e., activities to be considered under the cumulative impacts analysis). Actions considered in these analyses were identified by FWP and other subject matter experts. Past and present actions are accounted for as part of the existing, or "baseline," environmental conditions. MEPA is forward-looking, with analyses focused on the potential impacts of the proposed action with consideration for any past, present, or future related actions.

Related Past, Present, and Future Actions:

In 1938, the current Makoshika State Park site was proposed as "Badlands National Park" by the Glendive Chamber of Commerce. Chamber secretary K. E. Burleigh wrote to federal officials, requesting that they "inspect our proposed bad-lands park . . . and we would appreciate any efforts on your part to have a park established near Glendive . . ." However,

the National Park Service regional office determined that the location was "not of national significance." Despite that Dawson County started to set land aside in the 1940's with the hopes of a future park. In 1953 Dawson County donated the land to the State for use as a state park. Over the next decades, the state bought and traded land with Federal Agencies, Dawson County, and private landowners to create what we have today.

Cumulative impacts from past and present state actions at Makoshika State Park are not mutually exclusive and impacts to the ecology and conservation of the affected landscape and actions from other related programs are considered prior to any actions that may impact the affected environment, such as the proposed project.

Table 3 below identifies environmental review conducted to assess potential impacts to the affected human environment from past, present, and known future related projects or actions. Past and present actions are accounted for as part of the existing, or "baseline," environmental conditions of the affected human environment prior to approval and implementation of the proposed project, and any known future related project(s).

Table 3: Historic Related Projects and Associated Environmental Review

Date	Action	Type of Review
01/18/1984	Makoshika State Park. Pave entrance road and switchbacks.	PER
02/06/1996	Makoshika State Park. Improvements.	Draft EA
03/02/1999	Makoshika State Park. Capital improvements, amphitheater renovation.	Draft EA
08/12/1999	Makoshika State Park. Planning to address potential oil and gas development.	Draft EA
04/02/2002	Makoshika State Park. Construct group-use shelter.	Draft EA
08/06/2002	Makoshika State Park. Acquisition, purchase of 7 sections of county land within park.	Draft EA
11/07/2005	Makoshika State Park. Ten-year implementation of final Management plan.	Draft EA
12/21/2007	Makoshika State Park. Replace and develop Glendive shooting range.	Draft EA
01/14/2014	Makoshika State Park. New recreational trail.	Draft EA
07/08/2014	Makoshika State Park. Proposal to restore McCarty Cabin.	Draft EA
04/02/2018	Makoshika State Park. Rebuild primary access road.	Draft EA
03/27/2020	Makoshika State Park. Water line project.	Draft EA
03/01/2021	Makoshika State Park. Pavilion project.	Draft EA
03/02/2021	Makoshika State Park. Yurt, deck, parking area, trails project.	Draft EA
12/15/2021	Makoshika State Park. Rockslide cleanup, road reopening, safety risks.	Draft EA
06/19/2023	Makoshika State Park. Archery range improvements.	Draft EA

None of the project-specific environmental review documents cited above identified the potential for significant adverse impacts to the affected human environment, including cumulative impacts. Therefore, preparation of an Environmental Impact Statement or EIS-level MEPA review was not required, and each project was approved through EA-level MEPA review. Similarly, with consideration for potential cumulative impacts from the proposed project, FWP determined that no significant adverse cumulative impacts would be expected (see Section XI. A and B, Proposed Project, Evaluation and Summary of Potential Impacts on the Physical Environment and Human Population).

In addition, several guiding documents inform the actions at state parks across Montana, including Makoshika State Park. These guiding documents outline strategies and considerations for taking management action and addressing any potential adverse impacts to the affected human environment from such management actions. These guiding documents and affected regulatory entities include the following:

Table 4: Guiding Documents – State Parks

Agency	Document
FWP	2005 Makoshika State Park Management Plan
FWP	2014-2018 Montana Outdoor Recreation Plan
FWP	2020-2024 Statewide Comprehensive Outdoor Recreation Plan (SCORP)
FWP	2024 Preliminary Lead-Impacted Soil Removal Work Plan
FWP	2008 FWP Weed Management Plan

The above-cited documents ensure projects, such as that proposed, are implemented, and managed consistently and in a manner that limits the potential for unforeseen adverse impacts to the affected human environment. All the above-cited guiding documents are available to the public on FWP’s website or directly by request.

Of particular importance regarding the proposed project, the proposed new campground would be located at the site of a former shooting range. Therefore, FWP, with Montana’s Department of Environmental Quality (DEQ) guidance, determined a remedial investigation of potential lead hazards at the affected site, and mitigation of any identified exceedances of applicable health and welfare-based lead standards, is necessary to ensure a safe environment for camping and related recreational uses prior to project approval. Lead can also negatively impact wildlife, especially birds, when it enters the food web. Mitigation of any lead exceedance would protect wildlife by restricting ingestion of spent lead shot or when predators and scavengers ingest prey that have consumed lead. Under no circumstances would FWP approve the proposed project until such time as the site has been adequately assessed and potential lead impacts are mitigated to a level deemed safe for public use. Please see Attachment 1, Preliminary Lead-Impact Soil Removal Work Plan for a description of the lead sampling investigation, sampling results, and soil removal plan. Therefore, any cumulative impacts related to the identification and mitigation, as necessary, of potential lead impacts resulting from the historic shooting range would be short- and long-term, moderate to major, and beneficial.

Because the base intent of the proposed project and all past, present, and future actions associated with the creation, development, and maintenance of the state park is to improve recreational opportunities for the residents of Dawson County, the State of Montana, and visitors from across the country and world, it is expected that any beneficial cumulative impacts associated with the proposed project would be long-term, negligible to major. Any adverse cumulative impacts would be short- and long-term and negligible to minor.

X. Alternative 1: No Action. Evaluation and Summary of Potential Impacts on the Physical Environment and Human Population

Under the “No Action” alternative, the proposed project would not occur. Therefore, no new/additional impacts to the physical or human environment in the analysis area would occur. The “No Action” alternative forms the baseline from which the potential impacts of the proposed Project can be measured.

Under the “No Action” alternative, the Makoshika State Park Campground Expansion project would not occur and no additional impacts to the physical environment or human population would occur. The need for additional campsites with increased amenities would not be provided. With no increase in capacity and the ongoing trend of increased use, this alternative would limit overnight visitation to the park. Reservations for RVs would continue to be difficult to schedule as only 15 campsites exist below the switchback and the road grade is too steep to permit large vehicles to access the 14 campsites above the switchback. Under this alternative, the local economy would see no benefit.

XI. Alternative 2: Proposed Project. Evaluation and Summary of Potential Impacts on the Physical Environment and Human Population

A. Evaluation and Summary of Potential Impacts on the Physical Environment

1. Terrestrial, Avian, and Aquatic Life and Habitats

Existing Environment/Baseline Conditions (No Action Alternative):

The affected area primarily consists of reclaimed vegetation with grasses and woody brush. Wildlife use of this area is generally light due to limited habitat and a regular public presence. Mule deer, mountain lion, birds, and small mammals pass through the area periodically. This list is representative but does not constitute a complete list of wildlife species present in the affected area. Additionally, Makoshika State Park is home to over 250 species of avian wildlife throughout the year. No aquatic life is found in the area as the lone creek bed located within the affected area only holds water after heavy rains and during spring snow melt. For additional information related to the affected environment see Section VIII, General Setting of the Affected Environment.

Direct Impacts:

No significant adverse direct impacts to terrestrial, avian, and aquatic life and habitats would be expected because of the proposed project. The proposed project area consists mostly of bare ground with reclaimed vegetation, including native grasses and woody brush. The affected area does not contain any critical wildlife habitat; however, the loss of 7.3 acres of low-grade wildlife habitat would occur with development of the proposed project. Construction activities associated with the proposed project may temporarily displace or prevent certain terrestrial and avian wildlife from using the affected area. However, any such impacts would last only as long as the construction phase. Further, the area surrounding the affected site generally includes the same/similar habitat structure; therefore, any wildlife displaced by construction activities would likely utilize other nearby, similar, and suitable habitat until project completion. Therefore, any adverse direct impacts to terrestrial and avian wildlife would be short-term and negligible to minor. Any adverse direct impacts to terrestrial and avian wildlife habitats would be short- and long-term, minor to moderate, limited by the lack of existing critical wildlife habitat, and mitigated by the existence of nearby and plentiful similar, suitable habitats. No perennial aquatic habitats or aquatic life exist on or occupy the affected site; therefore, no direct impacts to aquatic life and habitats would be expected because of the proposed project.

Secondary Impacts:

No significant adverse secondary impacts to terrestrial, avian, and aquatic life and habitats would be expected because of the proposed project. After project implementation, the site would be expected to experience increased visits from the public resulting in additional human impacts in the immediate proximity of the project. Some wildlife use patterns may change as they are displaced to the surrounding landscape both within and external to the state park, all of which largely constitutes undeveloped land. Therefore, it would be expected that any wildlife displaced by the proposed project would readily find suitable habitat nearby. Therefore, any adverse secondary impacts to terrestrial and avian life and habitats would be long-term and negligible to minor. No aquatic life or habitat exist on the site; therefore, no secondary impacts to aquatic life and habitats would be expected because of the proposed project.

Cumulative Impacts:

No significant adverse cumulative impacts would be expected because of the proposed project. However, under the proposed action, cumulative impacts would occur. The proposed project would provide the affected public with additional state park amenities, infrastructure, and related recreational resources to improve the overall experience and facilitate increased use of the park. The proposed action would mitigate the potential for adverse impacts associated with lead contaminated soils created by historic use of the affected site as a gun range and thereby eliminate an existing threat to public health and welfare. Lead poisoning of wildlife, especially birds is possible through the ingestion of spent lead shot or when predators and scavengers ingest prey that have consumed lead. The proposed action would also mitigate potential impacts of lead in the food web to game and nongame wildlife.

With consideration for any past, present, or known future, related projects, any beneficial cumulative impacts associated with the proposed project would be long-term and negligible to major. Any adverse cumulative impacts would be long-term and negligible to minor. Any unknown future projects and associated cumulative impacts to the affected human environment would be assessed on a case-by-case basis pursuant to MEPA and other affected public processes and regulatory mechanisms, as applicable, prior to project approval and implementation. For a more detailed discussion of potential cumulative impacts see Section IX, Cumulative Impacts Analysis. Please see Attachment 1, Preliminary Lead-Impact Soil Removal Work Plan for a description of the lead sampling investigation, sampling results, and soil removal plan.

2. Water Quality, Quantity, and Distribution

Existing Environment/Baseline Conditions (No Action Alternative):

The proposed project site primarily consists of reclaimed vegetation with grasses and woody brush with a non-perennial, dry creek bed located adjacent to the project. The creek bed generally holds water for just a few weeks each year and only after heavy rains and spring snow melt. For additional information related to the affected environment see Section VIII, General Setting of the Affected Environment.

Direct Impacts:

No significant adverse direct impacts to water quality, quantity, and distribution would be expected because of the proposed project. Construction activity will generally occur in dry conditions and will not impact the lone, non-perennial, dry creek bed located in the affected area. If heavy precipitation does coincide with the construction phase of the proposed project, it may result in adverse direct impacts to water quality associated with stormwater runoff. To mitigate such potential adverse direct impacts, FWP would obtain a MPDES stormwater discharge permit from DEQ. The permit would include enforceable stormwater control measures such as the use of straw wattles, siltation fencing, or other approved erosion control techniques, as deemed appropriate and effective for the proposed project. Further, the accidental spillage of fuel or other fluids associated with the operation of heavy equipment necessary for the construction phase of the proposed project could result in adverse direct impacts to water quality. However, no perennial water resources exist in the affected area; therefore, the potential for adverse direct impacts to water quality from stormwater runoff or fuel spillage would be limited. The MPDES stormwater discharge permit would also regulate the potential for fuel spillage and FWP would require the contractor to have a spill prevention, control and countermeasures plan and associated infrastructure in place prior to implementation of the proposed project. Therefore, any adverse direct impacts to water quality would be short-term and negligible.

Further, some adverse direct impacts to water quantity from the potential use of water to mitigate fugitive dust emissions resulting from the movement of vehicles and heavy equipment over exposed ground during the construction phase may occur. However, due to a lack of a perennial water source in the affected area, water for such purposes would be sourced elsewhere. Therefore, any adverse direct impacts to water quantity would be none, or short-term and negligible. No adverse direct impacts to water distribution in the affected area would be expected because of the proposed project.

Secondary Impacts:

No significant adverse secondary impacts to water quality, quantity, and distribution would be expected because of the proposed project. Increased human use of the affected area could impact water quality within the typically dry creek bed located in the affected area when water is present. However, because the creek is non-perennial no long-term secondary impacts to water quality would be expected.

The proposed campground loop would be connected to the City of Glendive water system, which is sourced from the Yellowstone River. The City of Glendive currently provides treated potable water to the state park, has available capacity, and has agreed to supply the proposed campground expansion. Therefore, any secondary impacts to water quantity and distribution because of the proposed project would be long-term, minor, and accommodated by the City of Glendive's existing water right.

Cumulative Impacts:

No significant adverse cumulative impacts would be expected because of the proposed project. However, under the proposed action, cumulative impacts would occur. The proposed project would provide the affected public with additional state park amenities, infrastructure and related recreational resources to improve the overall experience and facilitate increased use of the park. The proposed action would also mitigate the potential for adverse impacts associated with lead contaminated soils created by historic use of the affected site as a gun range and thereby eliminate an existing threat to public health and welfare.

With consideration for any past, present, or known future, related projects, any beneficial cumulative impacts associated with the proposed project would be long-term and negligible to major. Any adverse cumulative impacts would be long-term and negligible to minor. Any unknown future projects and associated cumulative impacts to the affected human environment would be assessed on a case-by-case basis pursuant to MEPA and other affected public processes and regulatory mechanisms, as applicable, prior to project approval and implementation. For a more detailed discussion of potential cumulative impacts see Section IX, Cumulative Impacts Analysis.

3. Geology

Existing Environment/Baseline Conditions (No Action Alternative):

The project site at Makoshika State Park is located within the geological Hell Creek formation and surrounded by the Bearpaw and Fort Union Formations. The Hell Creek Formation is a division of rocks dating to the end of the Cretaceous Period, some 65.5 million years ago. The Hell Creek formation is up to 330 feet thick. Overall, soils are a sandy / clay mixture and mostly flat with no known unique geological features located within the 7-acre project site. For additional information related to the affected environment see Section VIII, General Setting of the Affected Environment.

Direct Impacts:

No significant adverse direct impacts to geology would be expected because of the proposed project. The proposed project would include a drain field and other amenities that will require excavation, which

will disturb area geology. However, because of the limited scope and relatively small footprint of the proposed project any adverse direct impacts would be short-term and negligible.

Secondary Impacts:

No significant adverse secondary impacts to geology would be expected because of the proposed project. The proposed project would include a drain field and other amenities that will require excavation, which will disturb area geology. However, because of the limited scope and relatively small footprint of the proposed project, any adverse secondary impacts would be long-term and negligible.

Cumulative Impacts:

No significant adverse cumulative impacts would be expected because of the proposed project. However, under the proposed action, cumulative impacts would occur. The proposed project would provide the affected public with additional state park amenities, infrastructure and related recreational resources to improve the overall experience and facilitate increased use of the park. The proposed action would also mitigate the potential for adverse impacts associated with lead contaminated soils created by historic use of the affected site as a gun range and thereby eliminate an existing threat to public health and welfare.

With consideration for any past, present, or known future, related projects, any beneficial cumulative impacts associated with the proposed project would be long-term and negligible to major. Any adverse cumulative impacts would be long-term and negligible to minor. Any unknown future projects and associated cumulative impacts to the affected human environment would be assessed on a case-by-case basis pursuant to MEPA and other affected public processes and regulatory mechanisms, as applicable, prior to project approval and implementation. For a more detailed discussion of potential cumulative impacts see Section IX, Cumulative Impacts Analysis. Please see Attachment 1, Preliminary Lead-Impact Soil Removal Work Plan for a description of the lead sampling investigation, sampling results, and soil removal plan.

4. Soil Quality, Stability, and Moisture

Existing Environment/Baseline Conditions (No Action Alternative):

The soil types within the area affected by the proposed action consist of Badland and Benz-Trembles complex. The Badland soil type is barren or nearly barren, can be erosive and is found to have a highly variable slope. The Benz-Trembles complex has 2 to 15 percent slopes and the surface layer is about 6 inches thick. Soils are found to be brownish-gray loam that are strongly alkaline with slow permeability of water. This site supported a shooting range for almost 40 years. When the range was closed in 2008 the area was reclaimed including soil scraping, removal of all debris and native vegetation was planted. Two of the shooting range targets were inside the footprint of the proposed project. Soil samples taken throughout the proposed project site and adjacent ground, with a focus near the historical target locations, indicate that some lead impacted soil exists and will need to be mitigated. Please see Attachment 1, Preliminary Lead-Impact Soil Removal Work Plan for a description of the lead sampling investigation, sampling results, and soil removal plan. For additional information related to the affected environment see Section VIII, General Setting of the Affected Environment.

Direct Impacts:

No significant adverse direct impacts would be expected because of the proposed project. Construction of the proposed campground expansion will necessarily involve ground disturbance, some soil compaction, and the addition of clean fill material to the project site. The lead impacted soil (see Attachment 1 for extent and location) will be mitigated, as necessary, to assure public safety. Mitigation

may include removal and proper disposal, capped / sealed in place, or other approved method. Overall, the mitigation activities will decrease erosive potential at the site, improve the soil's ability to support vegetation, increase water permeability in some areas and remove the opportunity for lead contaminated soils to adversely impact visitors or wildlife.

During portions of the construction timeline, soils may be exposed to wind or rainwater erosion more than what typically occurs at the site due to ground disturbance. However, because of the limited scope and relatively small footprint of the proposed project any adverse direct impacts would be short-term and negligible.

Secondary Impacts:

No significant adverse secondary impacts would be expected because of the proposed project. Following the construction phase FWP staff would actively manage the site. Increased staff-time at the newly developed campground, including a camp host, would ensure that an erosive event or problem is discovered quickly and addressed immediately. Further, through design and the use of best practices, following project implementation the affected area would be expected to reduce the opportunity for adverse impacts to affected soils. For example, high traffic areas would be hardened, trails would be created to concentrate foot traffic between amenities (restroom, playground, picnic area, etc.) and vulnerable areas would be landscaped to discourage use.

Further, because the affected site has historically been used for a shooting range, certain areas have been or will be remediated prior to public use of the campground (see Attachment 1 for extent and location). Following any necessary remediation of lead impacted soils, the affected area would be deemed safe for human use. Therefore, any adverse secondary impacts to soil quality, stability, and moisture in the affected area would be long-term, and minor. Any beneficial impacts would be long-term and moderate to major.

Cumulative Impacts:

No significant adverse cumulative impacts would be expected because of the proposed project. However, under the proposed action, cumulative impacts would occur. The proposed project would provide the affected public with additional state park amenities, infrastructure and related recreational resources to improve the overall experience and facilitate increased use of the park. The proposed action would also mitigate the potential for adverse impacts associated with lead contaminated soils created by historic use of the affected site as a gun range and thereby eliminate an existing threat to public health and welfare.

With consideration for any past, present, or known future, related projects, any beneficial cumulative impacts associated with the proposed project would be long-term and negligible to major. Any adverse cumulative impacts would be long-term and negligible to minor. Any unknown future projects and associated cumulative impacts to the affected human environment would be assessed on a case-by-case basis pursuant to MEPA and other affected public processes and regulatory mechanisms, as applicable, prior to project approval and implementation. For a more detailed discussion of potential cumulative impacts see Section IX, Cumulative Impacts Analysis.

5. Vegetation Cover, Quantity, and Quality

Existing Environment/Baseline Conditions (No Action Alternative):

The proposed project site consists of approximately 65% vegetation cover although it is affected by annual precipitation. In those areas of the proposed project site with vegetation, plants include various

grasses, forbes, scattered dryland shrubs and minimal cactus. Common species found include bluebunch wheatgrass, curlycup gumweed, broom snakeweed, Gardner's saltbush, big sagebrush, and plains pricklypear. Some noxious weeds are also found at the site including cheat grass and leafy spurge. The site currently has a gravel parking area, trailhead, primitive picnic facilities and receives light use. For additional information related to the affected environment see Section VIII, General Setting of the Affected Environment.

Direct Impacts:

No significant adverse direct impacts would be expected because of the proposed project. The proposed project includes the development of various new infrastructure related to camping and other recreational pursuits including 16 new RV sites with electric hookups, 4 primitive campsites, and a day-use area with playground. The proposed level of development would be expected to displace approximately 30% of the existing vegetation cover on the affected site and replace it with gravel and/or asphalt surfaces. During construction of the proposed campground expansion, existing vegetation would be adversely impacted through removal to facilitate the proposed new infrastructure. However, due to the relatively limited scope and size of the proposed project, especially as it relates to the existing footprint of the state park, any adverse direct impacts would be short- and long-term and negligible to minor.

Secondary Impacts:

No significant adverse secondary impacts would be expected because of the proposed project. Removal of existing vegetation would be necessary to accommodate the proposed new infrastructure. The proposed level of development would be expected to displace approximately 30% of the existing vegetation cover on the affected site and replace it with gravel and/or asphalt surfaces. Further, the nature of the proposed infrastructure (gravel, asphalt, structures) would prevent the future establishment of vegetation cover. However, the extent of potential adverse secondary impacts would be limited by the relatively small scope and size of the proposed project, especially as it relates to the existing footprint of the state park.

Following project implementation, disturbed areas would also be subject to increased risk of invasion by noxious weeds. However, the affected areas would be monitored and, as necessary, treated to eliminate or limit the potential for infestation by noxious weeds in accordance with FWP's Statewide Integrated Noxious Weed Management Plan. Therefore, any adverse secondary impacts would be long-term and minor.

Cumulative Impacts:

No significant adverse cumulative impacts would be expected because of the proposed project. However, under the proposed action, cumulative impacts would occur. The proposed project would provide the affected public with additional state park amenities, infrastructure, and related recreational resources to improve the overall experience and facilitate increased use of the park. The proposed action would also mitigate the potential for adverse impacts associated with lead contaminated soils created by historic use of the affected site as a gun range and thereby eliminate an existing threat to public health and welfare.

With consideration for any past, present, or known future, related projects, any beneficial cumulative impacts associated with the proposed project would be long-term and negligible to major. Any adverse cumulative impacts would be long-term and negligible to minor. Any unknown future projects and associated cumulative impacts to the affected human environment would be assessed on a case-by-case basis pursuant to MEPA and other affected public processes and regulatory mechanisms, as applicable, prior to project approval and implementation. For a more detailed discussion of potential cumulative

impacts see Section IX, Cumulative Impacts Analysis.

6. Aesthetics

Existing Environment/Baseline Conditions (No Action Alternative):

The proposed project site is moderately vegetated (~ 65% of affected area) and offers good views of the surrounding badlands. The site is rustic and appears to be natural and undeveloped with some signs of human activity at the parking area and trailhead. Some disturbance from past human use of the site is evident. For additional information related to the affected environment see Section VIII, General Setting of the Affected Environment.

Direct Impacts:

No significant adverse direct impacts would be expected because of the proposed project. During project implementation, some impacts to the aesthetic nature of the affected area would occur because the operation of heavy equipment and presence of staff necessary to develop the proposed camping and related recreational infrastructure may disrupt the experience of anyone visiting the park during the construction phase. However, any such direct impacts would be limited to the construction phase of the proposed project. Further, due to the relatively limited scope and size of the proposed project the construction phase is expected to be relatively short. Therefore, any adverse direct impacts would be short-term and negligible to minor.

Secondary Impacts:

No significant adverse secondary impacts would be expected because of the proposed project. Following implementation, the existing natural, and largely undeveloped views of the affected site would transition to views of developed infrastructure with increased human activity on the landscape. However, the proposed infrastructure and resulting increase in human activity would be consistent with other areas of the park and largely consistent with what would be expected by visitors to this and other Montana state parks. Therefore, any adverse impacts would be long-term, consistent with existing impacts, and minor to moderate.

Cumulative Impacts:

No significant adverse cumulative impacts would be expected because of the proposed project. However, under the proposed action, cumulative impacts would occur. The proposed project would provide the affected public with additional state park amenities, infrastructure and related recreational resources to improve the overall experience and facilitate increased use of the park. The proposed action would also mitigate the potential for adverse impacts associated with lead contaminated soils created by historic use of the affected site as a gun range and thereby eliminate an existing threat to public health and welfare. Please see Attachment 1, Preliminary Lead-Impact Soil Removal Work Plan for a description of the lead sampling investigation, sampling results, and soil removal plan.

With consideration for any past, present, or known future, related projects, any beneficial cumulative impacts associated with the proposed project would be long-term and negligible to major. Any adverse cumulative impacts would be long-term and negligible to minor. Any unknown future projects and associated cumulative impacts to the affected human environment would be assessed on a case-by-case basis pursuant to MEPA and other affected public processes and regulatory mechanisms, as applicable, prior to project approval and implementation. For a more detailed discussion of potential cumulative impacts see Section IX, Cumulative Impacts Analysis.

7. Air Quality

Existing Environment/Baseline Conditions (No Action Alternative):

According to the Department of Environmental Quality (DEQ), air quality in the area affected by the proposed project is currently unclassifiable or in compliance with applicable national ambient air quality standards (NAAQS). Minimal sources of air pollution exist in the area and generally include fugitive dust associated with high wind events and exposed ground and vehicle travel on unpaved roads. No significant point-sources of air pollution exist in the area affected by the proposed project and no air quality restrictions currently exist for the affected area. For additional information related to the affected environment see Section VIII, General Setting of the Affected Environment.

Direct Impacts:

No significant adverse direct impacts to air quality would be expected because of the proposed project. During the construction phase, removal of existing vegetation would be necessary to accommodate the new entrance road, campsites, and other amenities. The removal of existing vegetation would expose bare ground, which may result in the generation of fugitive dust. Heavy machinery would be necessary to implement the proposed project and the movement of that machinery over exposed ground during the construction phase could generate fugitive dust emissions, which may directly and adversely impact air quality. Also, vehicle exhaust emissions resulting from the operation of heavy equipment would generate carbon monoxide, volatile organic compounds, nitrogen oxides, sulfur dioxide, and various air toxics including, but not limited to benzene, all of which may directly and adversely impact air quality.

During the construction phase, water or chemical dust suppressant would be used to limit fugitive dust, as necessary. Also, any adverse impacts would be limited by the relatively limited scope and size of the proposed project, especially as it relates to the existing footprint of the state park. Therefore, any direct adverse impacts to air quality would be short-term, limited by the use of dust suppressant, and negligible to minor.

Secondary Impacts:

No significant adverse secondary impacts to air quality would be expected because of the proposed project. Following the completion of construction activities, the proposed project would not be expected to result in any additional adverse air quality impacts to the affected area. In fact, FWP anticipates long-term, minor, and beneficial impacts to air quality associated with road and campsite surfacing and the resulting reduction of potential fugitive dust generated by vehicle traffic.

Cumulative Impacts:

No significant adverse cumulative impacts would be expected because of the proposed project. However, under the proposed action, cumulative impacts would occur. The proposed project would provide the affected public with additional state park amenities, infrastructure, and related recreational resources to improve the overall experience and facilitate increased use of the park. The proposed action would also mitigate the potential for adverse impacts associated with lead contaminated soils created by historic use of the affected site as a gun range and thereby eliminate an existing threat to public health and welfare.

With consideration for any past, present, or known future, related projects, any beneficial cumulative impacts associated with the proposed project would be long-term and negligible to major. Any adverse cumulative impacts would be long-term and negligible to minor. Any unknown future projects and associated cumulative impacts to the affected human environment would be assessed on a case-by-case basis pursuant to MEPA and other affected public processes and regulatory mechanisms, as applicable,

prior to project approval and implementation. For a more detailed discussion of potential cumulative impacts see Section IX, Cumulative Impacts Analysis.

8. Unique, Endangered, Fragile, or Limited Environmental Resources

Existing Environment/Baseline Conditions (No Action Alternative):

According to a search of the State Library's Montana Natural Heritage Program database, the 14 wildlife *species of concern* listed in Table 5 have been identified within the vicinity of Makoshika State Park.

Table 5: Potentially Affected Animal Species of Concern

Species (common name)	State/Global Status, Rank ^{A/B}	Federal Status ^C
Avian Species		
Great Blue Heron	S3/G5	NA
Least Tern	S1B/G4	MBTA, DM
Golden Eagle	S3/G5	BGEPA, MBTA
Loggerhead Shrike	S3B/G4	MBTA, Sensitive
Brewer's Sparrow	S3B/G4	MBTA, Sensitive
Sprague's Pipit	S3B/G3G4	MBTA, BCC11, BCC17, Sensitive
Mammal Species		
Long-eared Myotis	S3, G5	NA
Spotted Bat	S3, G4	Sensitive
Hoary Bat	S3B, G3G4	Sensitive
Little Brown Myotis	S3, G3G4	Sensitive
Dwarf Shrew	S2S3/G4	NA
Reptile Species		
Western Milk Snake	S2/G5	Sensitive
Plains Hog-nosed Snake	S2/G5	Sensitive
Greater Short-horned Lizard	S3/G5	NA

^A **State/Global Rank, Status:**

- S1 = At high risk because of extremely limited and/or rapidly declining population numbers, range and/or habitat, making it highly vulnerable to global extinction or extirpation in the state.
- S3 = Potentially at risk because of limited and/or declining numbers, range and/or habitat, even though it may be abundant in some areas.
- B = Breeding - Rank refers to the breeding population of the species in Montana. Appended to the state rank, e.g. S2B, S5N = At risk during breeding season, but common in the winter

^B **Global Rank, Status:**

- G3 = Potentially at risk because of limited and/or declining numbers, range and/or habitat, even though it may be abundant in some areas.
- G4 = Apparently secure, though it may be quite rare in parts of its range, and/or suspected to be declining
- G5 = Common, widespread, and abundant (although it may be rare in parts of its range). Not vulnerable in most of its range

^C **Federal Rank, Status:**

- MBTA = Migratory Bird Treaty Act. (16 U.S.C. §§ 703-712, July 3, 1918, as amended 1936, 1960, 1968, 1969, 1974, 1978, 1986 and 1989) implements four treaties that provide for international protection of migratory birds. The statute's language is clear that actions resulting in a "taking" or possession (permanent or temporary) of a protected species, in the absence of a U.S. Fish and Wildlife Service (USFWS) permit or regulatory authorization, are a violation of the MBTA.
- BGEPA = Bald and Golden Eagle Protection Act of 1940. (16 U.S.C. 668-668c) prohibits anyone, without a permit issued by the Secretary of the Interior, from taking bald or golden eagles, including their parts, nests, or eggs.
- BCC11, and BCC17 = Designations represent inclusion on the Birds of Conservation Concern list for Bird Conservation Region 11 and 17 in Montana.
- Endangered = Denotes species that are listed as Endangered under the Endangered Species Act
- Threatened = Denotes species that are listed as Threatened under the Endangered Species Act
- Sensitive = Denotes species listed as Sensitive on BLM lands
- DM = Recovered, delisted, and being monitored - Any previously listed species that is now recovered, has been delisted, and is being monitored.
- NA = Not Applicable

None of the animal *species of concern* identified in Table 5 are *threatened* or *endangered* pursuant to the federal Endangered Species Act (ESA). Bald eagles, which were formerly listed as *threatened* under the ESA, have recovered, and are now listed by the state of Montana as a *special status species*, have also been observed within and nearby Makoshika State Park. The proposed project is not adjacent to or near the Yellowstone River. In August 2024 the USFWS proposed listing the western regal fritillary

butterfly as threatened. The determination is currently pending. The western regal fritillary is found in North Dakota, South Dakota, and Wyoming; however, it has not been formally observed in Montana for over 100 years, including in the project area. Additionally, the project site does not possess the needed habitat to support the western regal fritillary, including violets to support larval growth and adequate tall native grasslands for shelter during the remainder of their life cycle.

In addition, according to a search of the Montana Natural Heritage Program database, the 5 plant species of concern listed in Table 6 have been identified within or within the vicinity of Makoshika State Park, including the following: Bittersweet, Bractless Blazingstar, Blue Toadflax, Narrowleaf Penstemon, and Painted Milkvetch.

Table 6: Potentially Affected Plant Species of Concern

Species (common name)	State/Global Status, Rank ^{A/B}	Federal Status ^C
Bittersweet	S1/G5	NA
Bractless Blazingstar	S1S2/G5	NA
Blue Toadflax	S1S2/G4G5	NA
Narrowleaf Penstemon	S2S3/G5	NA
Painted Milkvetch	S1S2S3/G4T3/G4T4	Sensitive

^A State/Global Rank, Status:

- S1 = At high risk because of extremely limited and/or rapidly declining population numbers, range and/or habitat, making it highly vulnerable to global extinction or extirpation in the state.
- S2 = At risk because of very limited and/or potentially declining population numbers, range and/or habitat, making it vulnerable to global extinction or extirpation in the state.
- S3 = Potentially at risk because of limited and/or declining numbers, range and/or habitat, even though it may be abundant in some areas.
- T = Rank of a subspecies or variety. Appended to the global rank of the full species, e.g. T3.

^B Global Rank, Status:

- G4 = Apparently secure, though it may be quite rare in parts of its range, and/or suspected to be declining.
- G5 = Common, widespread, and abundant (although it may be rare in parts of its range). Not vulnerable in most of its range.

^C Federal Rank, Status:

- Sensitive = Denotes species listed as Sensitive on BLM lands
- NA = Not Applicable

None of the plant *species of concern* identified in Table 6 are *threatened* or *endangered* pursuant to the federal Endangered Species Act (ESA). For additional information related to the affected environment see Section VIII, General Setting of the Affected Environment.

Direct Impacts:

No significant adverse direct impacts to unique, endangered, fragile, or limited environmental resources would be expected because of the proposed project. The presence of any animal and/or plant species of concern, species of special status, species federally listed as threatened or endangered, or any lands classified as important or “critical habitat” located within or near the affected area were assessed through the Montana Natural Heritage Program. None of the animal or plant *species of concern/species of special concern* identified in Table(s) 5 and 6 above are designated *threatened* or *endangered* pursuant to the ESA and none of the affected landscape constitutes critical habitat for any of the identified species.

The identified animal and plant species of concern and/or species of special concern may be adversely impacted by implementation of the proposed project. However, because the proposed project would occur within an area of the existing state park that has historically experienced a high level of human use, including the construction of existing, pre-proposed project infrastructure as well as historic human use of the shooting range, any adverse direct impacts would be consistent with current and historic impacts and expected to occur primarily during the construction phase of the proposed project. The 7.0-

acre site currently includes approximately 4 acres of undisturbed habitat and 3 acres with existing infrastructure (road, parking, picnic facilities) and existing public use.

FWP would adhere to all applicable requirements related to management, preservation, and recovery of sensitive species, as outlined by the applicable federal and state guidance, policy, and requirements. These practices would support limiting potential adverse direct impacts to the identified unique, endangered, fragile, or limited environmental resources as well as many other plant and wildlife species located within or periodically using the affected area. Therefore, any adverse direct impacts to wildlife and plants, including any *species of concern* or *species of special concern* (see Table 5 and 6) would be short-term, negligible to minor, and consistent with historic impacts.

Secondary Impacts:

No significant adverse secondary impacts to unique, endangered, fragile, or limited environmental resources would be expected because of the proposed project. Following the construction phase and overall implementation of the proposed project, some adverse secondary impacts to the identified animal species of concern and/or species of special concern (see Table 5) may occur due to increased public use of the site. However, because the affected area has consistently and historically been used by humans, and because the vast majority of the 11,500-acre state park constitutes undeveloped 'backcountry,' it would be expected that any animals displaced from the affected site would find suitable nearby habitat. Therefore, any adverse secondary impacts to the identified animal species of concern or species of special concern would be long-term, consistent with existing impacts within the existing state park, and negligible to minor.

Overall habitat loss because of the proposed project would result in an about 4 acres of badlands habitat being converted to a developed recreation site, while the vast majority of the 11,500-acre state park would remain undeveloped 'backcountry.' Therefore, while the proposed project has the potential to adversely impact the identified plant species' of concern, because FWP would adhere to all applicable requirements related to management, preservation, and recovery of sensitive species, as outlined by the applicable federal and state guidance, policy, and requirements, and because the affected area represents an insignificant geographical extent of the larger state park, any adverse secondary impacts to plant species of concern would be consistent with existing impacts and negligible to moderate.

Cumulative Impacts:

No significant adverse cumulative impacts would be expected because of the proposed project. However, under the proposed action, cumulative impacts would occur. The proposed project would provide the affected public with additional state park amenities, infrastructure and related recreational resources to improve the overall experience and facilitate increased use of the park. The proposed action would also mitigate the potential for adverse impacts associated with lead contaminated soils created by historic use of the affected site as a gun range and thereby eliminate an existing threat to public health and welfare.

With consideration for any past, present, or known future, related projects, any beneficial cumulative impacts associated with the proposed project would be long-term and negligible to major. Any adverse cumulative impacts would be long-term and negligible to minor. Any unknown future projects and associated cumulative impacts to the affected human environment would be assessed on a case-by-case basis pursuant to MEPA and other affected public processes and regulatory mechanisms, as applicable, prior to project approval and implementation. For a more detailed discussion of potential cumulative impacts see Section IX, Cumulative Impacts Analysis.

9. Historical and Archaeological Sites

Existing Environment/Baseline Conditions (No Action Alternative):

In keeping with the Montana Antiquities Act and related regulations, all undertakings within State Parks are assessed for their potential to affect cultural resources. Any temporary or permanent developments within Makoshika State Park will require prior cultural resource assessment. Where indicated, cultural resource inventories including pedestrian survey and/or subsurface testing will occur through consultation with the State Historic Preservation Office. The process for cultural resource inventory and consultation is outlined in Administrative Rules 12.8.501-12.8.510. FWP also consults with all Tribal Historic Preservation Offices (THPO) affiliated with the park in accordance with FWP's tribal consultation guidelines. The cultural resource inventory and consultation with the SHPO and relevant THPO will determine whether cultural resource monitoring is required during implementation. For additional information related to the affected environment see Section VIII, General Setting of the Affected Environment.

Direct Impacts:

No significant adverse direct impacts to historic and archaeological sites would be expected because of the proposed project. In keeping with the Montana Antiquities Act and related regulations (12.8.501-12.8.510), all undertakings on state lands are assessed by a qualified archaeologist for their potential to affect cultural resources. The process for this assessment may include a cultural resource inventory and evaluation of cultural resources within or near the project area, in consultation with the State Historic Preservation Office (SHPO). FWP also consults with all Tribal Historic Preservation Offices (THPO) affiliated with the affected property in accordance with FWP's Tribal Consultation Guidelines. If cultural resources within or near the project area are recorded that are eligible for the National Register of Historic Places, they will be protected from adverse effects through adjustments to the project design or cancellation of the project if no design alternatives are available. If cultural resources are unexpectedly discovered during project implementation, FWP will cease implementation, and contact FWP's Heritage Program and/or SHPO and affected THPOs for further evaluation. Therefore, no adverse direct impacts would be expected because of the proposed project.

Secondary Impacts:

No significant adverse secondary impacts to historic and archaeological sites would be expected because of the proposed project. In keeping with the Montana Antiquities Act and related regulations (12.8.501-12.8.510), all undertakings on state lands are assessed by a qualified archaeologist or historian for their potential to affect cultural resources. The process for this assessment may include a cultural resource inventory and evaluation of cultural resources within or near the project area, in consultation with the SHPO. FWP also consults with all THPOs affiliated with each affected property in accordance with FWP's Tribal Consultation Guidelines. If cultural resources within or near the project area are recorded that are eligible for the National Register of Historic Places, they will be protected from adverse effects through adjustments to the project design or cancellation of the project if no design alternatives are available. If cultural resources are unexpectedly discovered during project implementation, FWP will cease implementation, and contact FWP's Heritage Program and/or SHPO and affected THPOs for further evaluation. Therefore, no adverse secondary impacts would be expected because of the proposed project.

Cumulative Impacts:

No significant adverse cumulative impacts would be expected because of the proposed project. However, under the proposed action, cumulative impacts would occur. The proposed project would provide the affected public with additional state park amenities, infrastructure and related recreational

resources to improve the overall experience and facilitate increased use of the park. The proposed action would also mitigate the potential for adverse impacts associated with lead contaminated soils created by historic use of the affected site as a gun range and thereby eliminate an existing threat to public health and welfare.

With consideration for any past, present, or known future, related projects, any beneficial cumulative impacts associated with the proposed project would be long-term and negligible to major. Any adverse cumulative impacts would be long-term and negligible to minor. Any unknown future projects and associated cumulative impacts to the affected human environment would be assessed on a case-by-case basis pursuant to MEPA and other affected public processes and regulatory mechanisms, as applicable, prior to project approval and implementation. For a more detailed discussion of potential cumulative impacts see Section IX, Cumulative Impacts Analysis.

10.Demands on Environmental Resources of Land, Water, Air, and Energy

Existing Environment/Baseline Conditions (No Action Alternative):

Makoshika State Park is available for day use year-round, and overnight use from April 1 to October 31 of each year. During the camping season, the park provides public drinking water. The park utilizes two RV campsites to accommodate seasonal park hosts. The host sites include access to electricity, drinking water and a sewage connection to a drain field. The remaining RV sites have access to drinking water but no individual water, electrical or sewage hook up. Total Park electrical consumption has seen a three-year average of 600-kilowatt hour per month for the camping season, with peak usage in August. The August three-year average is 1,200 kilowatt hours for the month. Water usage at the park in 2023 was approximately 136,000 gallons. For additional information related to the affected environment see Section VIII, General Setting of the Affected Environment.

Direct Impacts:

No significant adverse direct impacts to demands on environmental resources of land, water, air, and energy would be expected because of the proposed project. Fuel would be required to operate equipment and vehicles used to develop the proposed project. However, any adverse direct impacts to energy resources resulting from development would be limited to the construction phase of the proposed project. Because the scope and geographical extent of the proposed project is relatively limited, the construction phase would be relatively short; therefore, the amount of fuel necessary to complete the proposed project would be minimal. Any adverse direct impacts to energy demand (fuel use) would be short-term and negligible.

As identified previously through the analyses of potential direct impacts to water quality, quantity, and distribution; soil quality, stability, and moisture; vegetation cover, quantity, and quality; and air quality; some adverse impacts to the environmental resources of water, land, and air may occur because of the proposed project. However, as noted previously, any such direct impacts would be short-term, negligible to minor, and adequately mitigated.

Secondary Impacts:

No significant adverse secondary impacts to demands on environmental resources of land, water, air, and energy would be expected because of the proposed project. Following project implementation, increased use of potable water and electricity would be expected. Potable water consumption is estimated to increase by 75% when the new campground loop is fully utilized. Electrical use in the park likely will increase by 100% during the recreation season with electrical hook-ups being utilized at 16 new RV campsites. Local utilities can easily accommodate the added demand and campsite fees paid by visitors will cover the increased cost of utilities. Therefore, any adverse secondary impacts to demands

for energy would be long-term and negligible. As identified previously through the analyses of potential secondary impacts to water quality, quantity, and distribution; soil quality, stability, and moisture; vegetation cover, quantity, and quality; and air quality, some adverse impacts to the environmental resources of water, land, and air may occur because of the proposed project. However, as noted previously, any such secondary impacts would be short-term, negligible to minor, and adequately mitigated. No other demands on the environmental resources of land, water, air, and energy would be expected because of the proposed project.

Cumulative Impacts:

No significant adverse cumulative impacts would be expected because of the proposed project. However, under the proposed action, cumulative impacts would occur. The proposed project would provide the affected public with additional state park amenities, infrastructure and related recreational resources to improve the overall experience and facilitate increased use of the park. The proposed action would also mitigate the potential for adverse impacts associated with lead contaminated soils created by historic use of the affected site as a gun range and thereby eliminate an existing threat to public health and welfare.

With consideration for any past, present, or known future, related projects, any beneficial cumulative impacts associated with the proposed project would be long-term and negligible to major. Any adverse cumulative impacts would be long-term and negligible to minor. Any unknown future projects and associated cumulative impacts to the affected human environment would be assessed on a case-by-case basis pursuant to MEPA and other affected public processes and regulatory mechanisms, as applicable, prior to project approval and implementation. For a more detailed discussion of potential cumulative impacts see Section IX, Cumulative Impacts Analysis.

11. Climate Change Impacts

Existing Environment/Baseline Conditions (No Action Alternative): Visitation at Makoshika State Park, including overnight use, is trending up year over year. The park is available for day use year-round, and overnight use from April 1 to October 31 each year. The proposed project site consists of approximately 65% vegetation cover. The park has several highly developed areas to support concentrated visitor use, however the vast majority of the 11,500-acre park remains remote backcountry and is accessible through an expansive trail network. The park currently includes amenities such as 29 primitive campsites, an often-visited frisbee golf course and new picnic facilities. The Visitor Center and interpretive programming are very popular with visitors and the park is becoming a destination for night sky viewing. Management of the park with existing facilities and current use levels does not result in significant adverse direct climate change impacts.

Direct Impacts:

Project implementation would occur over a 1.5-to-2-year period. The proposed project consists of the development of various new infrastructure related to camping and other recreational pursuits including 16 new RV sites with electric hookups, 4 primitive campsites, and a day-use area with playground. The proposed construction project would not result in significant adverse direct climate change impacts. Any impacts of the proposed action would be consistent with current impacts (i.e., the no action alternative).

Secondary Impacts:

After project implementation, it would be expected that the park would see increased visits from the public resulting in some additional human impacts, including increased energy and water consumption (discussed previously within this document). Due to the small footprint and limited scope of the project,

the proposed action would not result in significant adverse secondary climate change impacts. Any impacts of the proposed action would be consistent with current impacts (i.e., the no action alternative).

Cumulative Impacts:

The Makoshika State Park campground expansion project would add 16 new electrified campsites and 4 primitive campsites. The campsites would be available for overnight use from April 1 to October 31 of each year. The sites would be expected to have 90%+ occupancy on weekends in June, July and August. Mid-week and during the shoulder seasons (spring / fall) the occupancy rate is more closely tied to weather and is expected to be 40% to 50%. While added campsite capacity is needed and would facilitate additional overnight visits to the park, the project would have a small footprint within the 11,500-acre park and would not significantly alter park operations. As such, the proposed action would not result in significant adverse cumulative climate change impacts. Any impacts of the proposed action would be consistent with current impacts (i.e., the no action alternative).

B. Evaluation and Summary of Potential Impacts of the Proposed Project on the Human Environment

1. Social Structures and Mores

Existing Environment/Baseline Conditions (No Action Alternative):

Makoshika State Park is located on the eastern edge of Glendive, Montana and receives significant use from city residents as well as from travelers along Interstate 94. The park currently provides 19 tent camping sites and 9 RV sites. Much of the day use visitations is associated with hiking, picnicking, and site seeing. Non-resident visitation primarily occurs during the peak summer season of Memorial Day through Labor Day, while shoulder seasons see a greater percentage of local traffic. Campsites, especially RV sites are typically full during peak season. For additional information related to the affected environment see Section VIII, General Setting of the Affected Environment.

Direct Impacts:

No significant adverse direct impacts to pre-project social structures and mores would be expected because of the proposed project. Makoshika is an existing state park managed by FWP. As such, recreation, and related services support the existing social structure, customs, values, and conventions of the affected human population in and around the affected area. Some adverse impacts to pre-project social structure and mores may occur because of the construction phase of the proposed project. More specifically, during the construction phase, nearby residents, and visitors to Makoshika may realize adverse impacts to access and the general enjoyment of the park. However, because the construction phase would occur over a short period of time, any adverse direct impacts would be short-term and negligible to minor.

Secondary Impacts:

No significant adverse secondary impacts to pre-project social structures and mores would be expected because of the proposed project. Makoshika is an existing state park managed by FWP. As such, recreation and related services in the affected area support the existing social structure, customs, values, and conventions in an around the park. The proposed project would upgrade/improve the camping and recreational opportunities, add needed amenities including electrical hook ups, potable water, and increase universal accessibility. These improvements would further support existing social

structures and mores in the affected area. Therefore, any secondary impacts would be long-term, minor to moderate, consistent with existing impacts, and beneficial.

Cumulative Impacts:

No significant adverse cumulative impacts would be expected because of the proposed project. However, under the proposed action, cumulative impacts would occur. The proposed project would provide the affected public with additional state park amenities, infrastructure and related recreational resources to improve the overall experience and facilitate increased use of the park. The proposed action would also mitigate the potential for adverse impacts associated with lead contaminated soils created by historic use of the affected site as a gun range and thereby eliminate an existing threat to public health and welfare.

With consideration for any past, present, or known future, related projects, any beneficial cumulative impacts associated with the proposed project would be long-term and negligible to major. Any adverse cumulative impacts would be long-term and negligible to minor. Any unknown future projects and associated cumulative impacts to the affected human environment would be assessed on a case-by-case basis pursuant to MEPA and other affected public processes and regulatory mechanisms, as applicable, prior to project approval and implementation. For a more detailed discussion of potential cumulative impacts see Section IX, Cumulative Impacts Analysis.

2. Cultural Uniqueness and Diversity

Existing Environment/Baseline Conditions (No Action Alternative):

The proposed project would occur within Dawson County, near the town of Glendive. Glendive is a full-service community with hotels, restaurants, service stations, and a diverse business district. As of 2021, an estimated 8,904 people lived in Dawson County (2% decrease since the year 2000). In 2021, the median per capita income in Dawson County was \$31,966 and the median household income was \$57,684, both lower than state and national medians. Montana supports a large agricultural economy and Dawson County is no different with cattle ranching represents the largest proportion of agricultural production. Outdoor recreation and tourism are major components of Montana's economy and public lands attract large numbers of people to the state every year. Dawson County and Makoshika, Montana's largest state park, are host to significant outdoor recreation and tourism. For additional information related to the affected environment see Section VIII, General Setting of the Affected Environment.

Direct Impacts:

No significant adverse direct impacts would be expected because of the proposed project. FWP would use hired contractors and/or existing FWP staff to accommodate the construction and overall implementation phase of the proposed project. Because of the limited scope and relatively small footprint of the proposed project, the construction phase would be relatively short thereby requiring a limited number of contractors and/or existing FWP staff for a limited amount of time. Therefore, the implementation phase of the proposed project would not be expected to result in the immigration or emigration of people to or from the affected area or otherwise change the social make-up of the affected area. No direct impacts to the existing, pre-project cultural uniqueness and diversity of the affected area would be expected because of the proposed project.

Secondary Impacts:

No significant adverse secondary impacts to cultural uniqueness and diversity would be expected because of the proposed project. Following implementation, the proposed project would improve

various existing infrastructure associated with the existing park. While the proposed project would be expected to improve the existing state park experience, it would not be expected to appreciably result in the immigration or emigration of people to or from the affected area or otherwise change the social make-up of the affected area. Therefore, no secondary impacts to the pre-project cultural uniqueness and diversity of the affected area would be expected because of the proposed project.

Cumulative Impacts:

No significant adverse cumulative impacts would be expected because of the proposed project. However, under the proposed action, cumulative impacts would occur. The proposed project would provide the affected public with additional state park amenities, infrastructure and related recreational resources to improve the overall experience and facilitate increased use of the park. The proposed action would also mitigate the potential for adverse impacts associated with lead contaminated soils created by historic use of the affected site as a gun range and thereby eliminate an existing threat to public health and welfare.

With consideration for any past, present, or known future, related projects, any beneficial cumulative impacts associated with the proposed project would be long-term and negligible to major. Any adverse cumulative impacts would be long-term and negligible to minor. Any unknown future projects and associated cumulative impacts to the affected human environment would be assessed on a case-by-case basis pursuant to MEPA and other affected public processes and regulatory mechanisms, as applicable, prior to project approval and implementation. For a more detailed discussion of potential cumulative impacts see Section IX, Cumulative Impacts Analysis.

3. Access to and Quality of Recreational and Wilderness Activities

Existing Environment (No Action Alternative):

Makoshika State Park is located on the eastern edge of Glendive, Montana and receives significant use from city residents as well as from travelers. Makoshika is Montana's largest State Park and offers access to backcountry recreation and wilderness activities. Approximately 75% of the land in FWP Region 7 is in private ownership and public access to backcountry and wilderness activities on public land is very important. Makoshika State Park is a popular destination for front country and back country activities. For additional information related to the affected environment see Section VIII, General Setting of the Affected Environment.

Direct Impacts:

No significant adverse direct impacts to access and quality of recreational and wilderness activities would be expected because of the proposed project. No congressionally designated Wilderness Areas would be affected by the proposed action. Noise, odors, and fugitive dust resulting from construction activities necessary to implement the proposed project may adversely impact the quality of the recreational experience for some users of the state park. However, FWP and/or there hired contractor(s) would limit such potential using best management practices, including fugitive dust controls, as necessary. Therefore, any adverse impacts would be short-term and minor, lasting only as long as the implementation phase of the proposed project. Once the construction phase is completed no additional adverse direct impacts would be expected.

Secondary Impacts:

No significant adverse secondary impacts to access to and quality of recreational and wilderness activities would be expected because of the proposed project. FWP expects that recreational opportunities at Makoshika State Park would be improved because of the proposed project. Following

completion of the proposed project the facilities would be open to the public with improved amenities and would result in enhanced visitor experience associated with improved roadways, parking, tent and RV campsites, and latrines. Therefore, any secondary impacts would be long term, moderate, and beneficial.

Cumulative Impacts:

No significant adverse cumulative impacts would be expected because of the proposed project. However, under the proposed action, cumulative impacts would occur. The proposed project would provide the affected public with additional state park amenities, infrastructure and related recreational resources to improve the overall experience and facilitate increased use of the park. The proposed action would also mitigate the potential for adverse impacts associated with lead contaminated soils created by historic use of the affected site as a gun range and thereby eliminate an existing threat to public health and welfare. Please see Attachment 1, Preliminary Lead-Impact Soil Removal Work Plan for a description of the lead sampling investigation, sampling results, and soil removal plan.

With consideration for any past, present, or known future, related projects, any beneficial cumulative impacts associated with the proposed project would be long-term and negligible to major. Any adverse cumulative impacts would be long-term and negligible to minor. Any unknown future projects and associated cumulative impacts to the affected human environment would be assessed on a case-by-case basis pursuant to MEPA and other affected public processes and regulatory mechanisms, as applicable, prior to project approval and implementation. For a more detailed discussion of potential cumulative impacts see Section IX, Cumulative Impacts Analysis.

4. Local and State Tax Base and Tax Revenue

Existing Environment/Baseline Conditions (No Action Alternative):

Makoshika State Park is made up of 11,538 acres of land owned, managed, and operated by FWP. As Montana's largest state park, the badlands of Makoshika are set aside for visitors to see and enjoy. Included within the existing state park are scenic drives, hiking trails, 29 existing camping sites, group picnic area, frisbee golf course, archery range, outdoor amphitheater, and other infrastructure to support outdoor recreation and enjoyment. Nearby communities potentially impacted by local and state tax base and tax revenue include Glendive and Sidney. FWP is required to pay accommodation taxes based on annual camping revenue generation. In Fiscal year 2024, FWP paid over \$6,500 in accommodation taxes to Dawson County for overnight stays at Makoshika State Park. This amount is expected to increase by about \$5,100 per year after the Makoshika campground expansion project. For additional information related to the affected environment see Section VIII, General Setting of the Affected Environment.

Direct Impacts:

No significant adverse direct impacts to local and state tax base and tax revenues would be expected because of the proposed project. Funding to support the proposed project would come from FWP funding sources, including state special revenue. Matching federal funding may be utilized. The proposed campground extension would be developed within the existing state park footprint on land currently owned by FWP and no acquisition of additional land would be required. Therefore, pursuant to § 87-1-603, FWP would continue to pay property taxes at the same rate as private citizens and based on the same acreage as pre-project property taxes. Therefore, no direct impacts to existing property taxes would be expected because of the proposed project.

A limited amount of tax revenue may be lost due to restricted access to the existing 29 campsites during the construction phase of the proposed project. Actual restriction to existing campsites is expected to be minimal. Lost revenue associated with lost state park fees, and associated impacts to local and state tax revenue, would depend on the timing of construction and related closures (i.e., more impactful during typical high use seasons, less impactful during the off-season). The proposed project timing would be in fall and spring; therefore, FWP expects very little, if any, loss of revenue would be realized because of the proposed project. Further, the proposed project would be expected to increase state and local tax revenues from the local sale of fuel, supplies and/or equipment to implement the proposed project. Any adverse or beneficial direct impacts would be short-term and negligible to minor.

Secondary Impacts:

No significant adverse secondary impacts to the local and state tax base and tax revenues would be expected because of the proposed project. Pursuant to MCA 15-65-111 & 15-68-102, all camping fees include the 8% State of Montana accommodation tax. FWP is required to pay accommodation taxes based on annual camping revenue generation. Because the proposed action would increase camping capacity at the state park, a commensurate increase in accommodation tax would be expected because of the proposed action. Estimates for fiscal year 2026 accommodation tax due for the state park is expected to increase by approximately \$5,100. FWP considers such an increase in tax burden to be negligible, especially with consideration for the public benefit gained because of the proposed project. Therefore, any adverse impacts to FWP from increased accommodation tax burden would be long-term and negligible. Also, recreational spending in affected nearby communities may be increased by the proposed project, which would beneficially impact local tax revenue. Therefore, any beneficial secondary impacts would be long-term and minor.

Cumulative Impacts:

No significant adverse cumulative impacts would be expected because of the proposed project. However, under the proposed action, cumulative impacts would occur. The proposed project would provide the affected public with additional state park amenities, infrastructure and related recreational resources to improve the overall experience and facilitate increased use of the park. The proposed action would also mitigate the potential for adverse impacts associated with lead contaminated soils created by historic use of the affected site as a gun range and thereby eliminate an existing threat to public health and welfare.

With consideration for any past, present, or known future, related projects, any beneficial cumulative impacts associated with the proposed project would be long-term and negligible to major. Any adverse cumulative impacts would be long-term and negligible to minor. Any unknown future projects and associated cumulative impacts to the affected human environment would be assessed on a case-by-case basis pursuant to MEPA and other affected public processes and regulatory mechanisms, as applicable, prior to project approval and implementation. For a more detailed discussion of potential cumulative impacts see Section IX, Cumulative Impacts Analysis.

5. Industrial, Commercial, and Agricultural Activities and Production

Existing Environment/Baseline Conditions (No Action Alternative):

No industrial or agricultural activities occur within Makoshika State and limited commercial photography occurs by special use permit. Industrial, commercial, and agricultural activity all occur in the immediate vicinity. For additional information related to the affected environment see Section VIII, General Setting of the Affected Environment.

Direct Impacts:

No significant adverse direct impacts to industrial, commercial, and agricultural activities and production would be expected because of the proposed project. Makoshika is an existing state park established primarily for the purposes of public recreation, thus the area affected by the proposed project does not support agricultural or industrial activities and/or production. Because the affected area is not used for such purposes, no direct impacts to agricultural or industrial activities or production within or near the park would be expected because of the proposed project. Limited agricultural activities and production do occur in the vicinity of the state park; however, FWP does not anticipate any impact to surrounding agricultural production because of the proposed project.

FWP does periodically facilitate commercial activity at the state park for varied interests. All commercial activities are managed in accordance with the FWP commercial use permitting policy and associated administrative rules at ARM 12.14.101 through 12.14.170. Further, FWP would hire a local/in-state contractor(s) for the construction phase of the proposed project, thereby directly and beneficially impacting local and/or state commercial activity and production. Therefore, any direct impacts to commercial activity and production because of the proposed project would be short-term, minor, and beneficial.

Secondary Impacts:

No significant adverse secondary impacts to industrial, commercial, and agricultural activities and production would be expected because of the proposed project. Makoshika is an existing state park established primarily for the purposes of public recreation, thus the area affected by the proposed project does not support agricultural or industrial activities and/or production. Because the affected area is not used for such purposes, no secondary impacts to agricultural or industrial activities or production within or near the state park would be expected because of the proposed project. The proposed improvements would facilitate improved state park resources and thereby potentially increase participation and enjoyment of the limited commercial activities within the state park, which may beneficially impact (i.e., increase) future participation in such events. Any secondary impacts to commercial activity and production in the affected area would be long-term, minor, and beneficial.

Cumulative Impacts:

No significant adverse cumulative impacts would be expected because of the proposed project. However, under the proposed action, cumulative impacts would occur. The proposed project would provide the affected public with additional state park amenities, infrastructure and related recreational resources to improve the overall experience and facilitate increased use of the park. The proposed action would also mitigate the potential for adverse impacts associated with lead contaminated soils created by historic use of the affected site as a gun range and thereby eliminate an existing threat to public health and welfare.

With consideration for any past, present, or known future, related projects, any beneficial cumulative impacts associated with the proposed project would be long-term and negligible to major. Any adverse cumulative impacts would be long-term and negligible to minor. Any unknown future projects and associated cumulative impacts to the affected human environment would be assessed on a case-by-case basis pursuant to MEPA and other affected public processes and regulatory mechanisms, as applicable, prior to project approval and implementation. For a more detailed discussion of potential cumulative impacts see Section IX, Cumulative Impacts Analysis.

6. Human Health and Safety

Existing Environment/Baseline Conditions (No Action Alternative):

Makoshika is the largest state park in Montana and the existing development footprint has been in place for decades. The park is on the edge of Glendive and is close to all services. Makoshika is a popular state park with day use and overnight facilities; however, campsites with electric hookups are not available. Park visitors have expressed interest in campsites with electricity to allow needed medical equipment and the operation of air conditioners. A playground and additional picnic facilities are important amenities that are frequently requested and, if available, would likely extend the length of time campers spend in the state park. For additional information related to the affected environment see Section VIII, General Setting of the Affected Environment.

Direct Impacts:

No significant adverse direct impacts to human health and safety would be expected because of the proposed project. Due to the lead impacted soil located within a portion of the project site FWP will require all necessary precautions for project implementation that would be required for project contractors. Affected government staff and/or contractors hired to implement the project may realize increased risk to human health and safety associated with the general construction phase of the proposed project; however, FWP would require affected staff and/or contractors to operate in a safe manner and utilize best management practices, including the use of available and appropriate safety precautions. Construction activities may also increase risks to human health and safety for users of the affected site(s). However, any increased risk to human health and safety would be mitigated by maintaining closure of the affected area during the construction phase of the proposed project. Therefore, any adverse direct impacts to human health and safety would be short-term, mitigated by best management practices, and negligible. Please see Attachment 1, Preliminary Lead-Impact Soil Removal Work Plan for a description of the lead sampling investigation, sampling results, and soil removal plan.

Secondary Impacts:

No significant adverse secondary impacts to human health and safety would be expected because of the proposed project. A primary goal of the proposed project is to provide additional campsites that will accommodate large RVs, provide electrical hook ups, access to potable water, and provide a playground. The new facilities would also be Americans with Disabilities Act or ADA compliant. The new facilities would be connected to an existing picnic area and the visitors center by a hike / bike trail as well as by road. Electrical hook ups at each campsite would provide a benefit to human health and safety for travelers that use of medical equipment or require air conditioning. Due to lead impacted soil, FWP will not approve the proposed project until the affected site has been adequately assessed and lead impacts mitigated to a level deemed safe for public use. Please see Attachment 1, Preliminary Lead-Impact Soil Removal Work Plan for a description of the lead sampling investigation, sampling results, and soil removal plan. Collectively, the proposed improvements to the state park would also improve health and safety conditions for all those that use the state park. Therefore, any secondary impacts to human health and safety would be long-term, moderate, and beneficial.

Cumulative Impacts:

No significant adverse cumulative impacts would be expected because of the proposed project. However, under the proposed action, cumulative impacts would occur. The proposed project would provide the affected public with additional state park amenities, infrastructure, and related recreational resources to improve the overall experience and facilitate increased use of the park. The proposed action would also mitigate the potential for adverse impacts associated with lead contaminated soils created by

historic use of the affected site as a gun range and thereby eliminate an existing threat to public health and welfare. Please see Attachment 1, Preliminary Lead-Impact Soil Removal Work Plan for a description of the lead sampling investigation, sampling results, and soil removal plan.

With consideration for any past, present, or known future, related projects, any beneficial cumulative impacts associated with the proposed project would be long-term and negligible to major. Any adverse cumulative impacts would be long-term and negligible to minor. Any unknown future projects and associated cumulative impacts to the affected human environment would be assessed on a case-by-case basis pursuant to MEPA and other affected public processes and regulatory mechanisms, as applicable, prior to project approval and implementation. For a more detailed discussion of potential cumulative impacts see Section IX, Cumulative Impacts Analysis.

7. Quantity and Distribution of Employment

Existing Environment/Baseline Conditions (No Action Alternative):

Dedicated Makoshika State Park staffing includes approximately 12 to 16 combined staff, student interns and volunteers that reside in the area. The staffing model for Makoshika State Park includes allocated time from the state park's administrative and maintenance personnel to provide year-round oversight and operation of the state park. During the peak operating season of May 1 through October 1, additional seasonal employees and volunteer campground hosts are onsite to provide customer service and operational assistance. In accordance with the FWP commercial use policy and administrative rules, commercial use permits are issued to provide economic opportunities and provide visitor services. These permits are typically associated with photography and event food services. For additional information related to the affected environment see Section VIII, General Setting of the Affected Environment.

Direct Impacts:

No significant adverse direct impacts to the quantity and distribution of employment in the affected area would be expected because of the proposed project. The necessary construction work would be accomplished by a private sector contractor(s). Contracted work would include general construction, road work and landscaping. Utility upgrades would require the need for plumbers and electricians. It is expected that gravel, concrete and many other supplies would be purchased locally. Commercial permit holders likely would not be adversely impacted by construction activities, as only periodic delays to access, and limited closures would be expected. Any direct impacts to commercial activities would be short-term and negligible. Impacts to quantity of employment during construction would improve for the contractors performing the work and for their suppliers. Therefore, any direct impacts to the quantity and distribution of employment would be short-term, negligible to minor, and beneficial.

Secondary Impacts:

No significant adverse secondary impacts to the quantity and distribution of employment in the affected area would be expected because of the proposed project. FWP anticipates recreational opportunities at the state park would be improved because of the proposed project. This could result in increased commercial activities within the park. More importantly, this project could increase visitation to the region and improve the distribution and quantity of employment in the area. Short-term part-time FWP employees or volunteers may be needed because of the proposed project. Therefore, any secondary impacts to the quantity and distribution of employment in the affected area would be long term, minor, and beneficial.

Cumulative Impacts:

No significant adverse cumulative impacts would be expected because of the proposed project. However, under the proposed action, cumulative impacts would occur. The proposed project would provide the affected public with additional state park amenities, infrastructure, and related recreational resources to improve the overall experience and facilitate increased use of the park. The proposed action would also mitigate the potential for adverse impacts associated with lead contaminated soils created by historic use of the affected site as a gun range and thereby eliminate an existing threat to public health and welfare.

With consideration for any past, present, or known future, related projects, any beneficial cumulative impacts associated with the proposed project would be long-term and negligible to major. Any adverse cumulative impacts would be long-term and negligible to minor. Any unknown future projects and associated cumulative impacts to the affected human environment would be assessed on a case-by-case basis pursuant to MEPA and other affected public processes and regulatory mechanisms, as applicable, prior to project approval and implementation. For a more detailed discussion of potential cumulative impacts see Section IX, Cumulative Impacts Analysis.

8. Density and Distribution of Human Population and Housing

Existing Environment/Baseline Conditions (No Action Alternative):

Dedicated Makoshika State Park staffing include approximately 12 to 16 combined staff, student interns and volunteers that reside in the area. The park is located on the edge of Glendive Montana, a small full-service community with a population of about 5,000 people. Glendive has several private campgrounds and trailer parks that act as short-term housing options. The surrounding land is rural and lightly populated. The park averages an estimated 100,000 annual visits, the bulk of which occur during the peak summer season. For additional information related to the affected environment see Section VIII, General Setting of the Affected Environment.

Direct Impacts:

No significant adverse direct impacts to the density and distribution of human population and housing in the affected area would be expected because of the proposed project. During project implementation, some adverse impacts to camping (i.e., temporary housing) opportunities in the affected area may be impacted by the potential for temporary closure of certain state park resources. However, given existing camping limits at Makoshika (i.e., no longer than 7 continuous days), and the existence of other, similar local camping opportunities in and around Glendive, it is unlikely any direct impacts from implementation of the proposed project would occur. In fact, the majority of those that visit and use the state park do so for recreational purposes, including short-term recreational camping and for day-use when hiking or picnicking. In addition, and if possible, the construction phase of the proposed project would be scheduled outside of peak visitation periods.

Further, construction and overall implementation of the proposed project would be accomplished by existing government staff and/or local contractors and would not otherwise require or result in any new employment opportunities or the movement of existing or new population into or out of the affected area. Therefore, no direct impacts to the distribution of people or housing in the affected area would be expected because of the project. Any direct impacts on the density and distribution of human population and housing would be short-term, negligible, and mitigated by the availability of other facilities located in Glendive.

Secondary Impacts:

No significant adverse secondary impacts to the density and distribution of human population and housing in the affected area would be expected because of the proposed project. The proposed project would use existing government staff and/or local contractors to accomplish the proposed infrastructure improvements and, once completed, would not require or likely result in the immigration or emigration of long-term residents to or from the affected area. Also, existing FWP staff currently responsible for managing the state park would continue to manage the improved facilities once the proposed project is completed. Depending on increased visitation, additional short-term maintenance staff may be required during the peak recreation season. Therefore, no secondary impacts on the density and distribution of human population and housing in the affected area would be expected because of the proposed project.

Cumulative Impacts:

No significant adverse cumulative impacts would be expected because of the proposed project. However, under the proposed action, cumulative impacts would occur. The proposed project would provide the affected public with additional state park amenities, infrastructure and related recreational resources to improve the overall experience and facilitate increased use of the park. The proposed action would also mitigate the potential for adverse impacts associated with lead contaminated soils created by historic use of the affected site as a gun range and thereby eliminate an existing threat to public health and welfare.

With consideration for any past, present, or known future, related projects, any beneficial cumulative impacts associated with the proposed project would be long-term and negligible to major. Any adverse cumulative impacts would be long-term and negligible to minor. Any unknown future projects and associated cumulative impacts to the affected human environment would be assessed on a case-by-case basis pursuant to MEPA and other affected public processes and regulatory mechanisms, as applicable, prior to project approval and implementation. For a more detailed discussion of potential cumulative impacts see Section IX, Cumulative Impacts Analysis.

9. Demands for Government Services

Existing Environment/Baseline Conditions (No Action Alternative):

Makoshika State Park is served by Glendive Fire Department and Dawson County Emergency Services for first response to wildfire, structural fire and emergency services. The park visitor center is located within the jurisdiction of the Dawson County Sheriff's Office. FWP game wardens conduct routine patrols of the park and provide the majority of law enforcement coverage. The Montana Department of Environmental Quality (DEQ) regulates public drinking water and septic systems. FWP staff manage Makoshika facilities, year-round. For additional information related to the affected environment see Section VIII, General Setting of the Affected Environment.

Direct Impacts:

No significant adverse direct impacts to demands for government services would be expected because of the proposed project. FWP expects most of the work necessary to implement the proposed project would be accomplished by private contractors rather than existing FWP staff. However, some adverse direct impacts to government services may be realized because the privately contracted work would be managed, overseen by FWP. Ongoing management may require a volunteer camp host or a short-term part-time FWP employee. Any adverse direct impacts to existing FWP staff and/or financial resources would be long-term, negligible to minor, and consistent with pre-project duties and expenditures.

Some direct impacts to DEQ staff may occur associated with required review and U.S. and Montana water quality act permitting limiting the potential for adverse impacts to potable water, natural surface waters, and groundwater resources in the affected area do not occur because of the proposed project. Additionally, DEQ may provide some guidance regarding lead impacted soils mitigation. No additional direct impacts to demands for government services would be expected because of the proposed project. Therefore, any adverse direct impacts would be short-term, minor, and consistent with pre-project impacts.

Secondary Impacts:

No significant adverse secondary impacts to demands for government services would be expected because of the proposed project. Long-term, following completion of the proposed project, FWP staff would continue to manage routine maintenance associated with the operation of the state park, including monitoring and control of noxious weeds and day-to-day operations, such as customer service, garbage collection, fee collection, monitoring for resource damage, litter removal, etc. The additional facilities, amenities resulting from the proposed project would be expected to increase workload for existing state park staff. However, any increase in such responsibilities would likely be accommodated by existing staff as part of their typical, day-to-day work responsibilities. Depending on the magnitude of the increased visitation, additional short-term maintenance staff or volunteers may be required during the peak recreation season. Therefore, any secondary impacts on demands for government service would be long-term and minor because of the proposed project.

Cumulative Impacts:

No significant adverse cumulative impacts would be expected because of the proposed project. However, under the proposed action, cumulative impacts would occur. The proposed project would provide the affected public with additional state park amenities, infrastructure and related recreational resources to improve the overall experience and facilitate increased use of the park. The proposed action would also mitigate the potential for adverse impacts associated with lead contaminated soils created by historic use of the affected site as a gun range and thereby eliminate an existing threat to public health and welfare.

With consideration for any past, present, or known future, related projects, any beneficial cumulative impacts associated with the proposed project would be long-term and negligible to major. Any adverse cumulative impacts would be long-term and negligible to minor. Any unknown future projects and associated cumulative impacts to the affected human environment would be assessed on a case-by-case basis pursuant to MEPA and other affected public processes and regulatory mechanisms, as applicable, prior to project approval and implementation. For a more detailed discussion of potential cumulative impacts see Section IX, Cumulative Impacts Analysis.

10. Locally Adopted Environmental Plans and Goals

Existing Environment/Baseline Conditions (No Action Alternative):

Makoshika constitutes an existing state park. The purpose of Montana state parks is to establish and maintain public access and opportunities for a wide range of outdoor recreational activities for the enjoyment of current and future generations of Montanans and visitors to the state. Makoshika currently provides remarkable opportunities for residents and visitors alike to get outside and enjoy expansive views, solitude, and the badlands of eastern Montana. In addition, 15 species “species of concern” have been observed within or in the vicinity of Makoshika State Park. Those species are listed and discussed in XI.A.8, Unique, Endangered, Fragile and Limited Environmental Resources. For additional information related to the affected environment see Section VIII, General Setting of the Affected Environment.

Direct Impacts:

No significant adverse direct impacts to locally adopted environmental plans and goals would be expected because of the proposed project. Construction activities associated with the proposed project may result in adverse impacts to recreational opportunities. For example, an expected increase in traffic associated with implementation of the proposed project could cause temporary delays, thereby limiting state park access and visitor use of overall state park facilities during this time.

Further, construction activities associated with the proposed project may adversely impact some wildlife species, including the 14 species of concern that have been observed within or in the vicinity of Makoshika, and 6 plant species of concern, listed and discussed in XI. A.8, Unique, Endangered, Fragile, or Limited Environmental Resources. The operation of heavy equipment, road and campsite construction, road paving, and the removal of buildings may result in the temporary displacement of these affected species of concern. However, again, any adverse direct impacts would be short-term and minor, lasting only as long as the construction phase of the proposed project. FWP is unaware of any other locally adopted environmental plans or goals that would be impacted by the proposed project.

Secondary Impacts:

No significant adverse secondary impacts to locally adopted environmental plans and goals would be expected because of the proposed project. Makoshika State Park was established to provide Montanans and those visiting the state with varied, high quality recreational opportunities in a remote setting, relatively unspoiled by human impacts to the environment. Following completion of the proposed project, the state park would continue to be managed to support this objective, with improvements. Further, in-line with federal, state, and local plans and goals related to wildlife and wildlife protections, no adverse secondary impacts to such wildlife resources would be expected because of the proposed project, see Section XI.A.8. Therefore, any secondary impacts associated with the proposed project would be long-term, minor to moderate, and beneficial.

Cumulative Impacts:

No significant adverse cumulative impacts would be expected because of the proposed project. However, under the proposed action, cumulative impacts would occur. The proposed project would provide the affected public with additional state park amenities, infrastructure and related recreational resources to improve the overall experience and facilitate increased use of the park. The proposed action would also mitigate the potential for adverse impacts associated with lead contaminated soils created by historic use of the affected site as a gun range and thereby eliminate an existing threat to public health and welfare.

With consideration for any past, present, or known future, related projects, any beneficial cumulative impacts associated with the proposed project would be long-term and negligible to major. Any adverse cumulative impacts would be long-term and negligible to minor. Any unknown future projects and associated cumulative impacts to the affected human environment would be assessed on a case-by-case basis pursuant to MEPA and other affected public processes and regulatory mechanisms, as applicable, prior to project approval and implementation. For a more detailed discussion of potential cumulative impacts see Section IX, Cumulative Impacts Analysis.

XII. Determining the Significance of Impacts

If the EA identifies impacts associated with the proposed action FWP must determine the significance of the impacts. This determination forms the basis for FWP's decision as to whether it is necessary to prepare an environmental impact

statement. FWP considered the criteria identified in **Table 6** below to determine the significance of each impact on the quality of the physical and human environment. ARM 12.2.431.

The significance determination is made by giving weight to these criteria in their totality. For example, impacts identified as moderate or major in severity may not be significant if the duration is short-term. However, moderate or major impacts of short-term duration may be significant if the quantity and quality of the resource is limited and/or the resource is unique or fragile. Further, moderate or major impacts to a resource may not be significant if the quantity of that resource is high or the quality of the resource is not unique or fragile.

Table 6: Determining the Significance of Impacts

Criteria Used to Determine Significance	
1	<p>The severity, duration, geographic extent, and frequency of the occurrence of the impact</p> <p>“Severity” describes the density of the potential impact, while “extent” describes the area where the impact will likely occur, e.g., a project may propagate ten noxious weeds on a surface area of 1 square foot. Here, the impact may be high in severity, but over a low extent. In contrast, if ten noxious weeds were distributed over ten acres, there may be low severity over a larger extent.</p> <p>“Duration” describes the time period during which an impact may occur, while “frequency” describes how often the impact may occur, e.g., an operation that uses lights to mine at night may have frequent lighting impacts during one season (duration).</p>
2	The probability that the impact will occur if the proposed project occurs; or conversely, reasonable assurance in keeping with the potential severity of an impact that the impact will not occur
3	Growth-inducing or growth-inhibiting aspects of the impact, including the relationship or contribution of the impact to cumulative impacts
4	The quantity and quality of each environmental resource or value that would be affected, including the uniqueness and fragility of those resources and values
5	The importance to the state and to society of each environmental resource or value that would be affected
6	Any precedent that would be set as a result of an impact of the proposed project that would commit FWP to future actions with significant impacts or a decision in principle about such future actions
7	Potential conflict with local, state, or federal laws, requirements, or formal plans

XIII. Private Property Impact Analysis (Takings)

The 54th Montana Legislature enacted the Private Property Assessment Act, now found at § 2-10-101. The intent was to establish an orderly and consistent process by which state agencies evaluate their proposed projects under the "Takings Clauses" of the United States and Montana Constitutions. The Takings Clause of the Fifth Amendment of the United States Constitution provides: "nor shall private property be taken for public use, without just compensation." Similarly, Article II, Section 29 of the Montana Constitution provides: "Private property shall not be taken or damaged for public use without just compensation..."

The Private Property Assessment Act applies to proposed agency projects pertaining to land or water management or to some other environmental matter that, if adopted and enforced without due process of law and just compensation, would constitute a deprivation of private property in violation of the United States or Montana Constitutions.

The Montana State Attorney General's Office has developed guidelines for use by state agencies to assess the impact of a proposed agency project on private property. The assessment process includes a careful review of all issues identified in the Attorney General's guidance document (Montana Department of Justice 1997). If the use of the guidelines and

checklist indicates that a proposed agency project has taking or damaging implications, the agency must prepare an impact assessment in accordance with Section 5 of the Private Property Assessment Act.

Table 4: Private Property Assessment Act (Taking and Damaging Assessment)

PRIVATE PROPERTY ASSESMENT CHECKLIST			
Does the Proposed Action Have Takings Implications under the PPAA?	Question #	Yes	No
Does the project pertain to land or water management or environmental regulations affecting private property or water rights?	1	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Does the action result in either a permanent or an indefinite physical occupation of private property?	2	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Does the action deprive the owner of all economically viable uses of the property?	3	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Does the action require a property owner to dedicate a portion of property or to grant an easement? (If answer is NO, skip questions 4a and 4b and continue with question 6.)	4	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Is there a reasonable, specific connection between the government requirement and legitimate state interest?	4a	<input type="checkbox"/>	<input type="checkbox"/>
Is the government requirement roughly proportional to the impact of the proposed use of the property?	4b	<input type="checkbox"/>	<input type="checkbox"/>
Does the action deny a fundamental attribute of ownership?	5	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Does the action have a severe impact of the value of the property?	6	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Does the action damage the property by causing some physical disturbance with respect to the property in excess of that sustained by the public general? (If the answer is NO, skip questions 7a-7c.)	7	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Is the impact of government action direct, peculiar, and significant?	7a	<input type="checkbox"/>	<input type="checkbox"/>
Has the government action resulted in the property becoming practically inaccessible, waterlogged, or flooded?	7b	<input type="checkbox"/>	<input type="checkbox"/>
Has the government action diminished property values by more than 30% and necessitated the physical taking of adjacent property or property across a public way from the property in question?	7c	<input type="checkbox"/>	<input type="checkbox"/>
Does the proposed action result in taking or damaging implications?		<input type="checkbox"/>	<input checked="" type="checkbox"/>
Taking or damaging implications exist if YES is checked in response to Question 1 and also to any one or more of the following questions: 2, 3, 4, 6, 7a, 7b, 7c; or if NO is checked in response to question 4a or 4b.			
If taking or damaging implications exist, the agency must comply with MCA § 2-10-105 of the PPAA, to include the preparation of a taking or damaging impact assessment. Normally, the preparation of an impact assessment will require consultation with agency legal staff.			
Alternatives: The analysis under the Private Property Assessment Act, §§ 2-10-101-112, MCA, indicates no impact. FWP does not plan to impose conditions that would restrict the regulated person's use of private property to constitute a taking.			

XIV. Public Participation

Scoping

Scope is the full range of issues that may be affected if an agency implements a proposed action or alternatives to the proposed action. The scope of the environmental review is described through a definition of those issues, a reasonable range of alternatives considered, a description of the impacts to the physical and human environments, and a

description of reasonable mitigation measures that would ameliorate the impacts. Scoping is the process used to identify all issues that are relevant to the proposed action.

Depending on the level of impact associated with a proposed action, the scoping process may include a request for public participation in the identification of issues.

Because FWP determined the proposed action will result in limited environmental impact, and little public interest has been expressed, FWP determined the proposed project did not meet the criteria for a public scoping meeting. Therefore, a public scoping meeting was not held for the proposed action.

Scoping also includes efforts to engage internal and affected external agencies. For the proposed project, these scoping efforts included queries to the following websites/databases/personnel:

AGENCIES CONSULTED

- Montana State Historic Preservation Office (SHPO)
- Montana Department of Environmental Quality (DEQ)
- Dawson County
- City of Glendive
- Montana Natural Heritage Program
- Montana Cadastral
- US Department of the Interior, National Park Service
- Six separate Tribal Historic Preservation Offices / tribal governments affiliated with the project area

Public Review of Environmental Assessments

The level of analysis in an EA will vary with the complexity and seriousness of environmental issues associated with a proposed action. The level of public interest will also vary. FWP is responsible for adjusting public review to match these factors (ARM 12.2.433(1)). For the proposed project, FWP determined the following public notice strategy will provide an appropriate level of public review:

- An EA is a public document and may be inspected upon request. Any person may obtain a copy of an EA by making a request to FWP.
- Public notice will be served on the Montana Fish, Wildlife and Parks website at: <https://fwp.mt.gov/public-notices>.
- Public notice will be served on the Montana Environmental Quality Council's MEPA Document List website at: <https://leg.mt.gov/mepa/search/>.
- As applicable, copies will be distributed to neighboring landowners to ensure their knowledge of the proposed project and opportunity for review and comment on the proposed action.
- FWP maintains a mailing list of persons interested in a particular action or type of action. FWP will notify all interested persons and distribute copies of the EA to those persons for review and comment (ARM 12.2.433(3)).

Public notice announces availability of the Draft EA for public review, summarizes the proposed project, identifies the time-period available for public comment, and provides direction for submitting comments.

- **Duration of Public Comment Period:** The public comment period begins on the date of publication of legal notice in area newspapers (see above). Written or e-mailed comments will be accepted until 5:00 p.m., Mountain Time, on the last day of public comment, as listed below:

Length of Public Comment Period: 30 days

Public Comment Period Begins: 02/25/2025

Public Comment Period Ends: 03/26/2025

Comments must be addressed to the FWP contact listed below.

- **Where to Mail or Email Comments on the Draft EA:**

Name: BRIAN BURKY

Email: brian.burky@mt.gov

Mailing Address:

Montana FWP Region 7 Office

PO Box 1630

Miles City, MT 59301

XV. Recommendation for Further Environmental Analysis

NO further analysis is needed for the proposed action	<input checked="" type="checkbox"/>
FWP must conduct EIS level review for the proposed action	<input type="checkbox"/>

XVI. EA Preparation and Review

	Name	Title
EA prepared by:	Riley Bell, Brian Burky	Region 7, Parks & Outdoor Recreation Manager; R7 Regional Parks & Outdoor Recreation Manager
EA reviewed by:	Eric Merchant	MEPA Coordinator

ATTACHMENT 1

PRELIMINARY

LEAD-IMPACTED SOIL REMOVAL WORK PLAN

PRELIMINARY LEAD-IMPACTED SOIL REMOVAL WORK PLAN



December 2,
2024

Revision 2.0

MAKOSHIKA STATE PARK

Prepared for:
Brian Burky
Montana Fish Wildlife & Parks
PO BOX 1630
Miles City, Montana 59301

Prepared by:
HydroSolutions Inc
2912 7th Avenue North
Billings, Montana 59101



REVISION HISTORY

Rev	Description	Date
--	Issued in Final	11 March 2024
1.0	Added high level overview of a capping alternative for lead-impacted areas (Section 5.0).	5 June 2024
1.1	Figure 2 updated to include latest campground layout from Interstate Engineering	14 October 2024
2.0	Revise to reflect updated EPA residential lead RSL of 200 ppm. Includes expanded estimated excavation area and new estimates of excavated soil volume.	2 December 2024

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Attachments

Attachment A: Project Health and Safety Considerations – Hygienix LLC Report

1.0 Introduction

Montana Fish Wildlife, and Parks (FWP) operates Makoshika State Park (the Park) near Glendive, Dawson County, Montana. FWP is in the process of planning a new developed campground in the Park that partially overlaps a former shooting range located near the Gunner's Ridge trailhead (the Site; Figure 1). Before developing the campground, FWP wishes to mitigate elevated concentrations of lead that have been identified in some soils at the Site.

Therefore, this Preliminary Lead-Impacted Soil Removal Work Plan has been developed to define a process for the removal of lead-impacted soils from the Site that safely and effectively accomplishes FWP's objective. This Work Plan presents a brief description of the Site and its history, a plan to excavate lead-impacted soils, preliminary information regarding landfill disposal, a confirmation sampling process, and an overview of safe work and monitoring procedures to ensure worker and public safety during lead-impacted soil removal.

This Work Plan has been prepared by HydroSolutions Inc (HydroSolutions) at the request of Mr. Brian Burky, FWP Region 7 POR Manager. Health and safety aspects of this Work Plan were developed by Hygienix LLC (Hygienix) under subcontract to HydroSolutions.

A final decision by FWP to proceed with the soil removal approach described herein has not been made at this time and may depend on cost, complexity, and other factors, so this Work Plan is considered preliminary. Other lead mitigation approaches, such as in-situ treatment and/or leaving soils in place and capping, may be considered as alternative mitigation measures for the Site.

2.0 Background

This section provides a brief description of the Site, its history, and previous soil investigations.

2.1 Site Description and History

The former shooting range site is located near the Gunner's Ridge trailhead within the Park and partially overlaps the proposed campground footprint (Figure 1). The proposed campground footprint includes only the firing line and target stand portion of the shooting range. The area identified for soil excavation and removal is a sub-area within this area that has been delineated by soil sampling and screening techniques (Section 2.2). The backstop of the shooting range, into which bullets were shot and trapped, is located outside of the proposed campground footprint and is not considered in this Work Plan.

The earliest use of the Site as a Shooting range is unclear but reports from FWP personnel suggest it was actively used for many decades prior to being decommissioned in 2008. Upon closure of the shooting range, the firing line and target stand structures were disposed of and surficial soil was scraped.

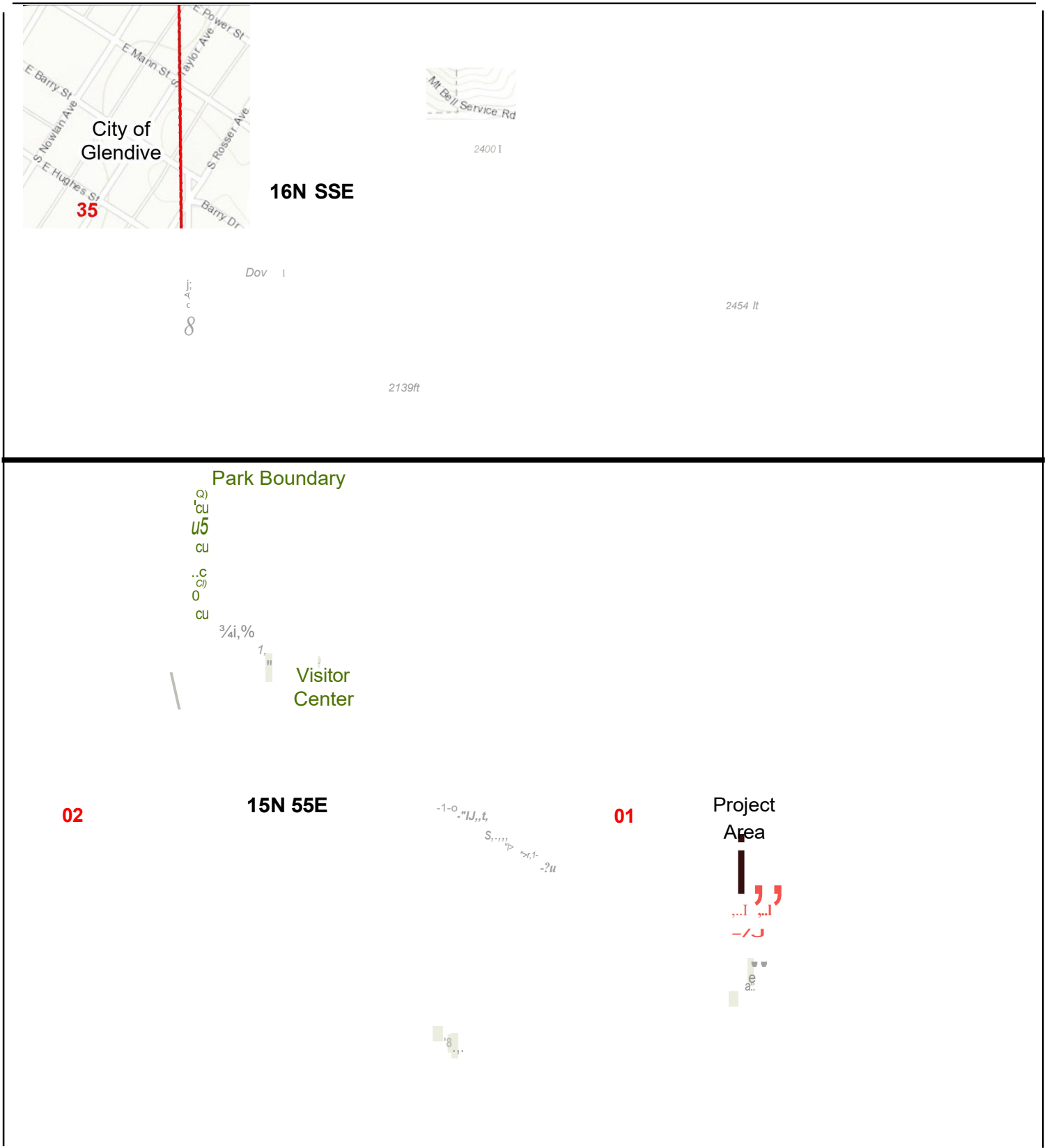


Figure I Project Area
Soil Excavation Work Plan (rev. 2.0)
Makoshika State Park Gunner's Ridge Trailhead Area
Dawson County, Montana



Base Map: ESRI Topographic
Coord. System: NAD 1983 StatePlane Montana FIPS 2500
Projection: Lambert Conformal Conic
Exported: 12/2/2024 12:10 PM
File: Mako.aprx, Layout: WP Overview

2.2 Previous Investigations

As part of the Environmental Assessment process for campground development, FWP engaged HydroSolutions to conduct soil screening for lead impacts at the Site due to its historical use as a shooting range. Initial laboratory analytical results from soil screening completed in July 2023 identified localized areas containing elevated concentrations of lead in soil (ranging from about 300 to 960 parts per million [ppm]; HydroSolutions Inc, 2023).

As a result of the lead detected during the initial screening, FWP requested that a follow-up investigation be conducted to more fully characterize the extent and magnitude of lead impacts at the Site. HydroSolutions completed the follow-up investigation during September 2023, which involved the use of a handheld field portable x-ray fluorescence (handheld XRF) instrument as well as laboratory sampling to delineate the extent and magnitude of the lead impacts (HydroSolutions Inc, 2023b). As a result of this investigation, an approximately 17,500 square foot, 12- to 18-inch deep area at the Site was identified for soil removal based on EPA's 400 milligram per kilogram (mg/kg; or parts per million [ppm]) Regional Screening Level (RSL) for lead in residential soil that was in force at the time of the report (EPA, 2023; HydroSolutions Inc, 2023b).

However, after the follow-up investigation was completed, EPA issued a revised, lower RSL of 200 ppm for lead in residential soil. Therefore, the approximate excavation area and estimated soil volume have been updated in this work plan to reflect the new RSL of 200 ppm (Figure 2). Assuming an average excavation depth of 15 inches over an area of approximately 37,500 square feet (Figure 2), the approximate anticipated excavation volume under the revised EPA RSL is 1,750 bank cubic yards.

Additionally, as part of the 2023 follow-up investigation, one Toxicity Characteristic Leaching Procedure (TCLP) sample was collected from the previously identified area of greatest apparent lead impacts. The TCLP result for this sample was 2.7 milligrams per liter (mg/L), which is less than the 5 mg/L lead toxicity threshold established in 40 CFR 261.24 (HydroSolutions Inc, 2023b). Additional waste characterization sampling will likely be required for landfill acceptance.

3.0 Health and Safety

Elevated lead concentrations present in soils at the Site require the implementation of health and safety measures beyond those employed for ordinary construction excavation activities. Therefore, HydroSolutions subcontracted with industrial hygiene consultants Hygienix of Great Falls, Montana to provide an overview of health and safety considerations associated with excavation of lead-impacted soil at the Site.

Hygienix's full report is provided in Attachment A and should be reviewed in its entirety. This section provides a brief summary of health and safety considerations outlined in the Hygienix report. Note that this section and the Hygienix report are intended to provide an overview of health and safety considerations for project planning purposes but do not constitute a Site-Specific Health and Safety Plan (SHASP) or a comprehensive compliance plan.

Key lead-related health and safety considerations for the project include the following (refer to Attachment A for full details):

Approximate Excavation Area (2024 RSLs)

Proposed Campground Layout (10/2024)

Historical Range Features

Excavation area: 37,500 sq ft

Estimated excavation depth: 12-18 in

Volume (assuming average depth = 15 in): 1,750 BCY
(*All values are approximate and rounded)

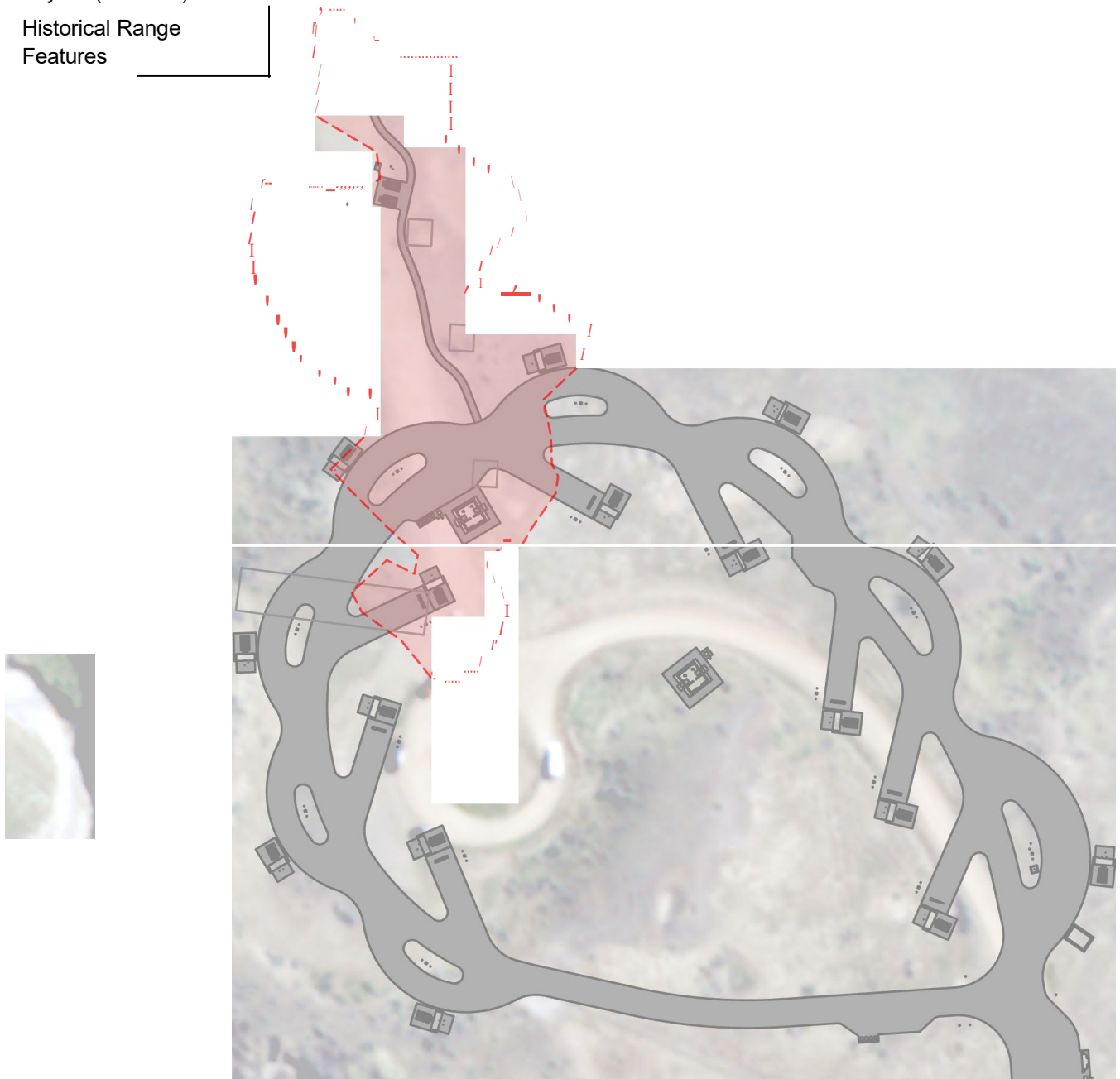


Figure 2 Approximate Bounds of Proposed Excavation Area
Soil Excavation Work Plan (rev. 2.0)
Makoshika State Park Gunner's Ridge Trailhead Area
Dawson County, Montana

Base Map: NAIP 2021
Coord. System: NAD 1983 StatePlane Montana FIPS 2500
Projection: Lambert Conformal Conic
Exported: 12/2/2024 12:00 PM
File: Mako.aprx, Layout: Ex Area-overlay-2024 RSL

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HydroSolutions
BILLINGS | HELENA

- Inhalation and ingestion are the primary lead exposure routes of concern for workers and others.
- Work for this project falls under the construction lead standard, 29 CFR 1926.62.
- A Site-Specific Health and Safety Plan (SHASP) must be prepared before work begins. Among other elements, this plan will document activities where lead exposure is a concern and measures that will be employed to monitor and reduce exposures (such as work practices). The SHASP will need to include a full respiratory protection program.
- Prior to beginning work, workers must be trained in the hazards associated with the site including potential lead exposure mechanisms, work procedures, required personal protective equipment, etc. Workers will require initial medical surveillance and must be cleared to wear a respirator at work.
- Due to uncertain exposure levels during initial work, the site will at first need to be managed as if the 29 CFR 1926.62 action level of 30 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$; 8-hour time-weighted average) of airborne lead has been exceeded. Workers will most likely be required to wear respiratory protection, and hygiene facilities will need to be provided, etc. (refer to Attachment A for additional details).
- An exposure assessment performed by an industrial hygienist or Competent Person should be conducted during initial work to characterize airborne lead levels at and around the work site. If the exposure assessment establishes that work activities expose workers to less than the 30 $\mu\text{g}/\text{m}^3$ action level, then work can likely proceed without respirator use.
- If the exposure assessment identifies activities that exceed the action level, then work practice modifications and additional engineering controls will be considered, along with continued respiratory protection and other lead health and safety measures (Attachment A).
- The work site shall be closed to the public and posted with signs reading “WARNING – LEAD WORK AREA – POISON – NO SMOKING OR EATING.” Signs must meet specific OSHA requirements.
- Area air monitoring and/or surface wipe testing outside of the work area should be conducted to confirm that excessive airborne lead particulates are not leaving the Site during work activities.

4.0 Impacted Soil Removal

This section details procedures for impacted soil excavation, transportation, confirmation sampling, and site reclamation.

4.1 Site Cleanup Standard

EPA's newly revised 200 ppm RSL for lead in residential soil (EPA, 2024) is recommended for adoption as the Site cleanup standard. In the absence of a specific standard or guidance from

the Montana Department of Environmental Quality (DEQ), this standard is considered conservative and exceeds EPA's 40 CFR 745.65(c) definition of a "soil-lead hazard" in children's play areas.

4.2 Excavation

Prior to beginning excavation activities, the approximate anticipated excavation area will be staked out in accordance with Figure 2 by FWP or their designee. Anticipated excavation depth in this area is 12 to 18 inches below ground surface (bgs). Note that the anticipated excavation area and depth are approximate, and the final limits of the excavation will be determined by field screening and confirmation sampling as described in Section 4.4. The final limits of the excavation should be documented on a map.

The excavation contractor is responsible for locating underground utilities at the site in accordance with Montana law prior to digging.

Due to the lead-impacted nature of the soil, it is important that all material disturbed by excavation activities, handled by excavation equipment, or transported is at all times kept sufficiently moist to minimize the creation of dust to the fullest extent practicable. Furthermore, work must stop if dust cannot be effectively mitigated due to windy conditions.

Soil moisture levels must be maintained continuously until the excavation is backfilled so that the production of dust is minimized, including during non-working days or hours. Thus, contractor should anticipate having a water truck on-site throughout the project and ensuring on a daily basis (minimum) that adequate moisture is being maintained for dust control even during non-work days. Specialized work practices, such as minimum soil moisture content and maximum wind speed, may be further specified in the SHASP.

For purposes of further minimizing dust, stockpiling of excavated soil should be reduced to the minimum necessary, with no long-term stockpiling permitted without a plan for dust management and approval by FWP or their designee. Additional specific work procedures or controls to reduce lead exposure may be included in the project's SHASP (a separate document to be prepared prior to work; see Section 3.0)

While maintaining adequate moisture for dust control is vital, excessive wetting of in-place soil or excavated material must also be avoided because saturated or dripping material is generally not acceptable for landfilling.

4.3 Disposal

HydroSolutions made contact with the Glendive Solid Waste Facility (GSWF), a local Class II landfill, in early March 2024 to discuss the possibility of the facility accepting lead-impacted soil from the Site. The results of both soil investigations (HydroSolutions Inc, 2023a; HydroSolutions Inc, 2023b), including all laboratory analytical reports, were provided in communications with the facility. The GSWF indicated that their compliance team would review the information provided, assess if the GSWF could accept the waste, and determine if any additional waste characterization sampling would be required (F. Ceane, personal communication, March 6,

2024). At the time of this writing, HydroSolutions has not yet received a response from the GSWF.

Further detail regarding soil disposal and additional characterization (if required) will be added to this work plan when a receiving landfill facility is confirmed. If a receiving facility cannot be identified within reasonable proximity to the Site, the excavation approach to soil mitigation proposed herein will need to be reconsidered as the economics of long-distance transportation of lead-impacted soil may not be viable.

Providing that soil waste from the Site can be disposed of at a nearby facility, transportation will be completed by standard semi-tractor trailer dump units commonly used for construction-related hauling. All loads must be sufficiently moistened and tarped before leaving the Site so as to prevent the emission of dust during transport.

4.4 Confirmation Sampling

Prior to backfilling the excavation, soil remaining in place should be screened to ensure that lead concentrations are less than or equal to the cleanup standard and laboratory confirmation samples should be collected to document these conditions.

Screening should be conducted using a handheld XRF instrument operated in general accordance with EPA Method 6200 (EPA, 2007) and the methods utilized previously at the Site by HydroSolutions (2023b). If XRF screening identifies areas that may not meet the cleanup standard, additional excavation should be conducted in those areas until all remaining soils meet the standard.

Laboratory confirmation samples should be collected at a frequency of approximately one 5-point composite sample per 1,500 square feet of excavation floor (equivalent to an area approximately 39 feet by 39 feet). If excavation walls exceed 2 feet in depth, one 5-point composite wall sample should be collected for every 75 feet of excavation wall greater than 2 feet deep. This sampling framework is generally based on DEQ Enforcement Program Soil Sampling Guidance (DEQ, 2016) and is judged sufficient for establishing final excavation conditions.

Subsample locations for all confirmation samples should be recorded on an excavation map. Confirmation samples should be field sieved with a #10 sieve, placed in laboratory-supplied containers, and stored in an ice-filled cooler under chain-of-custody protocol until delivery to the laboratory. Samples shall be delivered to the laboratory in a timely manner to allow for analysis within the method-required holding time. Samples should be analyzed for lead via EPA SW846 Method 6020. Confirmation sample results at or below 200 mg/kg will be considered to have met the cleanup objectives for the Site.

4.5 Site Reclamation

Following closure sampling, the excavation should be backfilled with clean fill material approved by FWP and compacted in accordance with FWP's specifications for site work for the new campground. If further site development work is not scheduled to immediately follow this project,

the disturbed area should be re-seeded in accordance with best practices using an FWP-approved seed mix.

5.0 Capping Alternative

Although the primary purpose of this workplan is to provide procedures for *removal* of lead-impacted soil from the Site, capping all or parts of the impacted area is a viable alternative for isolating contaminants and preventing visitor contact with lead impacts, reducing the potential for migration of impacts, and potentially simplifying the remediation/construction phase of the project. This section presents a high-level overview of capping and its potential application at the Site; however, it is noted that a more detailed analysis and design should be completed before proceeding with this alternative.

Caps are often used in areas with large volumes of relatively low-level soil contaminants. The primary objectives of a cap are generally to (1) keep people and wildlife from contacting impacted material and (2) reduce or eliminate the spread of impacts via infiltration of precipitation or snowmelt, prevent wind erosion (dust migration), and prevent erosion via stormwater runoff or other surface activities. These objectives are typically accomplished by installing an adequate thickness of low-permeability cap material over the impacted area. Cap materials commonly include asphalt or concrete pavement or may be earthen in composition consisting of layers of clay, geomembrane, drainage material, topsoil, and vegetative cover.

A primary advantage of capping versus excavation of impacts at the Site is the reduction or elimination of the need to haul and dispose of lead-impacted soils, which is likely to be costly and logistically complex.

An obvious potential opportunity for capping at the Site would be if parking lots, paved trails, or other paved areas can be constructed on top of the lead-impacted area. Lead impacts in non-paved areas could also be addressed via capping with earthen materials, though particular attention should be paid to installing a cap of sufficient thickness and durability to keep visitors and wildlife from digging through the cap and contacting impacted materials.

Cap installation was not specifically considered in the Health and Safety section of this work plan, so if implemented, proposed construction procedures should be reviewed by an industrial hygienist and specific safety procedures developed to protect workers and the public during cap installation.

6.0 Works Cited

- DEQ. (2016). *Enforcement Program Soil Sampling Guidance*.
- EPA. (2007). *Method 6200: Field Portable X-Ray Fluorescence Spectrometry for the Determination of Elemental Concentrations in Soil and Sediment (Revision 0)*.
- EPA. (2023, May). *Regional Screening Levels (RSLs) - Generic Tables*. Retrieved September 2023, from <https://www.epa.gov/risk/regional-screening-levels-rsls-generic-tables>
- EPA. (2024). *Regional Screening Levels (RSLs) - Generic Tables*. Retrieved December 2, 2024, from <https://www.epa.gov/risk/regional-screening-levels-rsls-generic-tables>

HydroSolutions Inc. (2023a). *Makoshika State Park Lead Soil Screening Summary - Revision 1*.
Unpublished Memorandum dated 10/13/23 from HydroSolutions Inc to FWP.

HydroSolutions Inc. (2023b). *Makoshika State Park Summary of Additional Lead Soil Screening*.
Unpublished Memorandum dated 10/13/23 from HydroSolutions Inc to FWP.

Attachment A
Hygienix LLC Report



March 4, 2024

Mr. Michael Meredith, PG
Project Manager
HydroSolutions
1500 Poly Drive, Suite 103
Billings, Montana 59102
Transmitted Via E-mail To: MikeM@hydrosi.com

Subject: CIH Overview: Former Firing Range Remediation Plan
Makoshika State Park
Gunner's Ridge Trailhead – Section 1 T15N R55E
Dawson County, Montana
HYGIENIX Project No.: 24-011

Dear Mr. Meredith:

This overview report has been prepared to summarize the HydroSolutions Lead Soil Screening reports of the aforementioned property (Site) in conjunction with a Certified Industrial Hygienist (CIH) overview of health, safety, and environmental inclusion of standard that should be considered with the development of the cleanup of the property. Hygienix performed this scope of work in accordance with authorization from Mr. Meredith on February 20, 2024. As part of this overview, Hygienix was able to review the HydroSolutions September 11, 2023, Makoshika State Park *Summary of Additional Lead Soil Screening Memorandum* as well as the October 13, 2023, *Revision 1* to this document; both are herein included by reference.

Hygienix understands that HydroSolutions is looking to understand the considerations to be implemented for project specifications to prevent risk at the site for the community, contractors, and site end users after the cleanup.

BACKGROUND

Lead (Pb) is a heavy metal commonly associated with firearms and projectiles. Left in the soil or outdoors, lead will readily oxidize allowing small Pb particles to slowly migrate through soil. Where the soil is disturbed or made airborne as dust, the lead can be inhaled and absorbed through the upper respiratory tract. Lead can also enter the body through the digestive system if it is ingested. When absorbed through the above-mentioned mechanisms in certain doses, lead is toxic. Given the lead concentrations identified within the soil firing range (>400 mg/kg), proper management of potential exposures during soil removal/remediation is required.

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REQUIREMENTS

The Construction lead standard (29 CFR 1926.62) establishes several key provisions meant to ensure worker exposures to lead are appropriately managed to protect their health. They include the following;

Exposure Monitoring

No worker may be exposed to airborne lead concentrations in excess of the permissible exposure limit (PEL) of 50 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) averaged over the 8-hour period. Compliance to the standard is mandated at the action level or 30 $\mu\text{g}/\text{m}^3$. An exposure assessment (air monitoring) shall be performed to demonstrate worker exposure and to validate work methods and controls. Sampling frequency is determined by obtained values and should be performed by CIH or Competent Person.

Medical Surveillance

Initial medical surveillance is required for employees occupationally exposed to lead at or above the above the action level for more than one (1) day per year.

Medical Removal Protection

Allows for the removal of employees who demonstrate a blood sampling test at or above 50 micrograms per deciliter ($\mu\text{g}/\text{dl}$).

Information and Training

Employees shall be trained in the hazards associated with the site to include potential lead exposure mechanisms, work procedures, required PPE, hygiene requirements and other required controls. The site shall include warning signs; WARNING - LEAD WORK AREA – POISON - NO SMOKING OR EATING. Signs must be clearly legible and meet the OSHA requirements of letter type and sizes.

Compliance Program

A Site-Specific Health and Safety Plan (SHASP) is required, documenting activities where lead exposure is of concerns, equipment, materials, controls required, work methods and any other procedures in place to achieve compliance and to ensure exposures are maintained below the PEL such as air monitoring, hygiene, PPE use & cleaning, etc.

Engineering, Work Practice and Administrative Controls

Engineering, work practice, and administrative controls should be utilized where feasible to reduce and maintain employee lead exposure to or below the PEL. This may include In-Situ Treatment of Soils, water/misting the site during bulk soil removal or other methods as necessary.

In-Situ Treatment of the soil should be considered as a cost-effective measure to minimize /create waste volume with stabilization of the soil with the addition of a treatment to the soil to render it non-hazardous for lead. A treatability study may be

necessary/required to look at existing conditions/costs/and benefits/deficiencies that this remedial substitution may create. Blastox is currently available technology to complete this project.

For certain activities, wet methods, water misting may reduce dust generation and thus the risk of worker exposure. Maintaining soil moisture levels before disturbance and/or misting of dumping activities.

Certain models of heavy equipment are equipped with cabin air filtration systems that reduce dust exposures for operators. Additional cabin filtration systems and/or additive filtration may be necessary to meet project protection goals/requirements.

NOTE- Where utilized, controls must be evaluated to ensure they properly control worker exposure. Until properly validated, workers should be provided with appropriate respiratory protection.

Housekeeping

Equipment and work locations shall be maintained as free a practicable of lead contaminated soils. Cleaning methods must minimize dust generation. Vacuums equipped with high-efficiency particulate air (HEPA) filters or wet washing are preferred. Compressed air, dry sweeping should not be used unless appropriate ventilation is utilized. Equipment cleaning/decontamination should be included in the SHASP.

Hygiene Facilities

Clean change areas are required to allow for hand washing or showering shall ensure lead soils are not transferred to clean area. Clean areas shall be provided to allow for hydration, hygiene or meal breaks. Employees must wash their hands and face prior to eating, drinking, smoking or applying cosmetics. Change areas must be equipped with separate storage facilities for protective work clothing and equipment and for street clothes to prevent cross-contamination.

Personal Protective Equipment (PPE) & Respirators

As the primary route of exposure is inhalation, employees shall be provided with a suitable respirator such as a PAPR equipped with P100 cartridges. A full respiratory protection program that complies with 29 CFR 1910.134 shall be included in the SHASP. Personal protective clothing and equipment shall be assigned to prevent contamination of employees and their garments. Disposable coveralls, gloves, head protection and safety footwear and eye protection may be required.

OTHER CONSIDERATIONS/RISKS

Soil clean-up activities are within the scope of 1910.120 HAZWOPER. However, the intent of 1910.120 and 1926.62 (Lead) is to ensure worker protection. 1910.120(a)(2)(i) stipulates that the regulation which provides more protection should be applied. With that, the SSHASP should contain relevant information representative of the risk management aspects of both standards. Hygienix recommends that these stipulations are identified and included with project specification documentation to allow qualified contractors to understand the level of effort required to perform the remedial scope of work as part of the overall project and the requirements therein. This document should be completed by a CIH for inclusion.

The use of heavy equipment and haul trucks is likely to be implemented in the removal of the firing range soil. Worker protection, traffic management/safety, community safety and park patron protection are all factors that must be included in the respective SHASP. Soil disposal of Firing range soil must have a determination of hazardous/non-hazardous waste and may require special “contained-in” determination from a Class II/Class IV landfill based on overall hazard risks and/or if treatment of the soils will occur as part of the remediation plan.

LIMITATIONS

This overview report was prepared specifically for use by HydroSolutions. Use by any other entity is at the sole risk of the user(s). Hygienix’s general guidance was completed with a standard of care meeting or exceeding that of other consultants performing similar work in this area. Our interpretations of findings and recommendations are based on documentation provided and a general understanding of the project during our project overview, as described above. If conditions change and/or field conditions are altered that identify materials that were undiscoverable, during construction efforts, a supplemental lead assessment may be recommended to occur to identify these newly discovered materials and/or areas of consideration with respect to the remediation efforts and corrective action plan associated with the site.

Respectfully Submitted By:



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