



# HARRIMAN TRAIL SYSTEM: EXISTING CONDITIONS REPORT

PREPARED BY CRO PLANNING & DESIGN  
FOR FRIENDS OF HARRIMAN STATE PARK



**CRO Planning & Design**  
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# ACKNOWLEDGMENTS

## CORE PROJECT TEAM

Thank you to members of the Core Project Team who have contributed significant feedback, information, and context to support the Harriman Trail System Management Plan Project for the Harriman State Park of Idaho and Harriman Wildlife Refuge:

- Janice Brown, Friends of Harriman State Park
- Charlie Lansche, Friends of Harriman State Park
- Jess Brumfield, Idaho Department of Parks and Recreation
- Curtis Nepl, U.S. Forest Service
- Tim Swearingen, Idaho Department of Fish and Game

## CONSULTANT TEAM

This project is facilitated by the following experts in outdoor recreation planning, design, and research:

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- Richard Hayes, Integrated Trail Lab

This project is funded and administered by the Friends of Harriman State Park, Inc., a 501c3 organization dedicated to community projects that directly benefit Harriman State Park of Idaho.

Front and Back Cover Photo Credit: *Idaho Department of Commerce – Visit Idaho*

# 1 BACKGROUND & METHODOLOGY

## WHY PERFORM AN EXISTING CONDITIONS REPORT?

An existing conditions assessment for the Harriman Trail System establishes a clear baseline for the system's current assets, challenges, and opportunities. By documenting the current state of the Harriman Trail System and trail-based assets, as well as patterns of visitor use, accessibility, and maintenance, the assessment ensures that future planning is realistic and logical. The assessment highlights what is working well, where gaps exist, and where sensitive resources may require protection. This foundation not only supports data-driven decision-making but also helps align management strategies with the park's unique landscape and visitor experiences. The existing conditions assessment provides the factual basis that enables managers, stakeholders, and the public to make informed, realistic choices about how to enhance the Harriman Trail System while preserving the park's ecological integrity and unique recreational value.

## METHODOLOGY

The existing conditions assessment process was a nine-month-long process of collecting relevant data, information, and documentation about visitor use, operations, and management of the Harriman Trail System.

From February to October 2025, tasks conducted during the existing conditions assessment process included:

- Conducting multiple online and in-person surveys with the public to understand perceptions and priorities related to the utilization and management of the Harriman Trail System. Data collected from surveys was analyzed in detail and utilized to ensure management recommendations aligned with visitor needs.
- Interviewing managers from the Idaho Department of Parks and Recreation, Idaho Department of Fish & Game, and the U.S. Forest Service to understand agency management goals about recreational trail use at the Harriman Trail System.
- Performing multiple spatial analyses of the Harriman Trail System to understand the spatial distribution of environmental features, recreational assets, and trail density throughout the park.
- Collecting and analyzing information related to wildlife and ecological conditions at Harriman State Park to inform trail management recommendations that minimize disturbances to the park's unique wildlife population.

- Performing multiple site visits to Harriman State Park to evaluate the physical conditions of the Harriman Trail System, attend events to share information about the project, review ecological conditions, perform on-site visitor surveys, and interview visitors and park staff about the Harriman Trail System.
- Collecting and compiling information related to Harriman State Park's operational and financial structure related to the Harriman Trail System.
- Performing literature reviews of multiple management documents relevant to the Harriman Trail System.
- Compiling, reviewing, and comparing multiple sources of trail maintenance and development guidelines to inform the development of trail maintenance and monitoring guidelines specifically for the Harriman Trail System.
- Collecting and compiling information related to available funding sources and opportunities to financially support the maintenance and operations of the Harriman Trail System.

## TERMS AND TITLES

This document consistently refers to the following terms, which define the scope of the Harriman Trail System Management Plan Project:

- **Harriman State Park of Idaho:** The state park where the Harriman Trail System is primarily located, managed by the Idaho Department of Parks and Recreation. Throughout the report, Harriman State Park of Idaho is referred to as "Harriman State Park," "Harriman," and "the park."



Photo Credit: Idaho Department of Commerce – Visit Idaho

- **Harriman Wildlife Refuge:** A 16,000-acre area that encompasses the core of Harriman State Park and includes the surrounding Caribou-Targhee National Forest land.
- **Harriman Trail System:** The trail network that primarily lies within Harriman State Park and extends into the surrounding Harriman Wildlife Refuge. Throughout the report, the Harriman Trail System is also referred to as "the trail network," and "the trail system." Survey questions referred to the Harriman Trail System as "Harriman's trails" given that visitors primarily associate the Harriman Trail System with Harriman State Park. The Harriman Trail System is managed by the Idaho Department of Parks and Recreation.
- **The Harriman Trail System Management Plan:** Guiding documents that will provide recommendations for trail design, development, operations, and long-term maintenance of the Harriman Trail System. Throughout the report, the Harriman Trail System Management Plan is also referred to as the "Trails Management Plan."

management practices, and ecological conditions. Because the report includes many types of data and analysis, it has been organized into clear sections that can be read either individually or as part of the whole. Section takeaways are included at the beginning of most chapters to allow for quick comprehension of each section's major findings. Depending on the level of detail sought, the following is encouraged:

- If a reader wants to review the major findings of the existing conditions assessment process, it is recommended to read the **executive summary**.
- If a reader wants to review the major findings of a component or components of the existing conditions assessment process, it is recommended to read the **takeaway sections at the start of each chapter or specific sections of the executive summary**.
- If a reader wants to review the existing conditions assessment process and findings in detail, it is recommended to read **the entire text of the document or chapter**.

## HOW TO USE THIS DOCUMENT

This Existing Conditions Assessment Report provides a foundation for the Harriman Trail System Management Plan by compiling and analyzing current information about trail resources, user perceptions,

# 2 EXECUTIVE SUMMARY OF FINDINGS

## ECOLOGICAL REVIEW TAKEAWAYS Section 4

Harriman State Park and the surrounding wildlife refuge are home to key wildlife resources, including critical waterfowl nesting habitat, ungulate seasonal habitat and migration corridors, and grizzly bear habitat. To safeguard these resources, the project team provides the following perspectives and corresponding management options. Management options are available for consideration and may be applied, at the discretion of managers, in any combination depending on needs and constraints.

- Continue to enforce seasonal closures of existing and future trails within waterfowl nesting habitat.

- Continue to develop and employ strategies to prevent human-grizzly bear conflict.
- Employ strategies to minimize fragmentation of secure habitat and disturbance to ungulate populations during the spring and fall migration periods, as well as during seasonal residency. The overlap between the park area, valuable wildlife habitat, and ungulate migration corridors, especially elk and moose, is so widespread that designing a trail system that avoids these areas is not realistic. Rather, focus on actions and policies that mitigate disturbances and promote habitat connectivity.
- Develop trail management strategies to minimize damage to habitat and impacts stemming from elevated levels of multi-use visitation.



Photo Credit: *Charlie Lansche*

## HARRIMAN TRAIL SYSTEM USERS TAKEAWAYS Section 5

Three different outreach activities were performed to capture valuable and relevant data about the usage of the Harriman Trail System, as well as visitor perceptions, priorities, and interests regarding future management. In January 2025, postcard-sized survey cards were distributed to attendees of Harriman State Park's free winter access day event to capture perspectives about the Harriman Trail System's winter network. From February to April 2025, the Harriman Trails Experience Survey was an open-access online survey that asked visitors and stakeholders to share their experiences, perspectives, and management priorities related to the Harriman Trail System. From June to September 2025, intercept surveying occurred throughout designated locations at Harriman State Park, which obtained information about trail perceptions, experiences, and management priorities from an on-site sample of Harriman Trail System users. The intercept survey asked more in-depth questions related to findings from the Experience Survey and aimed to capture a representative sample of summer and fall trail users.

### TAKEAWAYS – FREE WINTER ACCESS DAY EVENT DATA

- Winter visitors value the Harriman Trail System's scenic landscapes, wildlife, tranquility, consistent grooming, and creating a welcoming experience for both beginners and experienced users.
- Respondents emphasized frequent, reliable grooming and clear communication of grooming updates as the most important actions to preserve current trail quality.
- Suggestions from winter visitors included adding mileage markers, designating snowshoe trails, grooming for fat biking, and expanding loop options, though some respondents felt no changes were needed.
- Increased promotion and trail etiquette education could further strengthen the user experience and attract more winter users.

### TAKEAWAYS – EXPERIENCE SURVEY DATA

- 91% support Harriman State Park's seasonal trail closures to protect wildlife.
- Over 90% of respondents agreed that the Harriman Trail System provides a special connection to the area and is well-suited for their abilities.



Photo Credit: *Charlie Lansche*

- Over 85% of all respondents agreed that the Harriman Trail System provides high-quality experiences for visitors, possesses useful signage, and has clean and well-maintained facilities (e.g., restrooms, picnic shelters, visitor center).
- Over 80% of all respondents stated that maintaining existing trails was a high or highest management priority, highlighting the importance of prioritized investments in upkeep, erosion control, and trail restoration. Respondents provided specific locations where they thought trail improvements and maintenance tasks were most needed.
- Less than half (43%) of respondents prioritized developing new trails for the Harriman Trail System. Mountain bikers and fat tire bikers were more likely to prioritize developing new trails compared to other users. A lack of mountain bike and fat tire bike-specific trails exists at the Harriman Trail System, according to these users.
- Only 15% of respondents listed developing new trailside amenities and expanding gear rental opportunities as high priorities.
- Enhancing the visibility, clarity, and consistency of communicating trail condition updates, grooming reports, maps, and policies is desired by visitors.



Photo Credit: *Harriman State Park of Idaho Instagram @harriman\_state\_park\_of\_idaho*

- A strong majority of respondents agree that Harriman State Park's per-vehicle entry fees, for both summer (82.4%) and winter (79.6%), are reasonable.
- One in five Experience Survey respondents (21.5%) reported experiencing conflict with other users during their visits to the Harriman Trail System, with most conflicts occurring between mountain bikers and horseback riders.
- A desire for new improvements, trails, and amenities exists among respondents; however, they also voiced the importance of preserving the Harriman Trail System's natural, quiet, and undeveloped character. The 'magic' of Harriman comes from its natural setting and unique opportunities to witness a plethora of wildlife. Harriman State Park's management can aim to strike a balance between enhancing experiences and access through new developments while minimizing ecological and environmental impacts.
- Newer users who have visited the park for five years or less (16.2%) expressed different preferences, priorities, and information needs compared to more experienced visitors (83.8%). Outreach efforts should consider varying park familiarity levels when providing information and resources to its users.
- Overall, given the responses received from the convenience sample survey, Harriman State Park's managers are encouraged to continually engage their user bases and the surrounding community throughout the implementation of the Harriman Trail System Management Plan.

## TAKEAWAYS – INTERCEPT SURVEY DATA

- Data captured through the intercept survey, coupled with the data captured through the online survey, provides a well-rounded understanding of the perspectives of both 'typical' visitors to the Harriman Trail System and 'invested users' who visit more frequently and sought out the opportunity to provide feedback online about the trail system and management.
- The average visitor age was 53 years, with the majority being white, college-educated, and higher-income earners. Nearly 70% were repeat visitors, having visited the park for an average of 17 years.
- Primary activities performed by visitors during the June - September sampling period included hiking/walking (21.8%), fishing/angling (20.2%), attending programs and events (10.7%), horseback riding (9.9%), wildlife observation (9.9%), and mountain/gravel biking (8.2%). Most visitors (76.8%) reported engaging in two or more activities over their years visiting Harriman.
- Surveyed users reported a high degree of place attachment to Harriman. 78.6% agreed that Harriman is "very special" to them, 70.8% agreed that they are "very attached" to Harriman, and 70.4% agreed that they "identify strongly" with Harriman.
- Among potential trail-based amenity investments, directional trail signage and mileage markers ranked highest, and visitor kiosks ranked lowest among respondents. Respondents expressed a

need to place amenities at three primary locations: 1) the Ranchview parking lot and Railroad Ranch Area, 2) the Thurmon Creek Bridge, and 3) the Ranch Bridge.

- 41% of respondents reported experiencing some form of negative experience during recent or past visits to the Harriman Trail System. Most common conflicts included other visitors with dogs (23.1%), off-trail use (16.5%), and noisy behavior (15.2%). However, respondents reported the likelihood of conflicts was low, with all conflict types occurring on 8% or less of visits.
- When conflicts occurred, they were often within the same activity group (e.g., hikers encountering other hikers), not necessarily between different uses (e.g., anglers vs. wildlife observers), suggesting that behavioral management and etiquette education may be more effective than activity zoning. This finding differs from the online survey, where inter-group conflict was more likely to be reported (i.e., bikers vs. equestrians). This may be, in part, due to the more diverse activity portfolio in the intercept survey, where respondents engaged in multiple activities on the Harriman Trail System, as opposed to just one that placed them in conflict with other types of users.
- To address conflicts, the most preferred management strategy was "no action," followed by separation of activities, then education. Limiting access was highly unpopular, and directionally redesigning trails was also unpopular. These results indicate that a light-touch, communication-based approach to conflict management is preferred by visitors. Examples include 'nudging' visitors to activity-optimized routes to disperse users and placing emphasis on informing, not

policing, user behavior through signage and visitor/staff correspondence. Additional route development could also disperse users. This can be achieved through formalizing existing networks, rather than breaking ground on entirely new trails.

## MANAGEMENT CONDITIONS OF HARRIMAN STATE PARK'S TRAIL SYSTEM TAKEAWAYS Section 6

- Harriman State Park's foundational Gift Agreement emphasizes its dual identity as both a wildlife refuge and recreation area, requiring ongoing balance between habitat protection and public access.
- The Idaho State Parks Strategic Plan (2025–2028) stresses expanding recreational access, reducing maintenance backlogs, and strengthening stewardship. For the Harriman Trail System, this aligns directly with addressing its trail maintenance capacity limits, reliance on external partners, and the need to balance recreation demand with habitat protection.
- Park staff spend about \$10,000 annually on fleet and equipment repair. Trail maintenance is often limited by budget fluctuations, with most work accomplished using existing staff and supplemented by donations or volunteers. Harriman State Park now has a dedicated Trail Ranger position (2025), marking a shift toward more consistent trail operations and oversight.

- Winter grooming occurs 1–2 times per week but is vulnerable to equipment breakdowns and other staffing priorities, risking inconsistent coverage.
- Summer trail work typically consists of about four consolidated weeks per year, focusing on graveling, clearing hazard trees, and targeted repair projects. Given these necessary responsibilities, Harriman State Park’s trail crews are limited in their ability to perform large, complex trail projects.
- The park’s trail maintenance fleet and tools (e.g., grooming snowmobiles, tractors, chainsaws) are functional but aging. Trail operations rely heavily on external funding and partnerships, including Friends of Harriman State Park donations, concessionaire revenue, and U.S. Forest Service cost-share agreements. Monitoring tools like a vehicle trail counter are in place but limited, highlighting an opportunity to strengthen visitor use data collection and reporting.
- Dry Ridge Outfitters, Harriman State Park’s former commercial horseback riding concessionaire, used all official park trails plus a network of unofficial, unmapped routes, which increased complexity in managing user conflicts and trail maintenance. Concessionaire use was heavily concentrated on certain loops and riverside trails, creating localized

impacts and higher maintenance needs on specific official trail segments. An opportunity emerges to address concerns, impacts, and conflicts related to high-volume concessionaire use through the modification of the concessionaire lease and vendor change occurring in early 2026.

- Youth Employment Program (YEP) crews have provided recurring trail maintenance support since 2024, particularly in erosion repair, rerouting, and drainage improvements. Effective use of YEP requires clear work tasks, alignment with crew skills, and oversight, highlighting the need for structured planning when leveraging these teams. The park is expected to continue its relationship with YEP into 2026.

## HARRIMAN TRAIL SYSTEM CONDITIONS TAKEAWAYS

### Section 7

- The Harriman Trail System exhibits a mix of conditions, with some well-built, sustainable sections and others showing wear from heavy use, poor drainage, and user-created routes.



Photo Credit: *Charlie Lansche*

- Drainage remains a recurring concern across trail types, as standing water, cupping, and erosion were observed in several areas, signaling a need for improved water management features. Ongoing maintenance and monitoring remain as one of the most important management tasks for the trail system.
- User-created “braiding” trails and extensive unofficial routes highlight both maintenance challenges and opportunities for expanding and better distributing recreation.
- High levels of equestrian and visitor use, especially near the Ranchview and Thurmon Creek areas, contribute to surface wear and widening trails beyond intended design.
- Gravel trails near the park’s core improve accessibility and durability but vary in quality, with some sections requiring re-compaction to restore firm tread surfaces.
- Harriman East provides largely undeveloped landscapes with potential for low-impact trail formalization but would require staff capacity and coordination with the U.S. Forest Service.
- Any trail development in Harriman East should prioritize minimal disturbance, formalizing existing informal paths rather than creating entirely new routes.
- Broader trail design guidance integrates multiple national standards and resources to ensure consistency, sustainability, and accessibility across all trail types. These include the U.S. Forest Service Trail Accessibility Guidelines (FSTAG), Trail Design Parameters, and the Trail Maintenance and Construction Notebook; the U.S. Access Board’s Accessibility Standards; the Manual on Gravel Roads (LHTAC, 2021); and trail development frameworks from the International Mountain Bike Association, Bureau of Land Management, and Kootenay Adaptive Trail Standards. Together, these sources provide context for optimal tread width, grade, surface materials, user types, and maintenance best practices.
- Regional trail connections to adjacent systems like the Box Canyon, Brimstone, and the Greater Yellowstone Trails could enhance visitor access and tourism, though each would require multi-agency collaboration and careful long-term planning.

## EXISTING TRAIL FUNDING OPPORTUNITIES TAKEAWAYS

### Section 8

- Stakeholders and managers of the Harriman Trail System can draw from numerous local, state, national, and federal funding sources to support trail maintenance and development.
- Grants can greatly assist in supplementing limited operating budgets for trail-related projects. Available grant programs range from small community-based funds to major federal infrastructure grants.
- Application cycles, matching requirements, and funding priorities change regularly. Any prospective applicants should re-check the grant application requirements before starting the application process.
- Events such as races or community gatherings can generate additional funding and public awareness for trail initiatives.
- Selling trail-branded merchandise offers an avenue for raising money and building visitor engagement.
- Partnerships with local businesses, nonprofits, and schools can provide financial, material, or volunteer support.
- All fundraising and event activities should consider Harriman State Park’s ecological sensitivity and visitor capacity limits.
- Combining grants, community fundraising, and partnerships creates a diversified and sustainable funding approach for the Harriman Trail System.

# 3 SPATIAL REVIEW

## BACKGROUND

A comprehensive assessment of existing conditions began with a spatial analysis of the project area to establish a clear understanding of its physical, recreational, ecological, and environmental context. The review incorporated a range of geographic datasets to evaluate how the site's natural and built elements interact.

The physical assessment focused on mapping existing summer and winter trail networks, identifying infrastructure, and documenting both formal and informal fishing access points along the Henrys Fork River. An inventory of existing amenities, including yurts, restrooms, pavilions, trail intersections, and parking areas, was also conducted to understand their distribution and relationship to visitor use patterns.

Environmental datasets, such as flood zones and wetland delineations, were analyzed in conjunction with ecological information identifying wildlife habitat areas and movement corridors. Together, these layers will provide a comprehensive view of the landscape's opportunities and constraints, forming the foundation for data-driven trail planning.

The maps on the following pages illustrate these key components and demonstrate how spatial and environmental insights will directly inform future management and design of the trail network.



Photo Credit: *Charlie Lansche*

## BOUNDARY MAPS Where is the Project Border?

The boundary map depicted in the map below highlights the jurisdictions involved in this project and where the trail network currently lies. A paper map obtained from the Idaho Department of Parks and Recreation depicted where the Harriman Wildlife Refuge boundaries lie within the two jurisdictions.

Harriman State Park itself is approximately 11,230 acres, while the Harriman Wildlife Refuge boundary encompasses 16,000 acres that span through the State Park land and the Caribou-Targhee National Forest (Figure 3.1).

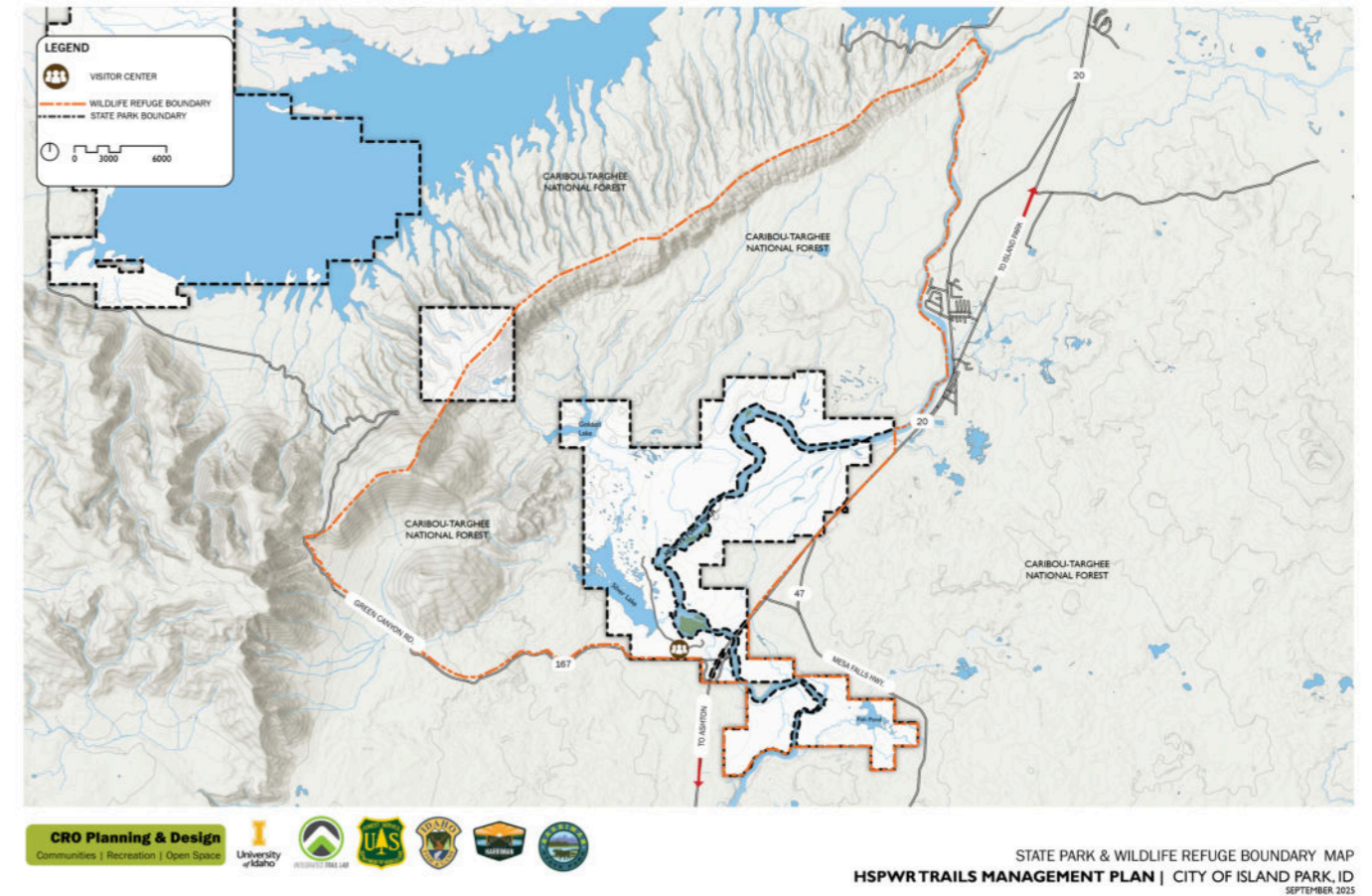


Figure 3.1: Harriman State Park, Caribou-Targhee National Forest, and the Harriman Wildlife Refuge Boundary Map. State Park and National Forest boundary data were derived from the USGS Protected Areas Designation database (PAD-US).

## INFRASTRUCTURE MAP What Assets Exist in the Project Area?

The infrastructure map identifies structures and buildings located throughout the project area. These

structures include stables, barns, ranch housing, yurts, the visitor center, and maintenance areas.

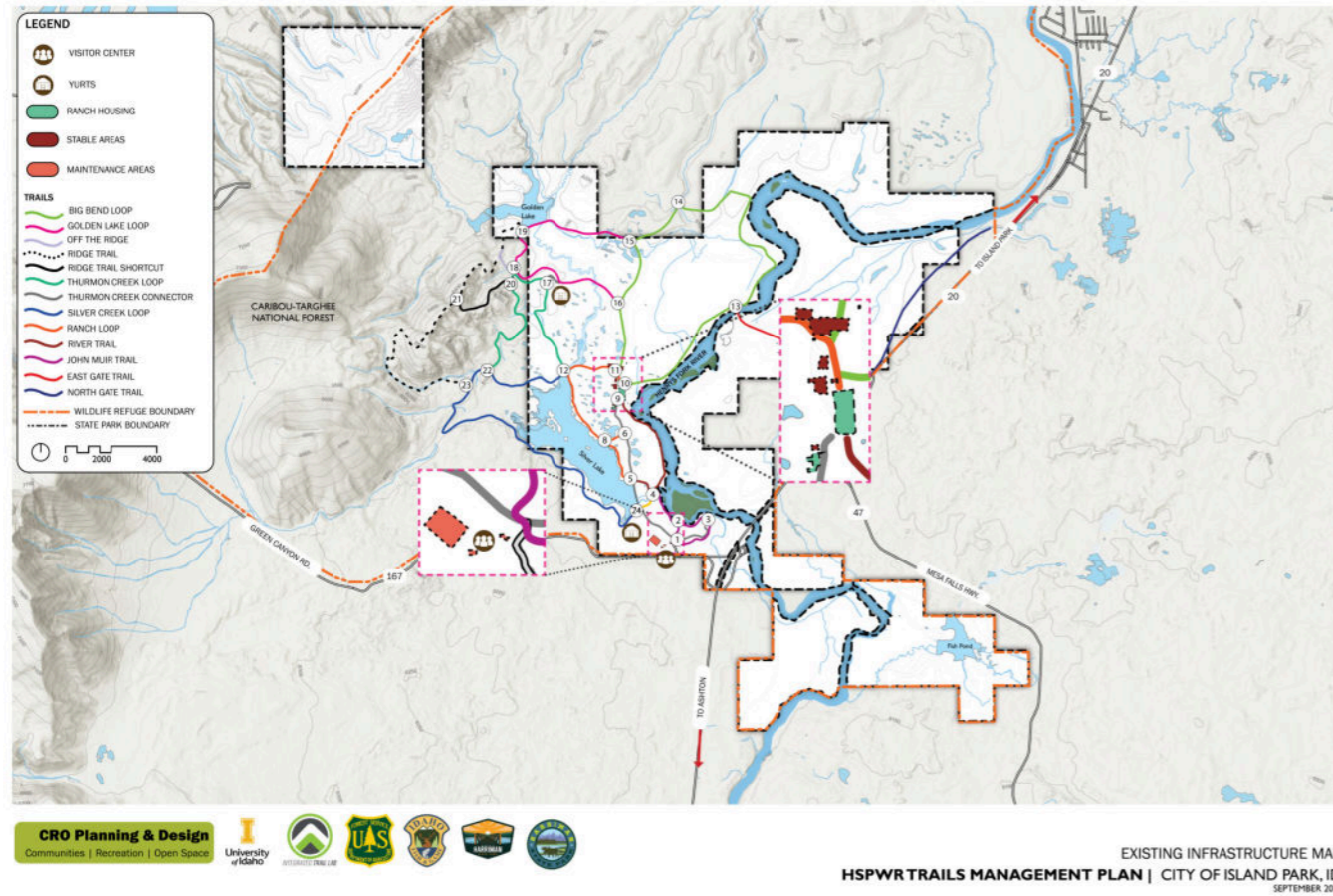


Figure 3.2: Harriman State Park Infrastructure map. Polygons represent ranch housing, stables, and maintenance areas. Additionally, there are two yurts for public use. Polygon features were drawn over aerial imagery.

## SUMMER TRAILS MAP Official Summer Trails at Harriman State Park

The Idaho Parks and Recreation Department provided geographic information system data to understand

the current official trails for the Harriman Trail System. The trails were classified based on their respective titles. There are currently 13 official trails at the park, totaling approximately 21 miles.

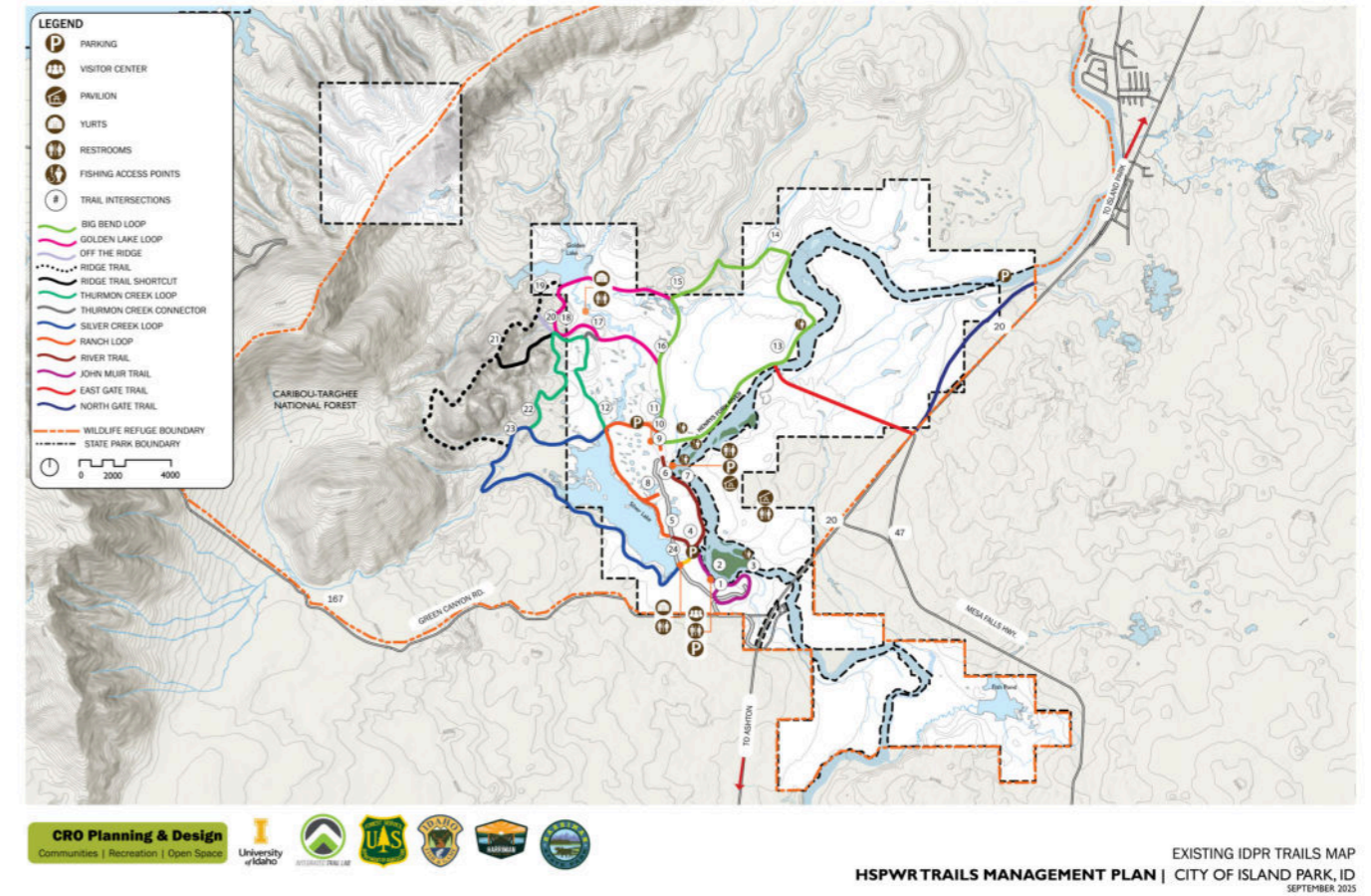


Figure 3.3: Harriman State Park summer trails map. Data was provided by the Idaho Parks and Recreation Department.

Photo Credit: Charlie Lansche



## WINTER TRAILS MAP Official Winter Trails at Harriman State Park

The Harriman Trail System offers an abundance of quality cross-country and snowshoe trails during the winter months. Trails range from classic beginner

groomed to ungroomed, skier-defined. With over 40 miles of trail either within or connected to Harriman State Park, there are options for all types of users to enjoy, along with the ability to ski short distances or all-day adventures. Table 3.1 provides mileage for each trail type and the total number of each trail type throughout the network.

**Table 3.1: Winter Trails Map**

TRAIL TYPE	NUMBER OF TRAILS	APPROXIMATE MILEAGE
Classic, Intermediate	3	3.9
Classic, Novice	7	7.19
Classic, Skate, Intermediate	8	21
Fat Bike Trail	1	2
Road	1	1.3
Skier Defined	12	5
Skier Defined, Advanced	1	2.2
<b>TOTAL MILEAGE</b>		<b>42.6</b>

Data was gathered by Georeferencing the Harriman State Park Winter Map. Mileage was calculated using geodesic geometry that considers the Earth curvature for better accuracy.

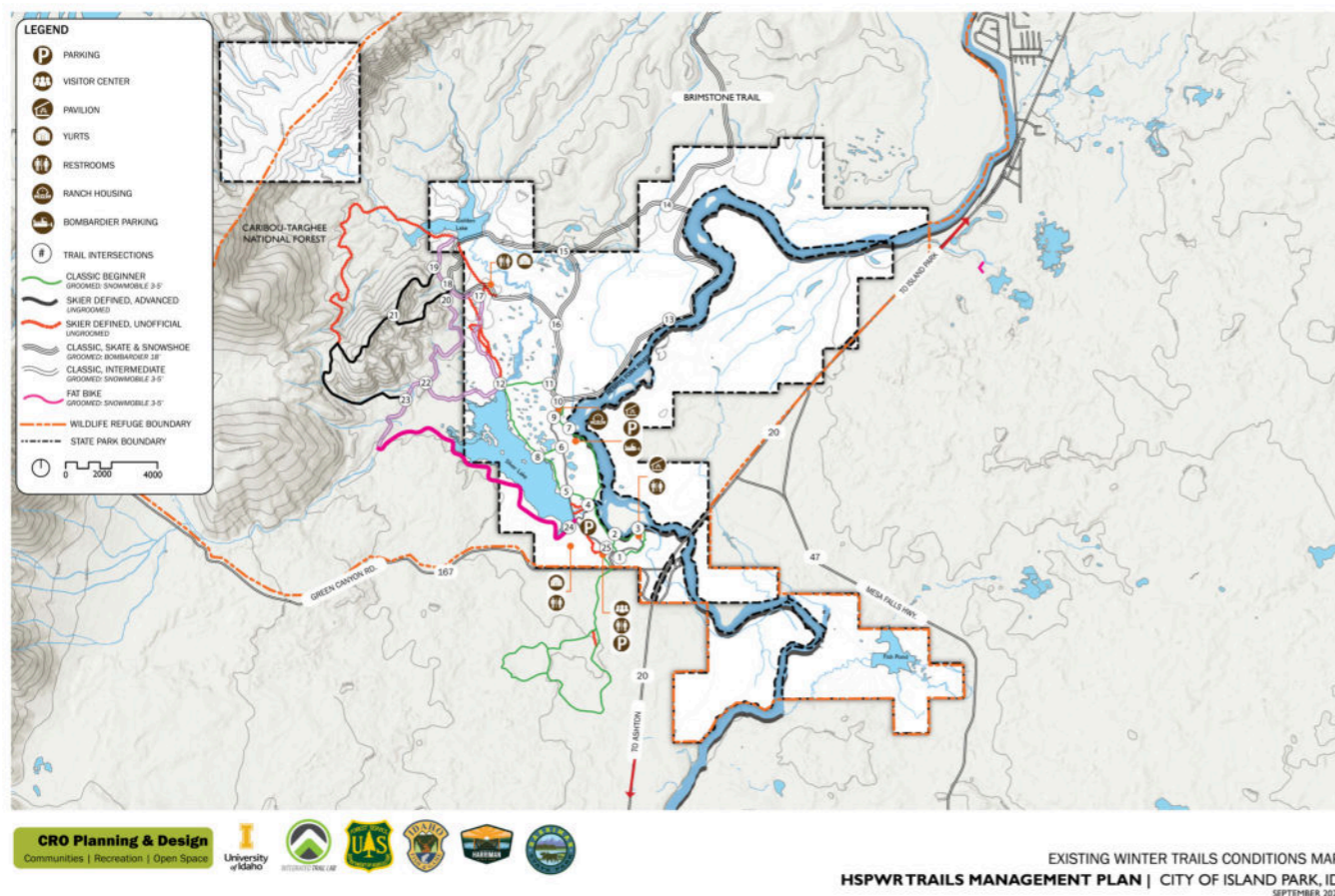


Figure 3.4: Winter Trails Map.

## TRAILS MAP Integrated Trail Labs Spring Trails Assessment at Harriman State Park

During the week of May 12th – 14th, 2025, Integrated Trail Lab founder and owner, Richard Hayes, conducted an assessment of the Harriman Trail System. The spring season is an exceptional season

for a trails assessment as the trails are in their most vulnerable state, making it an ideal time to identify trail damage, standing water, and drainage issues due to wet conditions and raw topography. Concluding Richard's assessment, the trail system was classified based on trail type. The breakdown of each trail category, the number of trails identified throughout the park, and their total mileage is shown in Table 3.2.

**Table 3.2: Integrated Trail Lab May Trails Assessment**

TRAIL TYPE	NUMBER OF TRAILS	APPROXIMATE MILEAGE
Dirt Road	13	12.6
Double Track	3	3.3
Gravel / ADA	5	1.4
Horse Only	3	1.3
Paved	2	.33
Singletrack	28	25.7
<b>TOTAL MILEAGE</b>		<b>44.6</b>

Data was provided by Integrated Trail Lab. Mileage was calculated using geodesic geometry that considers the Earth curvature for better accuracy.

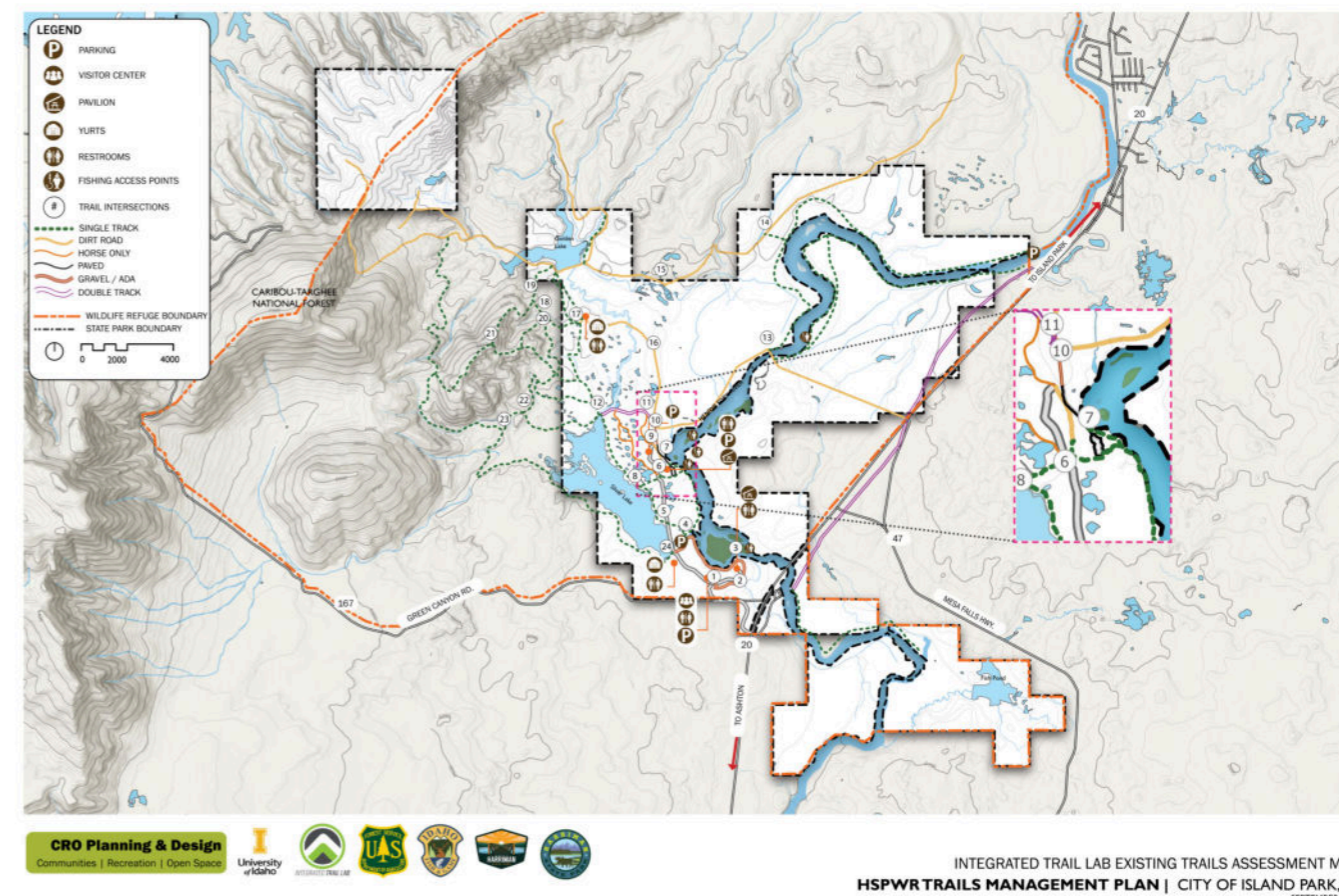


Figure 3.5: Integrated Trail Lab Trail Assessment Map.

## SITE EVALUATION MAP User-created Trails at Harriman State Park

Integrated Trail Lab conducted a second trail assessment during the week of July 22nd -25th, 2025. The objective of the assessment was to ride all trails that currently exist throughout the Harriman Trail System, official and unofficial. Integrated Trail Lab was accompanied by Charlie Lansche, a board member of the Friends of Harriman State Park, local resident, and mountain biker. Together, they rode the entirety of the network and recorded all segments.

Upon completion of the assessment, CRO conducted a desktop analysis, analyzing Integrated Trail Lab's data. The data was overlaid on the Idaho Department of Parks and Recreation official trail lines, and any segments outside the main corridor were calculated as "unofficial." A sum of the segments was calculated, resulting in approximately 57.5 miles of unofficial trails throughout the Harriman Trail System. The map below depicts trails in orange that are considered unofficial trails in relation to the Idaho Department of Parks and Recreation official trails shown in green.

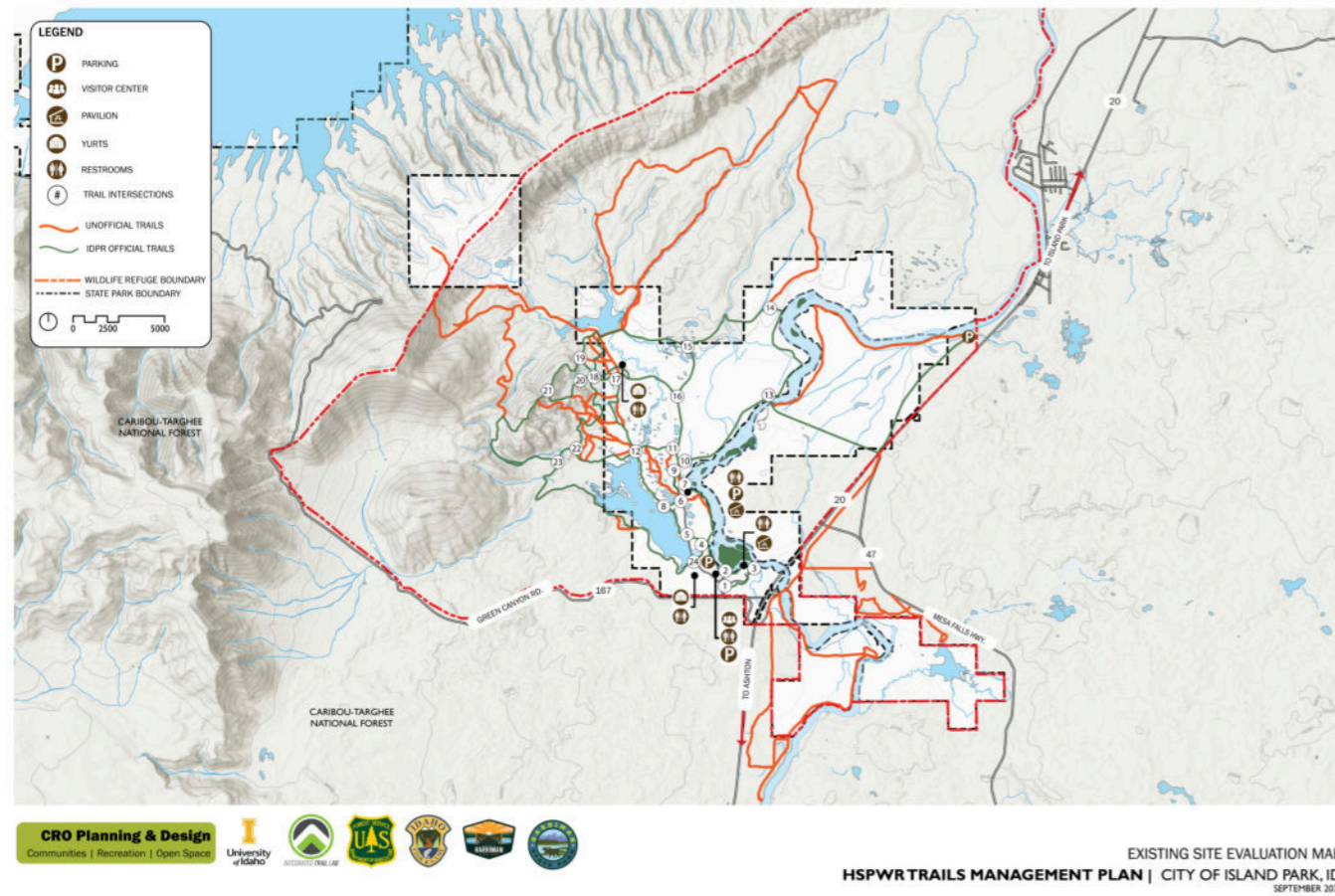


Figure 3.6: Site Evaluation Map. Data was provided by Integrated Trail Lab. Mileage was calculated using geodesic geometry that considers the Earth's curvature for better accuracy.

## HARRIMAN EAST

To deepen an understanding of unofficial trails documented by Integrated Trail Lab, selected segments are highlighted to bring awareness of what is currently happening on the ground and the opportunities within these areas. Figure 3.7 zooms in

on the Southeast quadrant of the park, known as "Harriman East," where Integrated Trail Lab identified opportunities to revitalize the trail network depicted in yellow. Additionally, this area possesses an opportunity to connect the network to the Pinehaven neighborhood, enhancing the connectivity of the trail network for residents.

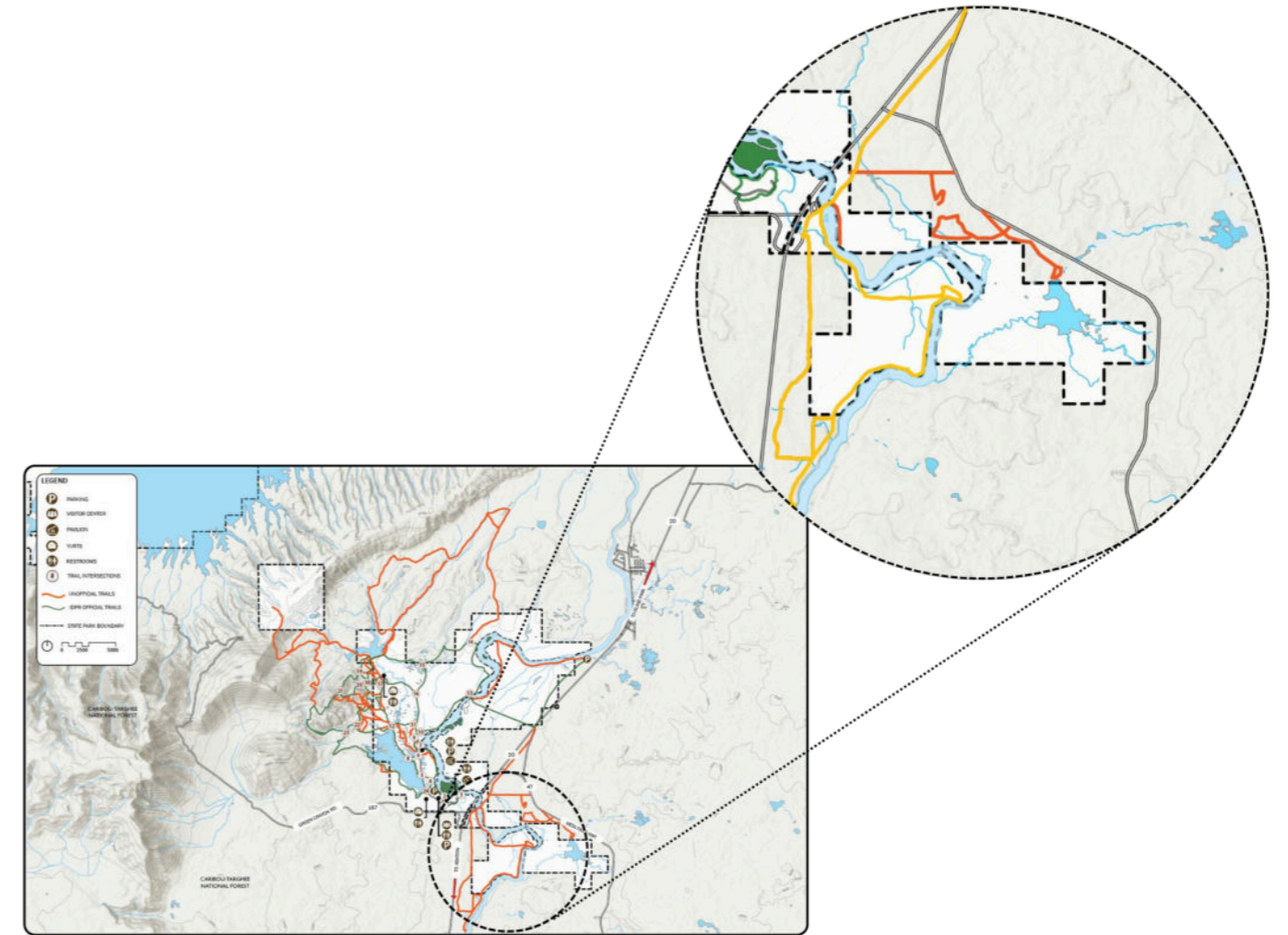


Figure 3.7: Southeast Quadrant.

## DUPLICATE TRAILS AND DOWNHILL OPPORTUNITY

As noted in Integrated Trail Lab's trail assessment report, duplicate trails that lead to the same place are shown in Figure 3.8. It is important to note that it is possible these segments could be heavily used game trails; however, there is evidence of horse traffic. In

Figure 3.9, the highlighted segment directly connects the Thurmon Creek Loop to the Ridge Trail and receives high traffic from a variety of users. Integrated Trail Lab described this as an interesting topographical segment with unique rock features. Due to the presence of these physical features, there is an opportunity for it to serve as the Harriman Trail System's first downhill mountain bike-optimized trail.

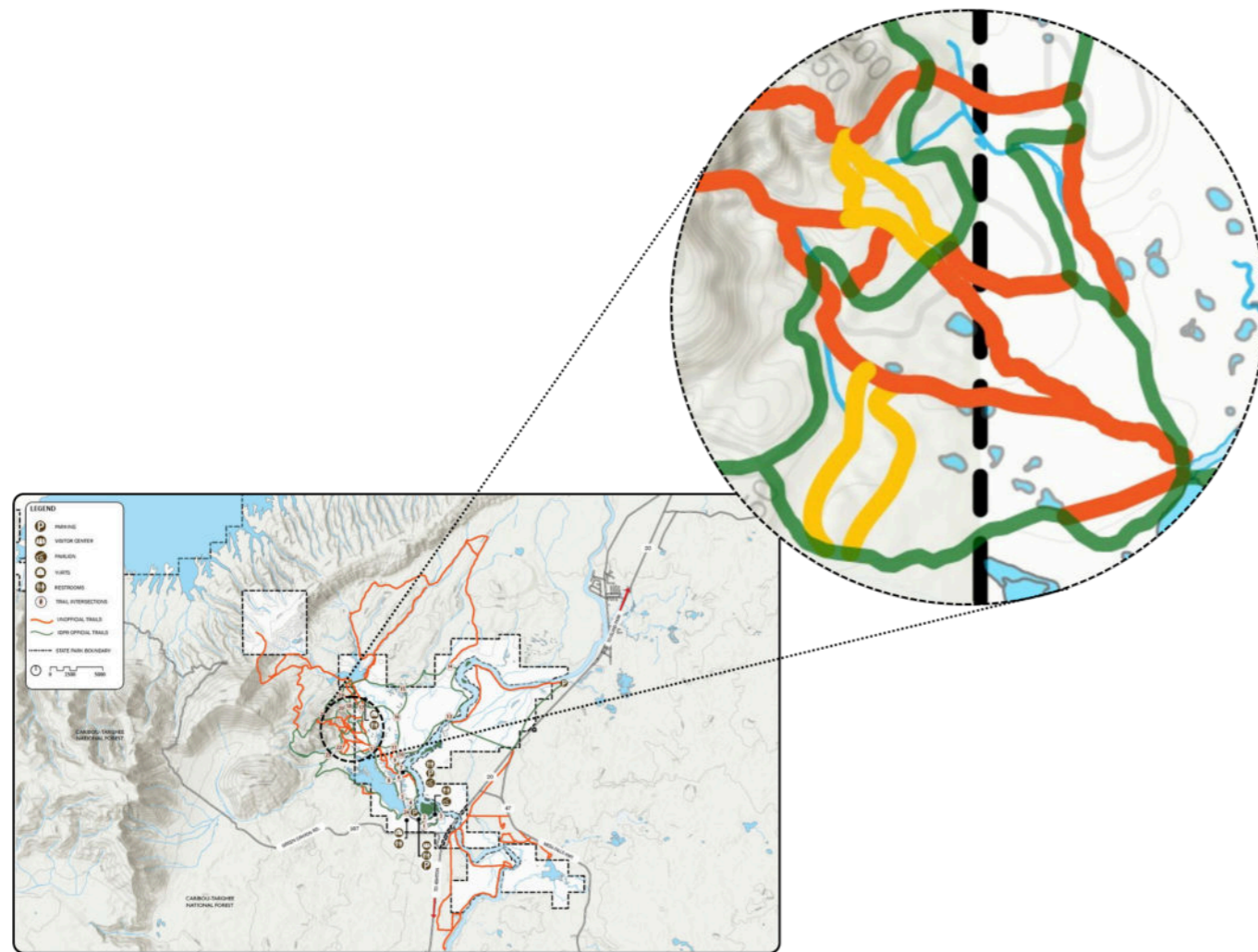


Figure 3.8: Examples of duplicate segments.

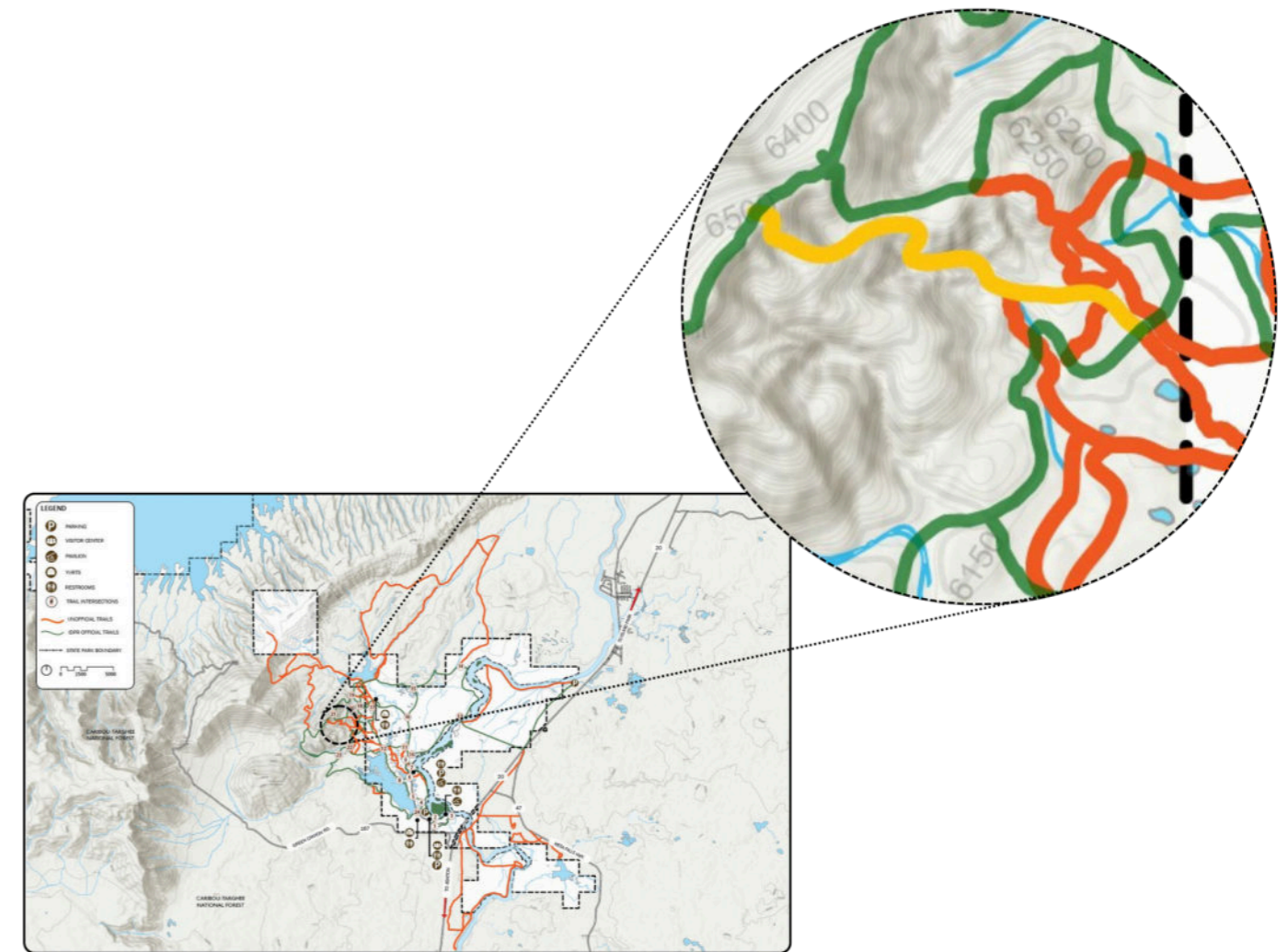


Figure 3.9: Potential Mountain Bike Optimized Trail.



Photo Credit: Charlie Lansche

## SOCIAL TRAILS

Lastly, Harriman State Park runs a commercial horse concession throughout the summer months. Horse concession designated trails exist throughout the park; however, Figure 3.10 brings awareness to the abundance of social trails being created, primarily by

horse traffic. It was observed that these segments were likely formed out of convenience and to avoid obstacles, such as fallen trees. There is an opportunity for leadership to either decommission some of these segments to decrease trail density to protect wildlife habitats and/or formalize highly trafficked areas.

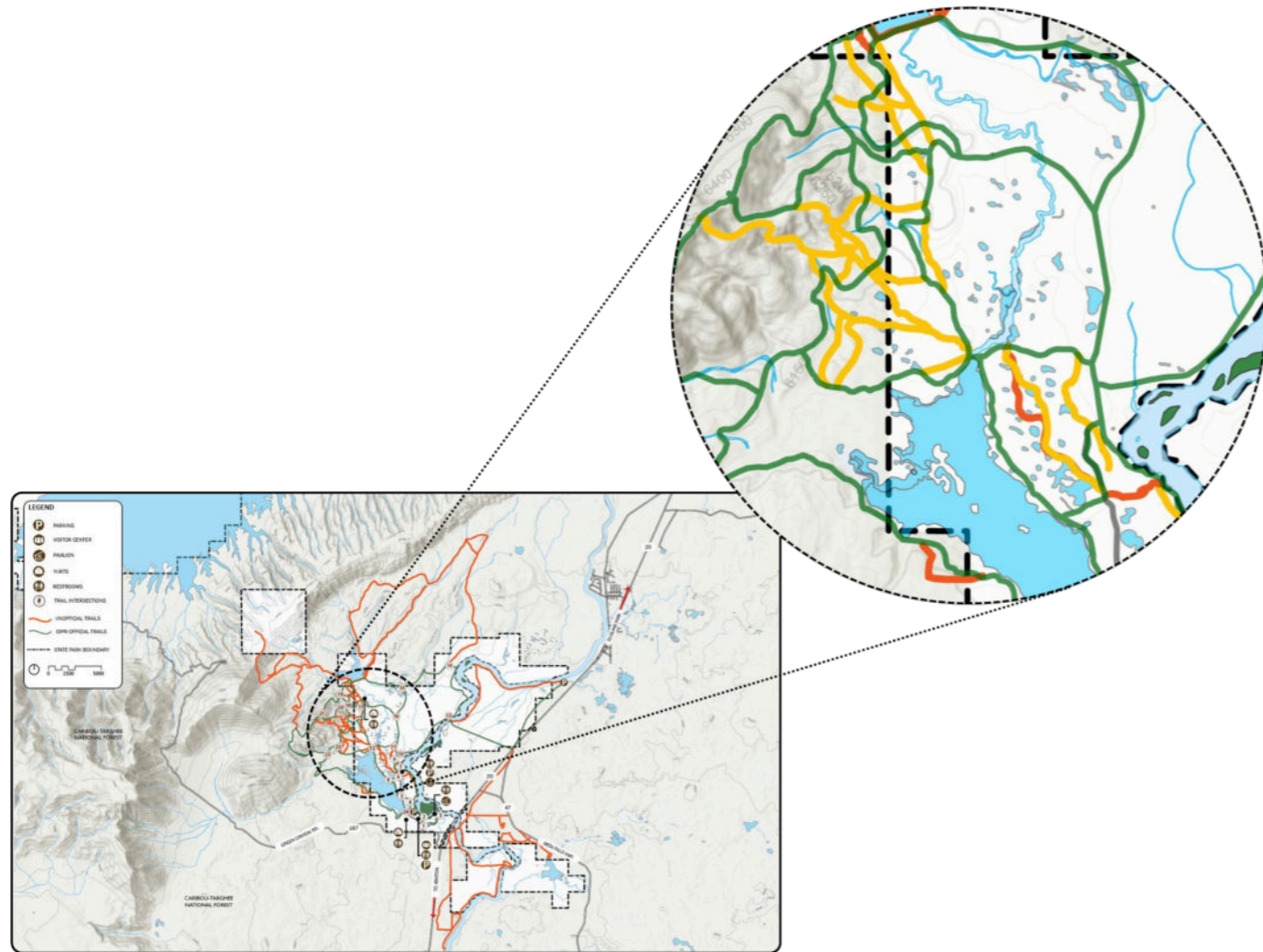


Figure 3.10: Social Trails.

## TRAIL CONDITIONS MAP Trail Conditions at Harriman State Park

The Silver Lake Loop, Ranch Loop, River Trail, John Muir Trail, Ridge Shortcut, and Thurmon Loop trails were evaluated in July 2025 using the ArcGIS Quick Capture application to document trail conditions. While the assessment did not encompass the entire

park, the resulting site evaluation map provides a representative snapshot of the types of trail disturbances most prevalent across the system. As illustrated in the map below, forms of trail degradation such as braiding and cupping, as identified in Integrated Trail Lab's review, are frequently observed along these high-use routes.

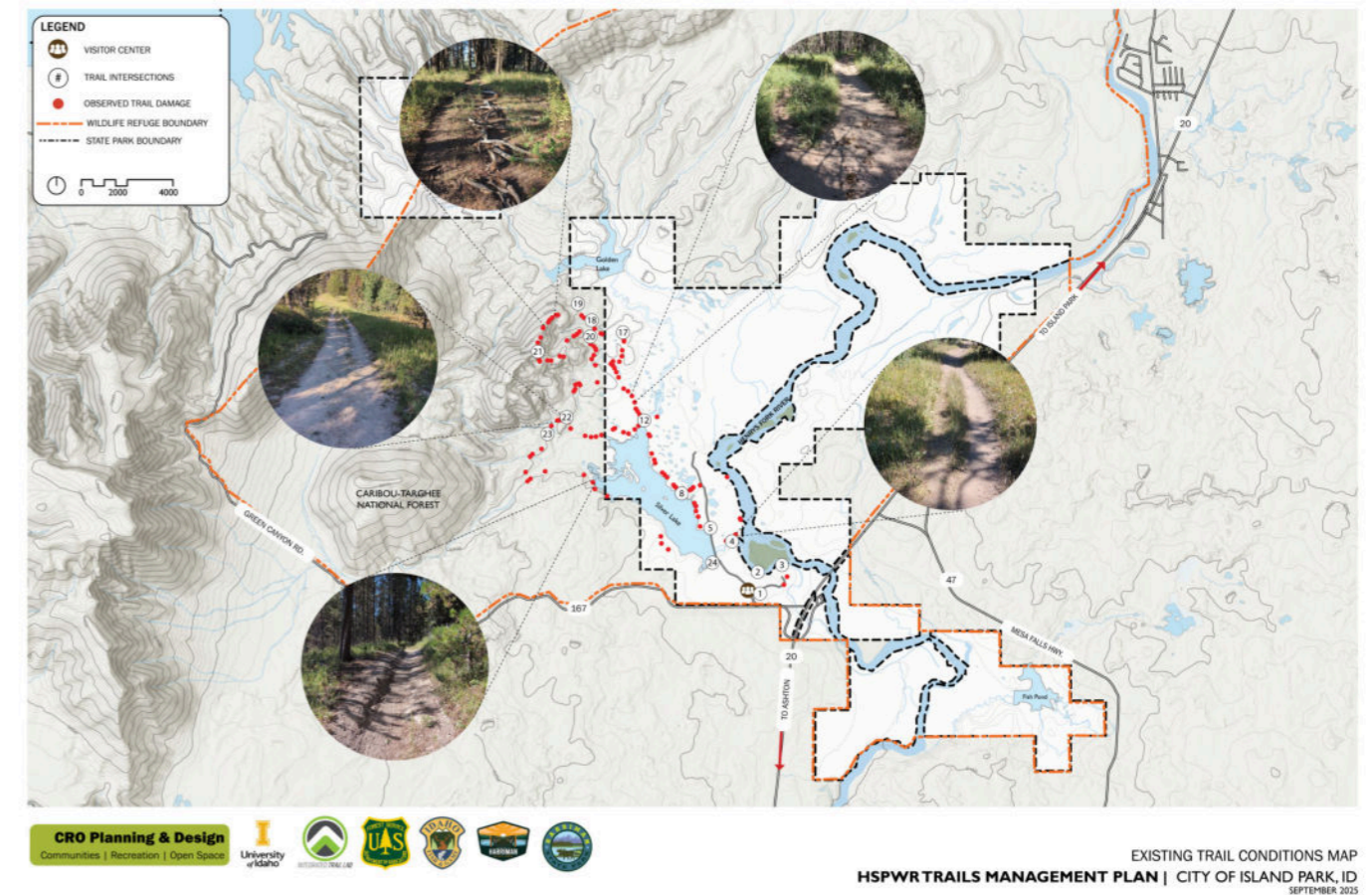


Figure 3.11: Trail Conditions Map.

## WETLANDS AND FLOOD ZONE MAP

### Environmental Conditions at Harriman State Park

The hydrology map provides a valuable reference for understanding where existing trails intersect with

wetlands and flood-prone areas. Several segments of the Harriman Trail System fall within these sensitive zones, warranting further evaluation to identify appropriate management strategies. Future analysis will focus on determining where reroutes, seasonal closures, or drainage feature installation may be necessary to protect ecological integrity and enhance trail sustainability.

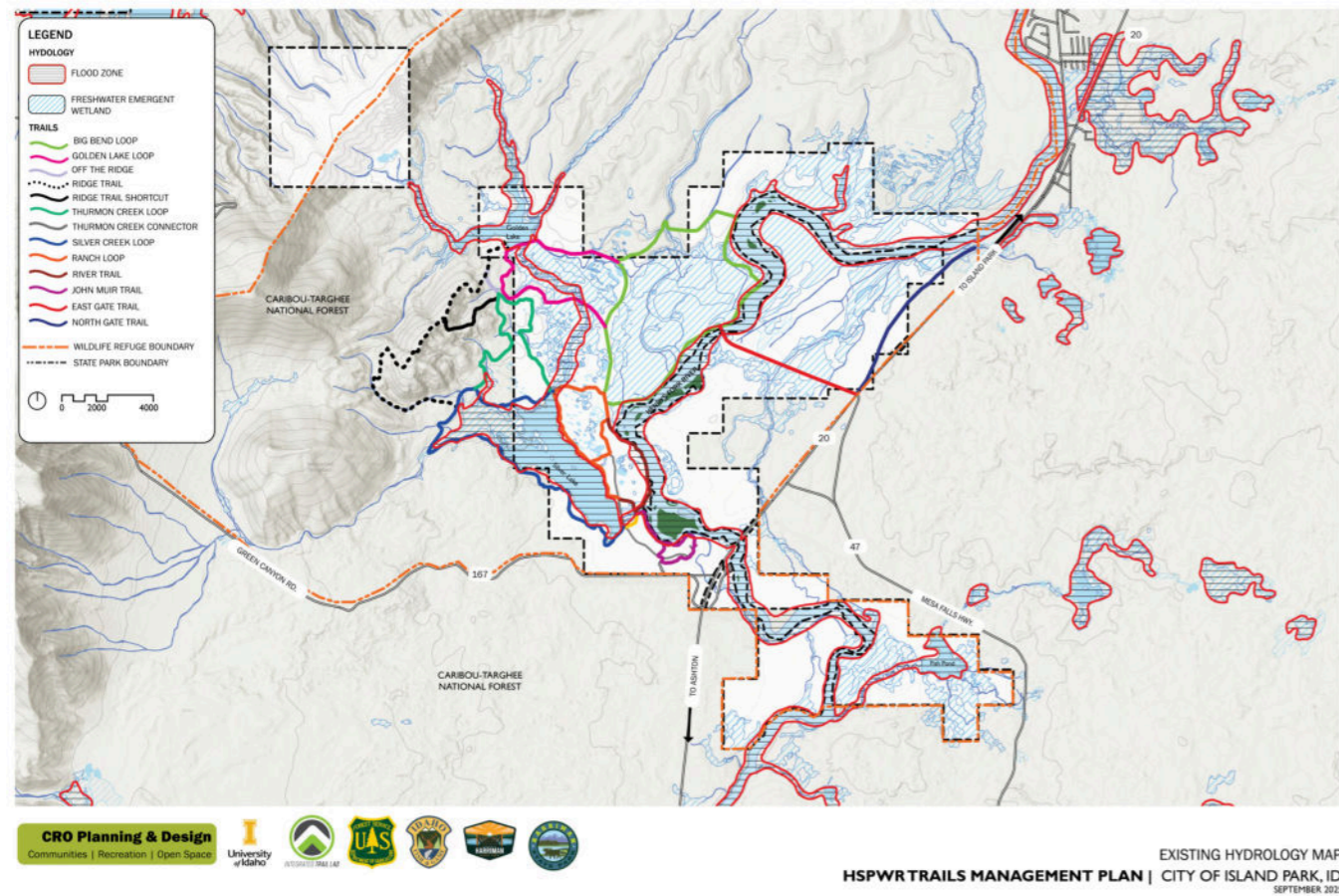


Figure 3.12: Hydrology Map. Data obtained from the National Wetlands Inventory and FEMA.



Photo Credit: Charlie Lansche

# 4 ECOLOGICAL & WILDLIFE CONDITIONS

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## TAKEAWAYS

Harriman State Park and the surrounding wildlife refuge are home to key wildlife resources, including critical waterfowl nesting habitat, ungulate seasonal habitat and migration corridors, and grizzly bear habitat. To safeguard these resources, the project team provides the following perspectives and corresponding management options. Management options are available for consideration and may be applied, at the discretion of managers, in any combination depending on needs and constraints.

- Continue to enforce seasonal closures of existing and future trails within waterfowl nesting habitat.
  - Management option 1a: Avoid or minimize new trail development within valuable, secure waterfowl nesting and overwintering habitat (e.g., shoreline and wetlands adjacent to Silver and Golden Lakes).
- Continue to develop and employ strategies to prevent human-grizzly bear conflict.
  - Management option 2a: Educate visitors to bear-safe behavior via signage in the park, electronic materials (e.g., website/social media), and staff/visitor interactions.
  - Management option 2b: Reporting and tracking sightings or evidence of grizzly bears.
  - Management option 2c: Making bear spray available for rent or purchase at the visitor center.
  - Management option 2d: Implement temporary trail closures, as necessary.
  - Management option 2e: Strategically identify and decommission informal trail density throughout the Harriman Trail System to reduce possibilities for human-grizzly bear conflicts and increase the amount of secure, undisturbed habitat.
  - Management option 2f: Promote, and potentially enforce, the use of mapped official trails and educate visitors about the importance of staying on official trails to support grizzly bear habitat security and avoid dangerous interactions in unmarked areas.
- Management option 2g: Perform trail maintenance that maximizes well-rounded viewsheds around trails to avoid incidental or surprise interactions with grizzly bears.
- Management option 2h: Consult with the Idaho Department of Fish and Game and U.S. Forest Service (when relevant) when designing new trails to minimize risks of visitor-bear encounters.
- Employ strategies to minimize fragmentation of secure habitat and disturbance to ungulate populations during the spring and fall migration periods, as well as during seasonal residency. The overlap between the park area, valuable wildlife habitat, and ungulate migration corridors – especially elk and moose – is so widespread that designing a trail system that avoids these areas is not realistic. Instead, strategies may include (as dictated by needs and logistical constraints):
  - Management option 3a: Enforce temporary closures of trails that overlap with migration corridors (the Silver Lake Loop from intersection 23 to 24, the Ranch Loop, the River Trail, and the Big Bend Loop) or core areas during spring (May-June) and fall (October-November) migration.
  - Management option 3b: Temporarily limit the volume of visitors.

- Management option 3c: Temporarily restrict the types of recreation allowed on trails overlapping migration corridors during ungulate migration periods.
- Management option 3d: Educate visitors via signage and staff/visitor interactions to encourage pass-through behavior on select trails.
- Management option 3e: Discourage off-trail use via educational materials, signage, and staff/visitor interactions.
- Management option 3f: Strategically identify and decommission informal trail density throughout the Harriman Trail System to create large-as-possible blocks of secure habitat. Promote the use of mapped official trails and educate visitors about the importance of staying on official trails to promote habitat security.
- Management option 3g: Avoid maintenance with motorized equipment during migration unless necessary.
- Develop trail management strategies to minimize damage to habitat and impacts stemming from elevated levels of multi-use visitation.
  - Management option 4a: Discourage off-trail use via educational signage and materials.
  - Management option 4b: Reduce the density of informal trails throughout the Harriman Trail System and formalize select user-created trails to disperse user-related impacts and concentrate impacts on known areas (this option implies a trade-off with dispersing disturbance to wildlife).
  - Management option 4c: Develop experience-specific trails that encourage user separation (e.g., optimize certain trails for biking, hiking, or horseback riding experiences).
  - Management option 4d: Widen and harden trails to align their design with the level of use they receive to minimize physical impacts and discourage off-trail braiding.
  - Management option 4e: Develop dedicated river access points and trails.

Idaho Department of Parks and Recreation, apart from the Sheridan Ranch unit, which is leased for livestock grazing and not managed for recreation. The Harriman Trail System also expands into U.S. Forest Service Land. The project team requested data on animal, fish, and plant observations, U.S. Fish and Wildlife Service Designated Critical Habitat, and Big Game Migration Routes and Stopovers in an area encompassing 10 miles around the boundaries of Harriman State Park and the neighboring Caribou-Targhee National Forest (Fig. 4.1) from the Idaho Department of Fish and Game (IDFG). The project team also performed a site visit in May 2025 to directly assess the Harriman Trail System and potential interactions with wildlife.

Animal observations within the park include 217 designated Special Status Species (IDFG; Table 4.1). Migration corridors for four big game species (elk *Cervus canadensis*, moose *Alces alces*, pronghorn *Antilocapra americana*, and mule deer *Odocoileus hemionus*) occur within the study area (IDFG; Fig. 4.2 and 4.3). Besides migration, the park provides critical calving habitat for elk and pronghorn during the summer months, as well as summer habitat for both species (IDFG, personal communication). Moose inhabit the park year-round, with more activity concentrated in the summer (IDFG, personal communication). Mule deer live in the park during the warmer part of the year and tend to migrate elsewhere in the winter (IDFG, personal communication). The park also encompasses waterfowl nesting habitat, and trail closures are already implemented within this habitat during the waterfowl breeding season. There are no known sharp-tailed grouse (*Tympanuchus phasianellus*) or greater sage-grouse (*Centrocercus urophasianus*) leks within the boundaries of the park (IDFG). Grizzly bear (*Ursus arctos horribilis*) observations are relatively common (IDFG), and there is posted signage on bear-safe behavior throughout the park.

The park provides important habitat for many large wildlife species. Populations of these large wildlife species necessitate large areas of habitat – larger than the extent of the entire park – to persist and thrive. Harriman State Park and the surrounding wildlife refuge are crucial components of a larger system of habitat patches encompassing the surrounding National Forest and other public land. Thus, trail design must aim to maximize the extent of undisturbed habitat that the area contributes to the larger mosaic.

## UNGULATE MIGRATIONS & HABITAT

Ungulate migrations are a key component to consider when evaluating the potential impacts of the Harriman Trail System on wildlife. Four ungulate species migrate

through this region in spring and fall: elk, moose, pronghorn, and mule deer. Migration is of critical importance for the viability of ungulate populations. Disturbance from recreation can alter ungulate movements, timing, and activity allocation. For example, elk have been shown to avoid areas surrounding trails (Wisdom et al. 2018), decrease their diurnal activity in favor of more crepuscular or nocturnal activity (Procko et al. 2024), and spend more time traveling and less time feeding and resting (Naylor et al. 2009) in response to outdoor recreation. A recent study in the Bridger-Teton National Forest, Wyoming found that elk are the most sensitive ungulate species to noise caused by recreationists, followed by pronghorn, and to a lesser extent, moose and mule deer (Zeller et al. 2024). A 2025 study highlighted that ungulate behavior can change due to the presence of non-motorized recreation, eliciting reactions like short to long-term avoidance of areas, changing movement patterns, and fleeing high-quality habitat areas; however, the study also pointed out that ungulates may habituate to human presence, and recreator presence can create refuge space from predators that fear humans (Jordan et al. 2025).

Elk (Fig. 4.3A) and moose (Fig. 4.3B) migration routes span across the bulk of the park (IDFG). Pronghorn (Fig. 4.3C) and elk (Fig. 4.3A) migrations occur within the Sheridan Ranch unit (IDFG). Mule deer migration

does not occur within the boundaries of the park (Fig. 4.3D), but it extends into the surrounding portion of the Caribou-Targhee National Forest (IDFG). The Sheridan Ranch unit is not managed for recreation, so it presents less of a concern than the rest of the park in terms of trail design. Thus, the following considerations mainly apply to the southern units of the park, where the Harriman Trail System is located.

Designing an updated trail system that spatially avoids ungulate migration corridors and habitat within Harriman State Park and the surrounding wildlife refuge is unfeasible. This is due to the much larger spatial scale of ungulate migration with respect to the size of Harriman State Park and the surrounding wildlife refuge. Elk migration routes, and presumably habitat, overlap with all units of the park and cover the majority of the park area (Fig. 3A). Moose migration routes, and presumably habitat, also encompass most of the park (with the exception of the Sheridan Ranch unit; Fig 4.3B). Recent evidence from a meta-analysis of wildlife responses to recreation indicates that recreationists can elicit behavioral responses in ungulates with encounters as close as 40 meters and as far as 1,000 m (Dertien et al. 2021). Anywhere a trail is placed in the park will be well within that critical distance from migration corridors. In fact, no trail configuration in the southern units of the park could entirely avoid falling within ungulate migration



Photo Credit: *Charlie Lansche*

## OVERVIEW

The goal of this section is to provide an evaluation of the potential impacts of existing and proposed recreation trails on wildlife throughout the Harriman Trail System. Harriman State Park and the surrounding wildlife refuge provide important seasonal habitat for big game and transitional habitat for multiple species. The park is primarily managed for recreation by the

corridors. IDFG categorizes migration corridors depending on the intensity of use; the core migration corridors are used by 20% or more of a population. Even if the goal were to design a trail system that only avoids the core of migration corridors, this would not be easily accomplished, because the core elk migration goes through the area west of the paved road and surrounding Silver Lake (Fig. 4.3A), which visitors must go through to reach the portions of the park that are less intensely used by migrating elk. The paved road itself falls within the core elk migration corridor (Fig. 4.3A). Thus, the potential to encounter migrating ungulates and trigger behavioral responses will not be eliminated by altering the spatial configuration of trails. However, strategically minimizing trail density throughout the Harriman Trail System and consolidating recreation on a few designated trails can reduce opportunities for encounters between wildlife and recreationists, thus reducing the potential for disturbance. While most studies have focused on quantifying responses of ungulates to recreation as a function of distance to trails, there is generally less information in the literature about the effects of trail density on ungulate behavior (Dertien et al. 2021). A low density of unpaved trails is generally not thought to result in habitat fragmentation for large wildlife (Miller et al. 2022); however, recreation development can result in habitat fragmentation (Jordan et al. 2025) and some mammalian species have been shown to avoid sites with high densities of trails within areas that experience a low volume of recreation (Marion et al. 2024). It is reasonable to assume that a higher density of trails corresponds to a greater number of opportunities for encounters between wildlife and recreationists, and therefore, that a lower trail density would correspond to lower disturbance.

In addition to minimizing trail density, management actions focused on temporal avoidance can reduce potential impacts of recreation on migrating ungulates. A range of management options can be applied, alone or in combination, at the discretion of managers and depending on logistical constraints. First, seasonal closures could be implemented on trails overlapping with ungulate migration corridors (Jordan et al. 2025), similar to those that are currently in place to protect nesting waterfowl. The timing of migration is subject to annual variation, but generally spring migration for elk in this region occurs from May to early June, and fall migration occurs in late October and November (Rickbeil et al. 2019). Specifically, elk are generally observed to arrive in Harriman State Park in May, with some calving occurring within the boundaries of the park and the surrounding wildlife refuge (IDFG, personal communication). Thurmon Ridge was noted as a particularly important calving area and secure habitat for elk (IDFG 2024). Some elk also congregate in Harriman State Park in September and October

before initiating fall migration (IDFG, personal communication). Thus, any trail closures should reasonably focus on May-June and October-November. The highest migratory activity occurs in the area surrounding the Silver Lake Loop from intersection 23 to 24, the Ranch Loop, the River Trail, and the Big Bend Loop. Second, managing the volume of visitors and the types of recreation allowed during migration seasons could help minimize disturbance to ungulates (Jordan et al. 2025). A study in the North Rainier Elk Herd range, WA, showed that elk begin to respond strongly to recreation pressure when the number of visitors increases above 12/day, while responses are weaker between 0 and 11 visitors/day (Procko et al. 2024). Elk appear to respond more strongly to motorized recreation, followed by mountain biking and, to a lesser extent, hiking and horseback riding (Naylor et al. 2009, Wisdom et al. 2018). However, responses to hikers and mountain bikers can be heightened if the recreationists are vocal and occur in large groups (Zeller et al. 2024). Third, educational efforts like encouraging pass-through behavior when visitors are on trails that overlap with migration corridors may help reduce disturbance to wildlife (Jordan et al. 2025). Fourth, discouraging off-trail recreation can help reduce opportunities for encounters with migrating ungulates and make human presence more confined and spatially predictable by animals.

In addition to migration corridors, the park encompasses important seasonal habitat for ungulate species – especially summer habitat. Because, to our knowledge, maps of seasonal habitat for ungulates within Harriman State Park are not available, the project team focused our evaluation of potential impacts of recreation on migration corridors. However, the same considerations for minimizing disturbance would apply to seasonal habitat. Generally, management strategies that minimize disturbance, reduce the density of informal trail networks, avoid further fragmentation of habitat with new trails, and concentrate impacts to select existing trails will help to support the preservation of as-large-as-possible stretches of secure habitat for ungulates.

## WATERFOWL

Numerous waterfowl species nest in Harriman State Park, including trumpeter swans (*Cygnus buccinator*), which are designated as a Species of Greatest Conservation Need by IDFG. Harriman State Park is identified as “some of the most important trumpeter swan habitats in Idaho” (IDFG, 2024). The Henry’s Fork, Thurmon Creek between Golden and Silver Lakes, and other open water throughout Harriman serve as critical winter habitat for trumpeter swans. In September 2022, wildlife surveyors found that 25% of

the state’s trumpeter swan cygnets produced in that year came from Silver Lake. In the same survey, 24% of Idaho’s adult trumpeter swans were documented in Harriman State Park.

Efforts to maintain these aquatic habitats as secure spaces for trumpeter swans should be a major priority for park managers. To maintain trumpeter swans in Harriman, IDFG identifies protecting wetlands and historic/current nesting habitats on Silver and Golden Lakes from disturbance and degradation, enhancing aquatic habitat quality in the Henry’s Fork River, and maintaining adequate buffers from human disturbance in key wintering areas as requirements. From a trail management perspective, these requirements can be achieved through minimizing additional new trail development along the waterbodies’ shorelines, adjacent wetlands, and other nesting habitats. Additionally, educating visitors about the importance of maintaining adequate distance from the habitats can also serve to mitigate recreation-related disturbances to waterfowl species.

The trails to the east of Harriman’s paved park entry road (River Trail, John Muir Trail, Big Bend Loop, East Gate Trail, North Gate Trail, Osborne Parking Area) are closed in the spring during the waterfowl nesting season to prevent disturbance from recreationists. These seasonal trail closures are important to protect waterfowl populations and should stay in place and apply to any new trails that may be developed in waterfowl nesting habitat. As necessary, additional

temporary closures along the Golden and Silver Lakes and Thurmon Creek should also be enforced to serve as buffers between trail users and trumpeter swans during key times like molting, wintering, and nesting.

## HABITAT

Horse usage of trails can affect wildlife habitat by impacting soil and vegetation. Horses can damage or widen existing trails as well as create informal trails (Pickering et al. 2010), especially when snowmelt creates mud accumulation on designated trails. Other biophysical impacts of horse trampling on soils include erosion, compaction, nutrification, and the exposure of rocks or tree roots (Newsome et al. 2008, Pickering et al. 2010). Horses can also damage vegetation along trails and may favor the spread of invasive plants (Pickering et al. 2010, Quinn et al. 2010). Because of these impacts, trails that are open to horseback riding require frequent maintenance. Segregating horseback riders and hikers via dedicated trails or hardening trails to resist excessive amounts of visitation from multiple uses can help limit the need for frequent maintenance and mitigate damage to soil and vegetation. Formalizing trails to spread out use and reduce the wear and tear on the existing trails is another option that managers can consider to mitigate damage to habitat.

Anglers visiting Harriman State Park often access the river from multiple access points and use informal

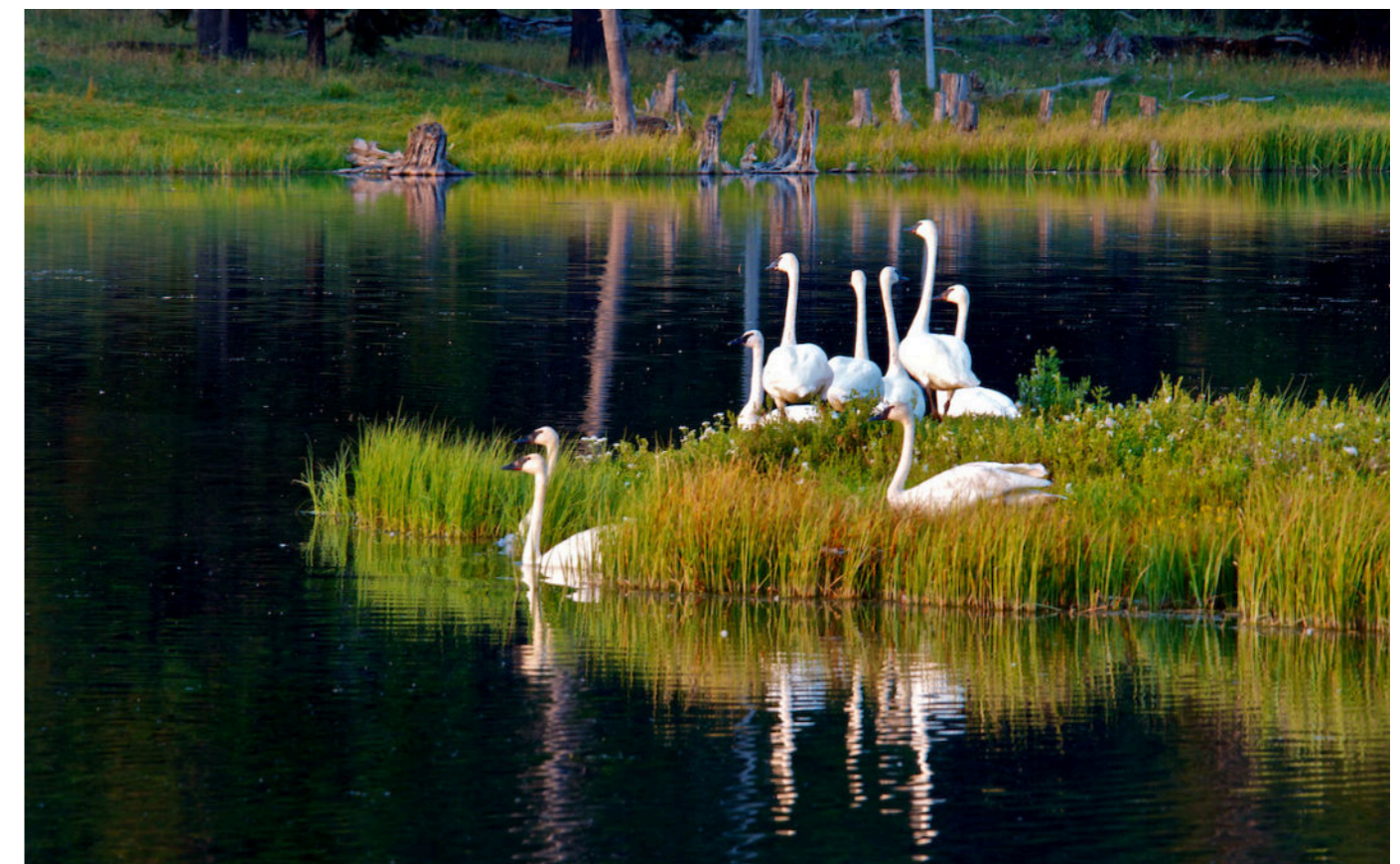


Photo Credit: *Charlie Lansche*

paths. Developing dedicated trails to reach the river would help focus disturbance to riparian habitat to a few access points, avoiding diffuse impacts on riverbanks and river-associated fauna. This is also true for other informal trails existing throughout the Harriman Trail System – strategically reducing the density of informal trails, formalizing and mapping select informal trails, and encouraging on-trail use of the Harriman Trail System’s officially-mapped trails can concentrate visitor impacts to known areas and reduce widespread habitat damage.

## GRIZZLY BEARS

While grizzly bear sightings are uncommon, their presence within the Harriman Trail System is regular, as the park serves as a major corridor for movement in Island Park. In particular, IDFG identified Harriman State Park as especially valuable grizzly bear habitat from May through August (IDFG 2024). It should be expected that periodic grizzly bear denning occurs within the park, and park managers should assume that Harriman is consistently providing secure habitat for grizzly bears. Given their known presence and increased user visitation of the Harriman Trail System across multiple non-motorized user types, particularly mountain bikers and e-bikers who are likely to visit the Ridge Trail, managers should strongly prioritize minimizing potential conflicts between grizzly bears and park visitors. This can be achieved through a combination of passive education and active management strategies.

Harriman State Park staff regularly track and report sightings and evidence of grizzly bears. Education

campaigns also exist through staff communication, on-site signage, and online communication materials. However, given the influx of new users on the Harriman Trail System in the last half-decade, especially during the summer, additional and more intensive communication efforts may be warranted. Educational efforts should focus on human behaviors that reduce risks for grizzly bear attacks, such as traveling in group sizes of three or more, staying on trail, and always carrying bear spray (Gunther and Haroldson 2020). Additional management strategies, like enacting temporary trail closures (especially when an animal carcass is discovered in proximity to trails) and making bear deterrents available for rent can further avoid risks of human-grizzly encounters (Gunther and Haroldson 2020; Gunther 2022).

Trail design strategies, like performing trail maintenance to open viewsheds and minimizing the amount of time users spend in thick brush, could also mitigate unwanted and dangerous encounters. Strategically reducing trail density, particularly among unmapped social trails, throughout the Harriman Trail System could serve to reduce chances of unwanted encounters with grizzly bears (especially in remote/backcountry settings) and facilitate rescue efforts in the event of an attack. This management strategy would also provide more secure, undisturbed habitat space for bears. When developing any new trails for the Harriman Trail System, management should consult with IDFG and the U.S. Forest Service (when relevant) to evaluate potential risk factors related to grizzly bears and visitor safety and subsequently implement appropriate design techniques to mitigate risks of encounters.



Photo Credit: *Charlie Lansche*

## TABLES

**Table 4.1: List of Special Status Species observed in Harriman State Park in Fremont County, Idaho. The Special Status designation is assigned to species that have been identified as species of conservation concern at the state or federal level. Source: Idaho Department of Fish and Game.**

COMMON NAME	LATIN NAME	NUMBER OF OBSERVATIONS
Trumpeter Swan	Cygnus buccinator	957
American White Pelican	Pelecanus erythrorhynchos	395
Double-crested Cormorant	Nannopterum auritum	335
American Robin	Turdus migratorius	310
Bald Eagle	Haliaeetus leucocephalus	308
Common Raven	Corvus corax	297
Mountain Chickadee	Poecile gambeli	283
Gadwall	Anas strepera	271
Yellow Warbler	Setophaga petechia	260
Caspian Tern	Hydroprogne caspia	257
Yellow-rumped Warbler	Setophaga coronata	248
Ring-billed Gull	Larus delawarensis	229
Great Blue Heron	Ardea herodias	227
Song Sparrow	Melospiza melodia	221
Bufflehead	Bucephala albeola	208
Sandhill Crane	Grus canadensis	202
Dark-eyed Junco	Junco hyemalis	200
Chipping Sparrow	Spizella passerina	196
Red-winged Blackbird	Agelaius phoeniceus	192
Osprey	Pandion haliaetus	182
Marsh Wren	Cistothorus palustris	174
Northern Pintail	Anas acuta	171
Ruby-crowned Kinglet	Corthylio calendula	170
Common Merganser	Mergus merganser	167
Red-tailed Hawk	Buteo jamaicensis	166
Tree Swallow	Tachycineta bicolor	165
Northern Flicker	Colaptes auratus	162
Belted Kingfisher	Megaceryle alcyon	158
Barrow's Goldeneye	Bucephala islandica	154
Cliff Swallow	Petrochelidon pyrrhonota	153
Mountain Bluebird	Sialia currucoides	153
California Gull	Larus californicus	148
Spotted Sandpiper	Actitis macularius	147
Barn Swallow	Hirundo rustica	146
Western Wood-Pewee	Contopus sordidulus	146

COMMON NAME	LATIN NAME	NUMBER OF OBSERVATIONS
Lesser Scaup	Aythya affinis	145
Western Grebe	Aechmophorus occidentalis	143
Western Tanager	Piranga ludoviciana	142
Red-necked Grebe	Podiceps grisegena	138
Pine Siskin	Spinus pinus	134
White-crowned Sparrow	Zonotrichia leucophrys	129
Brewer's Blackbird	Euphagus cyanocephalus	125
Cinnamon Teal	Anas cyanoptera	125
Red-breasted Nuthatch	Sitta canadensis	125
Violet-green Swallow	Tachycineta thalassina	116
Swainson's Hawk	Buteo swainsoni	114
Franklin's Gull	Leucophaeus pipixcan	113
Pied-billed Grebe	Podilymbus podiceps	111
Brown-headed Cowbird	Molothrus ater	95
Eared Grebe	Podiceps nigricollis	94
Turkey Vulture	Cathartes aura	91
Olive-sided Flycatcher	Contopus cooperi	90
Warbling Vireo	Vireo gilvus	85
Black-capped Chickadee	Poecile atricapillus	83
Savannah Sparrow	Passerculus sandwichensis	78
Killdeer	Charadrius vociferus	73
Long-billed Curlew	Numenius americanus	71
Yellow-headed Blackbird	Xanthocephalus	68
Vesper Sparrow	Pooecetes gramineus	66
Hairy Woodpecker	Picoides villosus	65
American Kestrel	Falco sparverius	64
Common Loon	Gavia immer	64
Forster's Tern	Sterna forsteri	62
Northern Harrier	Circus cyaneus	62
House Wren	Troglodytes aedon	61
Red Crossbill	Loxia curvirostra	61
Dusky Flycatcher	Empidonax oberholseri	60
Cassin's Finch	Haemorhous cassinii	58
Cedar Waxwing	Bombycilla cedrorum	58
Ruddy Duck	Oxyura jamaicensis	55
Western Meadowlark	Sturnella neglecta	54
Lincoln's Sparrow	Melospiza lincolni	52
Evening Grosbeak	Coccothraustes vespertinus	45
Willet	Tringa semipalmata	45
Blue-winged Teal	Anas discors	43
Clark's Grebe	Aechmophorus clarkii	43

COMMON NAME	LATIN NAME	NUMBER OF OBSERVATIONS
Wilson's Snipe	Gallinago delicata	42
Canvasback	Aythya valisineria	41
Sora	Porzana carolina	40
Black-billed Magpie	Pica hudsonia	39
American Avocet	Recurvirostra americana	38
Eastern Kingbird	Tyrannus tyrannus	37
Red-naped Sapsucker	Sphyrapicus nuchalis	36
Northern Rough-winged Swallow	Stelgidopteryx serripennis	35
Wilson's Phalarope	Phalaropus tricolor	35
Red-breasted Merganser	Mergus serrator	32
Brewer's Sparrow	Spizella breweri	30
Common Nighthawk	Chordeiles minor	30
White-faced Ibis	Plegadis chihi	30
Hammond's Flycatcher	Empidonax hammondii	28
American Goldfinch	Spinus tristis	25
American Dipper	Cinclus mexicanus	23
Common Yellowthroat	Geothlypis trichas	23
Williamson's Sapsucker	Sphyrapicus thyroideus	23
Willow Flycatcher	Empidonax traillii	23
Wilson's Warbler	Cardellina pusilla	22
Black-crowned Night-Heron	Nycticorax nycticorax	21
American Pipit	Anthus rubescens	19
Brown Creeper	Certhia americana	18
Canada Jay	Perisoreus canadensis	18
Bonaparte's Gull	Chroicocephalus philadelphia	17
Downy Woodpecker	Picoides pubescens	17
Sharp-shinned Hawk	Accipiter striatus	17
Cooper's Hawk	Accipiter cooperii	16
Townsend's Solitaire	Myadestes townsendi	16
Gray Catbird	Dumetella carolinensis	15
Black-headed Grosbeak	Pheucticus melanocephalus	14
Long-billed Dowitcher	Limnodromus scolopaceus	14
Terrestrial Gartersnake	Thamnophis elegans	14
Golden Eagle	Aquila chrysaetos	13
Peregrine Falcon	Falco peregrinus	13
Steller's Jay	Cyanocitta stelleri	13
Bank Swallow	Riparia riparia	12
Swainson's Thrush	Catharus ustulatus	12
Yellow-pine Chipmunk	Neotamias amoenus	11
Common Tern	Sterna hirundo	10

COMMON NAME	LATIN NAME	NUMBER OF OBSERVATIONS
Great Horned Owl	Bubo virginianus	10
Greater Yellowlegs	Tringa melanoleuca	10
Least Sandpiper	Calidris minutilla	10
Marbled Godwit	Limosa fedoa	10
Northern Saw-whet Owl	Aegolius acadicus	10
Orange-crowned Warbler	Oreothlypis celata	10
Golden-crowned Kinglet	Regulus satrapa	9
Horned Grebe	Podiceps auritus	9
Horned Lark	Eremophila alpestris	9
Black Tern	Chlidonias niger	8
Clark's Nutcracker	Nucifraga columbiana	8
Hermit Thrush	Catharus guttatus	8
MacGillivray's Warbler	Geothlypis tolmiei	8
Western Kingbird	Tyrannus verticalis	8
Black-necked Stilt	Himantopus mexicanus	7
Boreal Chorus Frog	Pseudacris maculata	7
Common Gartersnake	Thamnophis sirtalis	7
Common Grackle	Quiscalus quiscula	7
House Finch	Haemorhous mexicanus	7
Northern Goshawk	Accipiter gentilis	7
Short-eared Owl	Asio flammeus	7
Baird's Sandpiper	Calidris bairdii	6
Broad-tailed Hummingbird	Selasphorus platycercus	6
Bullock's Oriole	Icterus bullockii	6
North American Porcupine	Erethizon dorsatum	6
Northern Waterthrush	Parkesia noveboracensis	6
Red-necked Phalarope	Phalaropus lobatus	6
Black-bellied Plover	Pluvialis squatarola	5
Fox Sparrow	Passerella iliaca	5
Great Gray Owl	Strix nebulosa	5
Green-tailed Towhee	Pipilo chlorurus	5
Least Flycatcher	Empidonax minimus	5
Lesser Yellowlegs	Tringa flavipes	5
Long-eared Owl	Asio otus	5
Sanderling	Calidris alba	5
Semipalmated Plover	Charadrius semipalmatus	5
Snow Bunting	Plectrophenax nivalis	5
Ferruginous Hawk	Buteo regalis	4
Grizzly Bear	Ursus arctos	4
Least Chipmunk	Neotamias minimus	4
Northern Shrike	Lanius excubitor	4

COMMON NAME	LATIN NAME	NUMBER OF OBSERVATIONS
Prairie Falcon	Falco mexicanus	4
Rock Wren	Salpinctes obsoletus	4
Rufous Hummingbird	Selasphorus rufus	4
Western Sandpiper	Calidris mauri	4
American Mink	Neogale vison	3
American Three-Toed Woodpecker	Picoides dorsalis	3
Pectoral Sandpiper	Calidris melanotos	3
Rough-legged Hawk	Buteo lagopus	3
Say's Phoebe	Sayornis saya	3
Townsend's Warbler	Setophaga townsendi	3
Virginia Rail	Rallus limicola	3
American Golden-Plover	Pluvialis dominica	2
Barn Owl	Tyto alba	2
Belding's Ground Squirrel	Urocitellus beldingi	2
Black-backed Woodpecker	Picoides arcticus	2
Calliope Hummingbird	Selasphorus calliope	2
Eurasian Wigeon	Anas penelope	2
Grasshopper Sparrow	Ammodramus savannarum	2
Great Egret	Ardea alba	2
Herring Gull	Larus argentatus	2
Lazuli Bunting	Passerina amoena	2
Lewis's Woodpecker	Melanerpes lewis	2
Little Gull	Hydrocoloeus minutus	2
Loggerhead Shrike	Lanius ludovicianus	2
Moose	Alces alces	2
Northern Pygmy-Owl	Glaucidium gnoma	2
Red Knot	Calidris canutus	2
Semipalmated Sandpiper	Calidris pusilla	2
Sharp-tailed Grouse	Tympanuchus phasianellus	2
Short-billed Gull	Larus brachyrhynchus	2
Snowshoe Hare	Lepus americanus	2
Solitary Sandpiper	Tringa solitaria	2
White-breasted Nuthatch	Sitta carolinensis	2
White-rumped Sandpiper	Calidris fuscicollis	2
American Black Bear	Ursus americanus	1
American Tree Sparrow	Spizella arborea	1
Black-chinned Hummingbird	Archilochus alexandri	1
Blue Jay	Cyanocitta cristata	1
Blue-gray Gnatcatcher	Polioptila caerulea	1
Bohemian Waxwing	Bombycilla garrulus	1

COMMON NAME	LATIN NAME	NUMBER OF OBSERVATIONS
Dunlin	Calidris alpina	1
Gray-crowned Rosy-Finch	Leucosticte tephrocotis	1
Greater Sage-Grouse	Centrocercus urophasianus	1
Long-tailed Jaeger	Stercorarius longicaudus	1
Merlin	Falco columbarius	1
Mountain Goat	Oreamnos americanus	1
Northern Flying Squirrel	Glaucomys sabrinus	1
Ross's Goose	Chen rossii	1
Ruddy Turnstone	Arenaria interpres	1
Sagebrush Sparrow	Artemisiospiza nevadensis	1
Short-billed Dowitcher	Limnodromus griseus	1
Snowy Egret	Egretta thula	1
Snowy Plover	Charadrius nivosus	1
Spotted Towhee	Pipilo maculatus	1
Veery	Catharus fuscescens	1
Western Bumble Bee	Bombus occidentalis	1
Western Tiger Salamander	Ambystoma mavortium	1
White-throated Sparrow	Zonotrichia albicollis	1
Whooping Crane	Grus americana	1
Wolverine	Gulo gulo	1

## FIGURES

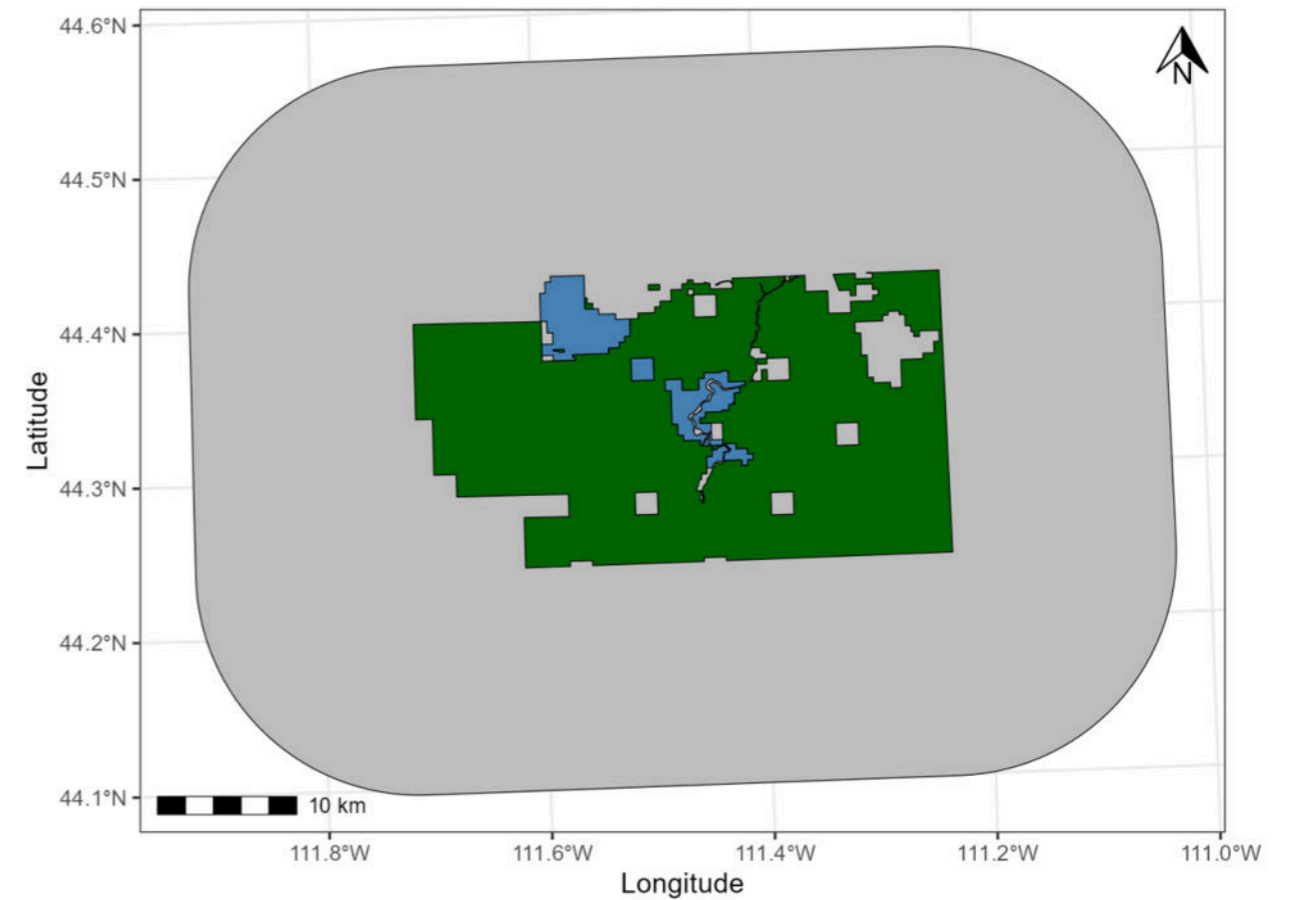


Figure 4.1: Map of the study area. The blue polygons indicate Harriman State Park in Fremont County, Idaho. The green polygon indicates the portion of the Caribou-Targhee National Forest located within the study area. The gray polygon indicates a 10-mile buffer around the study area.



Photo Credit: Charlie Lansche

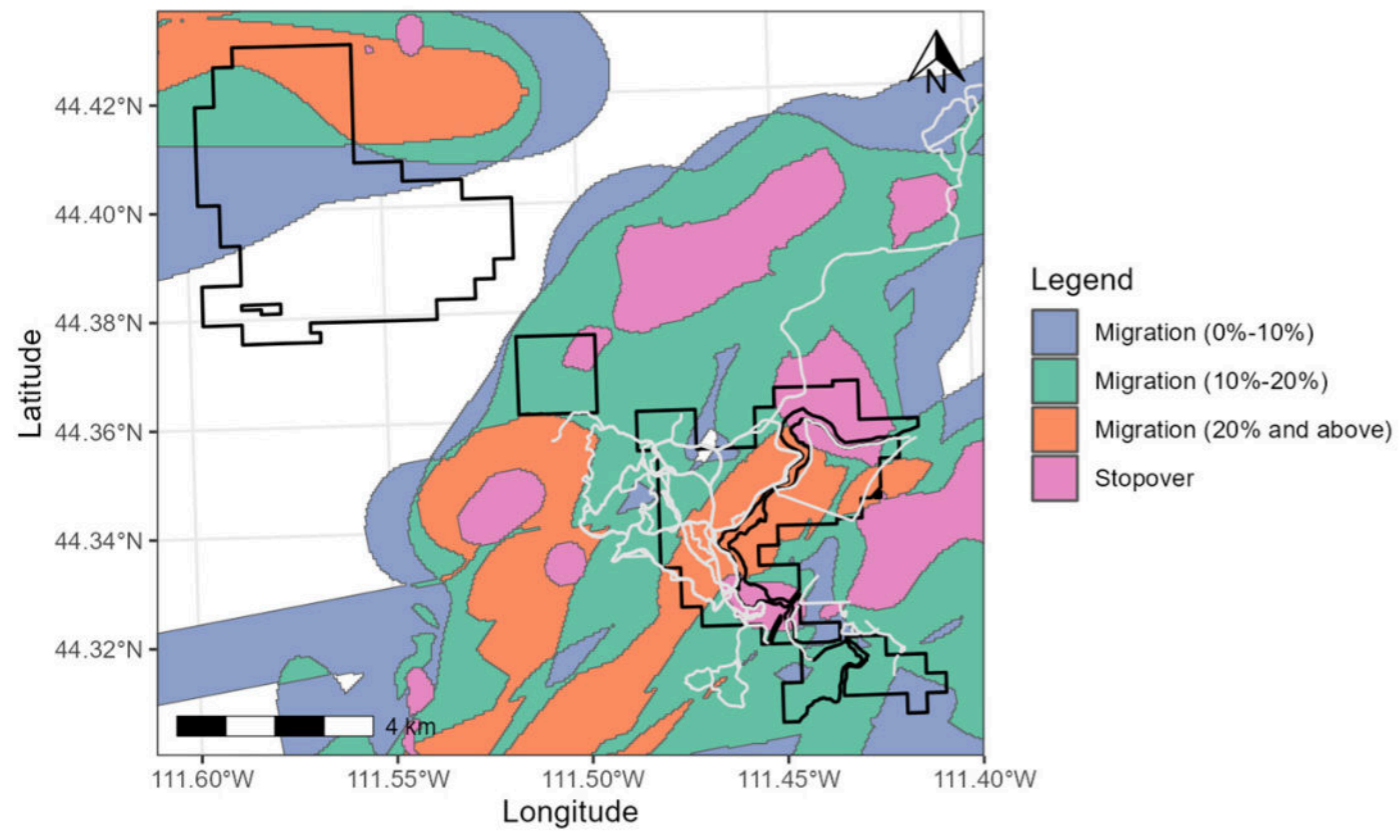


Figure 4.2: Ungulate migration corridors in and around Harriman State Park, Fremont County, Idaho. Corridors for migratory elk, moose, mule deer, and pronghorn are merged. Colors indicate intensity of use (0-10% of the population in blue, 10-20% in green, or 20% and above in orange). Stopover sites are shown in pink. Black polygons indicate the park boundaries. Gray lines indicate existing trails. Data source: Idaho Department of Fish and Game.



Photo Credit: Charlie Lansche

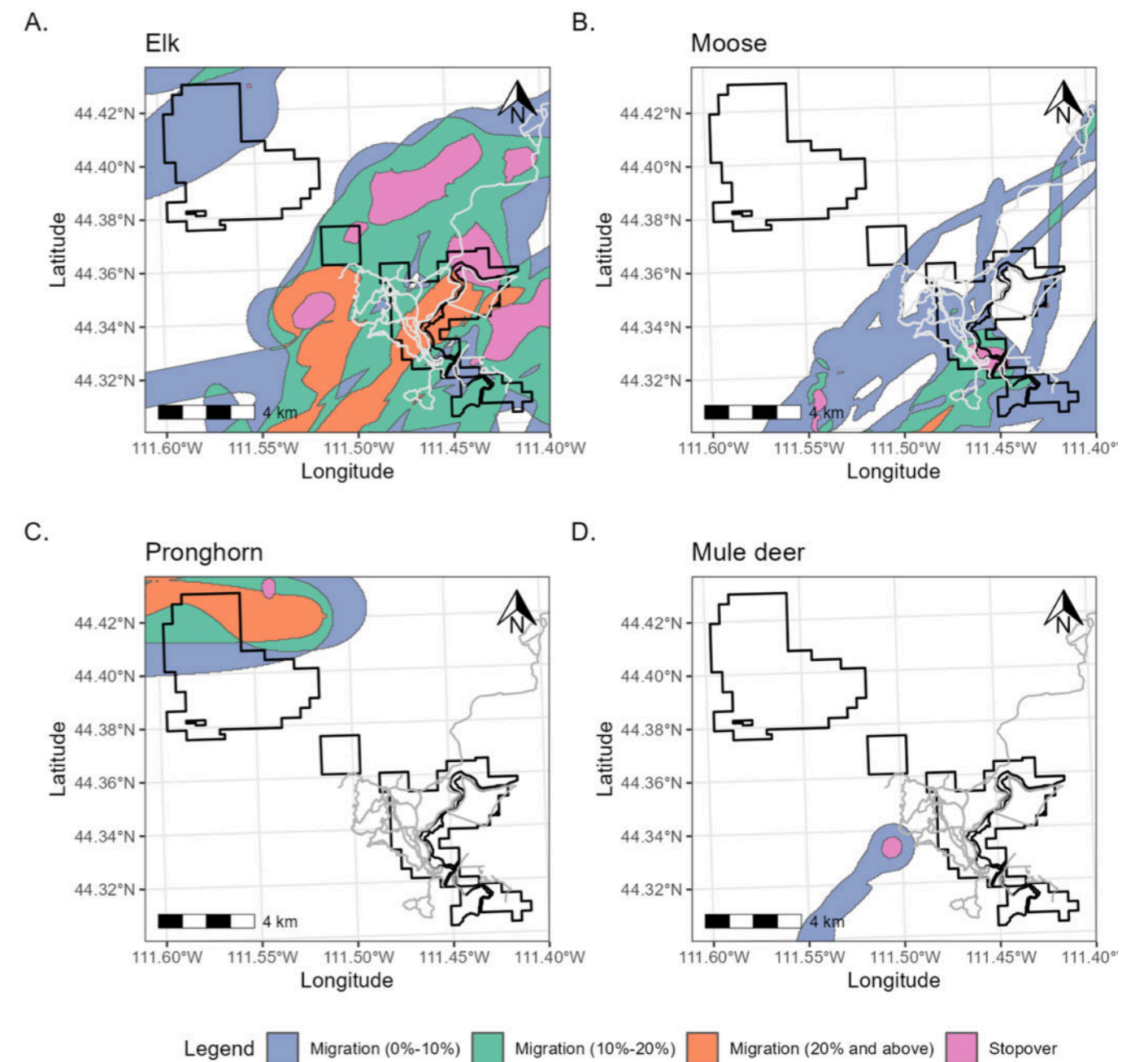


Figure 4.3: Ungulate migration corridors in and around Harriman State Park, Fremont County, Idaho, broken down by species. Colors indicate intensity of use (0-10% of the population in blue, 10-20% in green, or 20% and above in orange). Stopover sites are shown in pink. Black polygons indicate the park boundaries. Gray lines indicate existing trails. Data source: Idaho Department of Fish and Game. A. Elk migration. B. Moose migration. C. Pronghorn migration. D. Mule deer migration.

# 5 HARRIMAN STATE PARK'S TRAIL USERS

## TAKEAWAYS

### Free winter access day event data

- Winter visitors value the Harriman Trail System's scenic landscapes, wildlife, tranquility, consistent grooming, and creating a welcoming experience for both beginners and experienced users.
- Respondents emphasized frequent, reliable grooming and clear communication of grooming updates as the most important actions to preserve current trail quality.
- Suggestions from winter visitors included adding mileage markers, designating snowshoe trails, grooming for fat biking, and expanding loop options, though some respondents felt no changes were needed.
- Increased promotion and trail etiquette education could further strengthen the user experience and attract more winter users.

## TAKEAWAYS

### Experience survey data

- 91% support Harriman State Park's seasonal trail closures to protect wildlife.
- Over 90% of all respondents agreed that the Harriman Trail System provides a special connection to the area and is well-suited for their abilities.
- Over 85% of all respondents agreed that the Harriman Trail System provides high-quality experiences for visitors, possesses useful signage, and has clean and well-maintained facilities (e.g., restrooms, picnic shelters, visitor center).
- Over 80% of all respondents stated that maintaining existing trails was a high or highest management priority, highlighting the importance of prioritized investments in upkeep, erosion control, and trail restoration. Respondents provided specific locations where they thought trail improvements and maintenance tasks were most needed.
- Less than half (43%) of respondents prioritized developing new trails for the Harriman Trail System. Mountain bikers and fat tire bikers were

more likely to prioritize developing new trails compared to other users. A lack of mountain bike and fat tire bike-specific trails exists at Harriman, according to these users.

- Only 15% of respondents listed developing new trailside amenities and expanding gear rental opportunities as high priorities.
- Enhancing the visibility, clarity, and consistency of communicating trail condition updates, grooming reports, maps, and policies is desired by visitors.
- A strong majority of respondents agree that Harriman State Park's per-vehicle entry fees, for both summer (82.4%) and winter (79.6%), are reasonable.
- One in five Experience Survey respondents (21.5%) reported experiencing conflict with other users during their visits to the Harriman Trail System, with most conflicts occurring between mountain bikers and horseback riders.
- A desire for new improvements, trails, and amenities exists among respondents; however, they also voiced the importance of preserving the Harriman Trail System's natural, quiet, and undeveloped character. The 'magic' of the Harriman Trail System comes from its natural setting and unique opportunities to witness a plethora of wildlife. Harriman State Park's management can aim to strike a balance between enhancing experiences and access through new developments while minimizing ecological and environmental impacts.
- Newer users who have visited the park for five years or less (16.2%) expressed different preferences, priorities, and information needs compared to more experienced visitors (83.8%). Outreach efforts should consider varying park familiarity levels when providing information and resources to its users.
- Overall, given the responses received from the convenience sample survey, Harriman State Park's managers are encouraged to continually engage their user bases and the surrounding community throughout the implementation of the Trails Management Plan.

## TAKEAWAYS

### Intercept Survey Data

Data captured through the intercept survey, coupled with the data captured through the online survey, provides a well-rounded understanding of the perspectives of both 'typical' visitors to the Harriman Trail System and 'invested users' who visit more frequently and sought out the opportunity to provide feedback online about the trail system and its management.

- The average visitor age was 53 years, with the majority being white, college-educated, and higher-income earners. Nearly 70% were repeat visitors, having visited the park for an average of 17 years.
- Primary activities performed by visitors during the June - September sampling period included hiking/walking (21.8%), fishing/angling (20.2%), attending programs and events (10.7%), horseback riding (9.9%), wildlife observation (9.9%), and mountain/gravel biking (8.2%). Most visitors (76.8%) reported engaging in two or more activities over their years visiting Harriman.
- Surveyed users reported a high degree of place attachment to Harriman State Park. 78.6% agreed that Harriman is "very special" to them, 70.8% agreed that they are "very attached" to Harriman, and 70.4% agreed that they "identify strongly" with Harriman.
- Among potential trail-based amenity investments, directional trail signage and mileage markers ranked highest, and visitor kiosks ranked lowest among respondents. Respondents expressed a need to place amenities at three primary locations: 1) the Ranchview parking lot and Railroad Ranch Area, 2) the Thurmon Creek Bridge, and 3) the Ranch Bridge.
- 41% of respondents reported experiencing some form of negative experience during recent or past visits to the Harriman Trail System. Most common conflicts included other visitors with dogs (23.1%), off-trail use (16.5%), and noisy behavior (15.2%). However, respondents reported the likelihood of conflicts was low, with all conflict types occurring on 8% or less.
- When conflicts occurred, they were often within the same activity group (e.g., hikers encountering other hikers), not necessarily between different uses (e.g., anglers vs. wildlife observers), suggesting that behavioral management and etiquette education may be more effective than activity zoning. This finding differs from the online survey, where inter-group conflict was more likely to be reported (i.e., bikers vs. equestrians). This

may be, in part, due to the more diverse activity portfolio in the intercept survey, where respondents engaged in multiple activities at Harriman, as opposed to just one that placed them in conflict with other types of users.

- To address conflicts, the most preferred management strategy was "no action," followed by separation of activities, then education. Limiting access was highly unpopular, and directionally redesigning trails was unpopular. These results indicate that a light-touch, communication-based approach to conflict management is preferred by visitors. Examples include 'nudging' visitors to activity-optimized routes to disperse users and placing emphasis on informing, not policing, user behavior through signage and visitor/staff correspondence. Additional route development could also disperse users. This can be achieved through formalizing existing networks, rather than breaking ground on entirely new trails.



Photo Credit: Brett Rannow



## WHAT'S ONE THING PARK MANAGEMENT CAN DO TO KEEP THEM THAT WAY?

To maintain the quality of the Harriman Trail System's winter trails, respondents emphasized the importance of consistent and frequent grooming to ensure well-maintained trails. Many also suggest improving communication by sharing grooming updates with visitors. Maintaining current operations and keeping the trails non-motorized are also priorities. Additionally, some recommend better trail etiquette education, such as encouraging respectful behavior and proper trail use. Visitors shared expanding longer loops and increasing advertising efforts could further enhance the winter trail experience.

## HOW COULD HARRIMAN STATE PARK'S WINTER TRAILS BE EVEN BETTER?

To improve the Harriman Trail System's winter trails, respondents suggested more frequent and earlier grooming, including night grooming. Enhancing communication about the grooming schedule and adding mileage markers to indicate distances from the visitor center were stated as actions that would improve the user experience. Some visitors also proposed designated snowshoe trails and grooming for fat biking to expand recreational opportunities and reduce conflict. Additionally, increasing advertising and promotion could attract more visitors, if desired. Several respondents also feel that no changes are needed, indicating high satisfaction with the current trail conditions.

# HARRIMAN TRAILS EXPERIENCE SURVEY DATA FINDINGS

## BACKGROUND

The Harriman Trails Experience Survey (also referred to as the "online survey") was conducted to better understand how visitors currently use and experience the Harriman Trail System and perceive their aspirations for its future. The survey sought to capture a wide range of voices and perspectives from the trail system's diverse user base to inform long-term planning and management strategies that reflect the needs and values of its visitors. Data captured from the survey is used to align future trail investments and park management practices with the community's priorities. Results from the online Experience Survey informed the project team's development of the on-site intercept survey conducted in 2025 to capture more granular data related to trail use and management priorities among visitors. Data and perspectives from both surveys were analyzed separately and in tandem to inform the

recommendations outlined in the Harriman Trail System Management Plan.

## METHODOLOGY

The Harriman Trails Experience Survey was developed in February 2025 by CRO Planning & Design's team of recreation planners, specialists, and researchers. The survey underwent multiple iterations of review with the project's core team composed of representatives from the Idaho Department of Parks and Recreation, Idaho Department of Fish & Game, the US Forest Service, and Friends of Harriman State Park to ensure usability and relevance.

The survey was launched in February 2025 and distributed via direct links and QR codes. Electronic and physical flyers and promotional materials were developed to support survey distribution. A registration sheet was distributed at the Banff Centre Mountain Film Festival at the Colonial Theater in Idaho Falls in January 2025, allowing attendees to sign up and be sent a link upon the survey's release. Upon the survey's launch, survey links and distribution materials were sent to 84 email contacts, which included registrants from the Banff Centre Mountain Film Festival, local Fremont County businesses, municipal offices, organized recreation user groups, homeowners' associations, and other civic organizations. Email contacts were assessed by the project's core team to confirm the representativeness of the numerous parties with vested interests in Harriman. The survey was also highlighted in an article published in the Rexburg Standard Journal on February 3rd, 2025, which included a registration link to the survey. The survey was promoted in February 2025 on Harriman State Park's Facebook page, which was then shared and distributed by the page's followers. Sampling occurred in February and March 2025, with the survey closing during the first week of April.

## RESULTS – ALL RESPONDENTS

### WHO TOOK THE HARRIMAN TRAILS EXPERIENCE SURVEY?

A total of 386 people responded online to the Harriman Park Experience Survey, with 266 respondents completing the survey in its entirety and 120 partial responses. The largest percentage of respondents (33.2%) indicated that they learned about the survey directly through the Harriman State Park and Idaho Parks and Recreation Department, while other notable sources included the Snake River Mountain Bike Club (19.4%), Friends of Harriman State Park (15.7%), and Backcountry Horsemen of Idaho (13.5%).

## DEMOGRAPHICS

Most respondents (88.3%) were white, with an additional 1.9% of respondents identifying as Hispanic or Latino, 1.5% of respondents identifying as American Indian or Alaska Native, 1.1% identifying as Asian, 0.4% identifying as Native Hawaiian or Pacific Islander, and 0.4% identifying as Middle Eastern or North African.

Regarding income brackets, 38.1% of respondents possessed a household income of \$75,000 or below. \$75,000 is approximately the median household income for the State of Idaho. Nearly half (45%) possessed a household income of \$75,000 or above. Nearly 17% of respondents preferred not to answer the question.

Over half of respondents have a degree from higher education, with 36.3% reporting a bachelor's degree, 24.3% reporting a master's degree, and 11.2% reporting a doctorate or professional degree. An additional 12.4% of respondents reported some college, but no degree.

## VISITATION TO THE HARRIMAN TRAIL SYSTEM

Most respondents (97.7%) have visited the Harriman Trail System, showing that the audience is aware of and engaged with the trail network. Of the few who had not visited the Harriman Trail System, one respondent was unaware of the Harriman State Park's

existence, three respondents lived too far from Harriman State Park, and two respondents felt that the trail system did not offer their desired experiences, which included close-to-home fat tire biking and better-marked horse trails. On average, respondents have been visiting the Harriman Trail System for 19 years. Those who had previously visited the trail system split their time evenly across the seasons, with 86.0% visiting during the summer months of June-August, 78.1% visiting the park during the fall months of September-November, 67.1% visiting during the winter months of December-February, and 49.5% visiting during the spring months of March-May.

Most respondents who visited the Harriman Trail System in the wintertime did so without much regularity, with 34.3% of respondents noting they visited "A few times per winter" and 20.9% indicating they visited just "About once per winter." Eleven percent of respondents visited the park weekly or more in the wintertime.

In the spring, summer, and fall months, visitation frequency increased, with 21.6% of respondents noting they visit "More than once per week" or "About once per week." During the spring, summer, and fall months, 25.4% visited "A few times per month," 17.6% visited "About once per month," 24.7% visited "A few times per year," and 10.8% noted that they only visited "About once per year" (Figure 5.2).

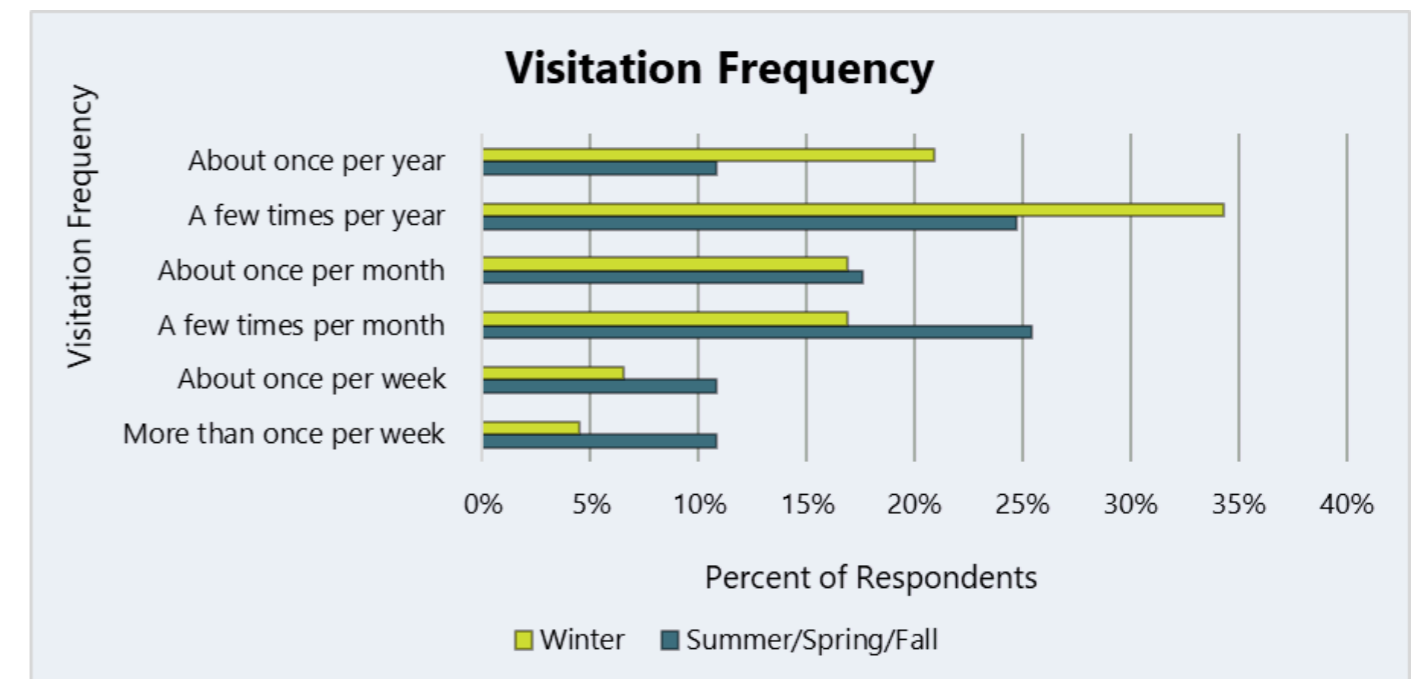


Figure 5.2: Visitation frequency to the Harriman Trail System by Season

Over three-quarters of respondents reported visiting the Harriman Trail System with friends (76.7%) and family (79.3%), while only 9.0% indicated that they visit the trail system alone. Of those visiting with friends

and family, 40.50% noted that they visit with their own children or others, while 59.5% do not bring children (Figure 5.3).

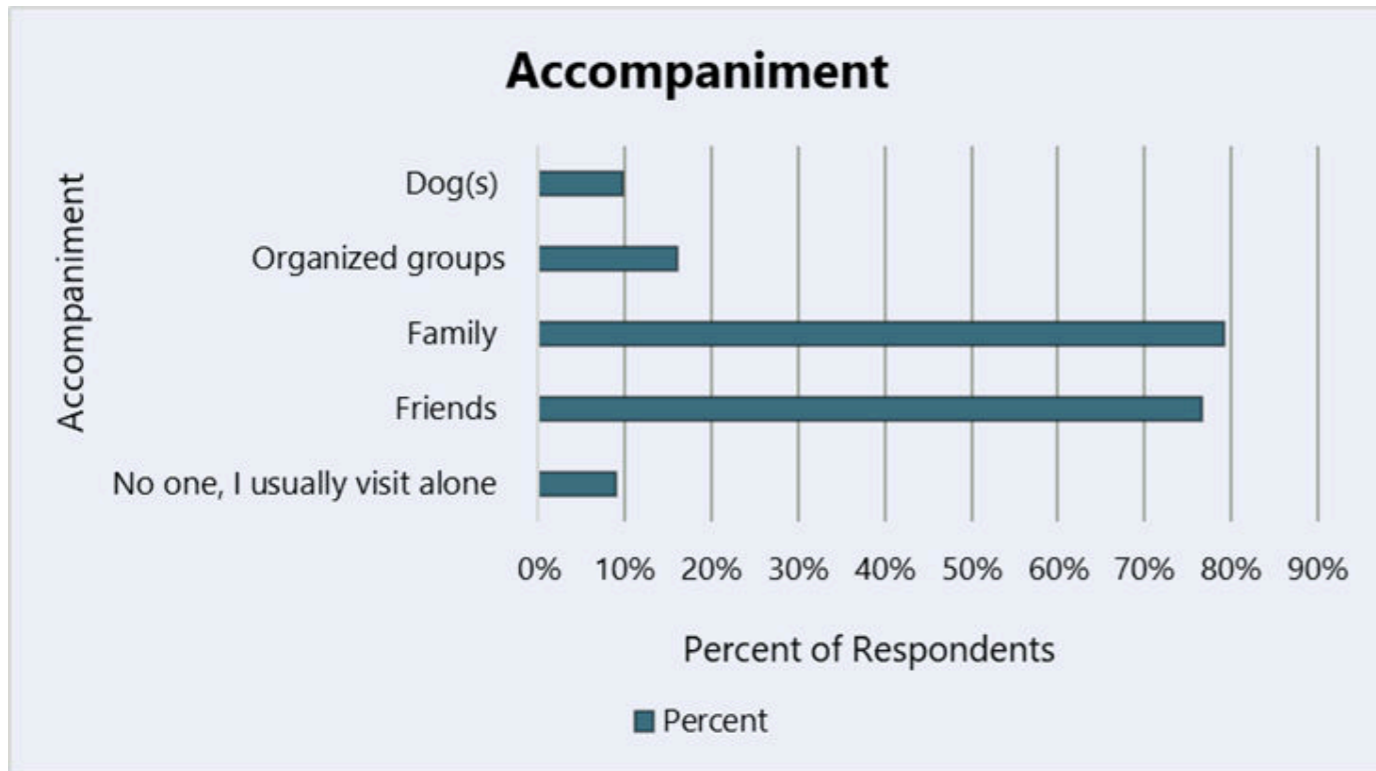


Figure 5.3: Accompaniment Types Among Respondents

Nearly 10% of respondents said they bring their dog on visits to the Harriman Trail System. Most visits with dogs occur during winter months (79.3%), with fewer people taking their dogs out in spring, summer, and/or fall (34.5%). Two points are important here: 1) this seasonal discrepancy reflects Harriman State Park's rules around dogs. Dogs are not allowed on or off-leash when using the Harriman Trail System in the summer, but are allowed on a designated trail in the winter; 2) the 1/3 of survey respondents who bring their dogs to the park in the spring through fall months highlight a potential gap in education around this policy or compliance with the existing policy.

#### ACTIVITY PARTICIPATION

Visitors enjoy a variety of activities on the Harriman Trail System in the warmer seasons (spring/summer/fall). Most respondents visited the Harriman Trail System to hike or walk (57.1%) and mountain or gravel bike (56.1%). Another 48.2% participated in wildlife observation, 30.7% visited to engage in horseback riding, 20% attended programs and events hosted at Harriman State Park, and 18.6% fished. A breakdown of activities and participation is in Table 5.1 below.

Table 5.1: Spring, Summer, and Fall Activity Participation Among Survey Respondents

SPRING/SUMMER/FALL ACTIVITY	PERCENT
Hiking/Walking	57.1%
Mountain/gravel biking	56.1%
Wildlife observation	48.2%
Horseback riding	30.70%
Photography	21.1%
Attend programs & events hosted at Harriman State Park	20%
Fishing/angling	18.6%
Overnight lodging (e.g. cabins, yurts)	17.5%
Trail running/jogging	11.4%
Outdoor study/interpretation	10%
Other	3.6%

During the winter months, most respondents use the Harriman Trail System for Nordic or cross-country skiing (80.2%), followed by snowshoeing (38.1%), wildlife observation (24.3%), and winter or fat tire

biking (24.3%). Additional activities included backcountry skiing (19.3%), photography (19.3%), and attending winter programs and events (15.3%) (Table 5.2).

Table 5.2: Winter Activities Among Survey Respondents

WINTER ACTIVITY	PERCENT
Nordic/Cross-country skiing	80.20%
Snowshoeing	38.10%
Wildlife observation	32.20%
Winter fat-tire biking	24.30%
Backcountry skiing	19.30%
Photography	19.30%
Attend winter programs & events hosted at Harriman State Park	15.30%
Winter hiking/walking	10.90%
Other	4.00%

#### TRAIL PERCEPTIONS

When assessing statements about the Harriman Trail System, respondents ranked options from "completely disagree" to "completely agree." Nearly all respondents either completely agreed or somewhat agreed with the statements "the Harriman Trail System provide a special connection to this place" (94.6%) and "the Harriman Trail System are well-suited for my level of experience/skill" (92.2%), highlighting how the Harriman Trail System provides visitors with a special connection to the unique landscape through comfortable trail experiences. Respondents also agreed that the Harriman Trail System "provides high-quality experiences for visitors" (89.3%) and "has useful signage that helps me find my way" (88.2%).

Eighty-one percent of respondents also agreed that the Harriman Trail System has enough amenities (e.g., benches, kiosks, scenic viewpoints, interpretive signage), highlighting the Harriman Trail System's success in providing a balance of both developed and primitive recreation opportunities.

Nearly 80% of respondents felt that the Harriman Trail System's spring/summer/fall trails are well-maintained, with only 10% disagreeing. Less agreement emerges for winter trails, with 66.7% agreeing that the Harriman Trail System's winter trails are well-maintained and over 20% disagreeing. Around two-thirds of respondents (63.6%) agreed that the Harriman Trail System is accessible to people of all abilities, while 26.1% were unsure (Table 5.3).

Table 5.3: Perceptions of the Harriman Trail System

STATEMENT	% SOMEWHAT AGREE OR COMPLETELY AGREE
Harriman's trails provide a special connection to this place	94.60%
Harriman's trails are well-suited for my level of experience/skill.	92.20%
Harriman's trails provide high-quality experiences for visitors	89.30%
Harriman's trails have useful signage that helps me find my way.	88.20%
Harriman's trails have enough amenities (e.g., benches, kiosks, scenic viewpoints, interpretive signage).	81.10%
Harriman's summer/spring/fall trails are well-maintained.	79.40%
Harriman's winter trails are well-maintained.	66.70%
Harriman's trails are accessible to people of all abilities.	63.60%

## TRAIL EXPERIENCES

When assessing statements about experiences at the Harriman Trail System, respondents ranked options from “completely disagree” to “completely agree.” Nearly all respondents (91%) agreed that they supported seasonal trail closures to protect wildlife, highlighting the value that visitors place on Harriman State Park’s unique ecological setting and understanding of the area’s importance to providing secure wildlife habitat. Most respondents (87.4%) find the facilities (e.g., restrooms, rental facilities, visitor center, kiosks) on the Harriman Trail System clean and

well-maintained, and 86% agreed that they can always find parking when visiting the Harriman Trail System. Both results emphasize park management’s success in providing two critical components that enhance recreational experiences – easy access and clean facilities. Around 16% of respondents agreed that they have had negative experiences related to overcrowding on the Harriman Trail System, and only 1.5% of respondents have had negative experiences with wildlife while using the Harriman Trail System, mostly spurred by moose encounters (Table 5.4).

**Table 5.4: Experience Statements Related to the Harriman Trail System**

STATEMENT	% SOMEWHAT AGREE OR COMPLETELY AGREE
I support Harriman State Park's seasonal trail closures to protect wildlife.	91.00%
I find the facilities (e.g., restrooms, rental facilities, visitor center, kiosks) on Harriman’s trails clean and well-maintained.	87.40%
I can always find parking when visiting Harriman’s trails.	86.10%
I have had a negative experience when Harriman’s trails were overcrowded.	16.40%
I have had a negative experience(s) with wildlife while using Harriman’s trails	1.50%

## TRAIL INFORMATION

When respondents seek information on the Harriman Trail Network’s trail conditions, over two-thirds of respondents (69.10%) prefer to find trail condition information online from the Harriman State Park

website, 47.7% prefer to find information online from social media sites such as Facebook and Instagram, 33.2% prefer to find information at the visitor center or trail kiosks, and 31.5% prefer to find this information through word of mouth (Table 5.5).

**Table 5.5: Preferred Sources for Information on the Harriman Trail System’s Conditions**

TRAIL CONDITIONS RESOURCE	PERCENT
Online from the Harriman State Park website	69.10%
Online from social media (Facebook, Instagram, X, etc.)	47.70%
Visitor Center/Kiosk	33.20%
Word of mouth	31.50%
Online from a trails database (Trail finder, AllTrails, Trailforks, etc.)	19.10%
Other (please describe):	4.40%
Newspapers, newsletters, and magazines	4.00%
Online from another source (tourism websites, blogs, etc.)	2.70%

When assessing statements about obtaining information about the Harriman Trail System, respondents ranked options from “completely disagree” to “completely agree.” A large majority of respondents agreed that it is easy to find and understand information about the Harriman Trail System and amenities (81.4%), it is easy to find information about events and programs (76.5%), and

that it is easy to find information about policies about the Harriman Trail System (75.7%). Over 60% agreed that, if they cannot find information about the Harriman Trail System themselves, it is easy to contact a staff member to ask a question. There was less agreement about easily finding information about the conditions of the Harriman Trail System (e.g., trail closures, grooming reports) (56.3%) (Table 5.6).

**Table 5.6: Information Statements related to the Harriman Trail System**

STATEMENT	% SOMEWHAT AGREE OR COMPLETELY AGREE
It is easy to find and understand information about accessing Harriman’s trails and amenities.	81.40%
It is easy to find information about events and programs taking place at Harriman State Park.	76.50%
It is easy to find information about policies (e.g., fire restrictions, fishing regulations, dog policies, fee rates) pertaining to using Harriman’s trails.	75.70%
If I cannot find information about Harriman’s trails by myself, it is easy to contact a staff member to ask a question.	62.60%
It is easy to find information about the conditions of Harriman’s trails (e.g., trail closures, grooming reports).	56.30%

## PARK USAGE FEES

When assessing statements about fees at Harriman State Park, respondents ranked options from “completely disagree” to “completely agree.” Nearly 90% of respondents agreed with the statement “I understand how Harriman State Park’s entry fees help support the park system,” emphasizing how park management has successfully communicated the value of entry fees and their importance. Most respondents (82.4%) agree that Harriman State Park’s

vehicle entry fees are reasonable, and 79.6% agreed that Harriman’s special fees for winter trail use are reasonable. Three-quarters of respondents agreed that it is easy to pay entry fees to access the Harriman Trail System. Around half of the respondents (53.4%) stated they would pay more to access Harriman State Park if it improved trail conditions, and 47.5% agreed that they would pay a fee to access Harriman State Park via foot or bicycle if it led to improved trails and river access features (Table 5.7).

**Table 5.7: Fee Statements Related to the Harriman Trail System**

STATEMENT	% SOMEWHAT AGREE OR COMPLETELY AGREE
I understand how Harriman’s entry fees help support the park and trail system.	89.00%
Harriman’s per vehicle entry fees are reasonable.	82.40%
Harriman’s special fees for winter trail use are reasonable.	79.60%
It is easy to pay entry fees to access Harriman State Park’s trail system.	75.50%
I would pay more to access Harriman State Park if it improved the conditions of the trails.	53.40%
I would pay a fee to access Harriman State Park via foot or bicycle if it improved the condition of the trails and river access features.	47.50%

## USER CONFLICTS

One-fifth (21.5%) of respondents either somewhat agreed or completely agreed that they have had a negative experience with other visitors engaging in a different trail activity than they were (e.g., biker-horseback rider conflict) while using the Harriman Trail System; inversely, only 4.7% have experienced conflict with visitors performing the same activities as them (e.g., hiker-hiker conflict). When asked about negative interactions with other user types while recreating on the Harriman Trail System, two-thirds of respondents

who experienced conflicts in the past (67.8%) indicated a conflict between bikers and horseback riders. An additional 13.6% noted conflict between hikers and bikers, 27.1% indicated conflict between hikers and horseback riders, and 15.3% of respondents experienced conflict between horseback riders and joggers. During the winter months, 22% of respondents indicated conflict between cross-country skiing and fat-tire biking. These conflict responses illuminate a consistent theme of biking and horseback riding at the center of user conflict on trails (Table 5.8).

**Table 5.8: Conflict Types Among Visitors who have Experienced User Conflicts on the Harriman Trail System**

CONFLICT TYPE	% AMONG VISITORS WHO HAVE EXPERIENCED USER CONFLICTS
Biker/Horseback rider conflict	67.80%
Hiker/Horseback rider conflict	27.10%
Cross-country skier/fat tire biker conflict	22.00%
Horseback rider/Jogger conflict	15.30%
Hiker/Biker conflict	13.60%
Cross-country skier/snowshoer conflict	11.90%
Cross-country skier/winter hiker conflict	5.10%
Biker/Jogger conflict	3.40%
Backcountry skier/fat tire biker conflict	1.70%
Fat tire biker/snowshoer conflict	1.70%

**TRAIL DEVELOPMENT PRIORITIES**

When assessing development priorities for the Harriman Trail System, respondents ranked options from “Very Low Priority” to “Very High Priority.” The most evident priority was to “maintain existing trails,” which was a high or very high priority among 81.5% of respondents. The second highest priority was to “develop new trails,” which was a high or very high priority for 43% of respondents. These differences highlight a clear message: Harriman State Park’s visitors strongly prefer maintaining the park’s existing trail network over developing new ones.

Respondents had less uniform agreement among other trail priority statements. Around one-third (36.9%) of respondents prioritized providing more online information about trails (e.g., location, distance, difficulty, elevation gain), while 24.7% considered it a low priority. Similarly, in a near-even split, 24.9% of respondents stated that enhancing trail accessibility to provide opportunities for people with disabilities was a high priority, and 23.4% stated it was a low priority. Only 15.9% of respondents prioritized the development of new trailside amenities, and 15.1% prioritized the expansion of gear rental opportunities (e.g., skis, snowshoes) (Table 5.9).

**Table 5.9: Development Priorities for the Harriman Trail System**

STATEMENT	% HIGH OR VERY HIGH PRIORITY
Maintaining existing trails	81.50%
Developing new trails	43.00%
Providing more online information about trails (e.g., location, distance, difficulty, elevation gain)	36.90%
Enhancing trail accessibility to provide opportunities for people with disabilities	24.90%
Developing new trailside amenities (e.g., benches, kiosks, scenic viewpoints, interactive signage)	15.90%
Expansion of gear rental opportunities (e.g., skis, snowshoes, etc.)	15.10%

**PRIORITIZED TRAILS TO DEVELOP**

Among the 43% of respondents who ranked developing new trails as a high or very high priority, single-track or mountain bike-specific trails were identified as the highest priority (58%), closely followed by groomed winter trails (50.9%). Respondents also expressed interest in multi-use unpaved or soft surface trails (34.8%), hiking-specific trails (25.9%), and

horseback riding-specific trails (25%). Beyond these, 14.7% of respondents indicated that they believed additional trail types needed development at Harriman. Suggestions included stroller-friendly routes, additional dog-friendly winter trails, groomed winter trails specifically for fat biking, and backpacking routes with multi-day campsites (Table 5.10).

**Table 5.10: Desired Trails to Develop Among Respondents Who Prioritized the Development of New Trails**

TYPE OF TRAIL	PERCENT
Single-track/mountain bike-specific trails	58.00%
Groomed winter trails	50.90%
Multi-use unpaved or soft-surface paths (e.g., trails for hiking, biking, and horseback riding)	34.80%
Hiking-specific trails	25.90%
Horseback riding-specific trails	25.00%
Accessible/low-impact trails	17.90%
Access trails to the Henry's Fork River	15.20%
Educational/interpretive trails	13.40%
Ungroomed winter trails	9.80%

**TRAILSIDE AMENITIES**

While developing new trailside amenities was ranked as a low priority among most respondents, the 15.9% who did prioritize this management action generally wanted more directional signs and mileage markers (62.5%), as well as benches and seating areas (50%) (Table 5.11). Just under two-thirds of respondents

(27%) felt that there were amenity types they would like to prioritize beyond those reflected in Table 5.11. These additional suggestions for amenity improvements included hitching posts for horses, horse campsites, a western history interpretive center, a backcountry winter yurt rental, and water for horses in the parking area.

**Table 5.11: Desired Trailside Amenities Among Respondents Who Prioritized the Development of New Trailside Amenities**

AMENITY TYPE	PERCENT
Directional signs/mile markers	62.50%
Benches, seating, and/or designated rest points	50.00%
Scenic lookout points and/or observation decks	47.50%
Trash cans near trailheads	45.00%
Interpretive and educational signage	32.50%
Information kiosks	22.50%
Bicycle racks	12.50%

**DATA SEGMENT: NEW & EXPERIENCED USERS BACKGROUND**

This section examines survey results by user experience level, with new users defined as those with five or fewer years of experience visiting the Harriman Trail System (n = 47, 16.2%) and experienced users (n = 243, 83.8%) defined as those with six or more years of experience visiting the Harriman Trail System.

**PARK VISITATION**

The highest percentage of both new (63.4%) and experienced (71%) users found park and trail condition information online from the Harriman State Park website. About a third of new users (31.7%) found this information online from a trails database, such as AllTrails, as compared to only 16.2% of experienced users (Figure 5.4).

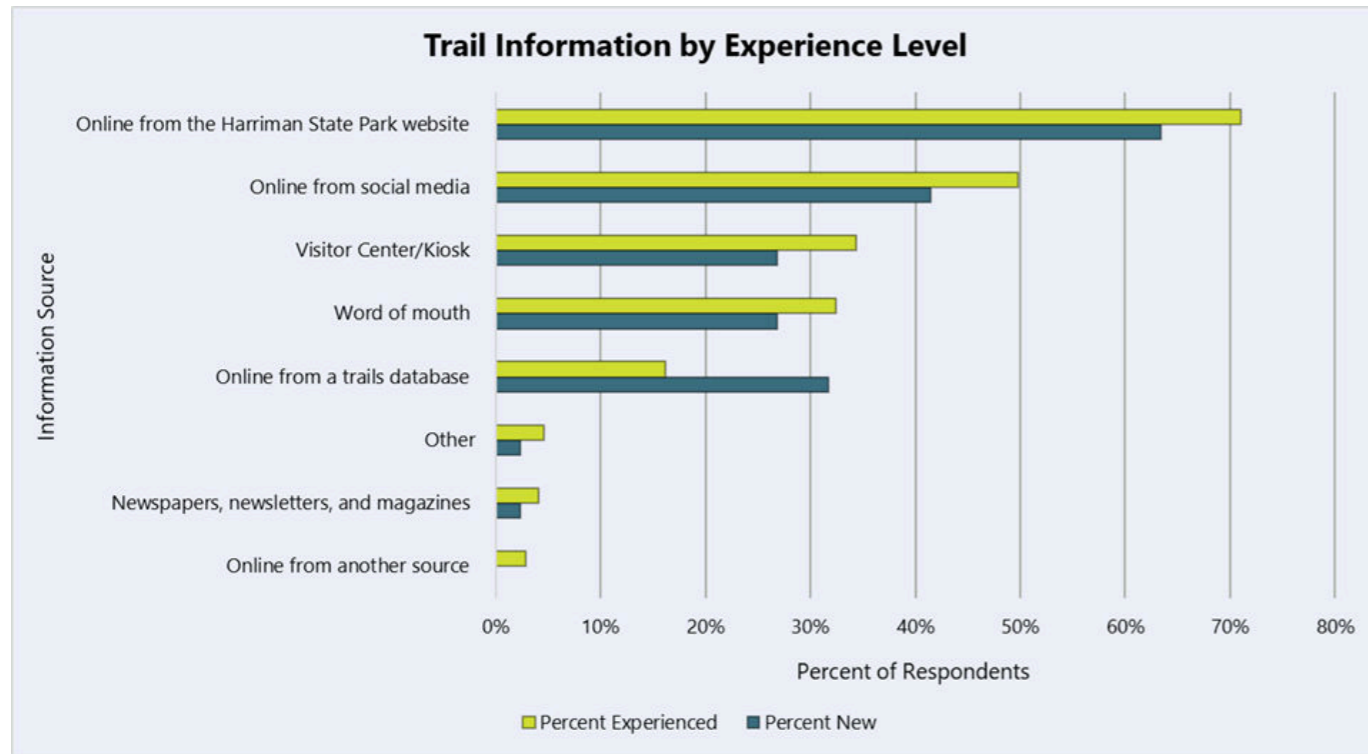


Figure 5.4: Trail Information Sources by Experience Level



Photo Credit: Charlie Lansche

The greatest difference in user experience occurred during the fall. Fifty-six percent of new users reported

visiting in the fall, while 82.3% of experienced users visited during this seasonal timeframe (Figure 5.5).

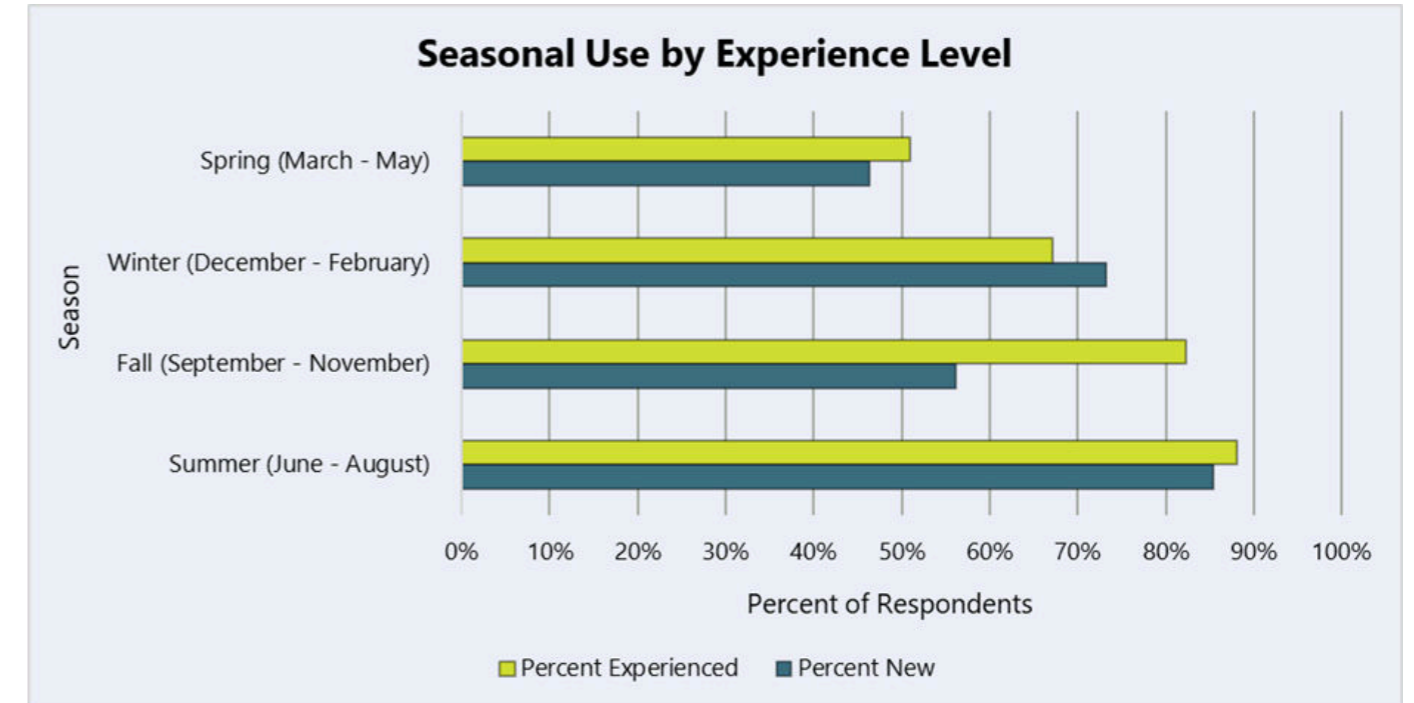


Figure 5.5: Seasonal Use by Experience Level

Both new and experienced users visit the Harriman Trail System in the winter, but a third of new users (33.3%) indicated that they visit at a frequency of "about once per winter" as compared to less than a quarter of experienced users for this same frequency (17.3%). A higher percentage of experienced users

(37%) than new users (23%) responded that they are more likely to visit "A few times per winter." "About once per week" reflected the lowest visit frequency for both groups, followed by "More than once per week" (Figure 5.6).

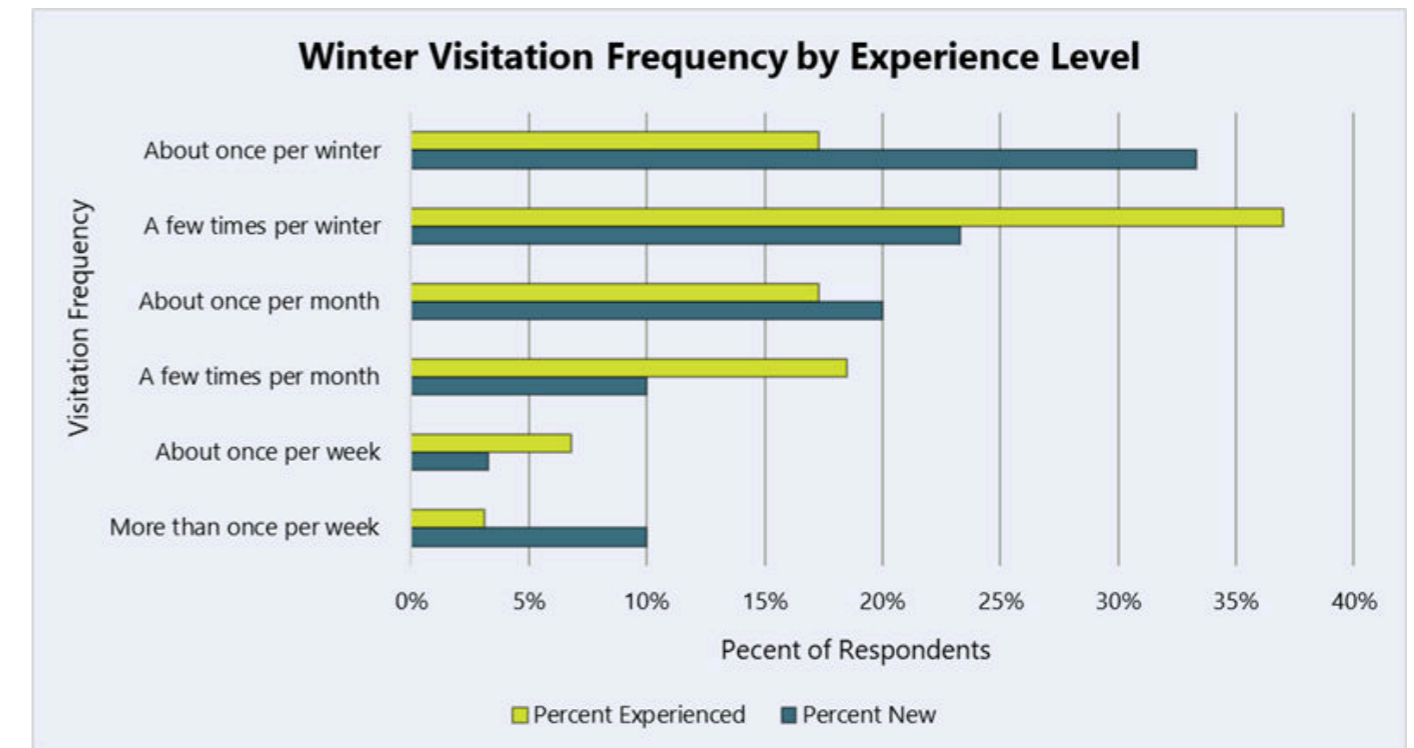


Figure 5.6: Winter Use Frequency by Experience Level

Both new and experienced users continue to visit the Harriman Trail System during the summer, spring, and/or fall. No new users reported visiting the trail system "About once per week," as compared to 13.3% of experienced users. At the same time, 33.3% of new

users reported visiting "A few times per year," as compared to 23.1% of experienced users. As for users who visited only "About once per year," 20.5% of new users selected this option as compared to only 7.6% of experienced users (Figure 5.7).

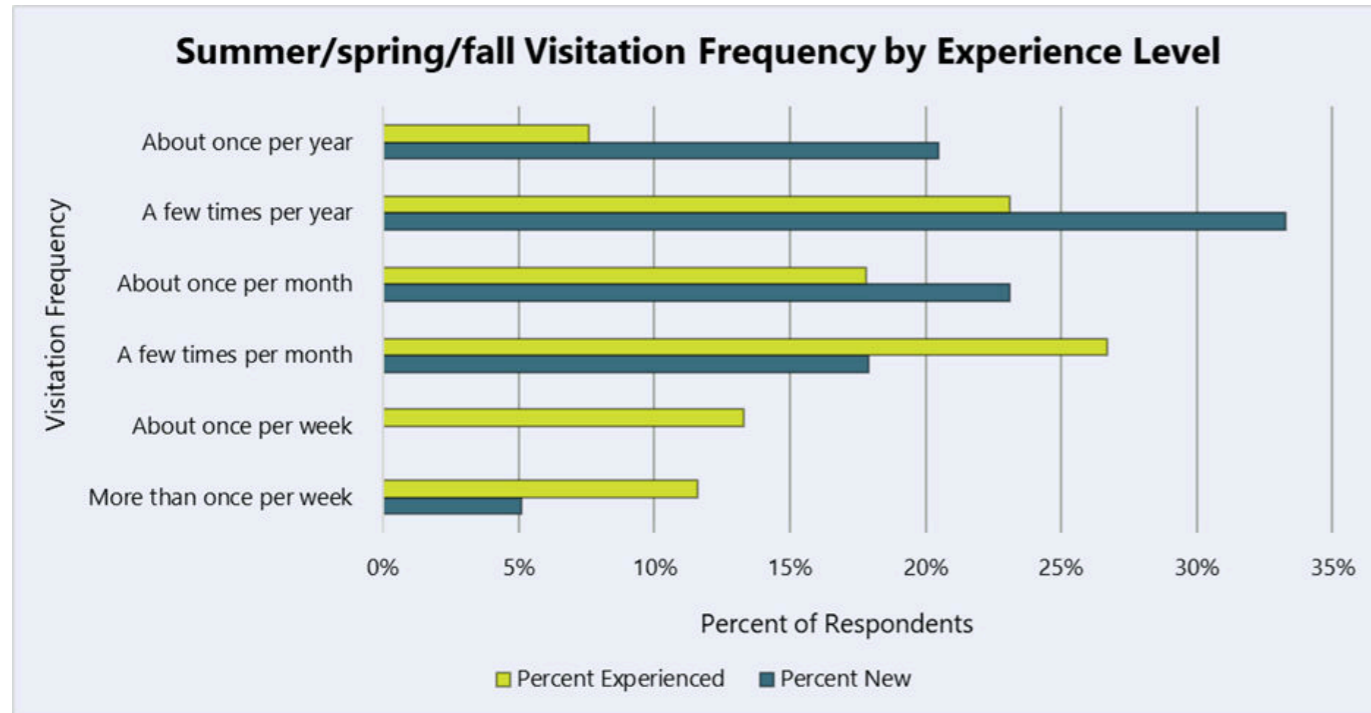


Figure 5.7: Spring, Summer, and/or Fall User Frequency by Experience Level

Respondents indicated whether they visit the Harriman Trail System alone, with friends, with family, with organized groups, and/or with dogs. Experienced users are four times more likely to visit alone than new users. Of users who visited with their dog(s), 75% of new users reported visiting with dogs in the summer as compared to only 26.1% of experienced users,

highlighting how new users are generally unaware of or non-compliant with Harriman State Park's dog policy in the summer. During the winter months, similar percentages of new (75%) and experienced (78.3%) users reported visiting with dogs. Harriman State Park offers a designated trail for dog walking in the winter (Figure 5.8).

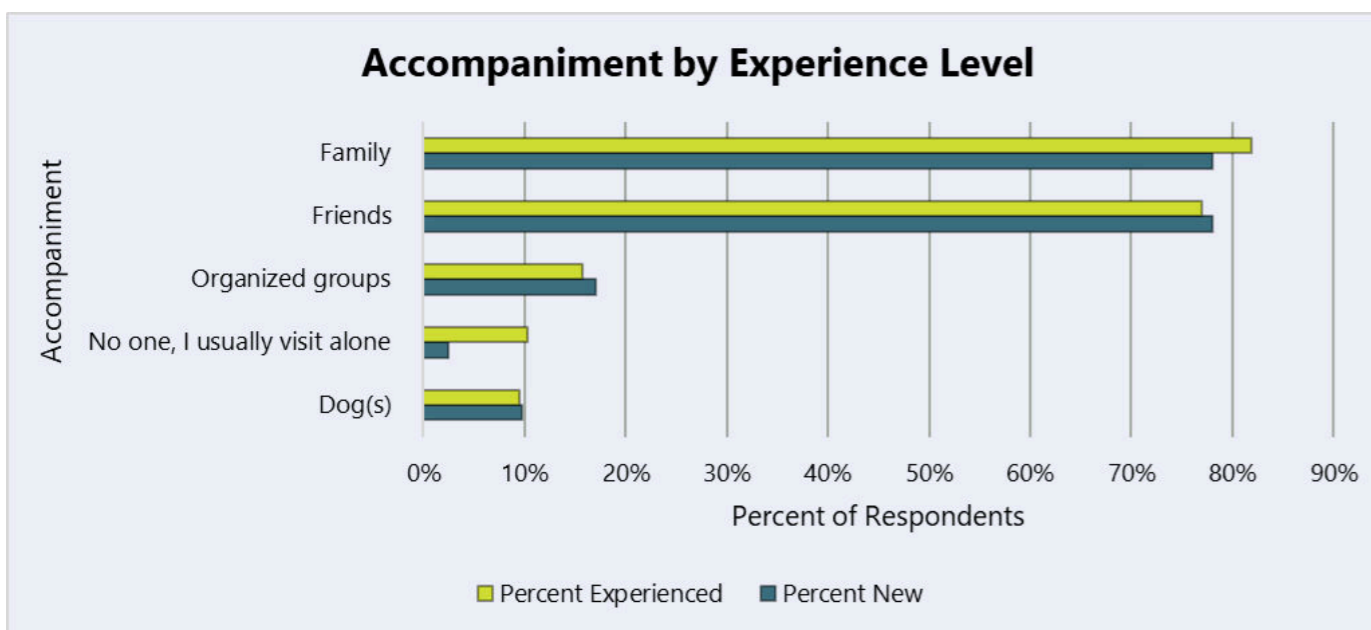


Figure 5.8: Accompaniment by Experience Level



Photo Credit: Charlie Lansche

### ACTIVITY PARTICIPATION

Both new and experienced users reported taking part in a range of winter activities on the Harriman Trail System. A greater percentage of experienced users (84%) took part in Nordic and cross-country skiing, as compared to new users (60%), although this activity reflected the highest percentage of users in both groups. A greater percentage of new users (50%) took

part in snowshoeing, as compared to experienced users (37.4%). Winter fat-tire biking also reflected a higher percentage of activity level amongst new users (33.3%), as compared to experienced users (23.3%). Wildlife observation, however, drew a greater percentage of experienced users (33.7%) than new users (20%) (Figure 5.9).

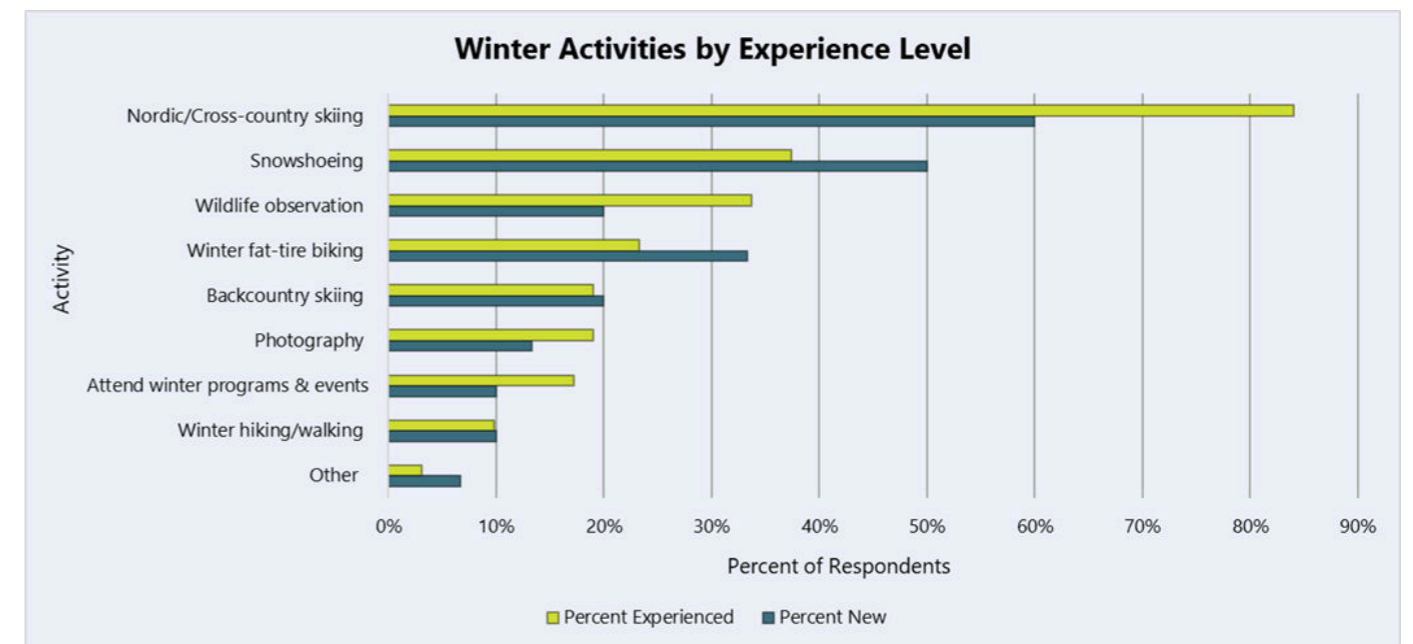


Figure 5.9: Winter Activity Participation by Experience Level

Similarly, in the spring, summer, and fall months, new and experienced users both took part in a wide range of activities. Activity levels were largely similar between these two user groups, except for attending programs

and events hosted at Harriman. Only 7.7% of new users reported attending these programs, as compared to 22.6% of experienced users (Figure 5.10).

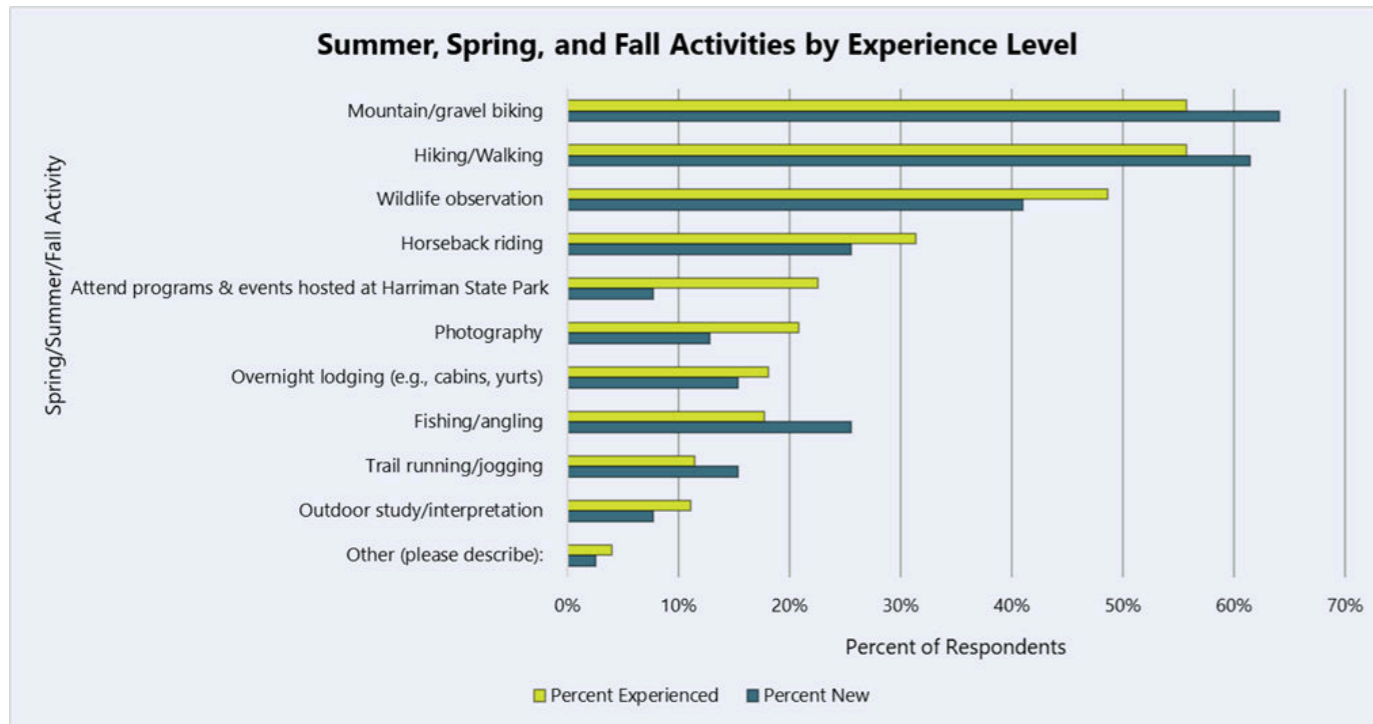


Figure 5.10: Spring/Summer/Fall Activity Participation by Experience Level

### TRAIL PERCEPTIONS & EXPERIENCES – STATEMENT RATING DIFFERENCES

Respondents rated a series of statements about the Harriman Trail System's signage, amenities, and fee structure on a scale from "completely disagree" to "completely agree." A consistently higher percentage of

experienced users offered ratings of "agree" and "completely agree" when compared with the responses of new users. Every statement reflects at least a 10% higher rating from experienced users than from new users (Table 5.12).

Table 5.12: Experience Statement Rating Differences by Experience Level

STATEMENT	% NEW (AGREE/ COMPLETELY AGREE)	% EXPERIENCED (AGREE/ COMPLETELY AGREE)
Harriman's trails provide high-quality experiences for visitors.	80.60%	90.80%
Harriman's trails have useful signage that helps me find my way.	77.80%	90.70%
I find the facilities (e.g., restrooms, rental facilities, visitor center, kiosks) on Harriman's trails clean and well-maintained.	72.30%	90.00%
I can always find parking when visiting Harriman's trails.	77.70%	88.70%
Harriman's per vehicle entry fees are reasonable.	67.60%	86.90%
It is easy to pay entry fees to access Harriman's trails.	63.90%	78.60%
If I cannot find information about Harriman's trails by myself, it is easy to contact a staff member to ask a question.	50.00%	64.20%
I would pay more to access Harriman State Park if it improved the conditions of the trails.	36.10%	56.80%
I would pay a fee to access Harriman State Park via foot or bicycle if it improved the condition of the trails and river access features.	38.90%	49.10%

### TRAIL PRIORITIES

Respondents rated a series of potential trail improvements on a scale from "completely disagree" to "completely agree." More than twice as many experienced users (17.1%) ranked "Developing new trailside amenities (e.g., benches, kiosks, scenic viewpoints, interactive signage)" as "agree" or "completely agree" compared to 6.3% of new users.

Half of new users (50.1%), however, selected "agree" or "completely agree" for the statement "Providing more online information about trails (e.g., location, distance, difficulty, elevation gain)" compared to 34.3% of experienced users. Over half of new users (59.4%) also rated "Developing new trails" as "agree" or "completely agree" compared with 41% of experienced users (Table 5.13).

Table 5.13: Trail Priority Rankings by Experience Level

STATEMENT	% NEW (HIGH/VERY HIGH PRIORITY)	% EXPERIENCED (HIGH/VERY HIGH PRIORITY)
Maintaining existing trails	84.40%	80.20%
Developing new trails	59.40%	41.00%
Providing more online information about trails	50.10%	34.30%
Enhancing trail accessibility to provide opportunities for people with disabilities	21.90%	25.00%
Developing new trailside amenities	6.30%	17.10%
Expansion of gear rental opportunities	12.50%	15.10%



Photo Credit: Charlie Lansche

Respondents who desired more trails shared their priorities for the types of trails to develop within the Harriman Trail System by rating a series of trails from “completely disagree” to “completely agree” in investing resources into their development. A quarter of experienced users (25.9%) expressed interest in developing horseback riding-specific trails by responding “agree” or “completely agree,” as compared to only 5.3% of new users. New users felt more

interested in winter trail development, with 63.2% expressing interest in developing groomed winter trails by responding “agree” or “completely agree,” compared to 49.4% of experienced users. Under a quarter of new users (21.1%) prioritized ungroomed winter trails as “agree” or “completely agree,” compared to just 8.2% of experienced users (Figure 5.11).

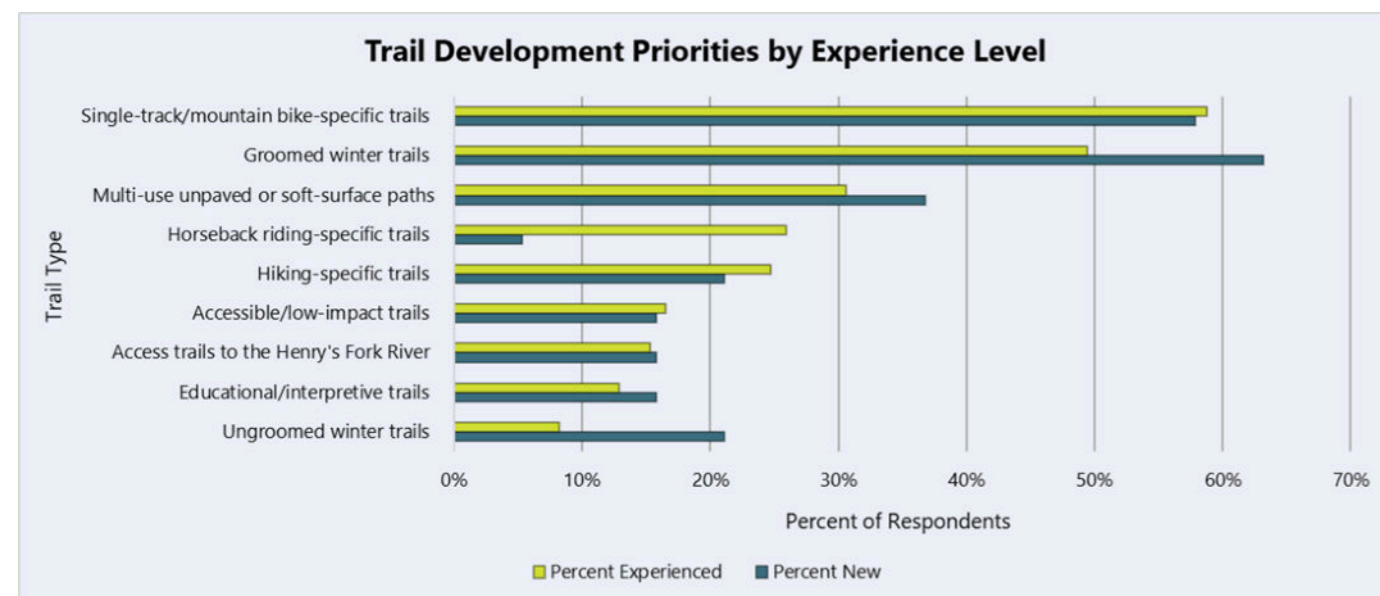


Figure 5.11: Trail Development Priorities by Experience Level

### TRAIL CONFLICTS

Among respondents who reported negative interactions with other users, a greater percentage of experienced users (12%) dealt with negative hiker-biker interactions on trails, as compared to no reports of these interactions amongst new users. Over half of

new users (60%; n = 28), however, experienced negative hiker-horseback rider interactions, as compared to 26% of experienced users (n = 63). About a quarter of new users (20%) also experienced negative cross-country skier-winter hiker conflict, as compared to just 4% of experienced users (Table 5.14).

Table 5.14: Conflicts by Experience Level

CONFLICT TYPE	% NEW	% EXPERIENCED
Biker/Horseback rider conflict	60.00%	68.00%
Hiker/Horseback rider conflict	60.00%	26.00%
Cross-country skier/fat tire biker conflict	20.00%	24.00%
Horseback rider/Jogger conflict	20.00%	16.00%
Hiker/Biker conflict	0.00%	12.00%
Cross-country skier/snowshoer conflict	20.00%	12.00%
Biker/Jogger conflict	0.00%	4.00%
Cross-country skier/winter hiker conflict	20.00%	4.00%
Backcountry skier/fat tire biker conflict	0.00%	2.00%
Fat tire biker/snowshoer conflict	0.00%	2.00%

## COMPARISONS ACROSS SPRING, SUMMER, AND FALL USER GROUPS

### BACKGROUND

This section compares user experiences between horseback riders, mountain bikers, hikers, and anglers. In the online survey, usage between horseback riders, mountain bikers, and hikers is exclusive, meaning that these respondents did not take part in the other two activities. Due to the limited number of angler responses, these users are not exclusive and may take part in the other three activities.

### PARK VISITATION

In comparison to the other user groups, the lowest percentage of horseback riders (55.1%) received their trail condition information from the Harriman State Park website. The greatest percentage of anglers (23.1%), in comparison to the other user groups, received information from other websites such as AllTrails. In comparison to the other user groups, the

highest percentage of horseback riders received information by word of mouth (53.1%). Anglers make up the highest percentage of users receiving information from the visitor center or park kiosks (40.4%).

During the summer months (June-August), responses indicated that the Harriman Trail System sees similar visitation levels across the four different user types. In the fall (September-November), mountain bikers reported lower use of the Harriman Trail System (73.2%) as compared to the other activities, which each reported above 84%. In the winter (December-February), the trail system hosts the lowest percentage of horseback riders (29.4%), as compared to the other activities, which all reported above 59%. In the spring (March-May), respondents indicated that the Harriman Trail System sees higher percentages of hikers and anglers (68.9% and 65.4% respectively) as compared to horseback riders and mountain bikers (47.1% and 53.6% respectively) (Figure 5.12).

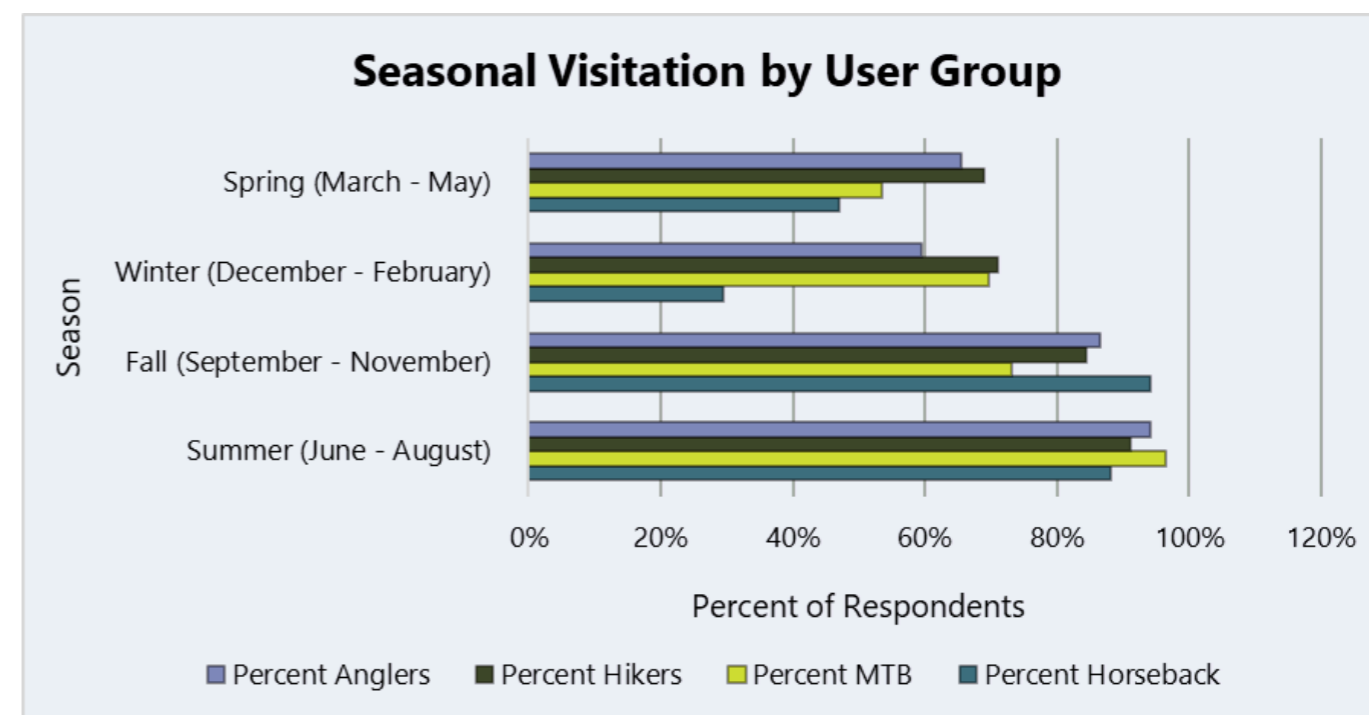


Figure 5.12: Seasonal Visitation by User Group

The highest percentage of anglers (30.8%), as compared to the other groups, reported visiting the Harriman Trail System more than once per week. The

highest percentage of hikers (32.1%), compared to the three other user groups, reported visiting the trail system a few times per year (Figure 5.13).

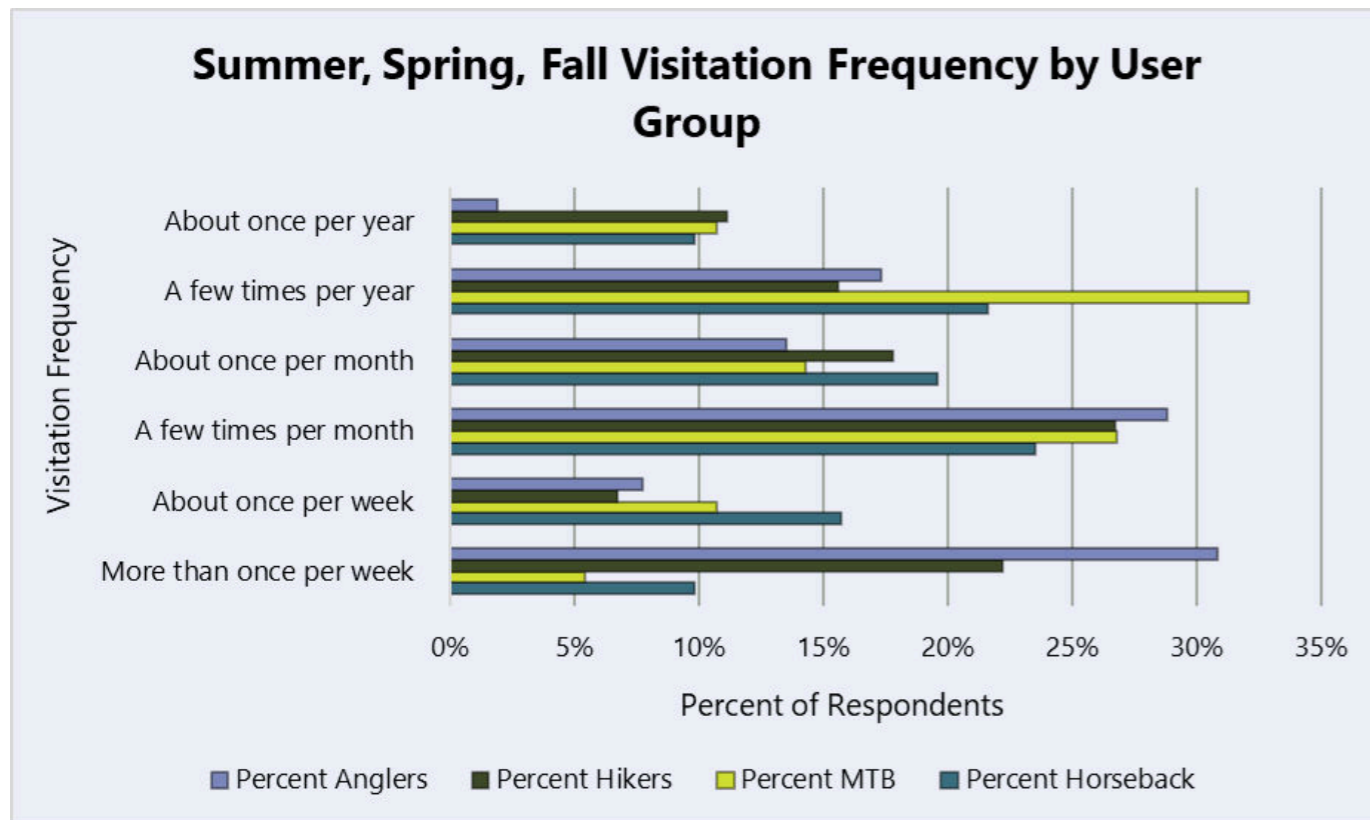


Figure 5.13: Visitation Frequency by User Group

A greater percentage of anglers (17.3%), in comparison to the three other user groups, visit the Harriman Trail System alone. Most horseback riders (86.3%) visit the trail system with friends, as compared to the three

other user groups. The smallest percentage of horseback riders (60.8%), however, visit the trail system with family in comparison to the other user groups (Figure 5.14).

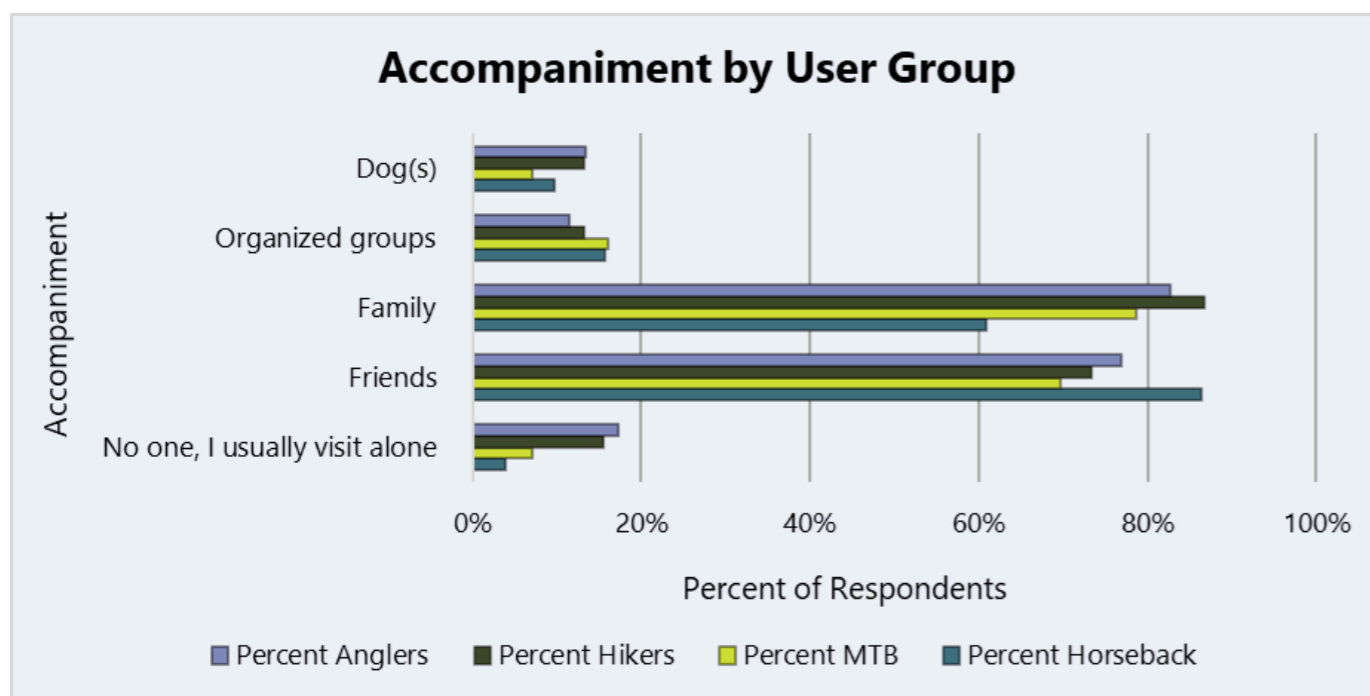


Figure 5.14: Accompaniment by User Group

### OTHER ACTIVITY PARTICIPATION

A third of hikers (33.3%), as compared to lower percentages for the other three user groups, attended programs and classes hosted at Harriman while visiting the trail system in the spring, summer, and fall. A greater percentage of hikers (35.6%) took part in angling, as compared to horseback riders (3.9%) and mountain bikers (10.7%). Nearly twice as high a percentage of hikers (24.4%) took part in outdoor study and interpretation than any other user group.

Hikers also represented the highest percentage of user groups taking part in overnight lodging at Harriman State Park during the spring, summer, and fall. The lowest percentage of mountain bikers took part in photography (5.4%) and wildlife observation (10.7%), as compared to at least 20% of all other user groups. No horseback riders reported taking part in trail running, as compared to at least 13.5% of other user groups (Figure 5.15).

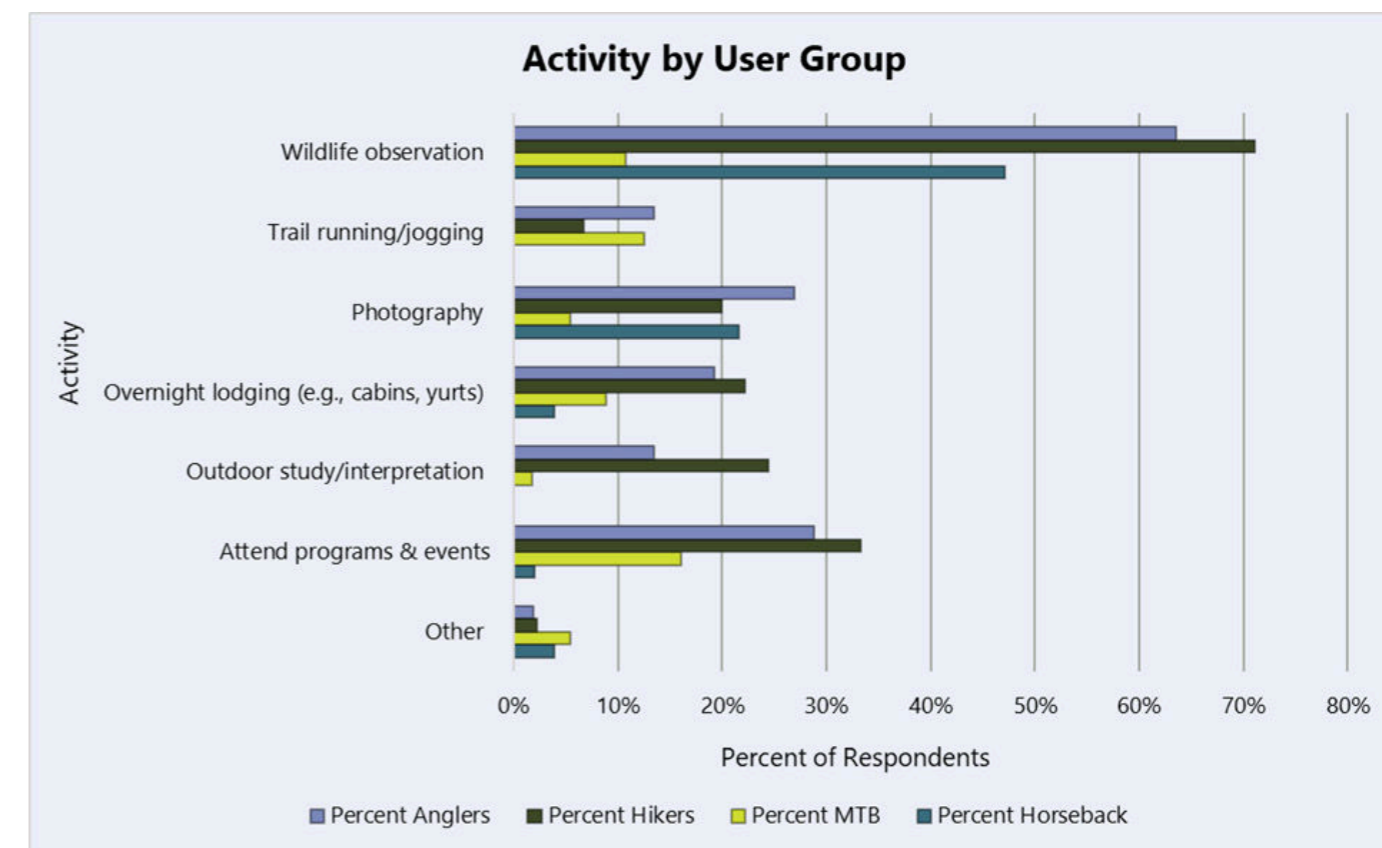


Figure 5.15: Other Activity Participation by User Group

### TRAIL PERCEPTIONS & EXPERIENCES – STATEMENT RATING DIFFERENCES

Mountain bikers consisted of the highest percentage user group (71.7%) to respond to the statement “Harriman’s trails are accessible to people of all abilities” as either “agree” or “completely agree.” Mountain bikers represented the lowest percentage user group (51.3%) to offer an “agree” or “completely agree” response to the statement “Harriman’s winter trails are well-maintained” (51.3%) and to the statement “Harriman’s summer/spring/fall trails are well-maintained” (66%).

Horseback riders represent the user group with the least “agree” or “completely agree” responses to several statements including “Harriman’s trails have useful signage that helps me find my way” (77.3%), “Harriman’s trails have enough amenities (e.g. benches, kiosks, scenic viewpoints, interpretive signage)” (71.1%), “I would pay more to access Harriman State Park if it improved the conditions of trails” (28.9%), “I would pay a fee to access Harriman

State Park via foot or bicycle if it improved the condition of the trails and river access features” (20.5%), and “I can always find parking when visiting Harriman’s trails” (63.6%). Horseback riders, however, represent the highest percentage of respondents stating “agree” or “completely agree” to the statements “I have had a negative experience when Harriman’s trails were overcrowded” (36.4%) and “I have had a negative interaction with other visitors engaging in a different trail activity” (38.7%).

Hikers represented the user group with the highest percent of “agree” or “completely agree” responses to “It is easy to find information about events and programs taking place at Harriman State Park” (85%), “If I cannot find information about Harriman’s trails by myself, it is easy to contact a staff member” (72.5%), and “It is easy to pay entry fees to access Harriman State Park” (82.5%). Hikers represented the lowest percentage of positive responses to “I understand how Harriman’s entry fees help support the park and trail system” (80%) (Table 5.15).

**Table 5.15: Statements by User Group**

STATEMENT	PERCENT HORSEBACK (AGREE/ COMPLETELY AGREE)	PERCENT MTB (AGREE/ COMPLETELY AGREE)	PERCENT HIKERS (AGREE/ COMPLETELY AGREE)	PERCENT ANGLERS (AGREE/ COMPLETELY AGREE)
Harriman's trails are accessible to people of all abilities.	56.80%	71.70%	58.50%	61.40%
Harriman's winter trails are well-maintained.	85.70%	51.30%	83.30%	68.20%
Harriman's summer/spring/fall trails are well-maintained.	81.80%	66.00%	80.00%	77.00%
Harriman's trails have useful signage that helps me find my way.	77.30%	86.80%	92.50%	79.60%
Harriman's trails have enough amenities (e.g., benches, kiosks, scenic viewpoints, interpretive signage).	71.10%	81.10%	87.50%	79.60%
It is easy to find and understand information about accessing Harriman's trails and amenities.	70.50%	77.40%	87.50%	76.20%
It is easy to find information about the conditions of Harriman's trails (e.g., trail closures, grooming reports).	57.70%	49.10%	62.50%	52.20%
It is easy to find information about events and programs taking place at Harriman State Park.	63.60%	73.10%	85.00%	79.50%
If I cannot find information about Harriman's trails by myself, it is easy to contact a staff member to ask a question.	48.90%	58.50%	72.50%	59.10%
It is easy to pay entry fees to access Harriman's trails.	73.40%	69.90%	82.50%	63.70%
I understand how Harriman's entry fees help support the park and trail system.	95.40%	92.40%	80.00%	84.00%
I would pay more to access Harriman State Park if it improved the conditions of the trails.	28.90%	52.80%	55.00%	54.60%
I would pay a fee to access Harriman State Park via foot or bicycle if it improved the condition of the trails and river access features.	20.50%	56.60%	52.50%	59.10%
I can always find parking when visiting Harriman's trails.	63.60%	86.70%	87.50%	81.90%
I have had a negative experience when Harriman's trails were overcrowded.	36.40%	7.60%	17.50%	34.10%

STATEMENT	PERCENT HORSEBACK (AGREE/ COMPLETELY AGREE)	PERCENT MTB (AGREE/ COMPLETELY AGREE)	PERCENT HIKERS (AGREE/ COMPLETELY AGREE)	PERCENT ANGLERS (AGREE/ COMPLETELY AGREE)
I have had a negative interaction(s) with other visitor(s) engaging in a different trail activity	38.70%	13.20%	23.10%	-

**TRAIL PRIORITIES**

In rating trail priorities, the lowest percentage of horseback riders responded "High Priority" or "Very High Priority" to "Maintaining existing trails" (61.4%) and "Providing more online information about trails (e.g., location, distance, difficulty, elevation gain)"

(16.3%). Mountain bikers represented the user group with the highest percentage of "High Priority" or "Very High Priority" responses to "Developing new trails" (59.5%) and "Enhancing trail accessibility to provide opportunities for people with disabilities" (40.4%, nearly double the next highest percentage) (Figure 5.16).

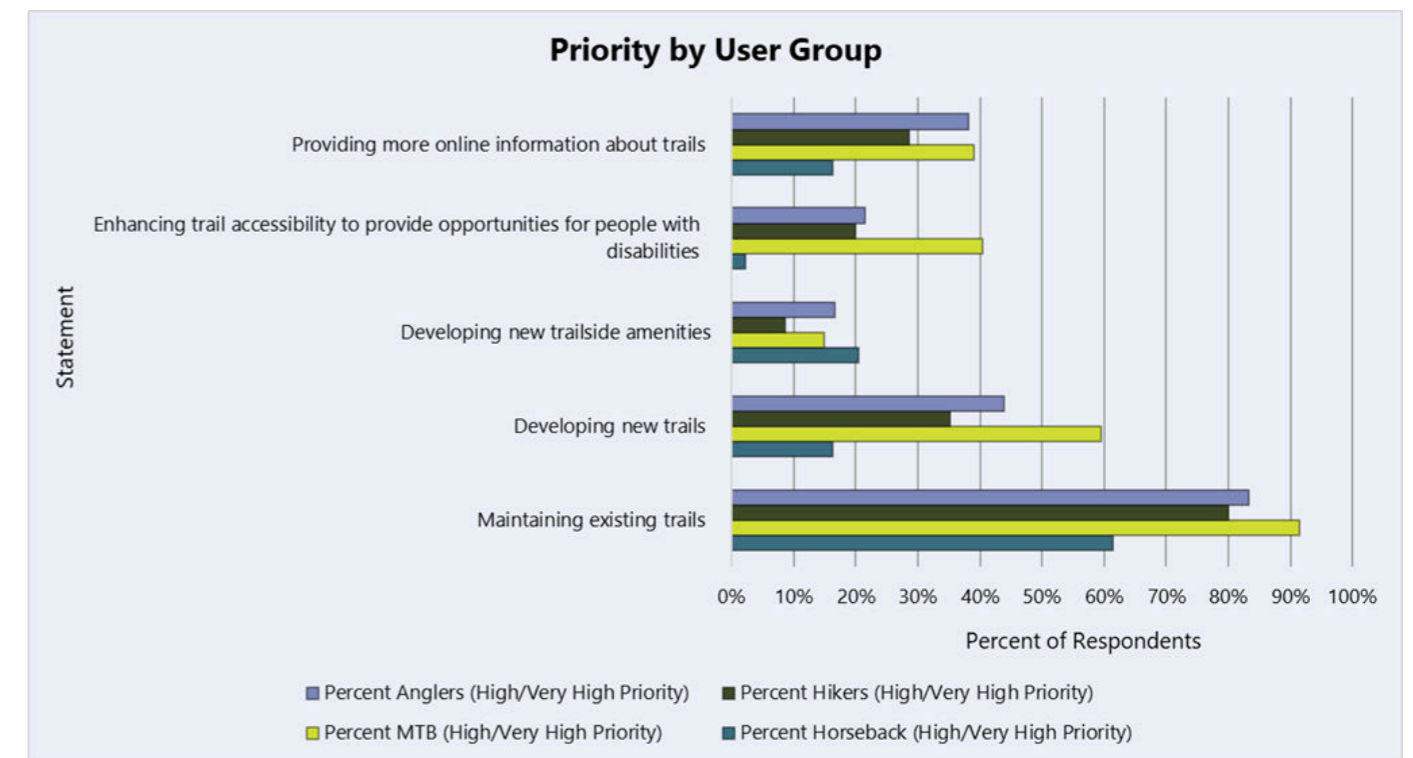


Figure 5.16: Trail Priorities by User Group



Photo Credit: *Charlie Lansche*

Horseback riders primarily indicated that the Ranch Loop, Silver Lake Trail, and Thurmon Creek Loop need trail improvements, with two other small zones requiring improvements on the Golden Lake Loop and Big Bend Loop (Figure 5.17). Mountain bike riders noted the need for trail improvement on the western side of the park, with the greatest need on the Ridge

Trail and Coronary Bypass/Heart Attack Hill area (Figure 5.18). Hikers indicated necessary trail improvements throughout the western side of the park, especially on the Ranch Loop, Silver Lake Trail, Thurmon Creek Loop, and Ridge Trail, with a small area in need of improvement on the East Gate Trail (Figure 5.19).

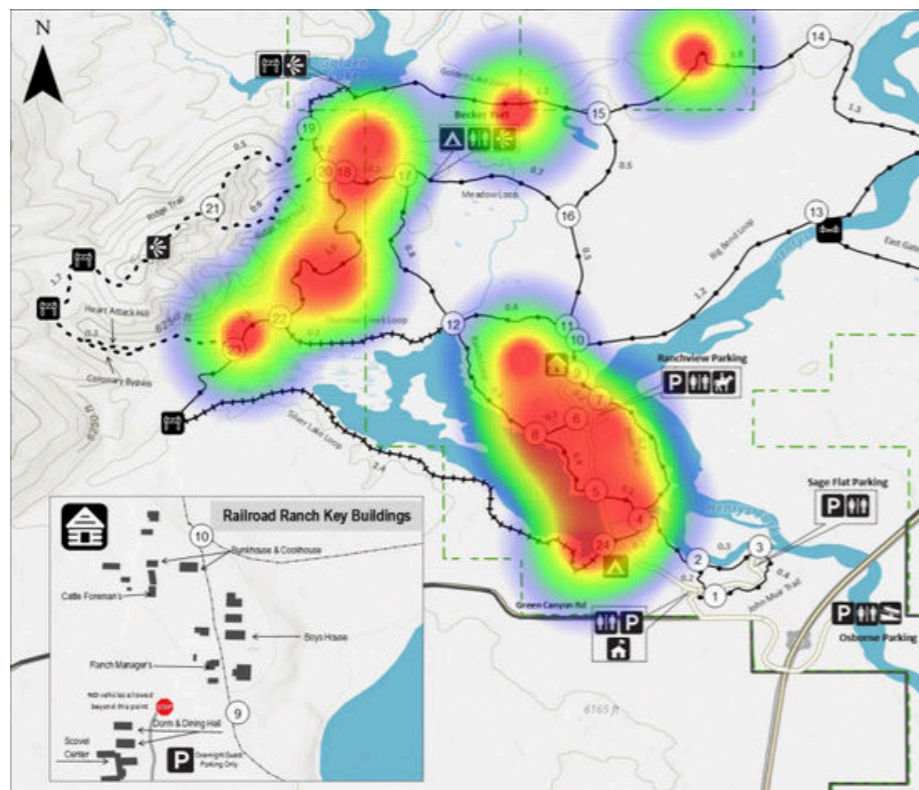


Figure 5.17: Areas of Trail Improvement Needed, According to Horseback Riders

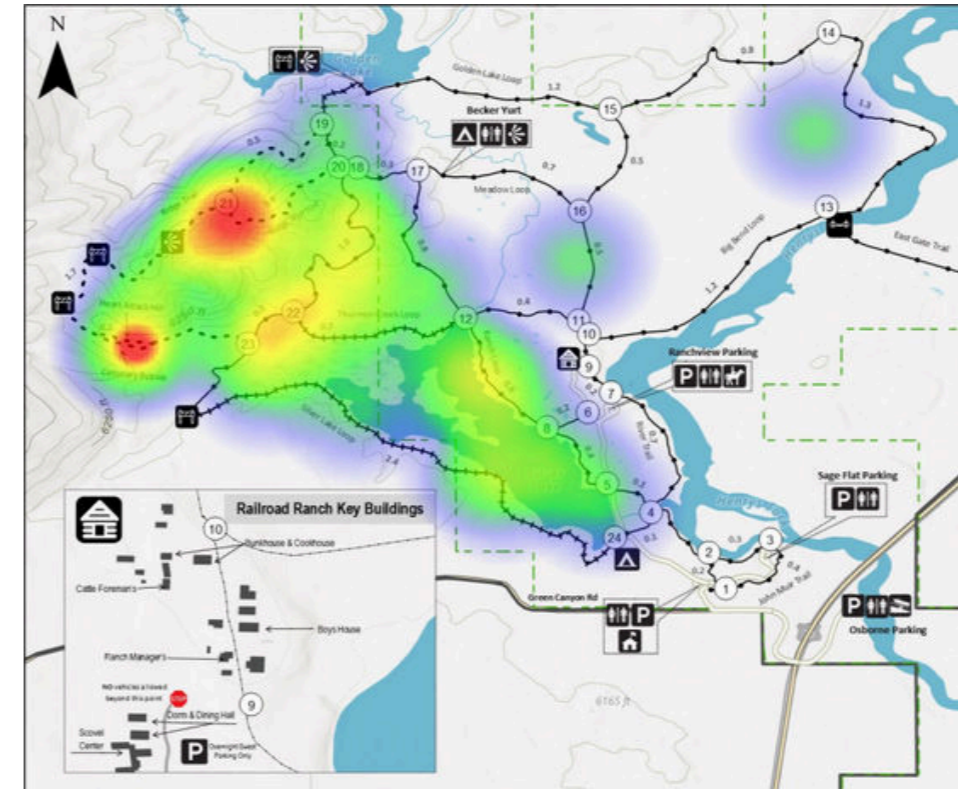


Figure 5.18: Areas of Trail Improvement Needed, According to Mountain Bikers

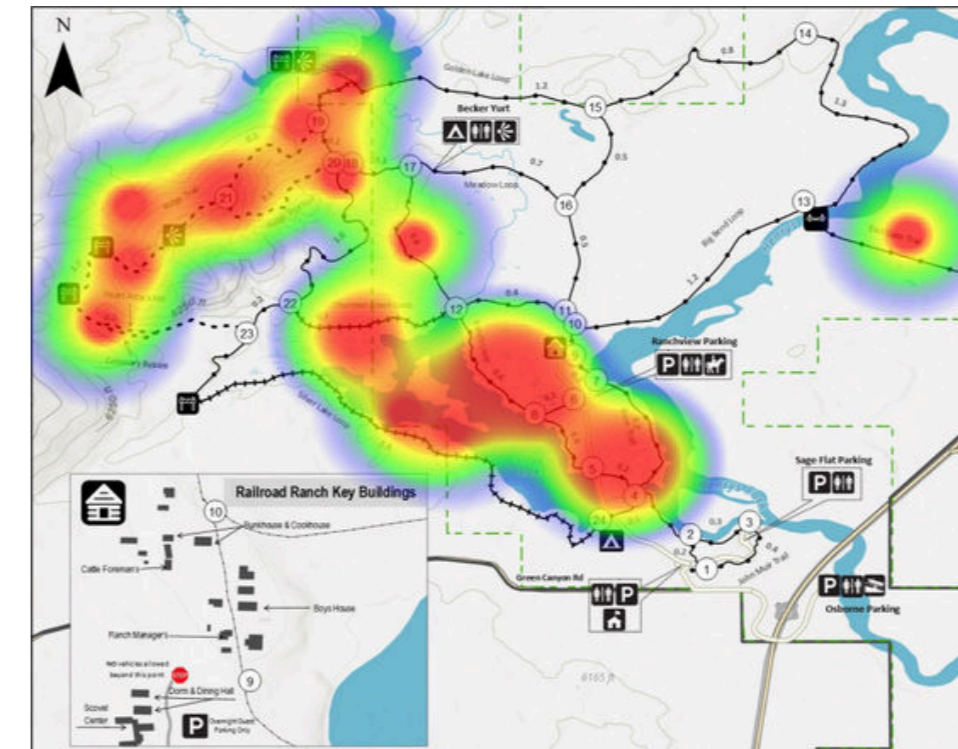


Figure 5.19: Areas of Trail Improvement Needed, According to Hikers

When prioritizing investing in additional trails within the Harriman Trail System, horseback riders (71.4%) and anglers (27.8%) who wanted additional trails developed prioritized "Access trails to the Henry's Fork River." Horseback riders also prioritized "horseback riding-specific trails (85.7%) and had the lowest preference for "groomed winter trails" (28.6%).

Mountain bikers represent the lowest percentage (3.7%) of users who prioritize "Accessible/low-impact trails," while 33.3% of hikers prioritized developing this

type of trail. Most mountain bikers (88.9%) prioritize the development of "Singletrack/mountain bike-specific trails."

Hikers represented the highest percentage of users to prioritize several trail types, including "Accessible/low-impact trails" (33.3%), "Educational/interpretive trails" (41.7%), "Hiking specific trails" (50%), and "Ungroomed winter trails" (25%). This user group was least likely to prioritize "Multi-use unpaved or soft-surface trails" (16.7%) (Figure 5.20).

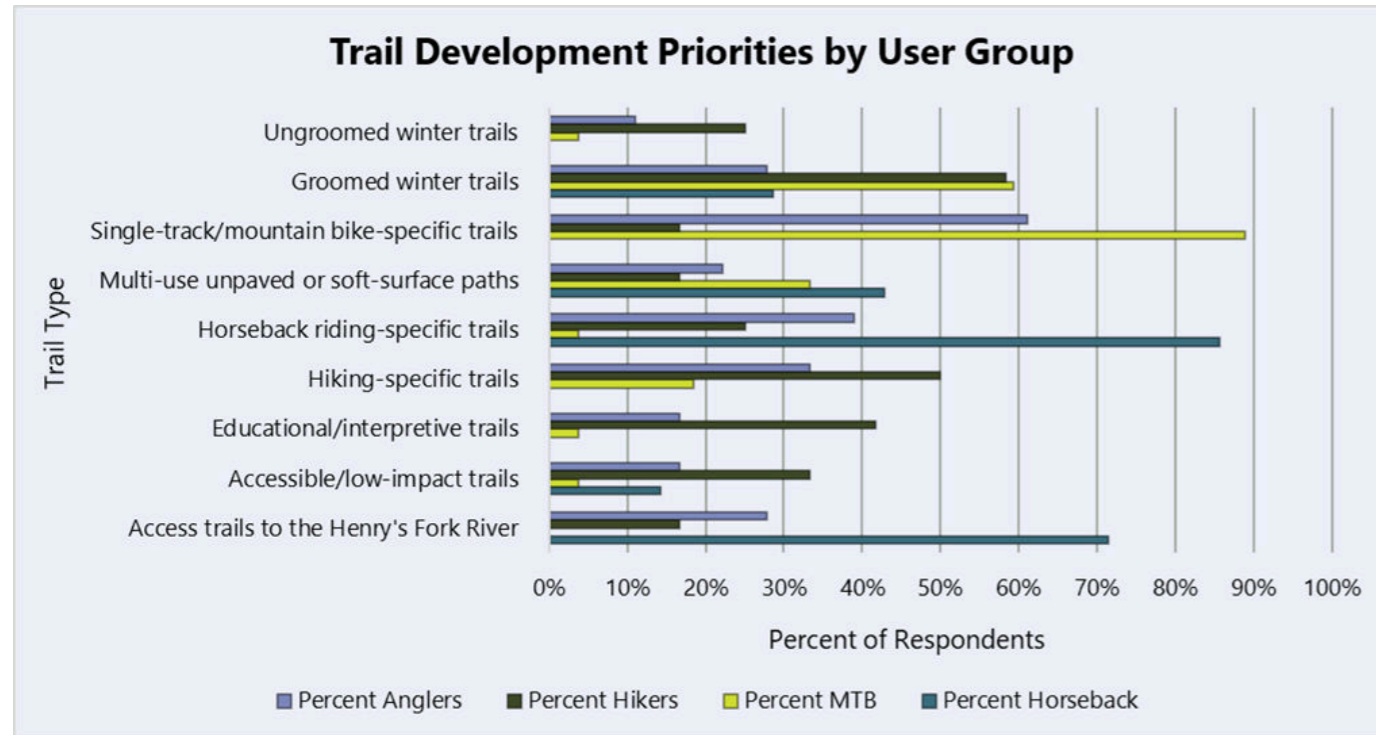


Figure 5.20: Trail Development Priorities by User Group

### TRAIL CONFLICTS

Horseback riders by far represented the largest percentage of users who experienced biker-horseback rider conflict (94.1%), while only 50% of mountain bikers reported this conflict. Horseback riders also constituted the highest percentage of users experiencing horseback rider-jogger conflict (23.5%). A third (33%) of hikers reported hiker-biker conflicts, compared to no mountain bikers reporting this type of

conflict. Hikers also served as the largest user group percentage reporting hiker-horseback conflict (66.7%), while only 11.8% of horseback riders experienced this conflict (Figure 5.21). Together, these findings are common in the recreation management literature (e.g., Manning et al., 2022), where users who move at faster speeds generally perceive less conflict than those moving at slower speeds.

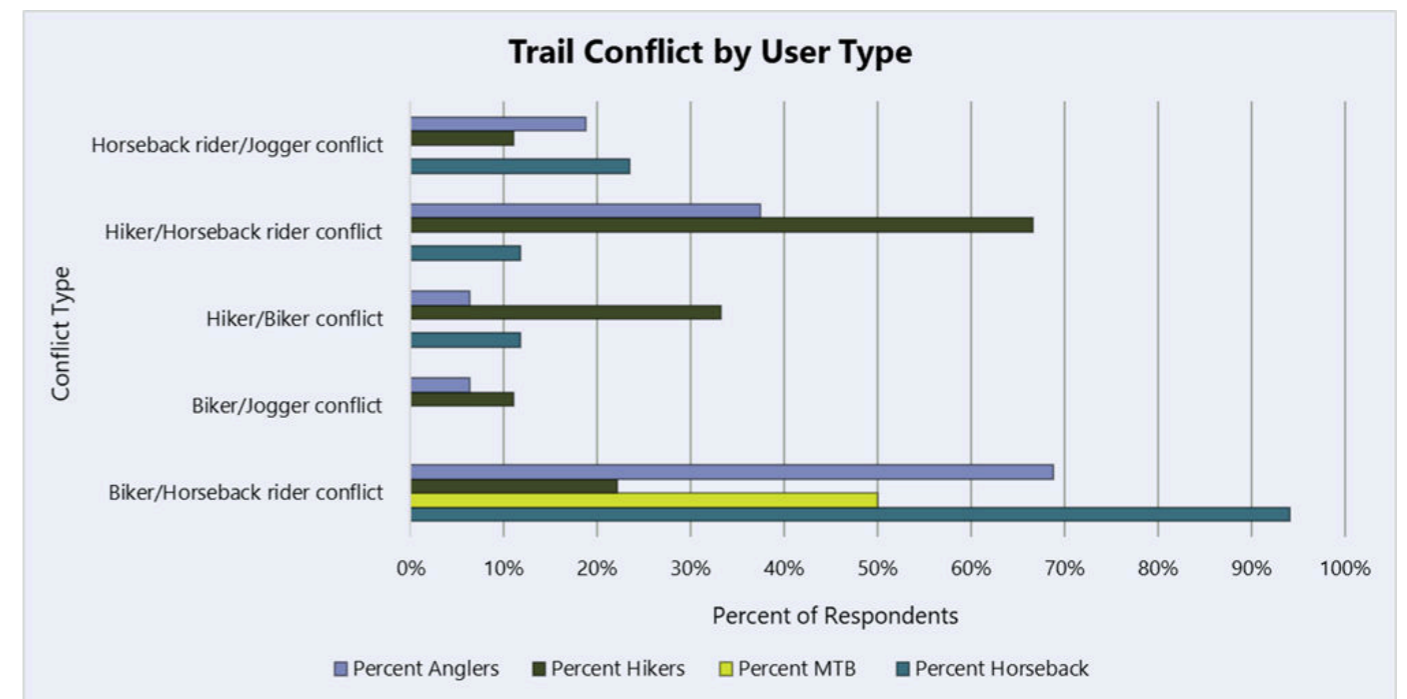


Figure 5.21: Trail Conflict by User Type

### COMPARISONS ACROSS WINTER TRAIL USER GROUPS BACKGROUND

This section compares user experiences between cross-country skiers, snowshoers, and fat bikers. The usage between these three user groups is exclusive, meaning that each of these users responding in this survey did not take part in the other two activities.

### PARK VISITATION

As compared to the other two user groups, the lowest percentage of cross-country skiers received their trail condition information from social media (46.1%) or from an online trails database (11.2%), whereas the cross-country skiers represented the highest percentage of users receiving information from the visitor center or kiosks (43.8%) (Figure 5.22).

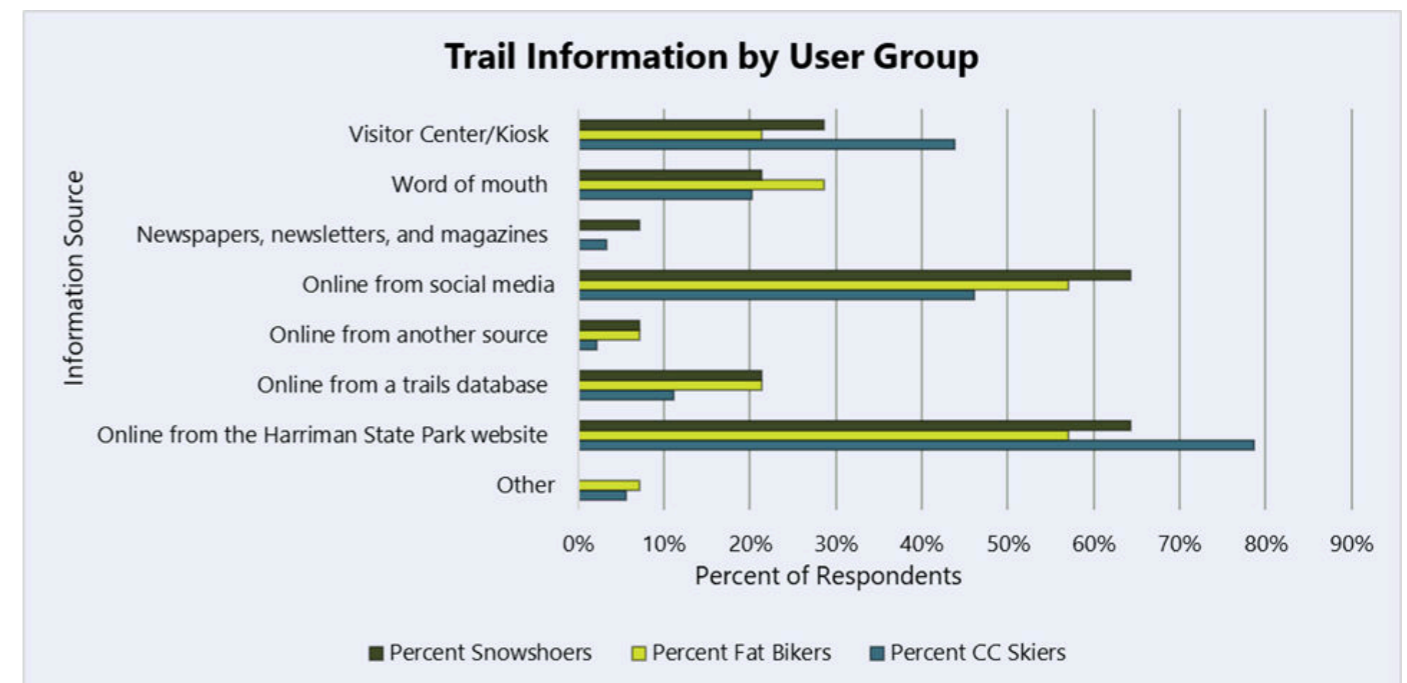


Figure 5.22: Trail Information Source by User Group

While each of the three user groups visits the Harriman Trail System during the winter season (December-February), they each also visit the trail system during other seasons. Snowshoers in particular visit the trail system during other seasons, with 100% of snowshoers also visiting in summer (June-August) and 85.7% of snowshoers visiting in fall (September-November). This is likely due to the similarity of activity between snowshoeing and hiking.

None of the fat biker respondents indicated visiting the Harriman Trail System during the winter season (December-February), they each also visit the trail system during other seasons. Snowshoers in particular visit the trail system during other seasons, with 100% of snowshoers also visiting in summer (June-August) and 85.7% of snowshoers visiting in fall (September-November). This is likely due to the similarity of activity between snowshoeing and hiking.

### Visitation Frequency by User Group

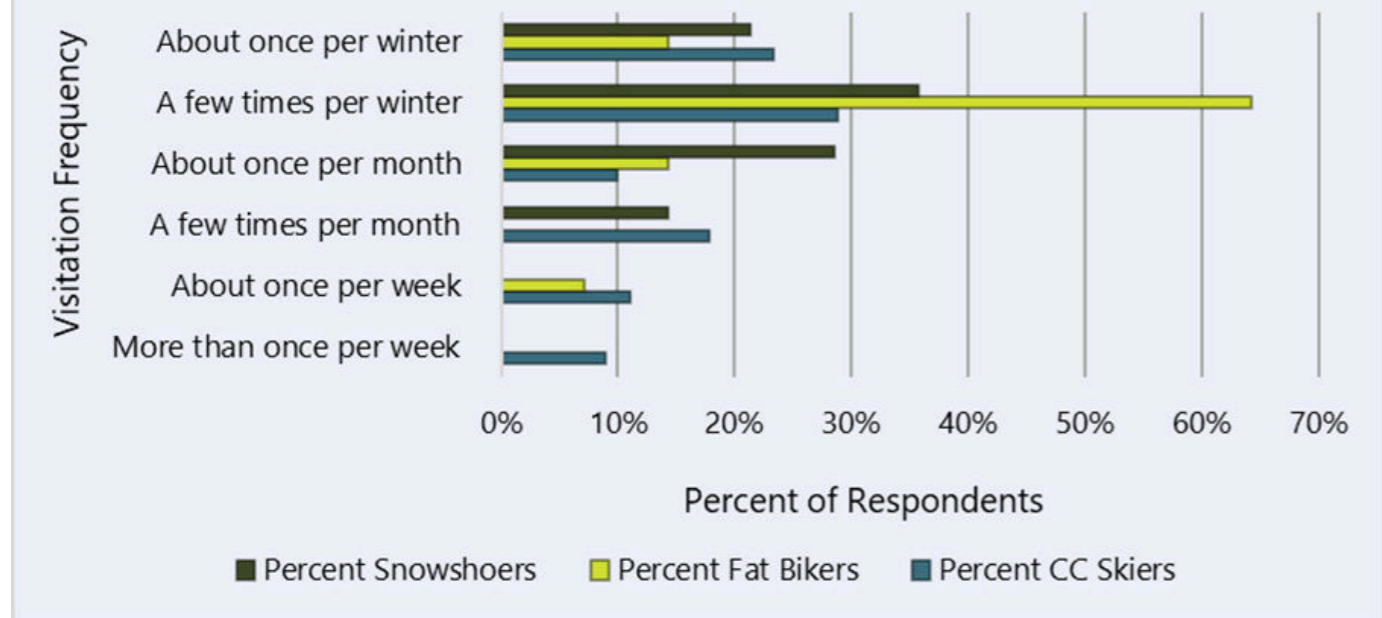


Figure 5.23: Visitation Frequency by User Group

None of the fat bike respondents reported visiting the Harriman Trail System alone, all fat bikers reported visiting with family, and about two-thirds (64.3%)

reported visiting with friends, indicating the social nature of this activity (Figure 5.24).

### Accompaniment by User Group

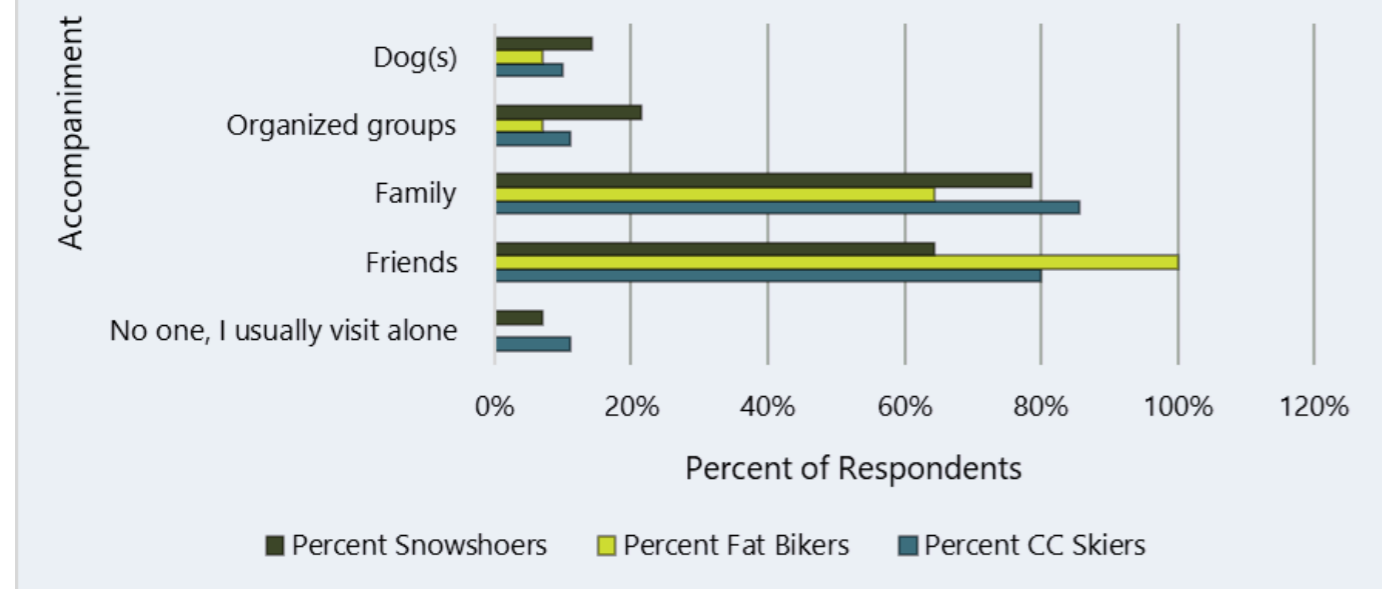


Figure 5.24: Accompaniment by User Group

### OTHER ACTIVITY PARTICIPATION

A higher percentage of cross-country skiers reported attending winter programs and events (16.7%) than the other two user groups. A higher percentage of snowshoers reported taking part in photography

(35.7%) than the other two user groups. None of the fat bikers took part in wildlife observation, while participation reached above 35% for the other two user groups (Figure 5.25).

### Winter Activity by User Group

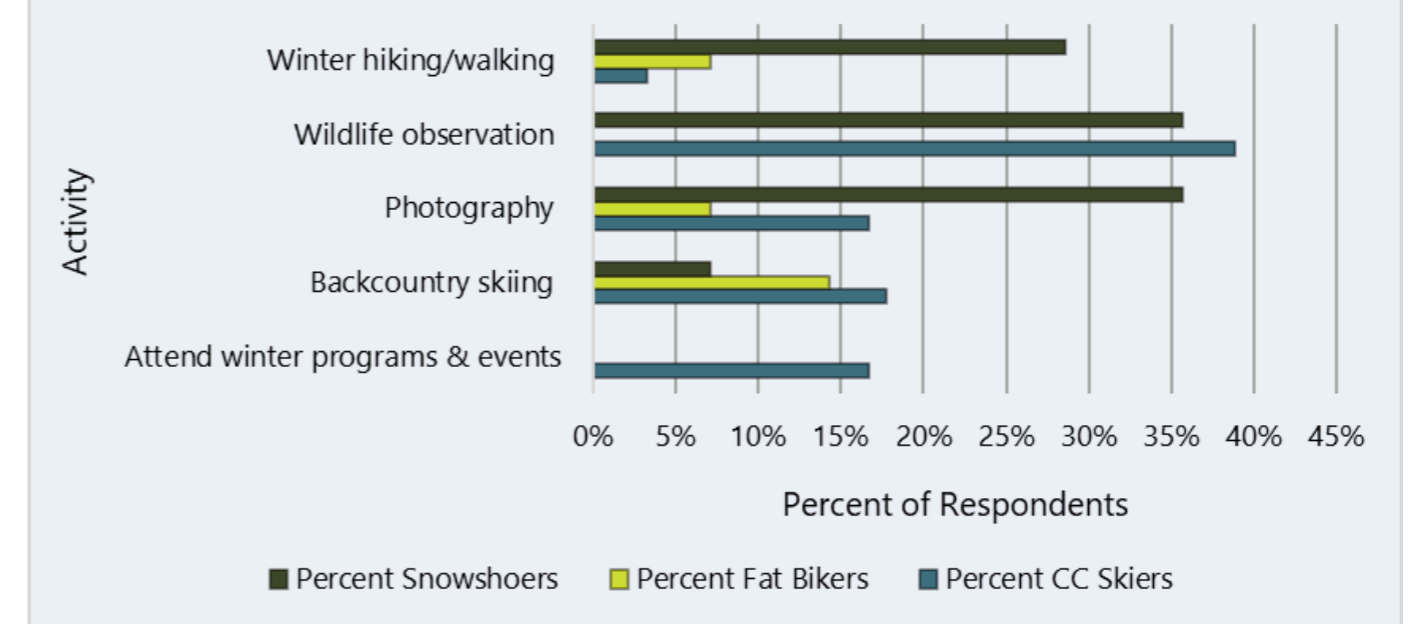


Figure 5.25: Other Activity Participation by User Group

### TRAIL PERCEPTIONS & EXPERIENCES – STATEMENT RATING DIFFERENCES

As compared to the other two user groups, the lowest percentage of fat bikers responded “agree” or “completely agree” to the statement “Harriman’s trails provide high-quality experiences for visitors” (53.9%), “Harriman’s summer/spring/fall trails are well-maintained” (53.9%), “It is easy to find information about policies (e.g. fire restrictions, fishing regulations, dog policies, fee rates) pertaining to using Harriman’s trails” (69.3%), and “If I cannot find information about Harriman’s trails by myself, it is easy to contact a staff member to ask a question” (46.2%). Fat bikers represent the largest percentage of respondents noting “agree” or “completely agree” to “I have had a negative interaction(s) with other visitor(s) engaging in a different trail activity as me” (38.5%).

Snowshoers represented the highest percentage of “agree” or “completely agree” responses to “Harriman’s winter trails are well maintained” (83.3%) and “It is easy to find information about the conditions of Harriman’s trails (e.g., trail closures, grooming reports)” (75%). Compared to the other user groups, a much lower percentage of snowshoers agreed with the statement “I would pay more to access Harriman State Park if it improved the conditions of the trails” (8.3%, compared to over 60% for both the other user groups) and “I

would pay a fee to access Harriman State Park via foot or bicycle if it improved the condition of the trails and river access features” (25%, compared to over 50% for both other user groups).

Most cross-country skiers responded “agree” or “completely agree” to the statement “Harriman’s per vehicle entry fees are reasonable” (88.4%), “I understand how Harriman’s entry fees help support the park and trail system” (86.2%), and “I find the facilities (e.g. restrooms, rental facilities, visitor center, kiosks) on Harriman’s trails clean and well-maintained” (95.4%) (Table 5.16).

**Table 5.16: Statement Responses by User Group**

STATEMENT	PERCENT CC SKIERS (AGREE/ COMPLETELY AGREE)	PERCENT FAT BIKERS (AGREE/ COMPLETELY AGREE)	PERCENT SNOWSHOERS (AGREE/ COMPLETELY AGREE)
Harriman's trails provide high-quality experiences for visitors.	93.00%	53.90%	90.90%
Harriman's winter trails are well-maintained.	60.90%	46.20%	83.30%
It is easy to find information about policies (e.g., fire restrictions, fishing regulations, dog policies, fee rates) pertaining to using Harriman's trails.	79.30%	69.30%	83.30%
It is easy to find information about the conditions of Harriman's trails (e.g., trail closures, grooming reports).	50.50%	53.90%	75.00%
It is easy to find information about events and programs taking place at Harriman State Park.	83.70%	76.90%	66.70%
If I cannot find information about Harriman's trails by myself, it is easy to contact a staff member to ask a question.	66.70%	46.20%	66.60%
Harriman's per vehicle entry fees are reasonable.	88.40%	69.30%	66.60%
Harriman's special fees for winter trail use are reasonable.	83.70%	69.30%	41.70%
I understand how Harriman's entry fees help support the park and trail system.	86.20%	69.30%	66.70%
I would pay more to access Harriman State Park if it improved the conditions of the trails.	66.60%	61.60%	8.30%
I would pay a fee to access Harriman State Park via foot or bicycle if it improved the condition of the trails and river access features.	51.70%	69.30%	25.00%
I support Harriman State Park's seasonal trail closures to protect wildlife.	93.00%	77.00%	100.00%
I find the facilities (e.g., restrooms, rental facilities, visitor center, kiosks) on Harriman's trails clean and well-maintained.	95.40%	69.30%	75.00%
I have had a negative interaction(s) with other visitors(s) engaging in a different trail activity (e.g., I was on horseback, they were hiking, etc.) as me.	16.00%	38.50%	0.00%

**TRAIL PRIORITIES**

When prioritizing park improvements, more snowshoers (36%) prioritized "Expansion of gear rental opportunities (e.g., skis, snowshoes, etc.)" compared to less than 10% of respondents from the other two user groups. On the other hand, snowshoers least prioritized "Developing new trails" (18.2%), compared

to above 30% for the other two user groups. The highest percentage of fat bikers (25%) prioritized "Developing new trailside amenities (e.g., benches, kiosks, scenic viewpoints, interactive signage)," compared to less than 10% for the other two user groups (Figure 5.26).

**Priorities by User Group**

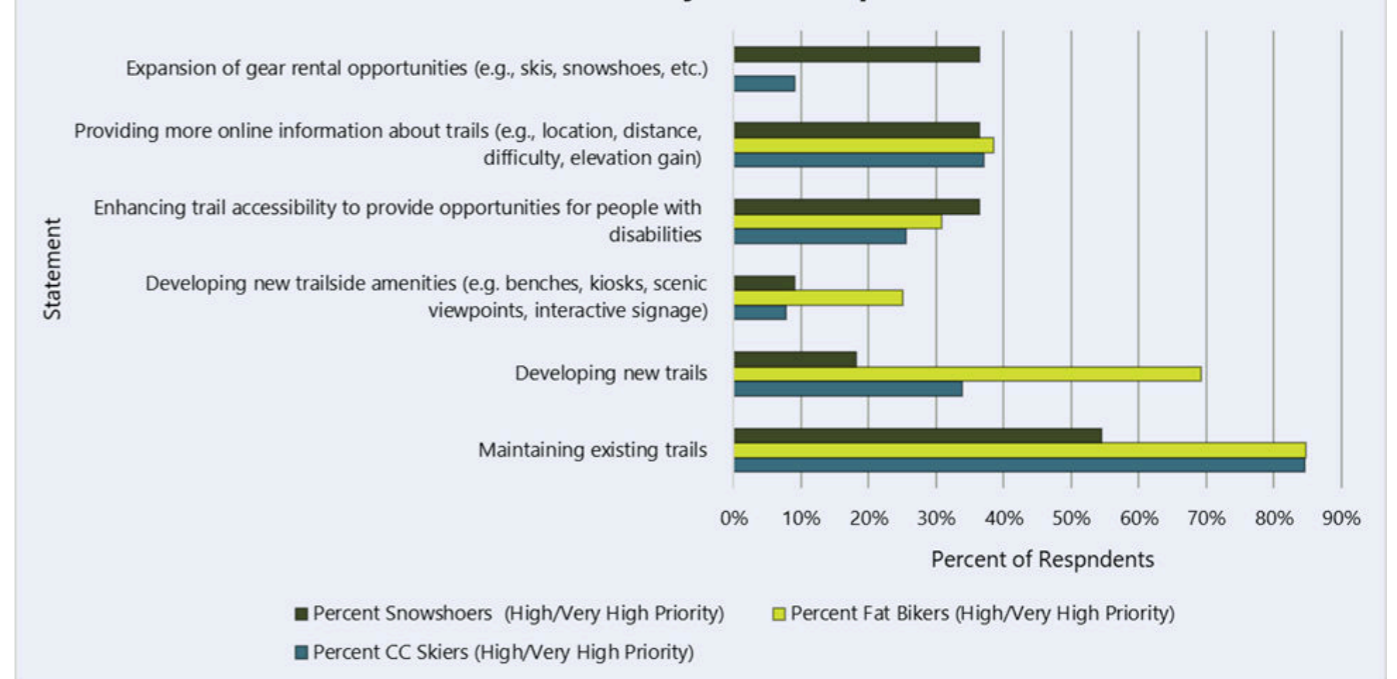


Figure 5.26: Trail Priorities by User Group

Respondents also indicated where they would most like to see trail improvements take place. The highest concentration of cross-country skiers wished for improvements on the Ranch Loop in the park's center, with some interest in improvement throughout the Harriman Trail System's western side on the Silver Lake Trail and Thurmon Creek Loop (Figure 5.27). Fat bikers

primarily sought trail improvements on the Silver Lake Trail, with some additional interest taking place on the Golden Lake Loop (Figure 5.28). Snowshoers indicated a need for trail improvements near the Ranchview parking area and the western side of the Thurmon Creek Loop (Figure 5.29).



Photo Credit: Charlie Lansche

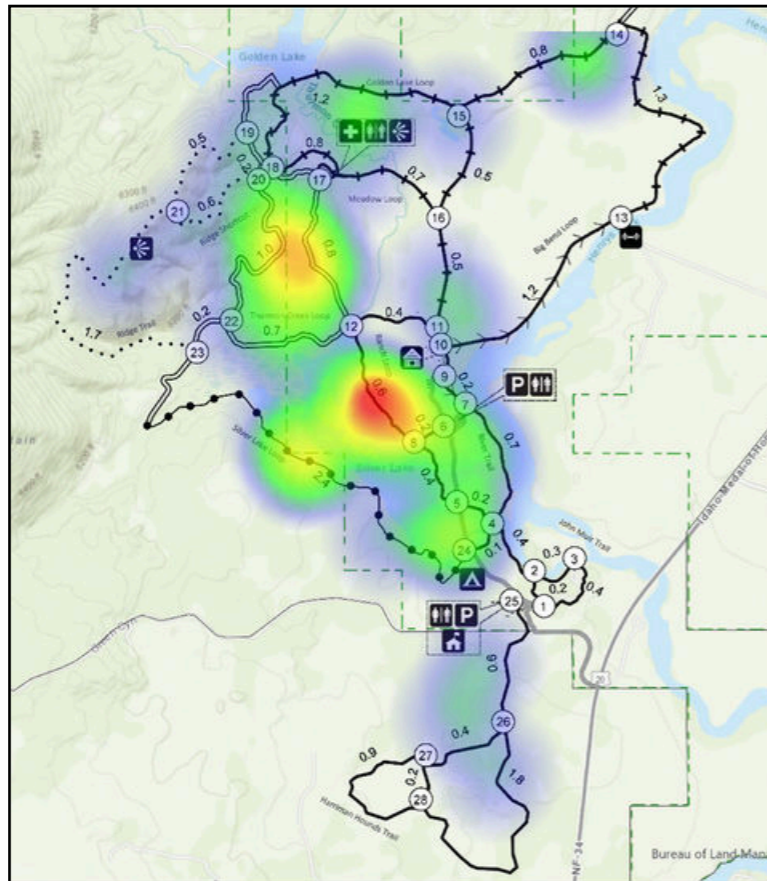


Figure 5.27: Areas of Trail Improvements Needed, According to Cross-Country Skiers

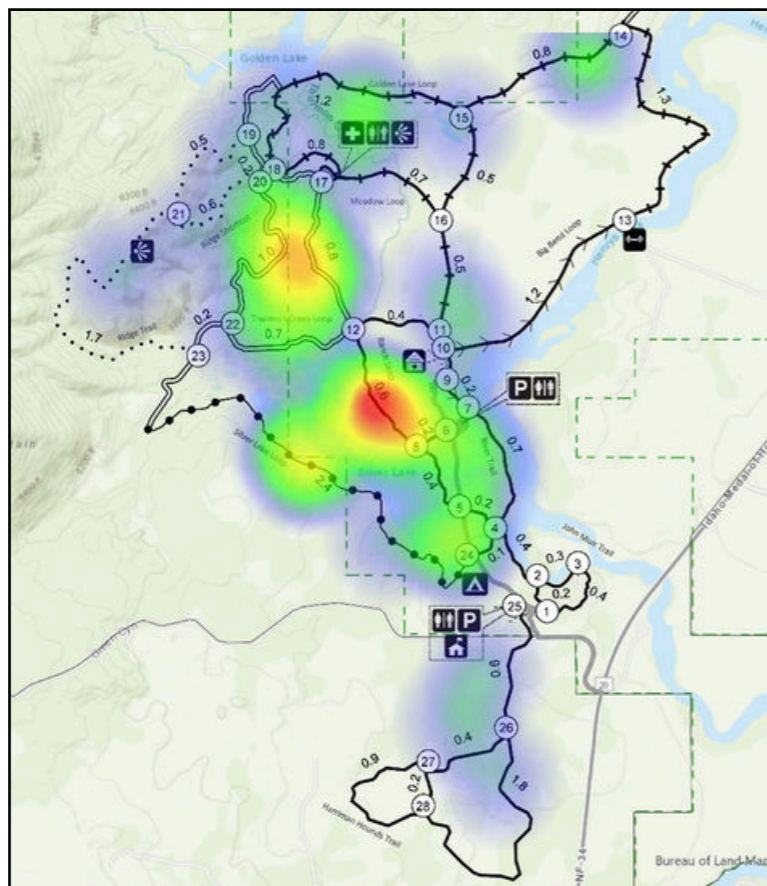


Figure 5.28: Areas of Trail Improvements Needed, According to Winter Fat Bikers

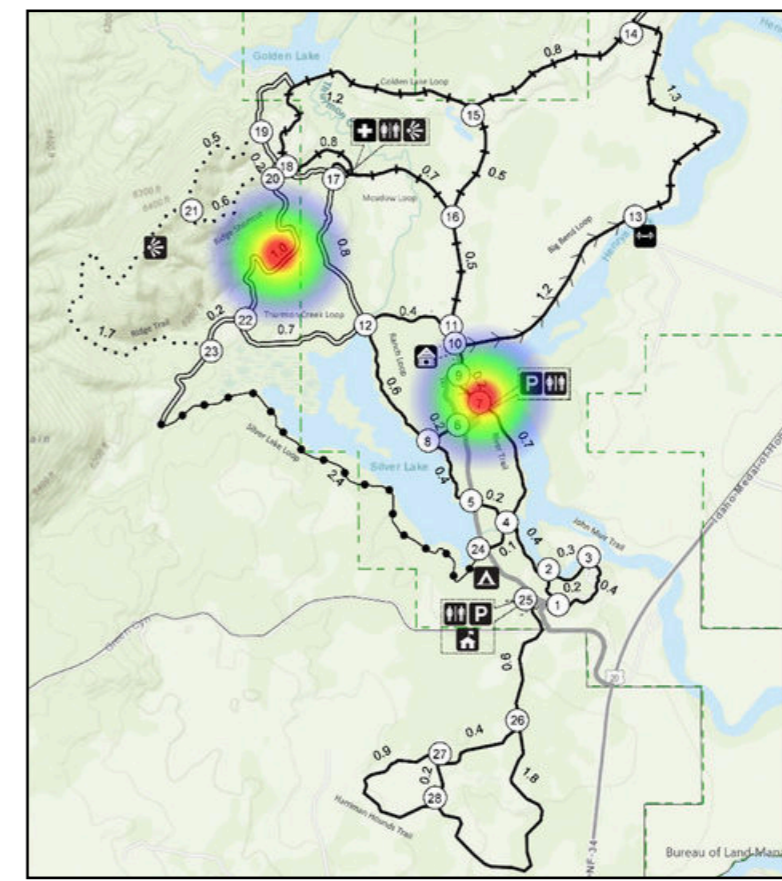


Figure 5.29: Areas of Trail Improvements Needed, According to Snowshoers

When prioritizing the types of trails to develop on the Harriman Trail System, 50% of snowshoers who wanted new trails developed prioritized "Access trails to Henry's Fork River," as compared to less than 4% for the other two user groups. Under a quarter (15.4%) of cross-country skiers prioritized "Accessible/low-impact

trails," compared to no users of other groups. All user groups expressed interest in seeing groomed winter trails, with at least 50% of all respondents prioritizing this trail type. Only cross-country skiers (23.1%) prioritized "Ungroomed winter trails" (Figure 5.30).

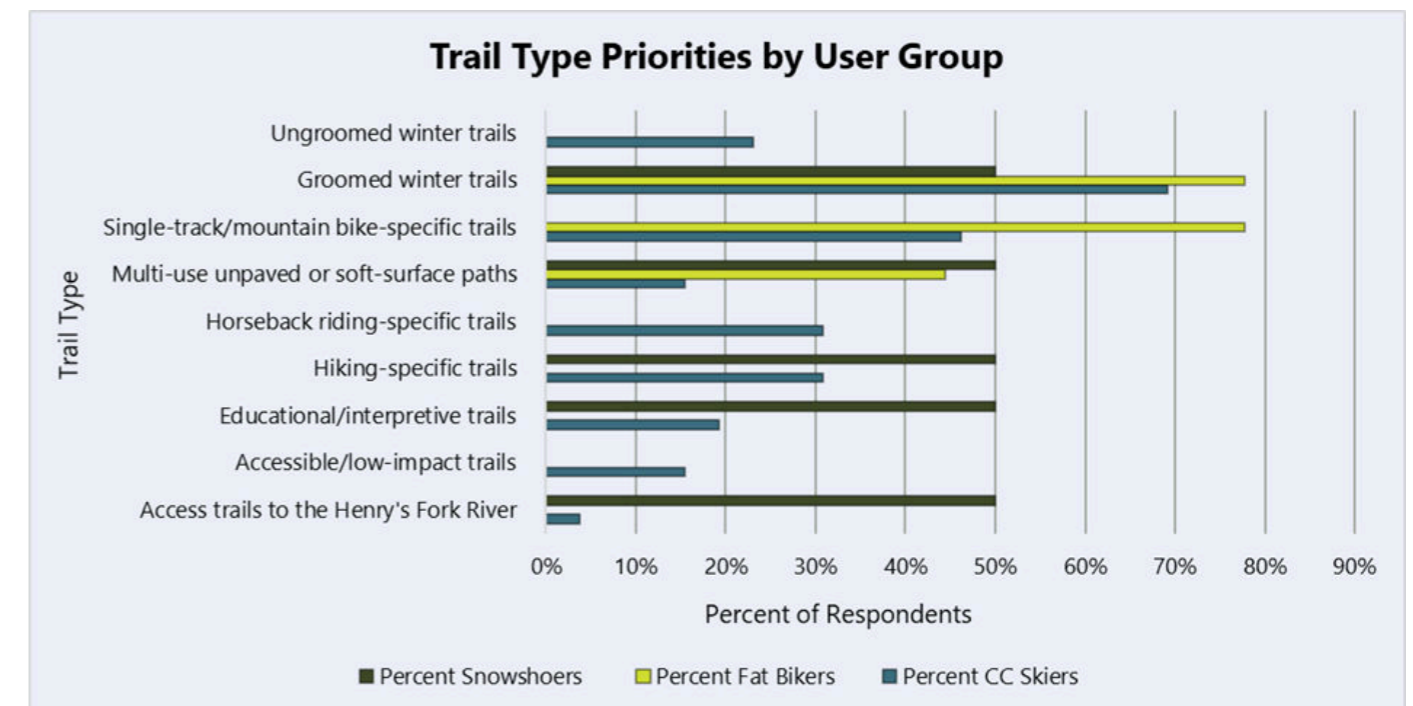


Figure 5.30: Trail Development Priorities by User Group

## TRAIL CONFLICTS

Over a third (42.9%) of cross-country skiers reported experiencing cross-country skier/snowshoer conflict, and 21.4% of cross-country skiers also reported user conflict with winter hikers. Snowshoers did not report

experiencing any types of user conflicts. The largest user conflict appeared to be between cross-country skiers and fat bikers, in which 80% of fat bikers and 42.9% of cross-country skiers reported this type of user conflict (Figure 5.31).

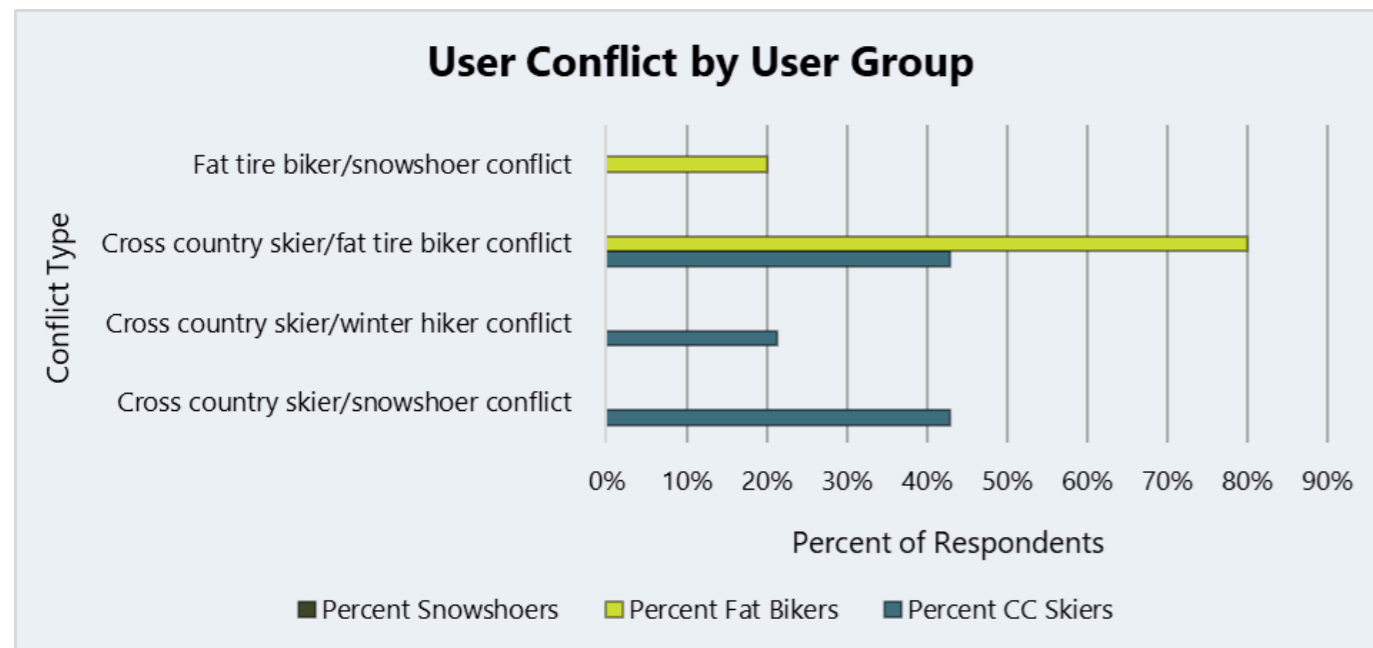


Figure 5.31: Trail Conflicts by User Group

## PUBLIC COMMENTS

In addition to the survey results, this public outreach process collected public comments. This section summarizes these comments into takeaways and overarching themes.

### HORSE USE & TRAIL IMPACTS

Respondents expressed concern about trail damage caused by horses, such as ruts, manure, and trail erosion. Several respondents asked for horse-specific trails or more separation from horse concessions, while other trail users advocate for maintaining access for equestrians as a core part of Harriman State Park's heritage.

### BIKING & FAT BIKING

Bikers stated feeling frustrated about the lack of grooming for fat bike trails and feel unwelcome by Harriman State Park's staff. Respondents made requests for dedicated or separated mountain biking trails and expressed some opposition to e-bikes due to speed and safety concerns.

### WINTER RECREATION & GROOMING

Respondents repeatedly mentioned inconsistent winter grooming and requested more reliable grooming reports that would ideally be posted on platforms like Nordic Pulse. Winter recreationists called for more dog-friendly trails and expanding skate/classic skiing routes.

### HIKER & GENERAL TRAIL USE

Respondents expressed strong support for the continued allowance of only non-motorized trail use. Some confusion was noted surrounding trail signage and map clarity. Although respondents would like to see improved maintenance on existing trails, they also wish to preserve the rustic feel of the Harriman Trail System.

### INFRASTRUCTURE & ACCESS

Many respondents commented on poor parking availability for horse trailers. In the vein of horse-related infrastructure, users also reported a desire for overnight horse corrals and yurt rentals with horse access. An overall upgrade of technology, including non-cash payment options and more information online (e.g., updates, maps, rules), was expressed.

### COMMUNICATION & PARK MANAGEMENT

Respondents expressed appreciation for park staff, but concern over low staffing and funding. Criticism about the lack of communication, particularly surrounding trail grooming, was also noted. Users suggest that Harriman honor the Harriman Gift Agreement and the park's historic intent of prioritizing wildlife protection.

### DOGS & WILDLIFE

Respondents raised concerns that dogs cause conflicts with wildlife. Some users would like to see dog-friendly access to the park, while others prefer that dogs continue to be restricted.

## SUMMARY OF STATEMENTS

Respondents shared a deep love and appreciation for the Harriman Trail System, with mixed perspectives on change. Some would like to keep the Harriman Trail System as it is, while others seek improvements to the park with minimal disruption. In considering trail changes, users desire to balance accessibility with preservation of nature and passive recreation.

## CONCLUSION

The Harriman Trails Experience Survey provides a comprehensive snapshot of how visitors engage with the Harriman Trail System and what they hope to see in the future. The survey captured a wide range of experiences and perspectives that reflect the park's diverse and engaged user base.

Visitors reported high levels of satisfaction with the Harriman Trail System, particularly due to the recreational opportunities it provides and connections it brings to the area's unique landscape. Hiking, biking, horseback riding, skiing, and wildlife observation were among the most common activities performed on the Harriman Trail System, with park use spanning across all four seasons.

Key challenges highlighted in the data include user conflicts, particularly among different spring, summer, and fall user groups, and gaps in communication around trail conditions, fees, and regulations. Differences in use patterns and preferences across user types (e.g., new vs. experienced users, winter vs. summer recreationists) highlight a need for adaptive, responsive management strategies. Respondents expressed both a desire to preserve the Harriman Trail System's current character and recognition that targeted improvements could enhance access, safety, and enjoyment for all.

## INTERCEPT SURVEY DATA FINDINGS

### BACKGROUND

The visitor intercept survey was designed to obtain data about trail use, perceptions of different trail management strategies, and investment priorities from visitors to the Harriman Trail System. The survey's stratified sampling schedule aimed to capture perceptions of park visitors over the course of the summer and fall seasons, providing a representative sample of park users. Data from the intercept survey, the online Experience Survey, and winter event postcard surveys were used to evaluate perceptions of both 'typical' park visitors and invested users of the Harriman Trail System.

## SAMPLE & METHODOLOGY

A combination of on-site stratified sampling and event-based sampling occurred over 48 days and 174 contact hours from June through September 2025. Idaho Master Naturalists, Washington & Lee University undergraduate interns, and CRO Planning & Design staff intercepted visitors at the Harriman State Park Visitors Center, East Entrance (Mailbox), North Entrance (Logjam), as well as Ranchview, Osborne, and Silver Lake parking lots. Intercepts were stratified by sampling location, time of day, and day of the week to control for variability in trail use activities (i.e., horseback riding, fishing access, mountain biking, etc.), visitors' desired conditions (i.e., early mornings, evening sunsets, etc.), and times of peak and off-peak demand (i.e., weekend afternoons, weekday mornings, etc.). Event-based sampling occurred during the Ranch Opener, Henry's Fork Days, Wildlife Festival, and Ranching Days.

Once intercepted, visitors were provided with the opportunity to voluntarily complete the 10-15-minute questionnaire on a tablet using Qualtrics, a survey software platform. If a visitor declined, they were provided the opportunity to use a QR code to take the questionnaire at their leisure on their own device. If visitors refused both options to complete a questionnaire, their activity type (i.e., biking, fishing, horseback riding, etc.) was recorded along with the number of individuals in their group and any stated reason for non-response.

In total, 458 visitors to the Harriman Trail System were intercepted and 315 agreed to complete the questionnaire either in-person or using the QR code, yielding a 69% response rate from on-site sampling. Of those who agreed to participate, 244 completed 50% or more of the questionnaire. The remaining 71 individuals either agreed to complete using the QR code on their personal device but never began the questionnaire (n = 67) or completed less than 50% (n = 4). Of those who declined to participate in the survey, 12% stated it was their first time visiting Harriman State Park, and 8% stated they did not have enough time. No other discernible pattern with activity type, group size, or state rationale was evident for non-responses.

## VISITOR INFORMATION DEMOGRAPHICS

The average age of survey respondents was 53 years old. Most respondents were white (78.7%), possessed a Bachelor's degree or higher (70.5%), and possessed a household income of \$75,000 or above (57.9%). Around 8% of respondents previously served in the military, slightly higher than the national average (6.1%).

**VISITATION**

Most respondents to the intercept survey were repeat visitors to the park (68.0%), with nearly one-third being first-time visitors. Respondents were primarily from Idaho (45.9%), followed by Utah (12.3%), Montana (2.9%), and California (2.0%). Most visitors typically visit Harriman State Park in the summer (85.0%), followed by fall (56.6%), winter (28.3%), and spring (27.0%). Fall, winter, and spring visitation reported in the intercept was dramatically lower than the online survey, likely reflecting the difference between more typical (intercept) and invested (online) visitors across the two surveys. In the intercept survey, that said, on average, repeat visitors have been visiting the Harriman State

Park for 17 years, similar to the Experience Survey sample.

Among winter visitors, 5.8% visit the Harriman Trail System a few times per week, 8.7% visit once per week, 26.1% visit a few times per month, and 59.4% visit once per month or less. Common activities performed by winter trail visitors include wildlife observation (77.9%), backcountry skiing (36.8%), photography (32.4%), and Nordic/cross-country skiing (27.9%) (Figure 5.31). While both remained important activities for visitors, unlike the Experience Survey, wildlife observation replaced Nordic/cross-country skiing in the intercept survey.

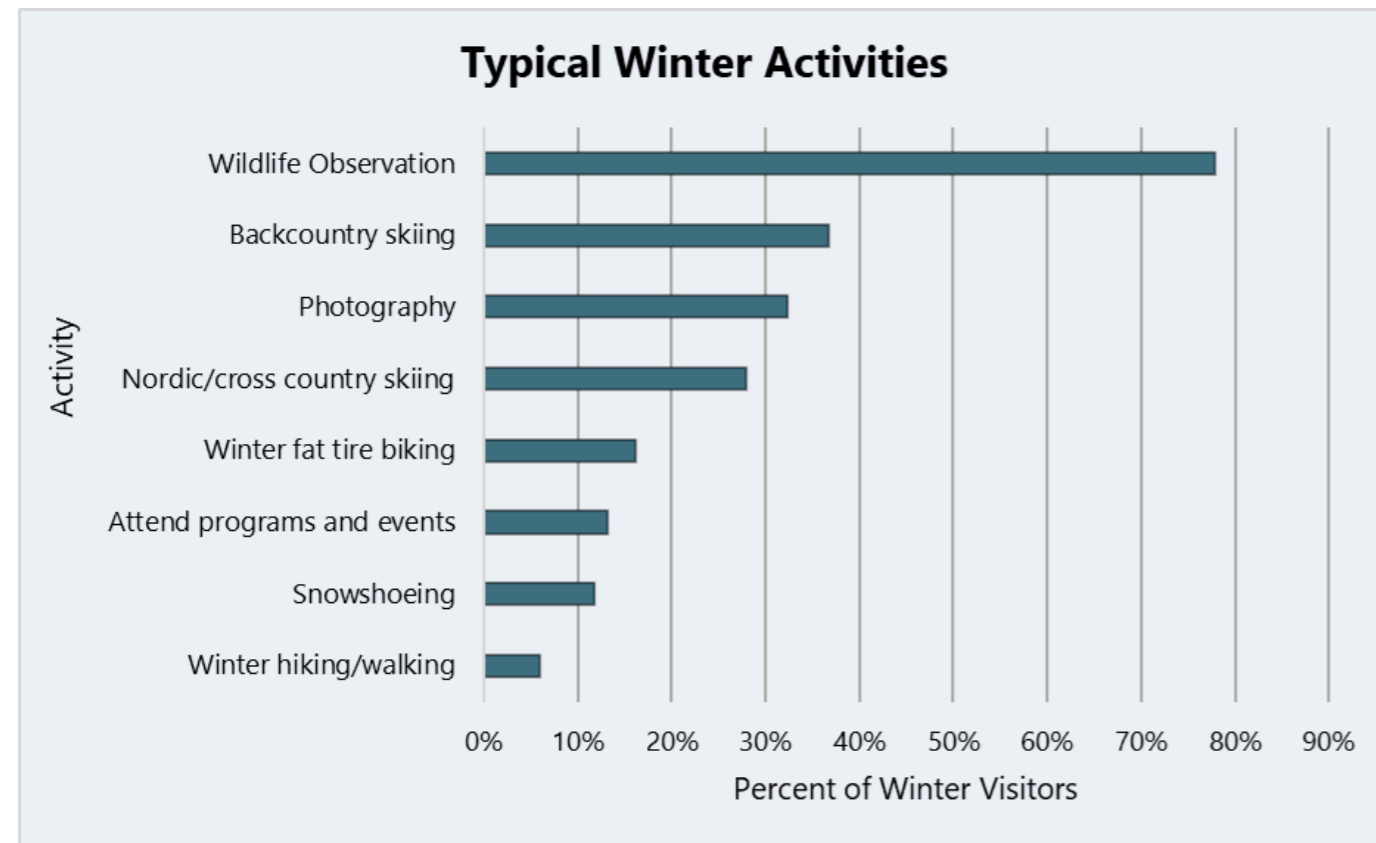


Figure 5.32: Typical Winter Activities Among Survey Respondents

Among spring/summer/fall visitors, nearly one-quarter (23.6%) visit the Harriman Trail System a few times per week, 7.6% visit once per week, 26.1% visit a few times per month, and 42.7% visit once per spring-fall or less. Common activities performed by these users include hiking/walking (71.3%), wildlife observation (49.4%),

fishing/angling (43.9%), mountain/gravel biking (41.5%), photography (26.8%), and outdoor study/interpretation (20.1%) (Figure 5.32). Compared to the online survey, this distribution retains hiking as the top activity, while representing more anglers and fewer horseback riders, for example.

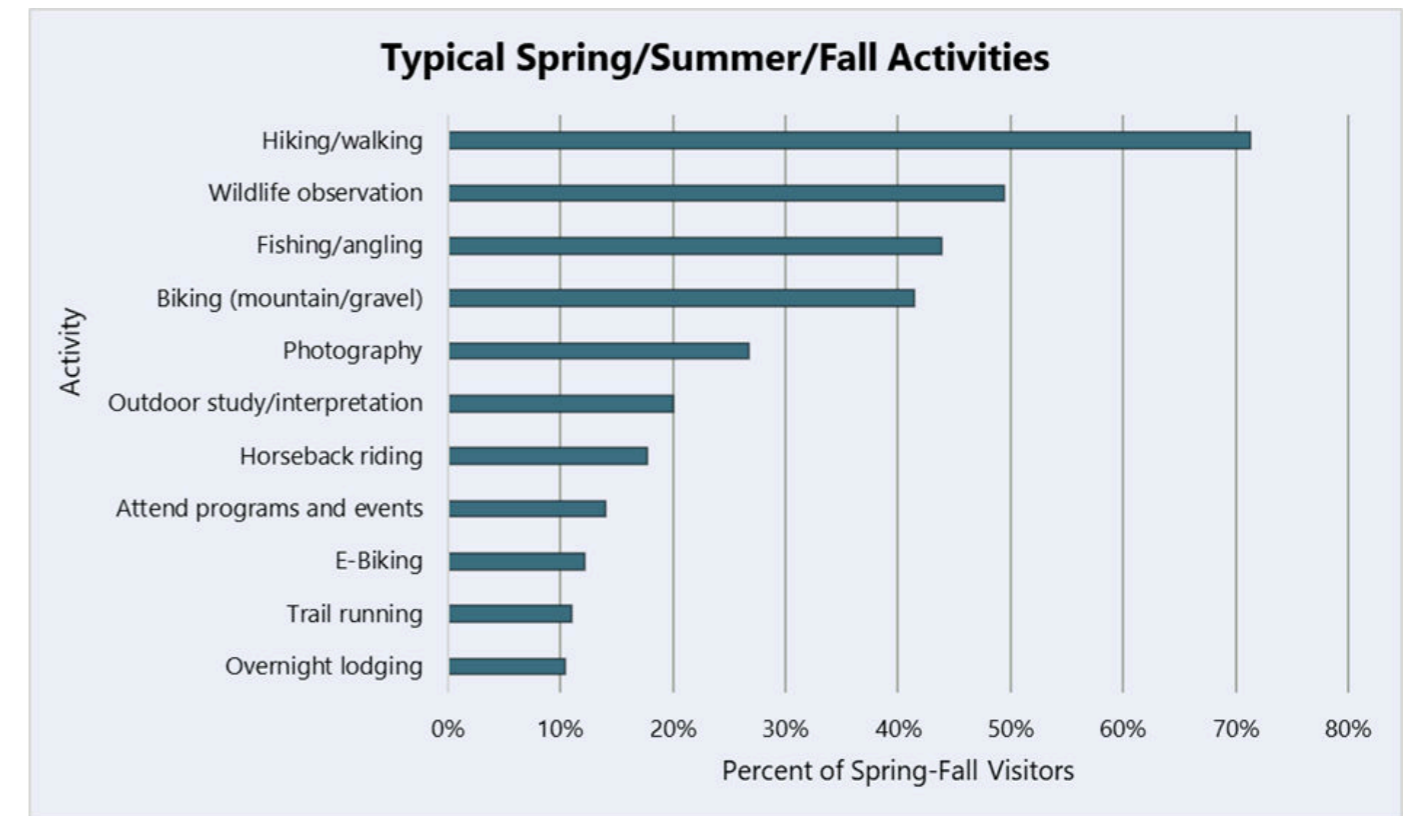


Figure 5.33: Typical Spring-Fall Activities Among Survey Respondents

**ACCOMPANIMENT**

Most repeat visitors to the Harriman Trail System tend to visit the park with family (72.5%) and friends

(62.9%). Around 20% visit alone, and 7.8% visit as part of organized groups Figure 5.34). Around 59% of repeat visitors typically bring children during their visit.

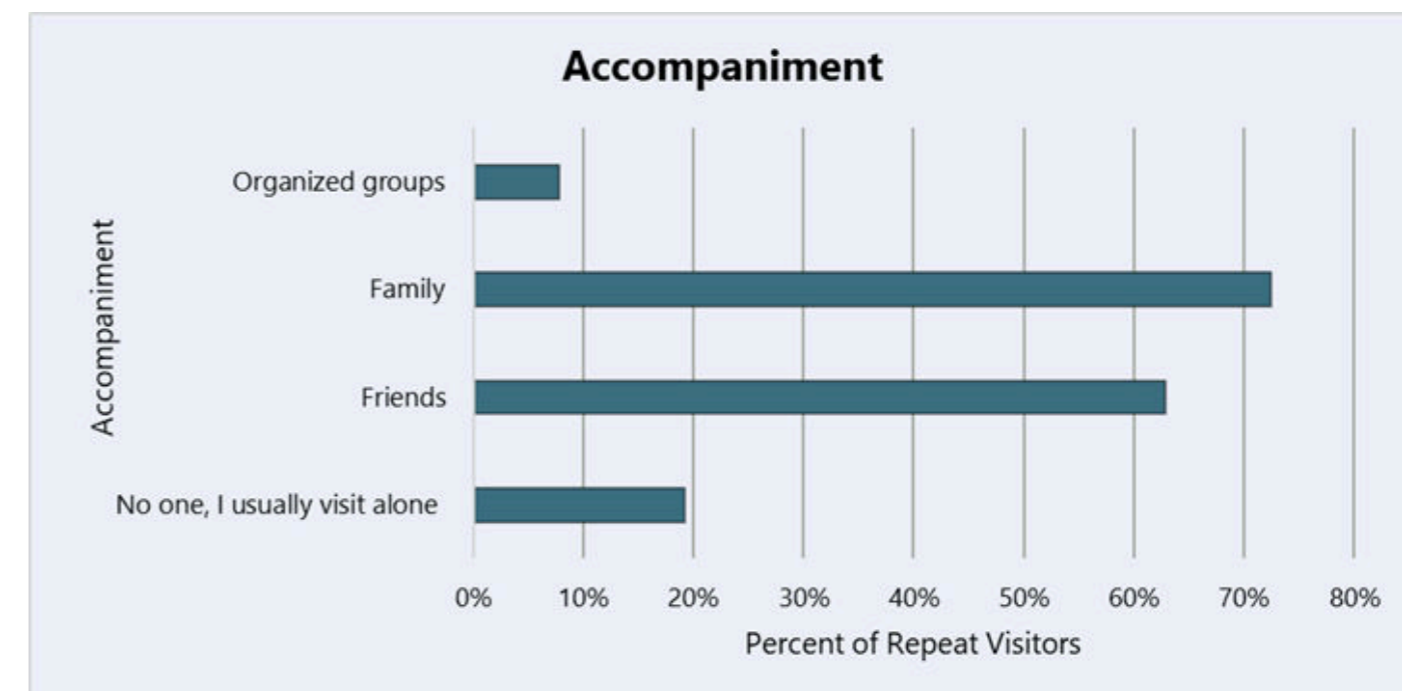


Figure 5.34: Accompaniment During Current Trip to Harriman

## CURRENT TRIP INFORMATION

### ACCOMPANIMENT

On the day they were surveyed, most respondents were visiting with family (58.2%) or friends (20.5%). Twenty-one percent were visiting alone, and 5.7% were part of an organized group. On average, people were visiting the park in groups of four total people. Around 30% of respondents were accompanied by children during their visit. This was lower than the percentage of users who are typically accompanied by children; however, this could be due to reluctance to take a survey while caretaking for children during a recreational outing.

**Table 5.17: Primary Activity Among Intercept Survey Respondents**

STATEMENT	PERCENT OF RESPONDENTS
Hiking/walking	21.80%
Fishing/angling	20.20%
Attending programs and events	10.70%
Horseback riding	9.90%
Wildlife Observation	9.90%
Biking (mountain/gravel)	8.20%
Trail Running	5.70%
Outdoor study/interpretation	4.10%
Photography	3.30%
E-Biking	2.50%
Other	2.50%
Overnight lodging	1.20%

## PLACE IDENTITY, DEPENDENCE, AND ATTACHMENT

Place attachment described the emotional and functional relationship humans have with specific places and is most commonly measured using place identity and place dependence (e.g., Manning et al., 2022; Zajchowski et al., 2020). In our survey, respondents were asked to rate, on a scale of one to five, with one being strongly disagree to five being strongly agree, how much they agree with six statements related to place identity and dependence to understand how visitors connect with Harriman State Park and value it as a unique recreation location. Respondents resonated more strongly with place identity statements than dependence statements. Nearly 80% of respondents either somewhat agreed or strongly agreed with the statement "Harriman State

## VISITOR ACTIVITY

Compared to the typical activity question, visitors were also asked what their primary activity was when intercepted by surveyors. Most respondents visited the Harriman Trail System for the primary purpose of hiking/walking (21.8%), followed by fishing/angling (20.2%), attending programs and events (10.7%), and observing wildlife (9.9%). Ten percent were visiting to enjoy horseback riding, 8.2% were mountain/gravel biking, and 5.7% were trail running (Table 5.17).

Park & Refuge is very special to me." Additionally, 70.8% agreed with the statement "I am very attached to Harriman State Park & Refuge" and 70.4% agreed with the statement "I identify strongly with Harriman State Park & Refuge." Regarding place dependence statements, 70.8% agreed with the statement "Harriman State Park and Refuge is the best place for the activities I like to do," and 57.6% agreed with the statement "No other place can compare to Harriman State Park and Refuge." Less than half of respondents (46.9%) agreed with the statement "I would not substitute any other area for the activities I do at Harriman State Park & Refuge." When averaging the means of place identity and dependence statements, a place attachment score of four out of five is attained, showing that visitors generally agree that they are attached to the park's unique landscape and recreational value (Table 5.18).

**Table 5.18: Place Identity and Dependence Statements**

STATEMENT	AVERAGE	AVERAGE STATEMENT	% SOMEWHAT OR STRONGLY AGREE
Harriman State Park & Refuge is very special to me	4.26	Somewhat agree	78.60%
I am very attached to Harriman State Park & Refuge	4.12	Somewhat agree	70.80%
I identify strongly with Harriman State Park & Refuge	4.15	Somewhat agree	70.40%
Harriman State Park & Refuge is the best place for the activities I like to do	3.97	Somewhat agree	70.80%
No other place can compare to Harriman State Park & Refuge	3.69	Somewhat agree	57.60%
I would not substitute any other area for the activities I do at Harriman State Park & Refuge	3.49	Neither agree nor disagree	46.90%

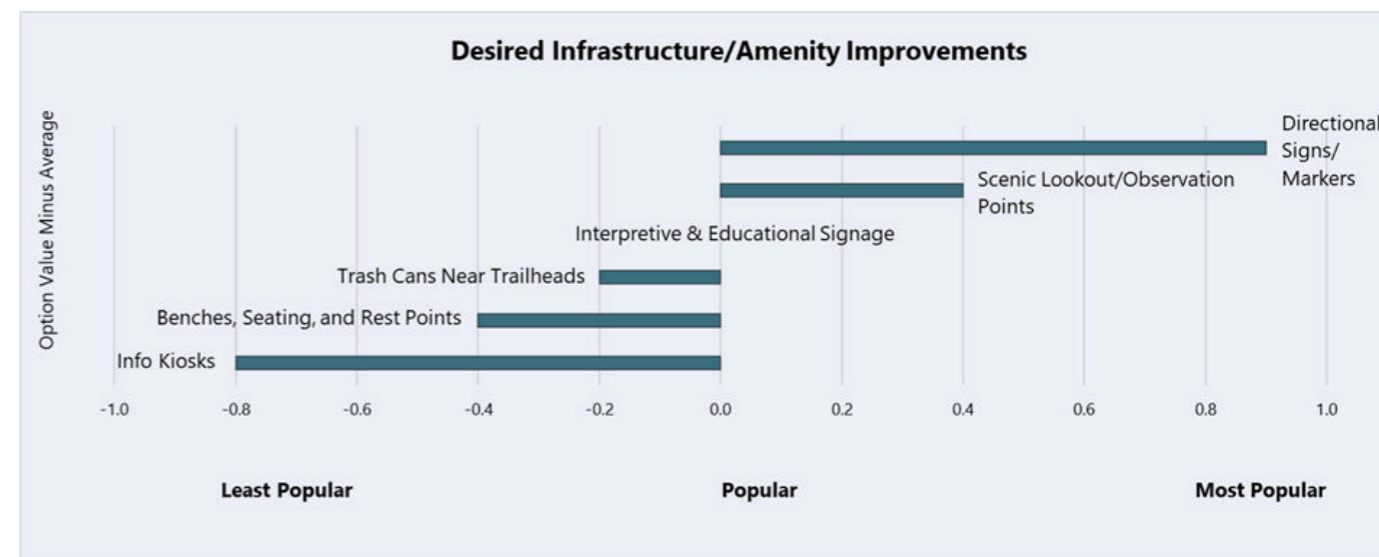
## INFRASTRUCTURE/AMENITY INVESTMENTS

### DESIRED AMENITY INVESTMENTS

Respondents were asked a series of Best-Worst Scaling questions to rank preferred trail-based amenity investments for the Harriman Trail System. Best-Worst Scaling is commonly used in social science and park planning efforts designed to understand ranks for specific preferences (e.g., Shoji et al., 2021). Respondents were asked to select the most and least preferred amenity/infrastructure investments among six options. Once two were selected, respondents were asked, again, to select the best and worst options among the remaining four options that were not previously selected. This continued until all options were ranked (i.e., 6 being the most preferred, 1 being the least preferred). Responses were then analyzed to understand the average 'popularity' of the six options

across respondents. Finally, responses were "mean-centered," meaning the average of all responses to all options was subtracted from the average of each option to show which options were ranked above and below the overall average (Figure 5.35).

Respondents viewed directional trail signage and mileage markers as the best investment option (0.9), followed by scenic lookout/observation points (0.4). Visitors were neutral about interpretive and educational signage, with a score of 0. Visitors were less receptive about investing in trash cans near trailheads (-0.2), benches, seating, and rest points (-0.4), and information kiosks (-0.8). Intercept survey responses from visitors mirror amenity investment priorities among online respondents, with directional signs/mileage markers being a top amenity investment for both survey groups.



*Figure 5.35: Desired Infrastructure/Amenity Improvements Among Respondents*

## AMENITY INVESTMENT LOCATIONS

Respondents were asked to identify the locations where they would like to see amenities installed. Three

primary locations were identified: 1) the Ranchview parking lot and Railroad Ranch area, 2) the Thurmon Creek Bridge, and 3) the Ranch Bridge (Figure 5.36).

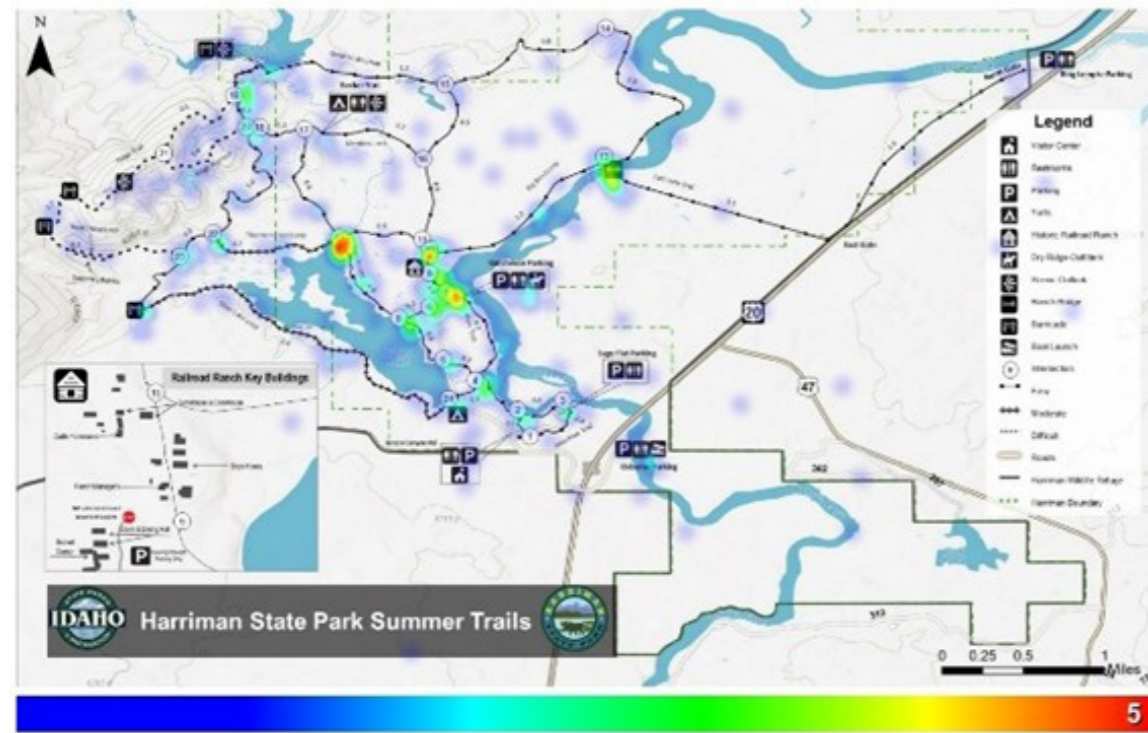


Figure 5.36: Desired Amenity/Infrastructure Investment Locations Among Respondents

## CONFLICT

### CONFLICT EXPERIENCES – ALL USERS

Given the moderate amount of conflict reported in the online survey, the intercept survey was designed to further investigate whether respondents experienced different types of negative interactions on the Harriman Trail System. Potential negative interactions participants were queried about were adapted from Oftedal et al. (2015) and included other people going too fast, other people going too slow, other people were rude, other people passing too closely, other people not yielding, other people were too loud, other people were going off trail, other people were too close to wildlife, other people had dogs with them, and there were too many people on the trail. Respondents were first asked if they had experienced each type of interaction (yes/no). If they answered “yes” to any of the 10 potential negative interactions, they were then asked how often they experienced each of the 10 (1 = never; 5 = every time at Harriman). Of the 244 survey

respondents, only 41% (n = 100) stated they have experienced one or more negative interactions on the Harriman Trail System. Put differently, 60% (n = 144) of trail users did not report any negative interaction with other users during any previous visits to the Harriman Trail System. For all survey respondents, the top three types of negative interactions mentioned included 1) other people had dogs with them (23.1%), 2) other people were going off-trail (16.5%), and 3) other people were too loud (15.2%). Taken together, these findings both support the lack of a dominant type of negative interaction stated by respondents, but also support the idea that conflict depends less on activity type than specific behaviors (i.e., bringing dogs into the park, etc.). Further, the frequency of these behaviors, as reported by respondents, was relatively low. “Other people had dogs with them” was reported to occur 8.2% of the time, while all other conflict types were reported less than 8% of the time during visits (Figure 5.37).



Figure 5.37: Trail-Based Conflict Experiences and Frequency Among Respondents

Unlike in the online survey, results in the intercept survey highlight that, when negative interactions were reported, they often were between trail users pursuing the same activities (i.e., fishers/anglers in conflict with each other) rather than solely between trail users pursuing different activities (i.e., fishers/anglers in conflict with bikers) (Figure 5.38). For example, the largest group reporting negative interactions was hikers/walkers (38%), and approximately half of those reporting these interactions shared that the other party in a negative encounter was also hikers/walkers.

This is not to neglect the instances of inter-group conflict: a segment of hikers/walkers also reported conflict with bikers, for example. Further, the online survey features these types of inter-activity conflicts (i.e., horseback riders and bikers, etc.). Taken together, the results from both surveys highlight the multi-faceted and diverse perspectives of the Harriman Trail System's current users, which do not point to any one specific conflict based on activity type or one corresponding management action.



Photo Credit: Charlie Lansche

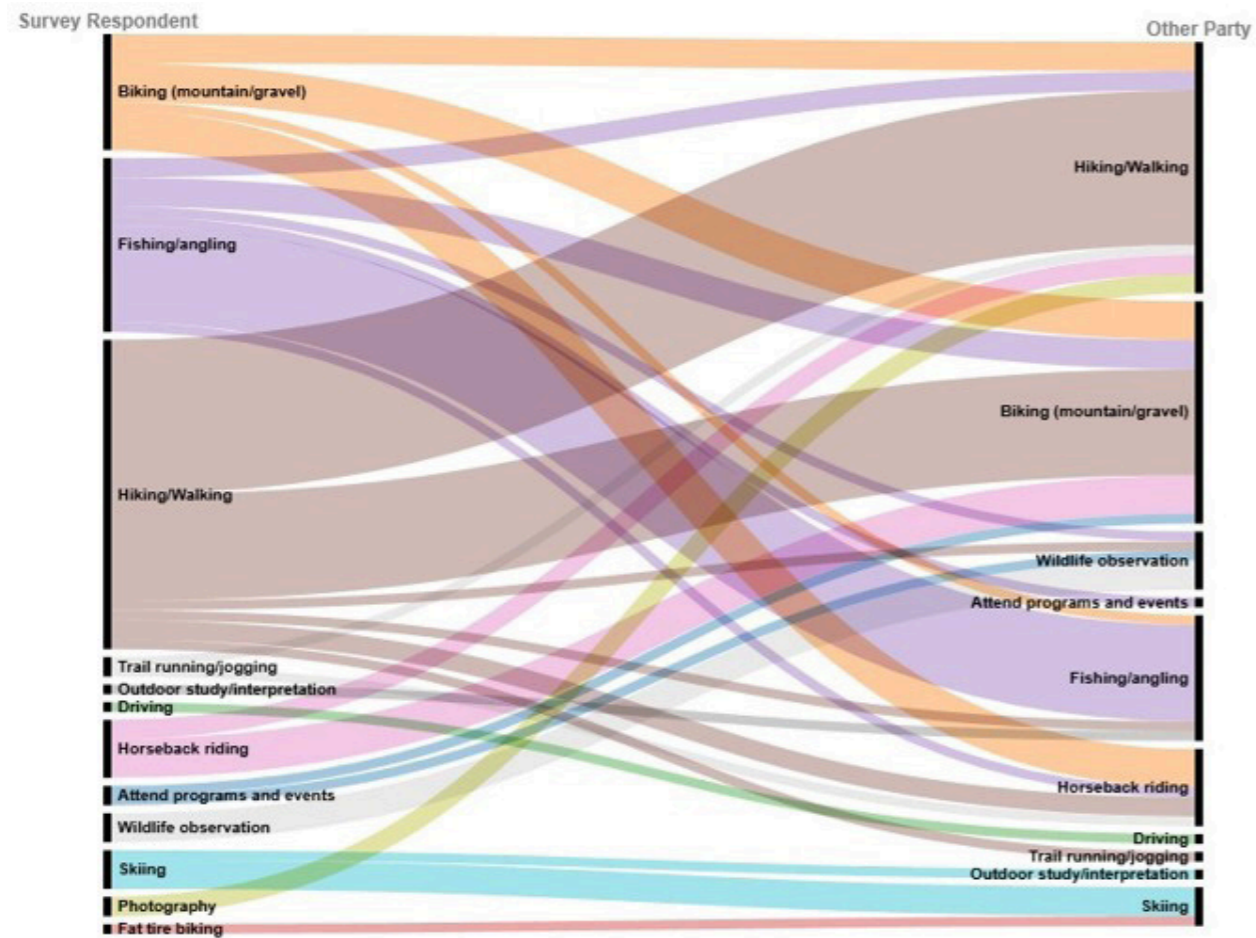


Figure 5.38: Distribution of Conflict Among Respondents

Note. Figure 5.38 Alluvial diagram displays the activity of person who is perceived a negative interacted (left) and the activity of the group/individual they encountered (right). Percentage distribution is only shown for activities 10%. For example, "Horseback riding" as an activity encountered by survey respondents occurred 9.5% of times, as opposed to "Hiking/walking" (31%).

Respondents who have experienced conflict on the Harriman Trail System (41%) were also asked to identify the likely locations of where the conflicts occurred or would occur on a map. Respondents most frequently identified the area surrounding the Ranchview parking lot as a hotbed for conflict. This includes the parking lot itself, the northeast section of

the River Trail, and the Western side of the Ranch Loop. Additional locations included both the Silver Lake and visitor center parking areas, highlighting that parking lots and trails adjacent to them are more conflict-prone than Harriman's back-country trails (Figure 5.39).

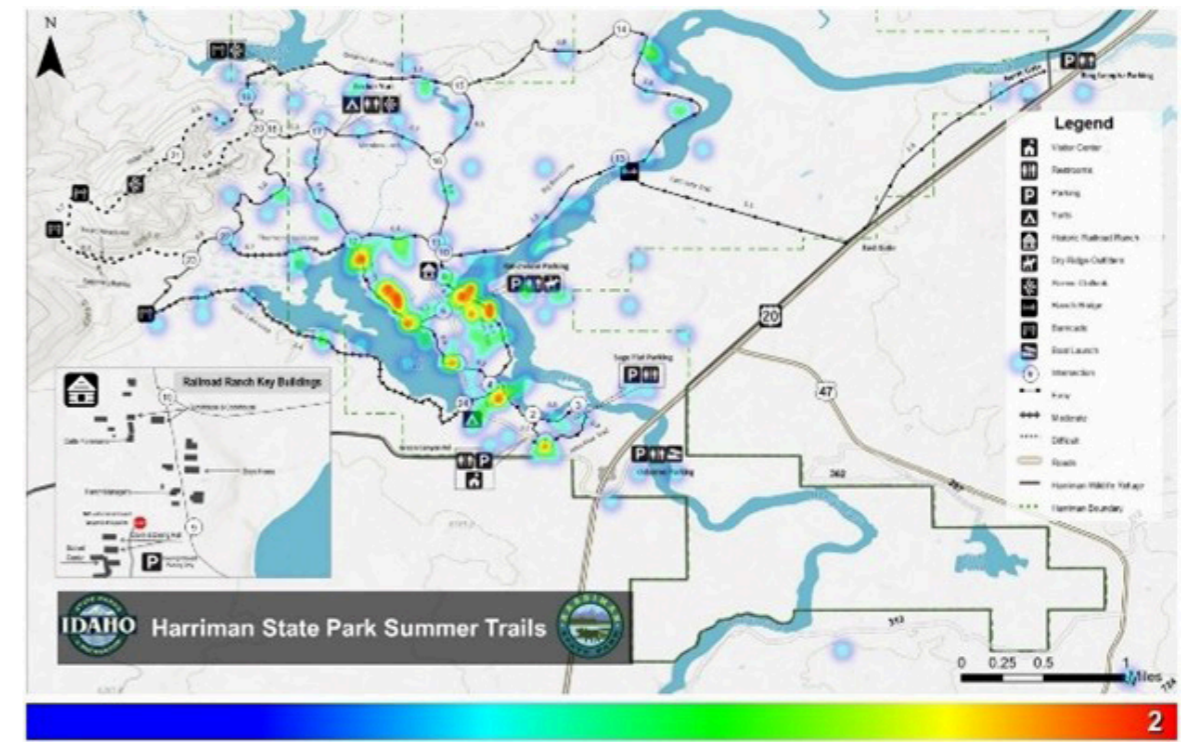


Figure 5.39: Likely Locations of Trail-Based Conflict

### CONFLICT EXPERIENCES – REPEAT VISITORS

To understand if certain demographic characteristics influenced perceived conflict, repeat visitors were segmented from the broader sample. Overall, 51.8% of repeat visitors have reported some form of conflict during their visits to the Harriman Trail System, meaning that nearly half of repeat visitors to Harriman have never experienced any form of user conflict at the park. Reported conflict patterns among repeat visitors, unsurprisingly, mirror the entire respondent

pool. The most commonly reported conflicts among repeat visitors include 1) other people had dogs with them (28.2%), 2) other people were going off-trail (22.7%), and 3) other people were too loud (19.5%). The frequency of these negative interactions was low. "Other people had dogs with them" was reported to occur 10% of the time, while all other conflict types were reported less than 10% of the time during visits (Figure 5.40).



Figure 5.40: Trail-Based Conflict Experiences and Frequency Among Repeat Visitors



Photo Credit: *Charlie Lansche*

### MANAGEMENT SOLUTIONS

In response to user conflicts on the Harriman Trail System, all respondents – whether they had experienced negative interactions or not – were asked a series of Best-Worst Scaling questions about preferred management interventions. Respondents were asked to select the most and least preferred options for managing conflict among seven options. Once two were selected, respondents were asked again to select the most and least preferred interventions among the remaining options. This continued until all options were selected. Finally, responses were “mean-centered,” meaning the average of all responses to all options was subtracted from the average of each option to show which

options were ranked above and below the overall average (Figure 5.35).

The most popular option was no action, with a score of 0.8. This was followed by separating activities (0.6), increasing educational efforts (0.5), and building more trails (0.3). Limiting access to users was overwhelmingly unpopular, with a score of -1.2. Respondents also viewed widening trails and designing one-way trails as unfavorable (-0.5). Findings suggest that visitors do not perceive existing levels of conflict on Harriman’s trails as something that necessitates modification to the trail system. Rather, if management action were to occur, visitors prefer practices that educate users, encourage (but do not



Figure 5.41: Preferred Conflict Management Options Among Respondents

force) user avoidance/separation, and add additional routes through the Harriman Trail System (Figure 5.41).

### CONCLUSION

Where feasible, results indicate that increased messaging related to dogs being prohibited on trails during the spring–fall months at Harriman may reduce the highest reported type of conflict. Additional enforcement activity may be prudent to address the owners bringing dogs into the park. Conversely, pending resources, wildlife management corridors, and other necessary conditions, establishing a trail in Harriman East where dogs are allowed (on leash) may provide an opportunity for those interested in bringing

their dogs to the park. Finally, results point to the potential for proactive strategies for possible activity-specific recommendations to reduce conflict. For example, rather than zoning specific trails for specific uses, park management could message the advantages of specific trails for specific types of activities (e.g., biking on the ridge trail) to “nudge” activity types to further disperse (e.g., Dustin et al., 2019). Again, participants reported very low instances and rates of conflict on the Harriman Trail System; thus, these recommendations are solely to proactively continue to disperse users to maintain these relatively low levels of reported conflict. .



Photo Credit: *Brett Rannow*

# 6 MANAGEMENT CONDITIONS

## TAKEAWAYS

- Harriman State Park's foundational Gift Agreement emphasizes its dual identity as both a wildlife refuge and recreation area, requiring ongoing balance between habitat protection and public access.
- The Idaho State Parks Strategic Plan (2025–2028) stresses expanding recreational access, reducing maintenance backlogs, and strengthening stewardship. For the Harriman Trail System, this aligns directly with addressing its trail maintenance capacity limits, reliance on external partners, and the need to balance recreation demand with habitat protection.
- Park staff spend about \$10,000 annually on fleet and equipment repair. Trail maintenance is often limited by budget fluctuations, with most work accomplished using existing staff and supplemented by donations or volunteers. Harriman State Park now has a dedicated Trail Ranger position (2025), marking a shift toward more consistent trail operations and oversight.
- Winter grooming occurs 1–2 times per week but is vulnerable to equipment breakdowns and other staffing priorities, risking inconsistent coverage.
- Summer trail work typically consists of about four consolidated weeks per year, focusing on graveling, clearing hazard trees, and targeted repair projects. Given these necessary responsibilities, Harriman State Park's trail crews are limited in their ability to perform large, complex trail projects.
- The park's trail maintenance fleet and tools (e.g., grooming snowmobiles, tractors, chainsaws) are functional but aging. Trail operations rely heavily on external funding and partnerships, including Friends of Harriman State Park donations, concessionaire revenue, and U.S. Forest Service cost-share agreements. Monitoring tools like a vehicle trail counter are in place but limited, highlighting an opportunity to strengthen visitor use data collection and reporting.
- Dry Ridge Outfitters, Harriman State Park's former commercial horseback riding concessionaire, used all official park trails plus a network of unofficial, unmapped routes, which increased complexity in managing user conflicts and trail maintenance. Concessionaire use was heavily concentrated on certain loops and riverside trails, creating localized impacts and higher maintenance needs on specific official trail segments. An opportunity emerges to address concerns, impacts, and conflicts related to high-volume concessionaire use through the modification of the concessionaire lease and vendor change occurring in early 2026.
- Youth Employment Program (YEP) crews have provided recurring trail maintenance support since 2024, particularly in erosion repair, rerouting, and drainage improvements. Effective use of YEP requires clear work tasks, alignment with crew skills, and oversight, highlighting the need for structured planning when leveraging these teams. Friends of Harriman State Park is expected to continue its relationship with YEP into 2026.



Photo Credit: Idaho Department of Commerce – Visit Idaho

## HARRIMAN STATE PARK ORGANIZATIONAL STRUCTURE

Figure 6.1 provides a visual overview of paid staff who can reliably support the development, maintenance, and management of the Harriman Trail System. This section does not describe the organizational structure of potential partners and volunteer groups who could assist Harriman State Park staff with trail management and maintenance.

Idaho Department of Parks and Recreation's staff at Harriman State Park are the most readily available to consistently develop, improve, maintain, and monitor the Harriman Trail System. Idaho Department of Parks and Recreation also works with partners and volunteer groups to expand labor capabilities related to trail development and maintenance. The U.S. Forest Service's Ashton Ranger District possesses dedicated trail crews in the region and may support trail construction work on U.S. Forest Service property; however, their assistance should not be relied on, given the stipulations outlined in the U.S. Forest Service and Idaho Department of Parks and Recreation Cost Share Agreement and the U.S. Forest Service's prioritization of maintaining NFS-connected trails. Staffing at Harriman State Park consists of:

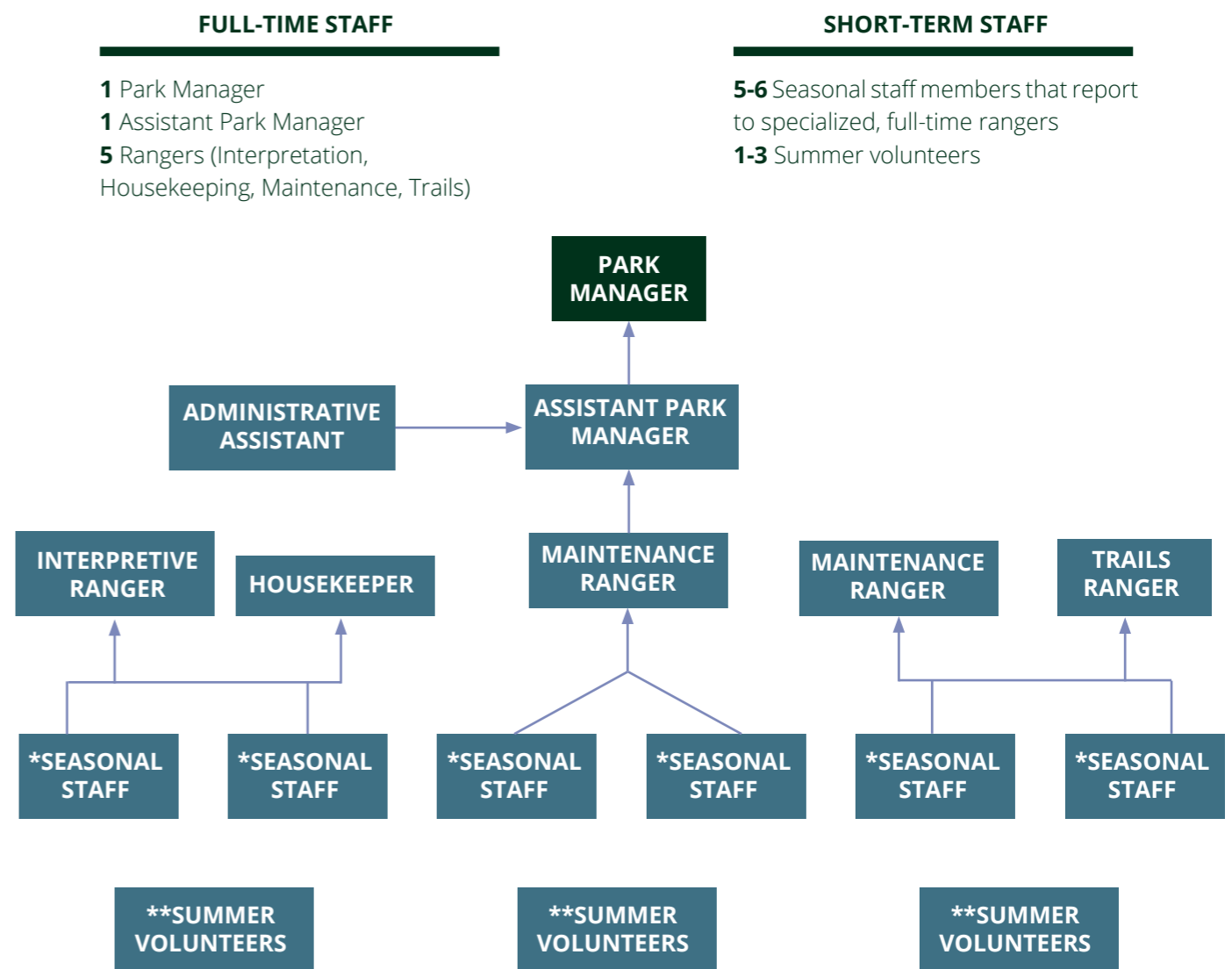


Figure 6.1: Harriman State Park Organizational Chart

Each position reports from the bottom upward.

\*The number of seasonal staff divided amongst each ranger varies. Typically between 5-6 are hired for the season. These numbers are based on budget and the number of applicants.

\*\*Summer volunteers vary between 1-3, depending on the year.

# LITERATURE REVIEW: MANAGEMENT POLICIES AND IMPACTS TO THE HARRIMAN TRAIL SYSTEM

## INTRODUCTION

The consulting team spent the month of March 2025 compiling management and policies relevant to the Harriman Trail System, emphasizing trails, wildlife, and fish management. Although many documents reviewed did not specify Harriman State Park or the Harriman Trail System directly, the information gathered will inform the Harriman Trail System Management Plan and guide best practices moving forward. The overall sentiment from these documents is collaborating with partners and other agencies to ensure humans and nature continue to co-exist in harmony within and the surrounding bounds of Harriman State Park and the Caribou-Targhee National Forest.

## HARRIMAN STATE PARK GIFT AGREEMENT

The Harriman State Park and Wildlife Refuge Gift Agreement is a foundational document, establishing

managerial parameters around Harriman State Park. The Agreement outlines the necessity to preserve Harriman State Park as a wildlife refuge while providing outdoor recreation opportunities to the public. Restrictions on fishing, hunting, and other activities deemed necessary by the state to maintain status as a wildlife refuge (i.e., motorized activities) are also detailed.

The Harrimans stated "In order that the people of Idaho in particular and visitors from other states and countries may continue to enjoy these privileges in perpetuity... a gift of the property known as Railroad Ranch to the people of Idaho to be maintained as a State Park... For the use and recreation of the general public...The wildlife of Idaho is not the exclusive property of any one generation but is a limited resource that must be passed on to succeeding generations... the Railroad ranch has protected game, birds, and fish and certain areas have been protected as a sanctuary for all forms of wildlife."

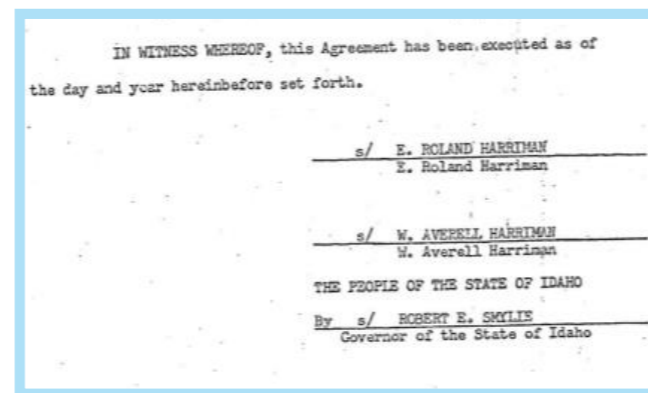
These statements are to be assumed as guiding principles to revisit as the park enhances its non-motorized recreational offerings to the public over time.

## HOW DOES THIS DOCUMENT IMPACT THE TRAILS MANAGEMENT PLAN?

- The document's emphasis on preserving Harriman State Park as a wildlife refuge underlines the

necessity of prioritizing habitat protection over trail development, particularly in and around sensitive areas.

- The document emphasizes the importance of allowing visitors from Idaho, the US, and beyond to access and enjoy Harriman State Park; therefore, the Trail Management Plan should provide recommendations that improve access to the Harriman Trail System and promote it as welcoming to all allowed use types.



## 1997 U.S. FOREST SERVICE TARGHEE FOREST PLAN

Within the context of the Plan's Island Park subsection, the Targhee Forest Plan emphasizes elk habitat protection while supporting improved recreation access and quality. Most trail-based activities are permitted with specific restrictions, such as prohibiting off-trail cross-country travel for bikers, snowmobilers, and motorized users. Recreation management efforts are centered around maintaining the assets of the Mesa Falls Scenic Byway.

Although the details outlined are not specific to Harriman State Park, they relate to the area by highlighting allowed uses comparable to Harriman (pedestrian use, horseback riding, cross-country skiing, and other non-motorized winter uses). The document also describes how the U.S. Forest Service focuses its efforts on protecting elk habitats through seasonal recreation regulations and closures.

## HOW DOES THIS DOCUMENT IMPACT THE TRAILS MANAGEMENT PLAN?

- Although dated, the document focused primarily on providing security for the elk herds that roam through the area. Since elk are a primary species within and surrounding the Harriman Trail System, the Trails Management Plan should follow relevant recommendations to secure their habitat and minimize disturbances.
- This document outlines the U.S. Forest Service's focus on continued improvements of recreational access and quality for all non-motorized trail users within the Island Park Subsection of the Targhee National Forest. The Trails Management Plan

should provide recommendations that enhance the quality of recreation experiences within the Harriman Trail System and the surrounding region.

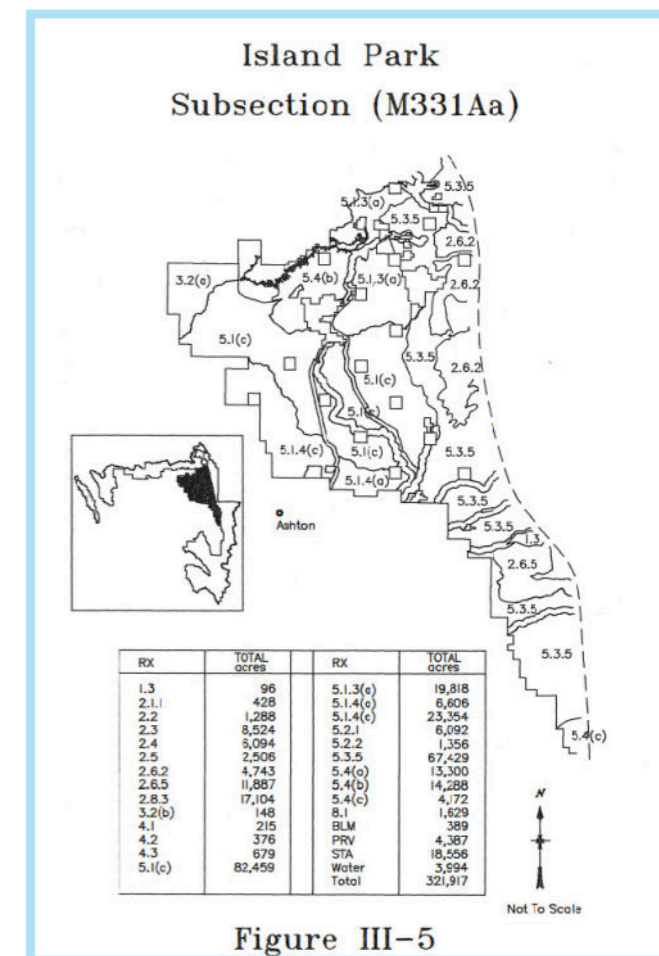


Figure III-5

## 2025-2028 IDAHO STATE PARKS STRATEGIC PLAN

The Idaho State Parks Strategic Plan emphasizes creating enriching outdoor experiences while being responsible stewards of natural and cultural resources. Key objectives include expanding access to recreational facilities, increasing daytime recreation opportunities, and developing new adventure-focused experiences.

Trail access and development are prioritized alongside efforts to reduce the State Park system's maintenance backlog by FY 2030, noting a need to establish an ongoing maintenance program. The plan also highlights the importance of protecting wildlife habitat through resource restoration and sustainable land management.

Overall, the State Parks Strategic Plan's strategy reflects a balanced commitment to recreation, preservation, and long-term stewardship.

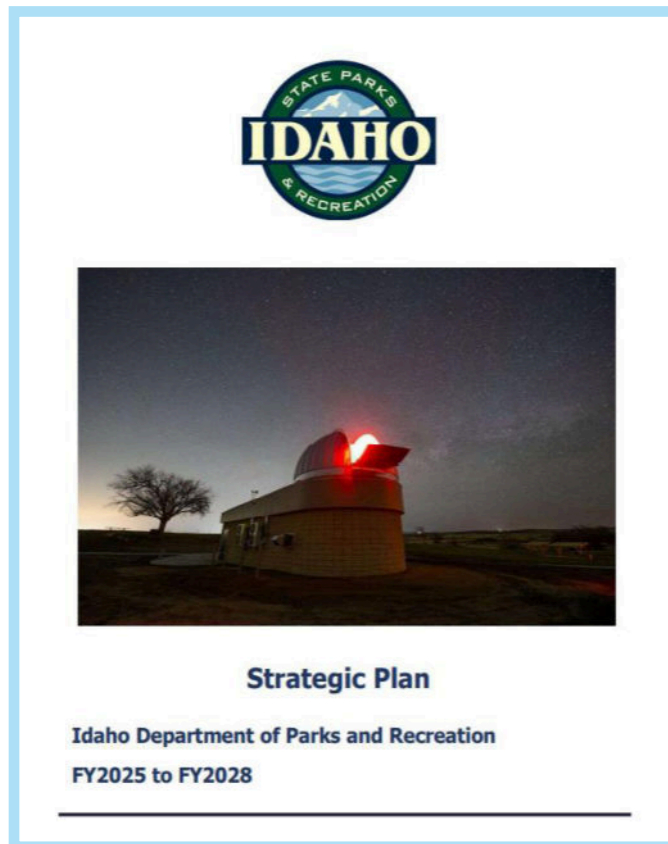
## HOW DOES THIS DOCUMENT IMPACT THE TRAILS MANAGEMENT PLAN?

- The document highlights three values that the Trails Management Plan should also reflect:



Photo Credit: Charlie Lansche

1. Create experiences that renew the human spirit.
  2. Maintain and create new opportunities for adventure.
  3. Be responsible stewards of our natural resources.
- The document emphasizes that Idaho State Parks strives to work with partners, volunteers, land agencies, etc., to accomplish these goals. Emphasizing collaboration between all relevant stakeholders will be a necessary component of the Trails Management Plan.
  - Stewardship priorities such as erosion control, invasive species management, riparian restoration, and fire risk reduction are central to the plan, reinforcing the need to design, maintain, and manage trail systems that protect sensitive habitats while supporting increased recreation demand.



## 2024 HARRIMAN WILDLIFE RESOURCES SUMMARY

The report provides an overview of important wildlife species and habitats within Harriman State Park and offers recommendations for integrating wildlife conservation into park management. The park, part of the Greater Yellowstone Ecosystem (GYE), was established as a wildlife refuge and remains a critical habitat for species such as elk, moose, grizzly bears, trumpeter swans, sage grouse, and long-billed curlew. The report highlights priority wildlife species, including game species, conservation-priority species (Species

of Greatest Conservation Need - SGCN), and important wildlife assemblages. Conservation targets focus on protecting aquatic habitats, maintaining habitat security, managing grazing, and mitigating human-wildlife conflicts. The document also emphasizes cooperation with external agencies to conserve habitat beyond park boundaries.

The report underscores the impact of trail development and recreational use on wildlife behavior and habitat security.

- **Trail Impacts on Wildlife:** Studies indicate that motorized and non-motorized recreation (hiking, biking, horseback riding) can disturb elk, grizzly bears, and nesting birds. Increased human presence near trails may reduce foraging time, alter migration patterns, and increase nest predation.
- **Trail Planning Considerations:** To minimize habitat fragmentation, the report recommends limiting new trail development in sensitive areas (e.g., Shotgun Valley, Thurmon Ridge, Silver & Golden Lakes) and implementing seasonal closures to protect calving and denning wildlife.
- **Grizzly Bear Conflict Avoidance:** Increased visitation to Harriman State Park raises the potential for human-bear conflicts. Park management is advised to implement trail-use guidelines, visitor education programs, and conflict-mitigation strategies.

By integrating wildlife conservation strategies into trail planning and recreation management, Harriman State Park's managers can balance public access with the long-term protection of its diverse wildlife and habitats.

### HOW DOES THIS DOCUMENT IMPACT THE TRAILS MANAGEMENT PLAN?

- This document emphasizes the species of greatest conservation need that reside within and around the Harriman Trail System and provides significant utility in establishing spatial recreational development guidelines for the Trails Management Plan. Understanding what species exist, where they are potentially located, and how IDFG and the Idaho Department of Parks and Recreation can work together to protect these species and secure their habitats in the wake of increased recreational demand is critically important for this project and Harriman State Park's long-term recreational management objectives.

## IDFG STATE WILDLIFE ACTION PLAN – AN EMPHASIS ON THE HUMAN INTRUSIONS & DISTURBANCE – OUTDOOR RECREATION SECTION

The Idaho State Wildlife Action Plan recognizes outdoor recreation as a vital part of the state's culture and economy and emphasizes the need to balance increasing recreational demand with protecting wildlife and habitats. As a result, the plan encourages collaborative efforts among recreation users, land managers, and conservation stakeholders. Thoughtfully designed and managed recreational infrastructure is vital to reducing impacts on sensitive species and habitats. Best management practices, like trail rerouting, seasonal closures, and erosion control, are also recommended. Education and outreach are central to informing recreationists about wildlife-friendly practices, while adaptive management strategies help monitor and respond to ecological impacts.

The plan outlines voluntary conservation actions tailored to different habitat types—forests, wetlands, deserts, alpine tundra, aquatic zones, and caves—all of which face unique challenges from recreational use. These actions aim to mitigate stressors such as invasive species, habitat degradation, and wildlife disturbance, particularly during critical life stages like nesting or migration. By promoting informed recreation management, habitat restoration, and strategic infrastructure placement, the plan seeks to protect the Species of Greatest Conservation Need (SGCN) while ensuring that outdoor recreation remains a sustainable and enriching part of Idaho's outdoor legacy.

### HOW DOES THIS DOCUMENT IMPACT THE TRAILS MANAGEMENT PLAN?

- This document provides in-depth information related to wildlife, fish, and plant habitats and the effects that human recreation has on these populations. It provides actionable examples of how to respond to outdoor recreation-related stressors towards specific habitats.
- The document outlines how the Idaho Department of Fish & Game (IDFG) recognizes that outdoor recreation activities (camping, hiking, fishing, biking, etc.) are essential to the livelihoods of the recreators and the economic benefits they provide to communities around the state. Protecting and conserving the species of greatest conservation need (SGCN) is possible through thoughtful planning and effective collaboration with stakeholders and partnerships throughout the state.



## IDFG ELK MANAGEMENT PLAN – FOCUS ON THE ISLAND PARK ELK ZONE

The Island Park Elk Zone, covering GMUs 60–62A, includes two major elk herds: Sand Creek (approximately 90% of the Island Park population and the herd that is seen at Harriman State Park) and Teton Canyon. The Sand Creek herd is largely dependent on high-desert winter habitat, with seasonal migration patterns that intersect with Yellowstone elk. The herd benefits from closure to human entry on most of its winter range, significantly reducing disturbance and providing security. However, habitat challenges persist due to development, wildfire, and recreation encroachment. The IDFG is actively working to manage elk depredation and livestock interactions, which are intensified during harsh winters. There is also concern over growing numbers of year-round resident elk in GMU 60A, which increases conflicts across all seasons.

Recreation and trail access have direct and indirect effects on elk behavior, habitat use, and survival. Research shows elk avoid roads and trails, especially those with high traffic or motorized access. Disturbance from motorized and non-motorized recreation can lead to reduced foraging, increased movement, and lower calf survival, particularly concerning during sensitive seasons like winter and spring calving. The plan recommends travel and recreation infrastructure be strategically located away from key elk habitats, such as calving areas, winter ranges, and migration corridors. Maintaining low

motorized trail route densities (<1.7 mi/mi<sup>2</sup>) and using seasonal closures (e.g., May 15–June 30 for calving and Dec 15–April 15 for winter relief) are strongly advised. Recommended unmotorized trail route density is undefined. IDFG also stresses the importance of collaborative recreation management with landowners and agencies to balance public access with elk conservation.

### HOW DOES THIS DOCUMENT IMPACT THE TRAILS MANAGEMENT PLAN?

- The Elk Management plan holds a section specific to the Island Park Elk zone, which is primarily comprised (90%) of the Sand Creek Herd (pages 154-158). This section provides clear guidance on promoting elk habitat protection within Island Park's recreational system. The Trails Management Plan should refer to this plan's overall and Sand Creek Herd-specific recommendations when considering responsible trail placements, closures, and re-route decisions within the Harriman Trail System.



### U.S. FOREST SERVICE TRAIL MAINTENANCE AND CONSTRUCTION NOTEBOOK

This document guides U.S. Forest Service managers in maintaining and constructing sustainable trail networks for non-motorized and motorized outdoor recreational uses.

### PLANNING FOR NEW TRAILS AND LAW REQUIREMENTS

Before beginning a trail project, planners should consider its alignment with current trail program priorities and land management plans; additionally, planners should comprehensively evaluate the environmental, social, and economic sustainability of any proposed developments. Planners must assess whether the proposed trail is physically sustainable in the local terrain and whether it impacts historic or sensitive ecological areas. The route should contribute to the broader trail system, accommodate multiple user groups, and reflect public and community input. It is also necessary to confirm long-term funding sources, maintenance capability, and workforce availability (employees, partners, or volunteers). Early involvement of line officers and environmental or cultural specialists is critical to ensure the appropriateness of the location and avoid resource conflicts.

Trail planning and construction activities are governed by several federal laws, chief among them the National Environmental Policy Act (NEPA). NEPA requires an assessment of environmental impacts for most federal actions. Line officers must sign off on environmental studies and associated decision documents, which define the scope, location, timing, and mitigation strategies for a project. However, routine maintenance tasks—like brushing, grading, drainage cleaning, and structure repair—are often exempt through categorical exclusions listed in Forest Service Handbooks (FSH 1905.15). Other relevant laws include the Clean Water Act, National Historic Preservation Act, Endangered Species Act, National Trails System Act, and the Travel Management Rule. Special precautions are required when working near riparian areas to avoid sedimentation and habitat disturbance.

### MAINTENANCE AND ASSESSMENT GUIDELINES

The trail maintenance guidelines within the document emphasized the importance of consistent, proactive care to preserve trail quality, user safety, and environmental sustainability. Maintenance should address root causes rather than superficial symptoms, focusing efforts on areas where safety risks or environmental damage are most evident. Effective trail upkeep involves restoring tread, clearing corridors, maintaining signs, and repairing associated features. Trail managers are encouraged to establish systems for reporting issues, prioritize projects based on condition assessments, and utilize data collected through standardized methods to inform decisions and justify resource allocation at both local and national levels.

Assessments are a critical component of trail maintenance, requiring trained personnel to evaluate current conditions against original design

specifications. Good assessments include detailed notes, photos, and thoughtful repair plans that consider access, materials, and weather impacts. Maintenance plans serve as operational roadmaps—identifying project needs, assigning responsibilities, and tracking progress. These plans enhance communication with stakeholders, aid in allocating resources, and help identify recurring issues that may indicate deeper problems. Regular sign and marker maintenance ensures trails remain navigable and safe for public use.

### MANAGEMENT OBJECTIVES

The Forest Service manages a diverse trail system that ranges from rugged backcountry paths to paved front-country routes. Each trail is designed to meet specific needs based on its setting, intended use, and development scale. Trail managers determine design and maintenance standards by evaluating factors such as the Recreation Opportunity Spectrum (ROS) class, motorized vs. nonmotorized status, development scale (trail class), and intended user types (e.g., hikers, bikers, ATV users).

A Trail Management Objective (TMO) outlines the trail's characteristics, ensuring design and maintenance align with the intended purpose. TMOs may include varying standards along different trail segments to reflect changes in terrain or land use (e.g., transitioning from a developed site to wilderness). This standardized approach promotes consistency across the National Forest System.

All trails must comply with national quality standards outlined in the Forest Service Trails Management Handbook (FSH 2309.18, chapter 10, section 15). These standards guide both construction and maintenance practices to ensure trails are safe, sustainable, and fit for their designated use. Trail managers rely on these directives, alongside digital resources like the Forest Service's trail planning web pages, to apply legal and technical specifications throughout the trail's lifecycle.

### HOW DOES THIS DOCUMENT IMPACT THE TRAILS MANAGEMENT PLAN?

- Core Project Team members from the U.S. Forest Service emphasized that, while maintenance and reroutes of U.S. Forest Service trails within the Harriman Trail System are embraced, developing entirely new trails on U.S. Forest Service land around Harriman State Park is a difficult task. The U.S. Forest Service has not built new trails around Harriman State Park in the past decade due to a disconnect from National Forest System trails, limited labor availability, and the region's existing trail capacity. The information provided around trail development is for educational purposes only to obtain a general understanding of the

processes required to develop new trails on U.S. Forest Service land.

- The document provides in-depth information about proper trail maintenance techniques, sustainability considerations, and management practices. As the Idaho Department of Parks and Recreation and U.S. Forest Service hold a cooperative agreement that outlines the Idaho Department of Parks and Recreation's responsibility for maintaining trails on U.S. Forest Service land, this notebook can serve as a valuable resource and source of alignment for the Trail Management Plan's trail maintenance and monitoring recommendations.

### 2004 HARRIMAN TRAILS MANAGEMENT PLAN

The 2004 Harriman State Park Trail Management Plan outlined a comprehensive strategy for the construction, maintenance, development, and protection of the Harriman Trail System. The plan emphasized non-motorized recreation with limited exceptions and prioritizes user safety, environmental protection, and trail conditions in its maintenance efforts. Seasonal closures were recommended to protect wildlife during sensitive periods and trail design standards were guided by principles of sustainability, accessibility, and scenic value. The plan identified opportunities to expand and connect trails within the park's four units—Railroad Ranch, Harriman East, Section 16, and Sheridan—as well as with regional networks to enhance recreational access and continuity.

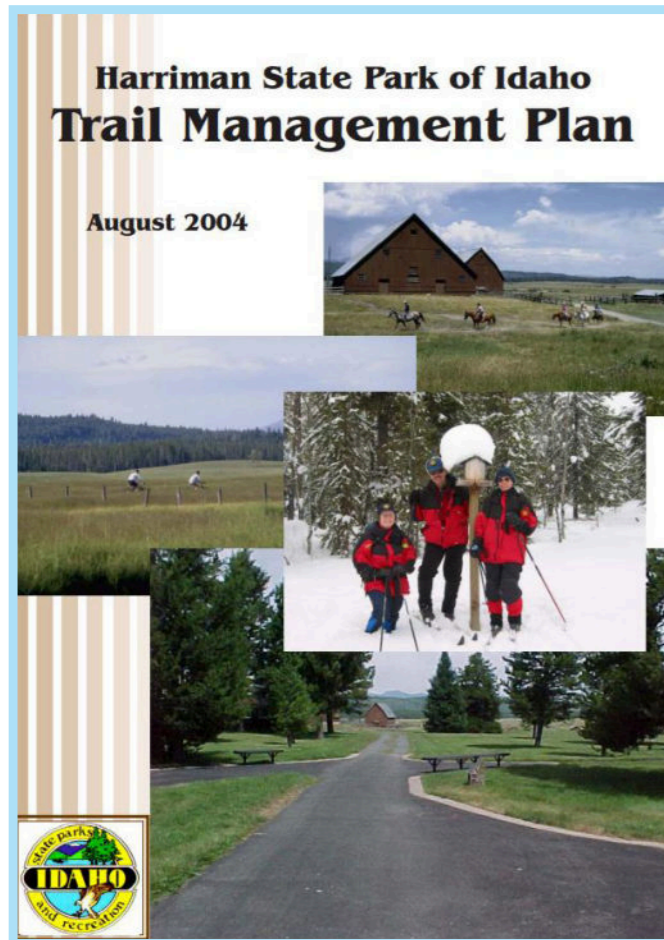
To support long-term trail operations, the plan recommended establishing funding sources such as trail-related merchandise sales, donation boxes, grants, and an Adopt-a-Trail program. It also proposed enhancing user experience through interpretive signage, improved trailheads, potential backcountry yurts, and distinct user separation, particularly in high-use equestrian areas. Partnerships with the Forest Service, Fremont County, local concessionaires, and community organizations play a critical role in trail connectivity and shared management efforts. Trail prescriptions and a natural resource management plan were also recommended to formalize standards and preserve the ecological integrity of Harriman State Park for future generations.

### HOW DOES THIS DOCUMENT IMPACT THE TRAILS MANAGEMENT PLAN?

- Although completed 21 years ago, many of the document's goals and objectives remain relevant for the updated Trails Management Plan. Exploring funding sources, identifying partnerships, enhancing the user experiences, improving

trailheads, and separating trail user types were recommended then and remain important today.

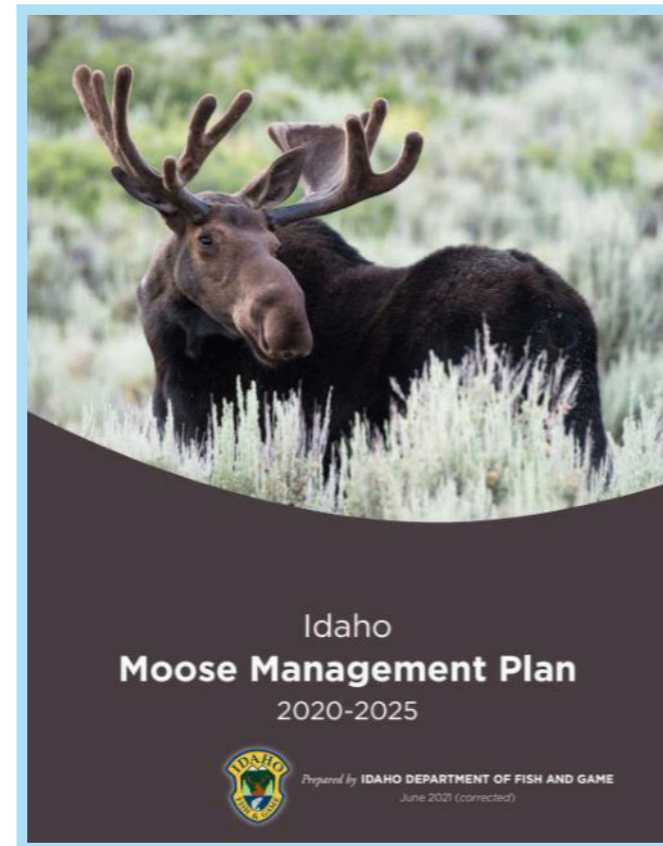
- The document provides valuable insight into pedestrian accessibility and trail maintenance priorities, with user safety as the highest priority, followed by resource/environmental protection.



Trails that intersect moose ranges should be planned to avoid key habitats, limit fragmentation, and minimize stress on moose populations—particularly in riparian corridors and thermal refuges. Future trail planning should consider seasonal restrictions, strategic alignment to preserve habitat mosaics, and collaborative land-use strategies with wildlife agencies to balance recreation and conservation goals.

#### HOW DOES THIS DOCUMENT IMPACT THE TRAILS MANAGEMENT PLAN?

- Careful considerations should be taken to protect sensitive moose habitats, especially during calving in the spring and winter. Such considerations include seasonal trail closures, signage, or trail re-routes in high-density moose zones.
- When considering trail re-routes, work to preserve vegetation cover and avoid trails in riparian or thermal refuge zones. Additionally, restoration of degraded habitat near existing trails can enhance moose resilience.



#### HARRIMAN STATE PARK CONCESSION AGREEMENT

This agreement is between the Idaho Department of Parks and Recreation and the Dry Ridge Outfitters. It explains in detail the implications of what the concession can and cannot do on the State Land. Regarding trail use, it mentions that the concession can lead guided horseback tours throughout the Harriman Trail System, however, those trails are not stated specifically. Additionally, after reviewing the current Harriman State Park trails map, it does not graphically

communicate where horses are approved to ride, resulting in no trail use regulations.

#### HOW DOES THIS DOCUMENT IMPACT THE TRAILS MANAGEMENT PLAN?

- Although the agreement states that concessionaires are allowed on certain trails throughout the park, it does not specify which trails exactly. The agreement explicitly states, “access to specific trails that the Park manager sets forth,” warranting an opportunity moving forward to designate and map trails specifically for horse/concessionaire use.



#### US FOREST SERVICE WILDLIFE, FISH, AND SENSITIVE PLANT HABITAT MANAGEMENT

The Forest Service Manual 2600 – Wildlife, Fish, and Sensitive Plant Habitat Management (Amendment 2600-2021-1) provides national guidance for maintaining and enhancing wildlife and fish habitats across National Forest System lands. The manual emphasizes integrating habitat objectives into all land management activities and requires coordination across resource programs to mitigate adverse impacts. It outlines specific responsibilities for Forest Service leadership at regional, forest, and district levels to ensure projects, including those involving recreation or infrastructure development, comply with Forest Plan objectives and are guided by habitat assessments conducted by qualified biologists.

#### HOW DOES THIS DOCUMENT IMPACT THE TRAILS MANAGEMENT PLAN?

- While trails are not mentioned explicitly, the guidance has strong implications for trail planning and operations. All trail-related development or maintenance activities that could affect habitat must include habitat impact evaluations, integrate mitigation measures, and prioritize protection of sensitive species and critical habitat areas, such as riparian zones and designated wildlife refuges.
- The manual also supports cooperative habitat management efforts and highlights funding

sources—like Knutson-Vandenberg (K-V) funds—for eligible improvement projects. These policies reinforce the need for interdisciplinary planning, wildlife-conscious design, and ongoing monitoring to ensure trails coexist with conservation goals.



#### U.S. FOREST SERVICE AND HARRIMAN STATE PARK COST SHARE AGREEMENT

This agreement outlines the responsibility for maintaining the existing trails on National Forest System (NFS) lands within the Harriman Trail System. Under its terms, the Park assumes full responsibility for the upkeep of trails that extend into Forest Service lands, committing to maintain them according to official U.S. Forest Service trail standards. While the U.S. Forest Service does not carry out the maintenance itself, it plays an oversight role by reviewing and approving the Park's annual operating plan, which must be submitted by November 1st each year.

Importantly, the agreement explicitly allows both the U.S. Forest Service and the Park to collaborate with other public or private entities, creating valuable opportunities for partnerships with volunteers, local organizations, and other stakeholders. These collaborations can significantly enhance trail maintenance efforts. However, the Park remains accountable for ensuring that all individuals involved in trail work are properly trained and directly supervised to meet safety and quality standards.

#### HOW DOES THIS DOCUMENT IMPACT THE TRAILS MANAGEMENT PLAN?

- The agreement establishes a clear and comprehensive framework for the relationship between the U.S. Forest Service and Harriman State Park. This understanding is essential as a Trails Management Plan is developed, providing a foundation for continued dialogue between both

entities. Such discussions will be important in identifying and addressing any gaps within the current agreement and exploring opportunities for refinement to ensure it effectively supports the mutual interests and responsibilities of both agencies.



Annually, the park spends around \$10,000 on fleet and equipment maintenance and repair for trail work.

Given these constraints, a sense of fiscal reality must be integrated into future trail management planning efforts. Innovative partnerships and external funding strategies will be essential to sustain and enhance the Harriman Trail System's infrastructure.

### EXTERNAL FUNDING SOURCES

Trail development and maintenance are supplemented through the following sources:

- Horse Concessionaire contract-stipulated concession trail upkeep
- U.S. Forest Service Cost-Share Agreement
- Friends of Harriman State Park donations

Future trail maintenance will rely heavily on volunteer groups and donations facilitated by the Friends of Harriman State Park. While park staff can support preventative maintenance, the park lacks standalone funding for projects requiring substantial materials, new tools, or specialized equipment. Long-term sustainability of the Harriman Trail System will depend on external contributions and partnerships.

### OPERATIONAL INFORMATION

Harriman State Park provides maintenance staff and basic trail tools year-round. Maintenance operations are largely self-scheduled and focused on seasonal upkeep. For more complex or large-scale trail projects, the park will depend on volunteer groups with their own equipment or the Friends of Harriman State Park for funding needs (e.g., tool/equipment replacement, paid crews, trail surfacing materials, and visitor amenities such as signage and picnic tables). A summary of Harriman State Park's existing trail maintenance fleet, equipment, and typical maintenance practices is included in the tables below.

## EXISTING TRAIL OPERATIONS AT HARRIMAN STATE PARK

### FINANCIAL INFORMATION

#### OPERATING BUDGET & INTERNAL RESOURCES

Harriman State Park's annual budget, allocated by the Idaho Department of Parks and Recreation, fluctuates and offers limited flexibility for purchasing new tools, hiring additional staff, or acquiring new equipment. Most of Harriman State Park's trail work is accomplished using existing resources, with older tools and equipment replaced incrementally as needed. In general, fiscal constraints limit the park's capacity to fund trail maintenance activities independently.

As of July 1, 2025, Harriman State Park added a full-time, permanent Trail Ranger position to support trail operations, maintenance, and development. Within the next two years, the park anticipates acquiring a John Deere Skid Steer with attachments, valued at \$125,000, to support trail-related operations.

### TRAIL MAINTENANCE FLEET

**Table 6.1: Trail Maintenance Fleet for Harriman State Park**

SEASON	EQUIPMENT TYPE	STAFFING NEEDS	UTILITY	QUANTITY
Winter	Bombardier groomer	Paid staff	Winter trail grooming.	1
Winter	Grooming snowmobiles	Paid staff	Winter trail grooming (3-5ft).	4
Summer	Side-by-side utility vehicles	Paid staff	Provides transportation of tools, materials, and personnel for trail work.	2
Summer	Four-wheeler	Paid staff	Provides quick access to remote trail areas, useful for light hauling and maintenance work.	1
Summer	Ford 9030 front loader	Paid staff	Ideal for heavy-duty, front-country tasks such as moving earth, clearing debris, and grading surfaces.	1
Summer	Kubota tractor with front bucket	Paid staff	Useful for moving earth, grading, material transportation, and clearing debris. Lighter and more versatile than Ford 9030 front loader.	1

### TRAIL MAINTENANCE TOOLS & EQUIPMENT

**Table 6.2: Trail Maintenance Tools and Equipment at Harriman State Park**

EQUIPMENT TYPE	UTILITY	QUANTITY
Chainsaws	2-5	Large debris removal, hazard mitigation, brush cutting, trail clearance/corridor maintenance
Handsaws	3	Light debris removal, hazard mitigation, trail clearance/corridor maintenance
Extendable power saw	1	Light debris removal, hazard mitigation (hanging branches), clearance/corridor maintenance
Mcleods	2	Shaping trail tread, clearing ground-laden debris, trail surface maintenance
Rakes	4	Clear loose ground-laden debris, smooth trail surface
Loppers	3	Clearance/corridor maintenance, small branch removal
Shovels (flat & round)	6	Light earthwork, obstacle removal, trail feature shaping, water diversion
Wheelbarrows	1	Transport light amounts of soil, gravel, and debris – useful for backcountry work
Dump trailer	1	Transport large amounts of soil, gravel, and debris – useful for front country work

## VISITOR MONITORING EQUIPMENT

**Table 6.3: Visitor Monitoring Equipment at Harriman State Park**

EQUIPMENT TYPE	QUANTITY	LOCATION	UTILITY
Vehicle trail counter	1	Park entrance	Useful in identifying park visitation, recommended to identify a multiplier unique to Harriman to understand in-person visitation

## MAINTENANCE SCHEDULES

### SUMMER TRAIL MAINTENANCE

Summer trail work typically begins in late May once trails become accessible after seasonal snowmelt and mud conditions subside. Primary maintenance tasks include:

- Laying gravel in pothole-prone or waterlogged areas
- Clearing hazardous trees
- Completing focused annual projects (e.g., trail widening, bridge repairs)

Due to staffing constraints, no fixed schedule is followed. Maintenance is prioritized around other daily park operations. On average, four consolidated weeks per year are dedicated to summer trail work. The newly formed Trail Ranger position expects to improve scheduling and increase completion rates for summer trail projects.

### WINTER MAINTENANCE

Fall preparations include installing trail markers, removing deadfall, posting signage, and readying equipment. Winter grooming is contingent upon equipment functionality and weather conditions (e.g., snowfall, temperature, wind, and ice). Grooming occurs 1–2 times per week, typically in the morning, but is considered secondary to core winter operations like plowing roads and maintaining visitor access. In winter 2024, for instance, grooming front-country trails was halted in February due to equipment failures. Backcountry trail grooming continued, however.

Grooming updates are posted to the park's Facebook page, and visitors can call for conditions. The incoming dedicated Trail Ranger will enhance grooming consistency and coverage.

## CONCESSIONAIRE OPERATIONS AND HARRIMAN TRAIL SYSTEM OVERVIEW

For the past two decades, Dry Ridge Outfitters has operated as the official horseback riding

concessionaire within Harriman State Park, offering guided trail rides throughout the park's scenic landscapes. As a long-standing operator, Dry Ridge Outfitters has played a significant role in shaping visitor experiences and equestrian use patterns within the park.

As of 2025, Dry Ridge Outfitters was authorized to utilize all official trails within the Harriman Trail System, provided they comply with seasonal trail closures intended to protect sensitive habitats, minimize trail damage, and manage user conflicts. In practice, however, horse use is concentrated on a subset of trails more suited to equestrian travel and convenient access to concessionaire facilities. Dry Ridge Outfitters also utilized a series of self-made, concessionaire-only trails throughout the Harriman Trail System.

Approximately 2,000 rides were hosted by Dry Ridge Outfitters last year with all visitation taking place in the spring, summer, and fall. This figure highlights the benefits that Dry Ridge Outfitters brings to the park through revenue generation and enhancing user experiences; however, this level of use, particularly on official trails that are also used by general non-motorized visitors, exacerbates the risk of user conflicts and trail degradation – especially if the trails were not designed to meet this volume of users.

### OFFICIAL TRAILS USED BY CONCESSIONAIRE OPERATIONS

According to park management, Dry Ridge Outfitters primarily used the following official trails throughout Harriman State Park:

- River Trail
- Ridge Trail
- Ranch Loop
- Meadow Loop
- Thurman Creek Loop
- Silver Lake Loop

Trails adjacent to the concessionaire facilities, like the River Trail, Ranch Loop, Thurman Creek Loop, and Silver Lake Loop, receive the heaviest concentration of concessionaire use. Other trails, like the Ridge Trail and Meadow Loop, receive less concessionaire use.

## CONCESSIONAIRE-ONLY TRAILS

Dry Ridge Outfitters operated on a network of unofficial, previously unmapped trails within the Harriman Trail System. These routes were established to provide guests with a more secluded horseback riding experience while minimizing interactions with other park users. Although signed as concessionaire-only, these trails are not formally documented, and it is believed that they are occasionally used by the public.

Many of these trails were originally permitted by past park managers; however, some extend onto adjacent U.S. Forest Service land without formal coordination, creating uncertainty around their exact locations, usage levels, and impacts on federal resources. This situation has underscored the need for improved collaboration between Harriman State Park and the U.S. Forest Service, especially given the area's complex, multi-jurisdictional landscape. Both agencies view this as an opportunity to strengthen interagency communication and align trail planning and management moving forward.

### OPERATIONAL CHALLENGES & OPPORTUNITIES

An opportunity emerges to address concerns, impacts, and conflicts related to high-volume concessionaire

use through the modification of the concessionaire lease and vendor change occurring in early 2026. Namely, Harriman State Park's managers see this change as an opportunity to evaluate policies related to commercial equestrian access, including:

- Identifying which concessionaire and unofficial trails should remain open or be decommissioned.
- Determining which official trails within the Harriman Trail System should continue to allow horse use under concession agreements.
- Establishing areas where equestrian use should be prohibited to minimize environmental impact or prevent user conflicts.

A revised framework for horseback riding operations, reflective of this report's data findings, interdisciplinary collaboration, and best land management practices, will aid in ensuring that commercial operators can continue to provide high-quality horseback riding experiences while meeting the needs of the Harriman Trail System's other non-motorized visitors, ecological community, and managerial landscape.



Photo Credit: Brett Rannow

## IDAHO YOUTH EMPLOYMENT PROGRAM PARTNERSHIP (YEP)

### BACKGROUND – YOUTH EMPLOYMENT PROGRAM AND HARRIMAN STATE PARK

The Youth Employment Program (YEP) is a non-profit organization that performs conservation work with youth and young adults. YEP's mission aims "to create opportunities for youth by training them in leadership, work ethic, and job skills and engaging them in projects that benefit our community and environment."

Underwritten by the Friends of Harriman State Park for the past two years, YEP has performed hand-crew trail maintenance work throughout the Harriman Trail System, primarily on trails residing on U.S. Forest Service land. In 2025, YEP crews prioritized work on high-need segments of trails, addressing erosion, poor drainage, and user-created routes. Their work included repairing switchbacks, constructing water diversion features, widening and brushing trails, removing hazard trees, and realigning segments to create safer, more sustainable routes.

Friends of Harriman State Park intends to partner with YEP in the 2026 season. Building on the third year of collaboration, the team envisions using YEP's motorized trail equipment to carry out durable, long-term improvements on targeted sections of the Harriman Trail System located on U.S. Forest Service land.

### BENEFITS OF YEP PARTNERSHIP

Partnering with YEP crews can benefit the Harriman Trail System by providing additional workforce capacity to carry out recurring maintenance and rehabilitation tasks. Additional assistance provided by YEP, especially when given clear tasks and work objectives, provides opportunities for park management to address annual trail maintenance tasks while freeing up capacity to address larger, more laborious trail projects. Recurring YEP assistance can also reduce managerial burden on park managers who would need to seek additional seasonal employees to accomplish tasks that YEP crews could perform. Beyond the benefits to the Harriman Trail System, YEP provides hands-on learning opportunities for youth to obtain job skills and spark an interest in conservation-related career paths.

### CONSIDERATIONS OF WORKING WITH YEP

While a partnership with YEP can provide many benefits to the Harriman Trail System, it is important to consider the following to ensure their work produces maximum value to the workers themselves, park management, and the trail system as a whole:

- Outline specific, achievable tasks for crews to accomplish and match project goals to the length of YEP hires.
- Ensure the type of work (e.g., hand-tool trail maintenance, brushing, water diversion features) fits the crew's training and experience level. Consider whether motorized or specialized tools are needed and whether YEP crew members are authorized or able to use them. Understand the limitations of a YEP crew, and when it is necessary to hire a professional trail crew to perform complex, high-impact tasks.
- Prioritize projects that will significantly improve trail safety, sustainability, or user experience.

- Review trails with park staff, YEP leaders, and U.S. Forest Service employees (as needed) to align priorities and expectations.
- Provide oversight to ensure technical guidance and safety standards are followed, especially for more complex tasks.

Photo Credit: *Charlie Lansche*



# 7 TRAIL CONDITIONS

## TAKEAWAYS

- The Harriman Trail System exhibits a mix of conditions, with some well-built, sustainable sections and others showing wear from heavy use, poor drainage, and user-created routes.
- Drainage remains a recurring concern across trail types, as standing water, cupping, and erosion were observed in several areas, signaling a need for improved water management features. Ongoing maintenance and monitoring remain as one of the most important management tasks for the trail system.
- User-created “braiding” trails and extensive unofficial routes highlight both maintenance challenges and opportunities for expanding and better distributing recreation.
- High levels of equestrian and visitor use, especially near the Ranchview and Thurmon Creek areas, contribute to surface wear and widening trails beyond intended design.
- Gravel trails near the park’s core improve accessibility and durability but vary in quality, with some sections requiring re-compaction to restore firm tread surfaces.
- Harriman East provides largely undeveloped landscapes with potential for low-impact trail formalization but would require staff capacity and coordination with the U.S. Forest Service.
- Any trail development in Harriman East should prioritize minimal disturbance, formalizing existing informal paths rather than creating entirely new routes.
- Broader trail design guidance integrates multiple national standards and resources to ensure consistency, sustainability, and accessibility across all trail types. These include the U.S. Forest Service Trail Accessibility Guidelines (FSTAG), Trail Design Parameters, and the Trail Maintenance and Construction Notebook; the U.S. Access Board’s Accessibility Standards; the Manual on Gravel Roads; and trail development frameworks from the International Mountain Bike Association, Bureau of Land Management, and Kootenay Adaptive Trail Standards. Together, these sources provide context for optimal tread width, grade, surface materials, user types, and maintenance best practices.
- Regional trail connections to adjacent systems like the Box Canyon, Brimstone, and the Greater Yellowstone Trails could enhance visitor access and tourism, though each would require multi-agency collaboration and careful long-term planning.

## ON-SITE REVIEW OF THE HARRIMAN TRAIL SYSTEM

### BACKGROUND

In May and July 2025, Integrated Trail Lab owner and professional trail designer Richard Hayes performed two site visits to Harriman State Park to conduct in-depth assessments of the Harriman Trail System. By visiting during both spring and summer, the trails’ most vulnerable and driest seasons, Integrated Trail Lab was able to observe conditions under contrasting stress points. Using a mountain bike and GPS tracking through OnX, Integrated Trail Lab evaluated trail conditions and identified critical needs for the Harriman Trail System’s long-term success.

### SITE VISIT OBSERVATIONS

#### DRAINAGE

During Integrated Trail Lab’s May visit, drainage issues were identified as the trail system’s most pressing threat. Drainage is the most important component, and subsequently one of the most common issues related to trails. The Harriman Trail System is no different, and its proximity to waterbodies, like Silver Lake, increases the risk of water build-up if not addressed. Standing water was consistently observed on the Harriman Trail System during the spring visit. Improper drainage can lead to major maintenance issues, impacts to visitor experiences, and exacerbated user impacts if left unaddressed. One issue resulting from improper drainage maintenance is cupping, or the creation of incipient gullies within a



trail’s tread. Cupping was observed on multiple trails throughout the system. Fortunately, Integrated Trail Lab noted, drainage improvements are relatively straightforward solutions and lead to long-lasting, sustainable trails once addressed.

#### BRAIDING

Braiding is an evident issue for the Harriman Trail System, which was observable in both May and July. Braiding occurs when users create parallel routes to bypass muddy conditions created by improper drainage. Many users think walking around standing



water or muddy trail sections helps the trail; however, it only creates more extensive problems. An opportunity emerges for Harriman’s management to educate users on this behavior and fix drainage issues that encourage trail braiding.

#### USER IMPACTS

Integrated Trail Lab observed sections of the Harriman Trail System that were overwhelmed by high-impact traffic, resulting in general damage and exacerbating issues like cupping and braiding. With a commercial horseback operation performing multiple daily visits to the Harriman Trail System during the summer, in addition to regular trail traffic, the system experiences impacts that it is not designed to handle. Heavily impacted trails were mainly observed around the Ranchview parking area, like the Ranch Loop and Thurmon Creek Loop.

## ALTERNATIVE ROUTES

Another major finding from the site visit was the presence of an extensive network of unofficial trails. In July, Integrated Trail Lab and Charlie Lanche, a Friends of Harriman State Park board member and local resident, rode the entirety of the Harriman Trail System, both official and unofficial trails. Concluding the assessment, the pair identified and mapped over 50 miles of unofficial trails. These trails represent both a challenge and an opportunity—when formalized, they can help disperse users, reduce concentrated impacts, and expand recreational experiences. For example, Harriman East possesses no mapped trails but a clearly used single-track loop that could expand recreation opportunities in the otherwise less-used section of the park. However, several trails are duplicates that both arrive at the same place, warranting the need for closure. A discussion within leadership surrounding formalizing and decommissioning unofficial trails is recommended.

## SINGLE-TRACK POSITIVES

Every trail observed during Integrated Trail Lab's May site visit contained ideal stretches of single-track trails. These stretches usually possess proper drainage features and are separated from continuous commercial operations, both of which improve sustainability. Properly maintained single-track trails are ideal for hiking and cycling in the summer and are easy to groom in the winter, given proper tree spacing



Photo Credit: Brett Rannow

critical opportunity for those with disabilities to enjoy the Harriman Trail System's unique landscape, an aspect of recreation management that is often overlooked. However, it was also observed that some sections of gravel trails are improperly compacted, resulting in a loose trail surface that is difficult for hikers, bikers, and horseback riders to use.

Hardening certain sections of overused trails with imported materials may be needed to mitigate consistent impacts caused by commercial operations and non-commercial visitors. Doing so would impact backcountry experiences, but it may be necessary for long-term sustainability in response to high levels of visitation. Harriman State Park's management should carefully evaluate and weigh the cost-benefit tradeoffs of hardening certain trail segments with imported materials to improve sustainability.

## PHASED MAINTENANCE RECOMMENDATIONS

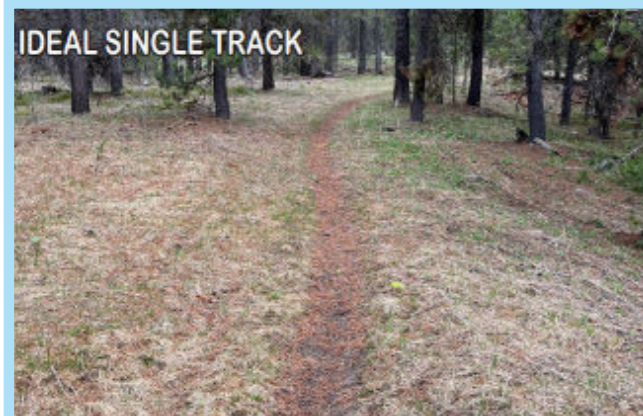
To guide improvements, Integrated Trail Lab developed a phased maintenance plan and map.

- **Phase 1** prioritizes the Ranch Loop, Thurmon Creek Loop, Silver Lake Loop, and River Trail—high-use corridors near the park core that serve both summer visitors and winter skiers. Integrated Trail Lab recommends a few re-route opportunities along the Ranch Loop to fix drainage issues. Addressing drainage in these sections will not only improve winter trail

conditions but also enhance snowmelt drainage that ultimately improves summer trail conditions, providing maximum value to Harriman State Park's management and benefit to its users.

- **Phase 2** focuses on the Ridge Trail (including Heart Attack Hill), Meadow Loop, and Golden Lake Loop. Ridge Trail improvements are critically needed and will require in-depth coordination with the U.S. Forest Service. Formalizing select unofficial trails in this area presents an

## IDEAL SINGLE TRACK



and even tread. The Harriman Trail System's northeast section possesses very well-maintained single-track trail sections, primarily due to low visitor use, making them ideal for mountain and gravel biking.

## GRAVEL TRAILS

Integrated Trail Lab noted the presence of several gravel trails surrounding Harriman State Park's visitor center. While gravel trails should not be the model for every trail on the Harriman Trail System, they do serve many benefits. Gravel trails are easy to groom, possess advantageous drainage, and prevent braiding. They are accessible to visitors with mobility issues. With wider trail tread and firm compaction, they are easy to ride on with adaptive bicycles, wheelchairs, and a variety of mobility devices. Gravel trails provide a

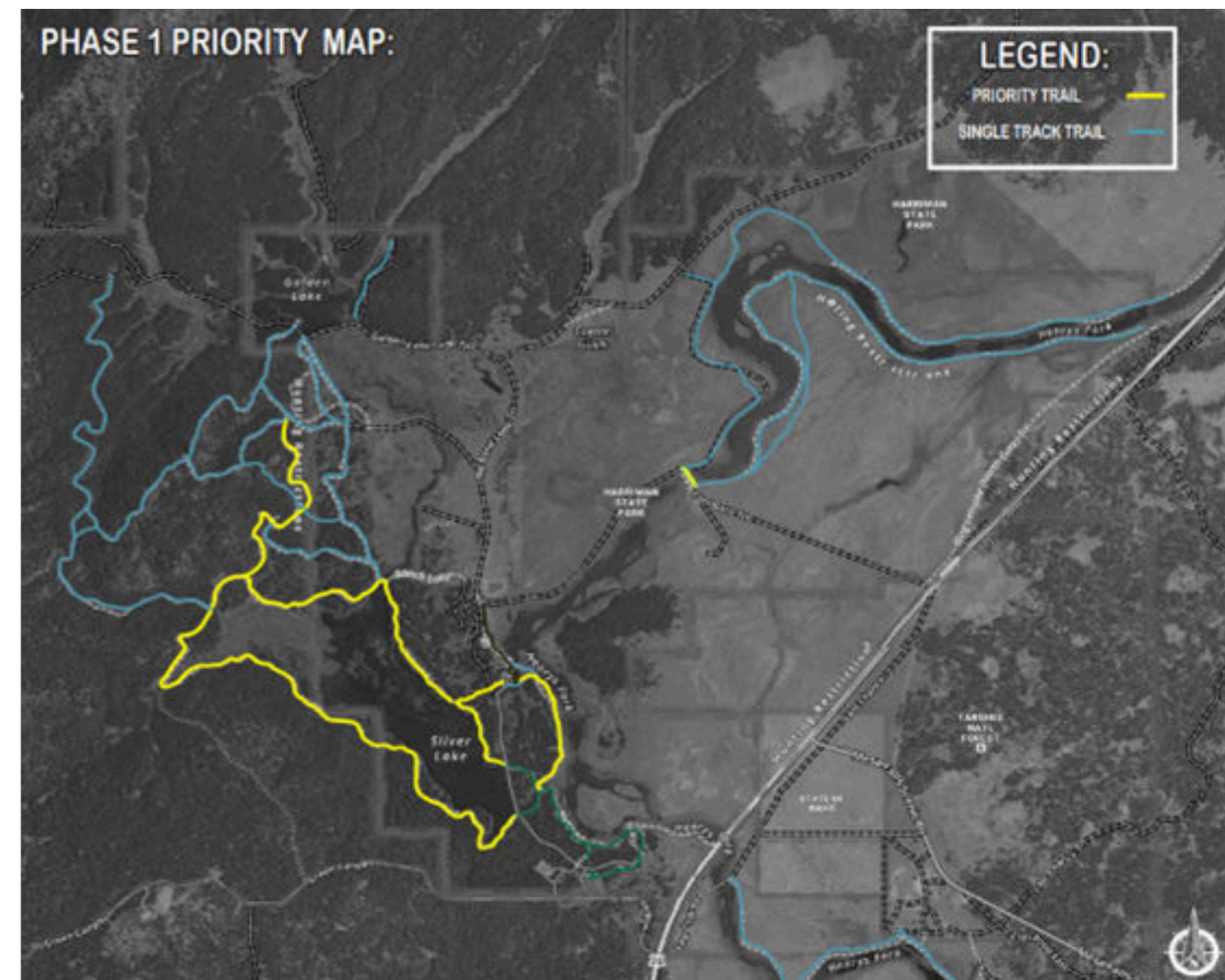


Figure 7.1: Phase 1 Maintenance Priority Map

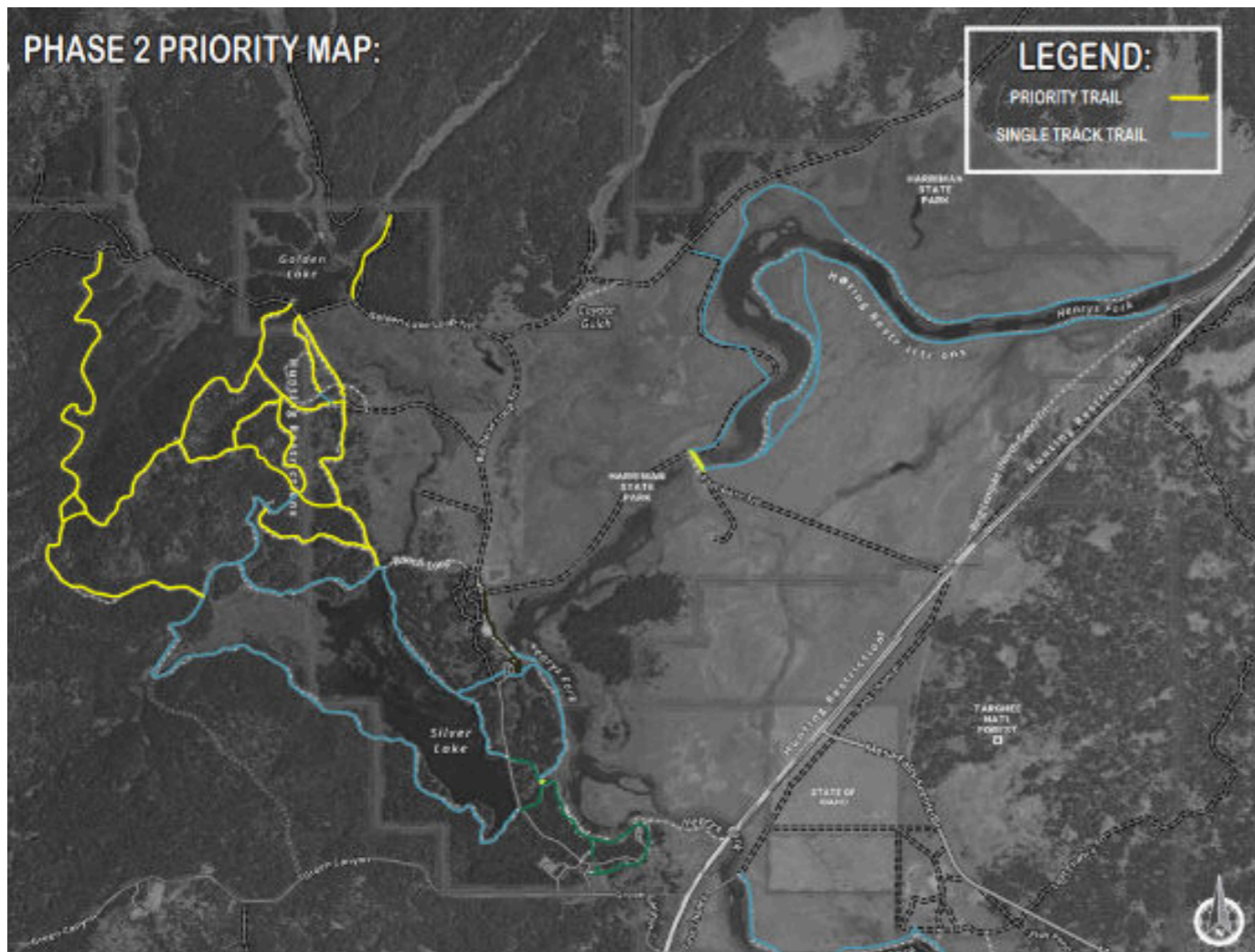


Figure 7.2: Phase 2 Maintenance Priority Map opportunity to introduce the park's first bike-optimized trail; additionally. The Meadow and Golden Lake Loops would benefit from hardening techniques and rerouting equestrian traffic to sustain heavy year-round use.

durable solutions rather than 'band-aid' fixes. Professional machine work can assist in properly distinguishing old trails and preferred routes, eliminate trail braiding by creating a single trail tread, and create an even tread that is advantageous for snowmobile grooming and Nordic skiing.

- Developing a long-term plan balancing non-motorized recreation and commercial equestrian use is critical. Management solutions include formalizing social trails, designating user-specific routes, and/or applying hardening techniques (e.g., imported aggregate).
- With these investments, the Harriman Trail System has the opportunity to transform from an impressive trail system into a world-class, sustainable network that balances recreation with ecological stewardship.

## ESTABLISHING TRAIL MANAGEMENT GUIDELINES FOR THE HARRIMAN TRAIL

### PERSPECTIVES FROM A PROFESSIONAL TRAIL BUILDER

- Honor Harriman State Park's identity as a wildlife refuge, with recreation secondary to habitat protection. Consider decommissioning specific unofficial trails that are either duplicates or are a disturbance to wildlife habitats. Continuing to eliminate hazardous conditions and safety concerns on the trail system remains a high priority (e.g., removing sticks, trees, old branches adjacent to trails, and addressing cupping occurrences).
- Addressing drainage issues should be a major goal for trail managers. Solutions include land bridges, culverts, and other water drainage features at key problem areas. Trail re-routes, particularly along the Ranch Loop, may be needed to reduce long-term drainage issues.
- Contracting a professional trail builder for targeted mini-excavator work would ensure

## SYSTEM

### INTRODUCTION

This section provides an overview of key considerations for the design, construction, and maintenance of five trail classifications: dirt roads, single-track, double track, gravel or ADA-accessible trails, and pack and saddle trails. Each trail type serves a distinct group of users and presents unique opportunities in terms of materials, classifications, and physical design guidelines. For each trail classification, this section outlines the intended user groups, typical construction materials, U.S. Forest Service trail classification, physical guidelines, winter grooming needs, and guidance for trail accessibility.

While the classification guidelines provide information about developing, maintaining, and managing the Harriman Trail System in accordance with a uniform standard, it is encouraged that trail managers view these parameters as flexible guidelines that can be changed as needed or relevant to visitor experiences, available resources, and environmental conditions.

### CONSIDERATIONS FOR ALL TRAIL TYPES

#### ACCESSIBILITY

For all trail types, it is important to consider means of ensuring year-round accessibility. However, "Accessible Trail" is a term to avoid. The technical provisions in section 7.4 of the U.S. Forest Service Trail Accessibility Guidelines (FSTAG) document allow for grades up to 12 percent. While such grades are understandable in challenging terrain, such as hiking paths selected by choice, the general public's expectation of an "accessible" pathway is that it has a gentle grade and other uniform factors. In addition, most trails constructed under the FSTAG use exceptions to some extent to maintain the nature of the setting. Therefore, a trail that has been constructed in accordance with the FSTAG should be advertised as a "trail that complies with the trail accessibility guidelines," rather than as an "accessible trail" (U.S. Forest Service Trail Accessibility Guidelines, 2013).

#### ONGOING MAINTENANCE

All trails require some level of ongoing upkeep. "For as long as a trail exists, it will need some amount of maintenance. However, the more physically sustainable the trail is, the less maintenance it will need" (U.S. Forest Service Trail Maintenance and Construction Notebook, 2025). Trail maintenance serves several purposes. "The goal of trail maintenance is to keep or return a trail to a condition that matches the design specifications for the use type and development scale, accounts for user safety and enjoyment, and minimizes environmental impact" (U.S. Forest Service Trail Maintenance and Construction Notebook, 2025). Identifying the root cause of trail

issues is an important step in effective maintenance. "When identifying a problem area on a trail that requires maintenance, find the source of the problem...often the source of the problem lies outside the trail corridor" (U.S. Forest Service Trail Maintenance and Construction Notebook, 2025). Furthermore, "prioritize maintenance projects based on unsafe conditions or where erosion or other impacts are damaging adjacent natural and cultural resources" (U.S. Forest Service Trail Maintenance and Construction Notebook, 2025).

A formal maintenance plan should be in place to guide trail upkeep efforts and should include a "baseline inventory of all trails that includes development scale, as well as their major use types, typical percent grade, features, centerline locations, status as a national scenic, historic, or recreation trail, and other basic information" (U.S. Forest Service Trail Maintenance and Construction Notebook, 2025). It should also include "results of trail logs, trail assessment and condition surveys, or problem area reports that identify work areas and help establish priorities" (U.S. Forest Service Trail Maintenance and Construction Notebook, 2025). The plan should list "identified priority maintenance projects to address safety issues, stabilize trail tread, and prevent resource damage" (U.S. Forest Service Trail Maintenance and Construction Notebook, 2025). Determinations should be made regarding which "project or project components require professional crews versus those that are appropriate for trail partners and volunteers" and should specify "specialized tools, equipment, and materials needed for priority trail projects, any timing limitations for work, documentation of project approval, and project status and accomplishments for reporting purposes" (U.S. Forest Service Trail Maintenance and Construction Notebook, 2025).

### DIRT ROADS

#### TRAIL USERS, TRAIL MATERIALS, AND TRAIL CLASSIFICATION

Dirt roads should meet specific guidelines to ensure safety, durability, and accessibility for trail users, which include equestrians, mountain bikers, e-bikers, cross-country skiers, fat bikers, and snowshoers. These trails are classified as Trail Class 5, which means the "tread [is] wide, firm, stable, and generally uniform" and the trails are "double lane where traffic volume is moderate to high" and feature "commonly hardened" surfaces "with imported materials" (U.S. Forest Service Trail Accessibility Guidelines, 2013). To support such use, the trail surface should be built with "a strong surface gravel material [that] will consist of the right mixture of crushed aggregate stone, sand, and fines. The aggregate provides strength, supporting the heavy loads on your roadway. The sand will fill in the spaces,

or voids, between the aggregate and helps stabilize. Finally, a fine material, typically a clay, acts as the binder or glue to hold the matrix together [...] This combination is essential to develop the strong bond necessary to create a long-lasting wear surface" (Manual on Gravel Roads, 2021).

## PHYSICAL GUIDELINES AND GROOMING NEEDS

Physical guidelines for creating a Trail Class 5 for hikers and pedestrians include creating "non-wilderness/ double lane" trails with tread widths of 36 to 120 inches and likely imported material with routine grading that is uniform, firm, and stable, with no protrusions or obstacles (U.S. Forest Service Trail Design Parameters, 2008). The target grade should be between 2 to 5 percent with a cross slope of 2 to 3 percent or a crowned surface. Additional specifications include a clearing height of 8 to 10 feet, a clearing width of 60 to 72 inches, shoulder clearance of 12 to 24 inches, and a turning radius of 6 to 8 feet (U.S. Forest Service Trail Design Parameters, 2008). Winter grooming for dirt road trails likely requires specialized equipment, such as a Bombardier Groomer to maintain usability in snow conditions.

## ACCESSIBILITY

Accessibility is a critical consideration when using dirt roads as trails. According to the U.S. Access Board, "the surfaces of trails, passing spaces, and resting intervals must be firm and stable. A firm trail surface resists deformation by indentations. A stable trail surface is not permanently affected by expected weather conditions and can sustain normal wear and tear from the expected uses between planned maintenance. Paving with concrete or asphalt may be appropriate for highly developed areas. For less developed areas, crushed stone, fine crusher rejects, packed soil, soil stabilizers, and other natural materials may provide a firm and stable surface. Natural materials can also be combined with synthetic bonding materials to provide greater stability and firmness. These materials may not be suitable for every trail" (U.S. Access Board, 2014).

Trail width and spacing are also subject to accessibility standards. "The clear tread width of trails must be a minimum of 36 inches. The 36-inch-minimum clear tread width must be maintained for the entire distance of the trail and may not be reduced by gates, barriers, or other obstacles unless a condition for exception does not permit full compliance with the provision" (U.S. Access Board, 2014). Additionally, "passing spaces must be at least 60 inches by 60 inches" to accommodate all users safely (U.S. Access Board, 2014). Elevation changes must be managed to meet slope guidelines for accessibility and "resting intervals are required between trail segments any time the running slope exceeds 1:20 (5 percent)" (U.S. Access Board, 2014). "When passing spaces and resting

intervals overlap, the technical requirements for resting intervals apply and the slope of the ground surface must be no steeper than 1:48 (2 percent) in any direction. When the surface is constructed of materials other than asphalt, concrete, or boards, slopes no steeper than 1:20 (5 percent) are allowed when necessary for drainage" (U.S. Access Board, 2014).

## DIRT ROAD MAINTENANCE

Proper maintenance is essential to ensure the longevity and usability of dirt road trails. Drainage infrastructure is especially important. As noted in the Manual on Gravel Roads, "a well-established and maintained ditch will complement your shouldering and crown work, and dramatically reduce your long-term maintenance and road repair costs [...] A v-ditch is, as the name implies, a V-shape cut along the edge of the shoulder to contain and direct water along the roadside... These ditches are commonly cut along hillsides and perform best in areas with vegetation to reduce erosion" (Manual on Gravel Roads, 2021). Without proper drainage, trail surfaces can deteriorate rapidly, leading to unsafe conditions and environmental damage.

## DOUBLE TRACK TRAIL USERS, TRAIL MATERIALS, AND TRAIL CLASSIFICATION

Double track trails accommodate a variety of non-motorized users, including equestrians, mountain bikers, e-bike riders, hikers, trail runners, cross-country skiers, fat bikers, and snowshoers. These trails are typically built to Trail Class 3 or 4 standards, ranging from Developed to Highly Developed, where the "tread [is] continuous and obvious," materials are either "native or imported," and surfaces "may be hardened (U.S. Forest Service Trail Accessibility Guidelines, 2013). These trails are either single lane with "allowances constructed for passing where required by traffic volumes in places where there is no reasonable opportunity to pass" or double lane "where traffic volumes are high and passing is frequent" (U.S. Forest Service Trail Accessibility Guidelines, 2013). Obstacles are "infrequent and insubstantial" with "vegetation cleared outside of trailway" (U.S. Forest Service Trail Accessibility Guidelines, 2013). Structures may be "common and substantial; constructed of imported or native materials" and including "natural or constructed fords," "bridges as needed for resource protection and appropriate access," and "trailside amenities" (U.S. Forest Service Trail Accessibility Guidelines, 2013).

## PHYSICAL GUIDELINES AND GROOMING NEEDS

Physical design parameters vary slightly based on user type. For Class 3-4 hiker and pedestrian use, tread widths range from 36 to 72 inches, with grades of 5 to



Photo Credit: Brett Rannow

20 percent and cross-slopes between 3 to 10 percent (U.S. Forest Service Trail Design Parameters, 2008). The surfaces of these trails are "native with some on-site borrow or imported material where needed for stabilization and occasional or routine grading" and are "intermittently to minor roughness" (U.S. Forest Service Trail Development Design Parameters, 2008). The clearing height is 7 to 10 feet, and the width is 36 to 72 inches (U.S. Forest Service Trail Development Design Parameters, 2008). For Class 3-4 bike-focused trails, tread widths extend from 36 inches up to 84 inches, grades range from 2 to 10 percent, and cross-slopes are 3 to 8 percent (U.S. Forest Service Trail Development Design Parameters, 2008). The clearing height is 6 to 9 feet, and the width is 60 to 96 inches, with a turning radius of 4 to 10 feet to support maneuverability (U.S. Forest Service Trail Development Design Parameters, 2008). The surfaces of these trails are "native with some on-site borrow or imported material where needed for stabilization and occasional or routine grading" and have "intermittently to minor roughness" with "sections of soft or unstable grades of less than 5 percent may be present but not common" (U.S. Forest Service Trail Development Design Parameters, 2008). During winter months, grooming with snowmobile tow-behind equipment is needed to maintain usability for snow-based activities.

## ACCESSIBILITY

Accessibility standards require trail surfaces, passing spaces, and resting intervals to be firm and stable. "A

firm trail surface resists deformation by indentations. A stable trail surface is not permanently affected by expected weather conditions and can sustain normal wear and tear from the expected uses between planned maintenance. Paving with concrete or asphalt may be appropriate for highly developed areas. For less developed areas, crushed stone, fine crusher rejects, packed soil, soil stabilizers, and other natural materials may provide a firm and stable surface. Natural materials can also be combined with synthetic bonding materials to provide greater stability and firmness. These materials may not be suitable for every trail" (U.S. Access Board, 2014).

Trail tread must be a minimum of 36 inches wide and maintained along the entire trail, without being narrowed by gates or obstacles, unless exceptions apply. "The clear tread width of trails must be a minimum of 36 inches. The 36-inch-minimum clear tread width must be maintained for the entire distance of the trail and may not be reduced by gates, barriers, or other obstacles unless a condition for exception does not permit full compliance with the provision" (U.S. Access Board, 2014). Additional requirements include "passing spaces [that] must be at least 60 inches by 60 inches" and "resting intervals [that] are required to exist between trail segments any time the running slope exceeds 1:20 (5 percent)" (U.S. Access Board, 2014). Where resting intervals and passing spaces overlap, "the slope of the ground surface must be no steeper than 1:48 (2 percent) in any direction.

When the surface is constructed of materials other than asphalt, concrete, or boards, slopes no steeper than 1:20 (5 percent) are allowed when necessary for drainage" (U.S. Access Board, 2014).

## **SINGLE-TRACK TRAIL USERS, TRAIL MATERIALS, AND TRAIL CLASSIFICATION**

Singletrack trails serve many user groups, including equestrians, mountain bikers, e-bikers, hikers, trail runners, backcountry skiers, fat bikers, and snowshoers. These trails consist of native or imported surfaces and are classified by the U.S. Forest Service as Trail Class 2 to 3, or Moderately Developed to Developed. Class 2 trails are characterized by "tread continuous and discernible, but narrow and rough" with a "single lane, with minor allowances for passing." On these trails, "obstacles may be common, substantial, and intended to provide increased challenge," but "blockages [are] cleared to define [the] route and protect resources," and "vegetation may encroach into the trailway" (U.S. Forest Service Trail Accessibility Guidelines, 2013). Class 3 trails are characterized by "tread continuous and obvious" with a "single lane, with allowances constructed for passing where required by traffic volumes in place where there is no reasonable opportunity to pass." On these trails, "obstacles may be common, but not substantial or intended to provide challenge," and "vegetation [is] cleared outside of the trailway" (U.S. Forest Service Trail Accessibility Guidelines, 2013).

## **PHYSICAL GUIDELINES AND GROOMING NEEDS**

Singletrack trails exist from easy to extremely difficult challenge levels. When referring to U.S. Forest Service and International Mountain Biking Association (IMBA) documents, each of these levels has unique physical guidelines for construction. Easy trails are characterized by a trail width of 36-72 inches; a hardened, firm, and stable tread surface; and an average trail grade of less than 5 percent and no more than 15 percent. Both unavoidable and avoidable obstacles may be present, but unavoidable obstacles should measure less than 2 inches tall. Bridges must be 36 inches or wider.

More difficult single-track trails have a trail width of 24 inches; a mostly stable tread surface with some variability; and an average grade between 5 and 15 percent, with a max grade of 15 percent or higher. Avoidable and unavoidable obstacles may be present, but unavoidable obstacles must measure less than 8 inches tall. Bridges must be 24 inches or wider. Natural obstacles 8 inches tall or less may be present, and technical features must not be taller than 24 inches. Bridges must be 24 inches or wider.

Very or extremely difficult single-track trails are characterized by a trail width between 6 and 12

inches; a widely variable and unpredictable trail surface; and an average grade of 15 to 20 percent or higher. Unavoidable and avoidable obstacles are both present, with unavoidable obstacles measuring 15 inches tall or less. Technical features must not be taller than 48 inches. Bridges must be 24 inches or wider.

For all single-track trails, especially ones that serve multiple uses, managers should consider having the trails' cross-slope between 5 to 15 percent (3 to 8 percent is ideal for hiker/biker/winter use), a clearance height of 6 to 8 feet, a clearance width of 24 to 60 inches (36 inch-minimum is ideal for hiker/biker use), and a turn radius of 3 to 8 feet.

In the winter, single-track trails will either remain ungroomed or, if wide enough, can be groomed with a snowmobile tow-behind groomer.

## **ACCESSIBILITY**

In terms of accessibility, easy single-track trails can follow the guidance of the U.S. Access Board. These guidelines state that "the clear tread width of trails must be a minimum of 36 inches. The 36-inch minimum clear tread width must be maintained for the entire distance of the trail and may not be reduced by gates, barriers, or other obstacles unless a condition for exception does not permit full compliance with the provision," and that "the surfaces of trails, passing spaces, and resting intervals must be firm and stable. A firm trail surface resists deformation by indentations. A stable trail surface is not permanently affected by expected weather conditions and can sustain normal wear and tear from the expected uses between planned maintenance." (U.S. Access Board, 2014). Additionally, "resting intervals are required between trail segments any time the running slope exceeds 1:20 (5 percent)" (U.S. Access Board, 2014).

## **GRAVEL/ADA TRAIL USERS, TRAIL MATERIALS, AND TRAIL CLASSIFICATION**

Gravel or ADA accessible trails are used by cyclists, mobility device users, hikers, trail runners, snowshoers, and cross-country skiers. They are constructed from imported materials and considered Trail Class 5 by the U.S. Forest Service, meaning that these trails have tread that is "wide, firm, stable, and generally uniform," a "double lane where traffic volume is moderate to high" and are "commonly hardened with imported materials" (U.S. Forest Service Trail Accessibility Guidelines, 2013).

## **PHYSICAL GUIDELINES AND GROOMING NEEDS**

The tread width of gravel or ADA trails must be 36 inches or wider with a permitted trail slope of up to 5% for any distance (U.S. Forest Service Trail Accessibility Guidelines, 2013). If the trail "is elevated

above the natural ground, the slope shall not be steeper than 2 percent in any direction" (U.S. Forest Service Trail Accessibility Guidelines, 2013). The trail should have a firm, uniform, and stable surface, have less than a 5 percent cross-slope, and possess a clearance height of 8 to 10 feet. Clearance width should be 60 to 72 inches, and the turn radius should be 6 to 8 feet.

In winter, gravel or ADA trails can be groomed with a Bombardier Groomer, if wide enough, or a snowmobile tow-behind, if narrower.

## **SPECIFIC ACCESSIBILITY CONSIDERATIONS**

Several additional requirements ensure the accessibility of these trails. The surface of these trails should be both firm and stable and the clear tread width must be at least 36 inches, but "where a condition for an exception prevents achieving the required width, the clear tread width may be reduced to 32 inches minimum (U.S. Forest Service Trail Accessibility Guidelines, 2013). If the condition for an exception prevents achieving the reduced width of 32 inches, comply to the extent practicable" (U.S. Forest Service Accessibility Guidelines, 2013). A slope grade of up to 5 percent is permitted for any distance, and no segment of a trail should exceed 12 percent grade (U.S. Forest Service Trail Accessibility Guidelines, 2013). Additionally, a maximum of 30 percent of the total trail length may have a grade higher than 8.3 percent (U.S. Forest Service Trail Accessibility Guidelines, 2013). The cross slope of the trail must not exceed 5 percent on a natural surface trail or 2 percent on a paved surface (U.S. Forest Service Trail Accessibility Guidelines, 2013).

Gravel of ADA accessible trails must include resting intervals that are a minimum of 60 inches long and 36 inches wide (U.S. Forest Service Trail Accessibility Guidelines, 2013) The slope of these intervals should not exceed 5 percent in any direction and paved trails should not have a slope greater than 2 percent in any direction (U.S. Forest Service Trail Accessibility Guidelines, 2013). In terms of passing space, the trail must leave 60 inches by 60 inches minimum or "the intersection of two trails providing a T-shaped space where the base and arms of the T-shaped space extend 48 inches minimum beyond the intersection (U.S. Forest Service Trail Accessibility Guidelines, 2013). Vertical alignment at the intersection of the trails that form the T-shaped space should be nominally level, and the "cross slope shall not exceed 5 percent" (U.S. Forest Service Accessibility Guidelines, 2013). Natural trail obstacles should not be more than 2 inches tall, and paved trail obstacles should not be more than 5 inches tall (U.S. Forest Service Trail Accessibility Guidelines, 2013). Finally, "openings in a trail tread

surface, trail resting spaces, and trail passing spaces shall be small enough to prevent passage of a half-inch diameter sphere" (U.S. Forest Service Trail Accessibility Guidelines, 2013).

## **PACK AND SADDLE TRAIL USERS, TRAIL MATERIALS, AND TRAIL CLASSIFICATION**

Pack and saddle trails are used only by horses and constructed from native materials. These trails are classified as Trail Class 2-4. Class 2 trails are moderately developed with "continuous and discernible, but narrow and rough" tread; single lane width with limited passing space allowed; and "typically native materials" (U.S. Forest Service Trail Accessibility Guidelines, 2013). Class 2 trails also have obstacles that may be "common, substantial, and intended to provide increased challenge," as well as "blockages cleared to define route and protect resources" and "vegetation may encroach into trailway" (U.S. Forest Service Trail Accessibility Guidelines, 2013). These trails have "structures of limited size, scale, and quantity" that are "adequate to protect trail infrastructure and resources" (U.S. Forest Service Trail Accessibility Guidelines, 2013). This may include natural fords and bridges, "as needed for resource protection and appropriate access" (U.S. Forest Service Trail Accessibility Guidelines, 2013).

Class 3 trails are considered developed and are characterized by "continuous and obvious" tread and single lane width with "allowances constructed for passing where required by traffic volumes in places where there is no reasonable opportunity to pass" and native or imported material construction (U.S. Forest Service Trail Accessibility Guidelines, 2013). These trails exhibit obstacles that "may be common, but not substantial or intended to provide challenge," and vegetation is "cleared outside of [the] trailway" (U.S. Forest Service Trail Accessibility Guidelines, 2013). Structures "may be common and substantial, and constructed of imported or native materials" (U.S. Forest Service Trail Accessibility Guidelines, 2013). These may include natural or constructed fords and bridges, as needed for resource protection and appropriate access.

Class 4 trails are highly developed with wide and smooth tread with "few irregularities" and single lane width "with allowances constructed for passing where required by traffic volumes in places where there is no reasonable opportunity to pass" and a "double lane where traffic volumes are high and passing is frequent" (U.S. Forest Service Trail Accessibility Guidelines, 2013). These trails are constructed from native or imported materials and "may be hardened" (U.S. Forest Service Trail Accessibility Guidelines, 2013). Trail obstacles are "infrequent and insubstantial," and "vegetation is cleared outside of the trailway" (U.S. Forest Service

Trail Accessibility Guidelines, 2013). Structures are “frequent and substantial” and “typically constructed of imported materials” (U.S. Forest Service Trail Accessibility Guidelines, 2013). These may include “constructed or natural fords”; bridges, “as needed for resource protection and user convenience”; and trailside amenities (U.S. Forest Service Trail Accessibility Guidelines, 2013).

### PHYSICAL GUIDELINES AND GROOMING NEEDS

Physical guidelines differ depending on whether the trails are single lane, non-wilderness, or double track. Guidelines apply for Trail Class 2-4, as Class 1 and Class 5 are not typically designed or actively managed for equestrians, even if they allow such usage. Single lane, non-wilderness trails have a tread width between 12 and 24 inches and a native tread surface with “some borrowed or imported material where needed for stabilization and occasional grading depending on the class” (U.S. Forest Service Trail Design Parameters, 2008). These trails are characterized by a grade between 5 and 20 percent, where Class 2 will be steeper than Class 4, and a cross slope between 5 and 10 percent, not to exceed 10 percent in any class (U.S. Forest Service Trail Design Parameters, 2008). The trail clearing will include a height between 8 and 12 feet and a width between 72 and 96 inches, a shoulder clearance between 6 and 18 feet, and a turning radius between 4 and 10 feet.

The physical guidelines for double track pack and saddle trails include a trail width between 60 and 120 inches, a native trail surface with “some borrowed or imported material where needed for stabilization and occasional grading depending on the class” (U.S. Forest Service Trail Design Parameters, 2008). These trails have a grade between 5 and 20 percent, where Class 2 will be steeper than Class 4, and a cross slope between 5 and 10 percent, where the cross slope should also be within 5 and 10 percent, not to exceed 10 percent in any class. In the winter, the accessibility of pack and saddle trails can be maintained through

grooming with a snowmobile tow behind or a bombardier, depending on the width.

### ACCESSIBILITY

To ensure year-round accessibility, the trail surfaces should be “both firm and stable” with a clear tread width of at least 36 inches, but “where a condition for an exception prevents achieving the required width, the clear tread width may be reduced to 32” minimum. If the condition for an exception prevents achieving the reduced width of 32” comply to the extent practicable (U.S. Forest Service Trail Accessibility Guidelines, 2013).” A slope grade of 5% is permitted for any distance, but the grade of any trail segment should not exceed 12 percent and no more than 30 percent of the total trail length may exceed a grade of 8.33 percent and the cross slope must not exceed 5 percent on a natural surface of 2 percent on a paved surface (U.S. Forest Service Trail Accessibility Guidelines, 2013). The trail length must be at least 60 inches with a minimum width of 36 inches, a slope that does not exceed 5 percent in any direction, and a paved slope that does not exceed 2 percent in any direction (U.S. Forest Service Trail Accessibility Guidelines, 2013). Trails must include a passing space of at least 60 inches by 60 inches or “the intersection of two trails providing a T-shaped space where the base and the arms of the T-shaped space extend 48 inches minimum beyond the intersection. Vertical alignment at the intersection of the trails that form the T-shaped space shall be nominally level; cross slope shall not exceed 5 percent” (U.S. Forest Service Trail Accessibility Guidelines, 2013). Natural trail obstacles must not be taller than 2 inches and paved trail obstacles must not exceed a half inch in height. Additionally, “openings in a trail tread surface, trail resting spaces, and trail passing spaces shall be small enough to prevent passage of a one-half inch diameter sphere” (U.S. Forest Service Trail Accessibility Guidelines, 2013).

### ADDITIONAL TRAIL CLASSIFICATION GUIDANCE

**Table 7.1 provides general guidance for trail classifications, sourced from a combination of the following resources (Table 7.2). Managers are encouraged, at their discretion, to utilize these resources if further trail guideline specifications are needed or desired.**

TRAIL CLASSIFICATIONS	TRAIL USER	SURFACE MATERIALS	TRAIL CLASSIFICATION (U.S. FOREST SERVICE MATRIX)	PHYSICAL GUIDELINES	GROOMING NEEDS
Dirt Road	Equestrian; Mountain Bikers; E-Bikers; XC Skiers; Snowshoers Fat Bikers	Mixture of crushed aggregate stone, sand, and fines	5 Fully developed	36-120” tread width; routine grading; uniform, firm, and stable surface; no protrusions or obstacles; 2-5% grade; 2-3% cross slope; 8-10’ clearance height; 60-72” clearance width; 12-24” shoulder clearance; 6-8’ turn radius	Bombardier
Double Track	Equestrian; Mountain Bikers; E-Bikers; Hikers; Trail Runners; XC Skiers; Snowshoers; Fat Bikers	Native or Imported materials	3-4 Developed to highly developed	<b>Hiker/Pedestrian</b> 36-72” tread width; routine grading and minor roughness; 5-20% grade; 3-10% cross-slope; 7-10’ clearing height; 36-72” clearing width; 4-10’ turn radius <b>Biker</b> 36-84” tread width; routine grading and minor roughness; 2-10% grade; 3-8% cross-slope; 6-9’ clearance height; 60-96” clearance width; 4-10’ turn radius	Snowmobile tow-behind

TRAIL CLASSIFICATIONS	TRAIL USER	SURFACE MATERIALS	TRAIL CLASSIFICATION (U.S. FOREST SERVICE MATRIX)	PHYSICAL GUIDELINES	GROOMING NEEDS
Singletrack	Equestrian; Mountain Bikers; E-Bikers; Hikers; Trail Runners; Backcountry Skiers; Snowshoers; Fat Bikers	Native materials	2-3  Moderately developed to developed	<p><b>All:</b> 5-15% cross-slope (3-8% ideal for hiker/biker/winter use), 6-8' clearance height; 24-60" clearance width (36" minimum ideal for hiker/biker use); 3-8' turn radius</p> <p><b>Easy</b> 36-72" tread width; hardened, firm, and stable; 5% or less grade (15% max); obstacles 2" tall or less may be present; 36" bridge width</p> <p><b>More Difficult</b> 24" tread width; mostly stable; 5-10% grade (15%+ max); obstacles 8" tall or less may be present; 24" bridge width; 24" high or less technical features may be present</p> <p><b>Very/Extremely Difficult</b> 6-12" tread width; widely variable and unpredictable surface; 15-20%+ grade (15%+ max); obstacles 15" tall or less may be present; possible loose rock; 24" bridge width; 48" or less technical features may be present</p>	Ungroomed or snowmobile tow-behind if wide enough
Gravel/ADA	Cyclists; Mobility Device Users; Hikers; Trail runners; Snowshoers; XC Skiers	Imported materials	5  Fully developed	36"+ tread width; uniform, firm, and stable surface; no protrusions or obstacles; <5% grade; <2% slope if elevated above natural ground; <5% cross-slope; 8-10' clearance height; 60-72" clearance width; 6-8' turn radius; 60"x36" resting intervals and 60"x60" passing spaces needed	Bombardier groomer (if wide enough) or snowmobile tow-behind

TRAIL CLASSIFICATIONS	TRAIL USER	SURFACE MATERIALS	TRAIL CLASSIFICATION (U.S. FOREST SERVICE MATRIX)	PHYSICAL GUIDELINES	GROOMING NEEDS
Pack & Saddle	Horses Only	Native materials	2-4  Moderately developed to highly developed	<p><b>Single Lane</b> 12-24" tread width; occasional grading; 5-20% grade; 5-10% cross-slope; 8-12' clearance height; 72-96" clearance width; 4-10' turn radius</p> <p><b>Double Track</b> 60-120" tread width; occasional grading; 5-20% grade; 5-10% cross-slope; 8-12' clearance height; 72-96" clearance width; 4-10' turn radius</p>	Snowmobile tow-behind or Bombardier (depending on trail width)



Photo Credit: Charlie Lansche

**Table 7.2: Trail Classification, Design, and Maintenance Resources**

TRAIL CLASSIFICATION	RESOURCES
Gravel Roads	<a href="#">LHTAC Gravel Roads Manual</a>
Double Track	<a href="#">USFS Trail Accessibility Guidelines (FSTAG)</a>
	<a href="#">USFS Trail Maintenance and Construction Notebook</a>
	<a href="#">USFS Trail Accessibility Guidelines (FSTAG)</a>
	<a href="#">USFS Trail Design Parameters</a>
	<a href="#">BLM/IMBA Guidelines for a Quality Trail Experience</a>
Single Track	<a href="#">IMBA Trail Difficulty Rating System</a>
	<a href="#">Kootenay Adaptive Trail Standards and Rating System</a>
	<a href="#">USFS Trail Accessibility Guidelines (FSTAG)</a>
	<a href="#">U.S. Access Board</a>
	<a href="#">USFS Trail Design Parameters</a> <a href="#">BLM/IMBA Guidelines for a Quality Trail Experience</a>
Gravel/ADA	<a href="#">IMBA Trail Difficulty Rating System</a>
	<a href="#">Kootenay Adaptive Trail Standards and Rating System</a>
Pack & Saddle	<a href="#">USFS Trail Accessibility Guidelines (FSTAG)</a>
	<a href="#">USFS Trail Maintenance and Construction Notebook</a>
OTHER	<a href="#">USFS Trail Design Parameters</a>
	Hiker/Pedestrian: Pages 1+2 Bicycle: Pages 5+6 Cross-Country Ski: Pages 13+14 Snowshoe: Pages 15+16

## RESOURCES

Table 7.1 provides general guidance for trail classifications, sourced from a combination of the following resources (Table 7.2). Managers are encouraged, at their discretion, to utilize these resources if further trail guideline specifications are needed or desired.

## HARRIMAN EAST HIGHLIGHT

### OVERVIEW

“Harriman East” refers to the eastern portion of Harriman State Park that is located east of Highway 20. Harriman East consists of approximately 900 acres of relatively undeveloped land and includes recreational assets like the Osborne Bridge boat landing and Fish Pond. Harriman East is primarily comprised of sage meadow, except for a lodgepole pine forested area around Fish Pond. Beyond access to the Osborne Bridge boat landing,

Harriman East is primarily accessed via dirt roads stemming off the Mesa Falls Byway. Other than the Osborne Bridge boat launch area, there is minimal signage and development throughout Harriman East. Harriman East is surrounded by the Caribou-Targhee National Forest.

Although opportunities exist to expand recreational amenities within Harriman East, this portion of the park currently experiences comparatively lower levels of visitation than the western section. Accordingly, any proposals for new trails or improvements in Harriman East should be evaluated within the broader framework of park management priorities, with emphasis placed on maintaining and enhancing existing amenities that serve most visitors.

### EXISTING RECREATION OPPORTUNITIES

Fishing and recreational boating are the most sought-after activities on Harriman East. The Henry’s Fork is located throughout the entirety of Harriman East, and Fish Pond is the only fishable lake in the state park. The Henry’s Fork is a world-renowned fishing river with strict gear and retention regulations. On the section of the Henry’s Fork that passes through Harriman State Park, fishing is only allowed between June 15 and November 30. No retention of fish caught in this area is allowed, only single-point barbless hooks may be used, and only fly fishing is permitted. No specific rules exist for Fish Pond beyond typical IDFG lake fishing regulations, and it is open all year. No built improvements exist at Fish Pond beyond a small hand launch boat ramp, a gravel parking area, and an

informational kiosk. Only non-motorized boats are allowed on the waterbody. The Osborne Bridge Boat Landing is a common location for shore fishing and launching watercraft to traverse the Henry’s Fork southward. The landing contains a gravel parking ring, a concrete boat launch, a vault toilet, and two informational kiosks.

While not on Harriman State Park’s property, a dispersed camping area exists on U.S. Forest Service land adjacent to Harriman East. The dispersed camping area, known as the “Gravel Pits,” contains numerous pull-off spots along Forest Road 20362 and contains no developed amenities.

### EXISTING TRAILS & PATHS

While no trails are marked on Harriman State Park’s official maps of Harriman East, numerous trails and paths exist in the area. South of the Henry’s Fork, a ~4.5-mile loop path exists that contains interpretive signage and a gate adjacent to the Osborne Bridge. The loop trail traverses the southern section of Harriman East, with the trail’s eastern section mostly meandering along the Henry’s Fork. The trail dips down into the northern section of the Pinehaven neighborhood and curves back north through U.S. Forest Service land into the Osborne Bridge boat launch area, providing an accessible walking route for residents.

On the north end of Harriman East, a trail exists that immediately follows the Henry’s Fork after crossing the Osborne Bridge. This path eventually leads to the Gravel Pits camping area located on U.S. Forest Service property. A dirt path exists north of the Osborne Bridge that cuts directly east, ending at the Mesa Falls Byway. Dirt paths and roads exist on U.S. Forest Service land throughout the Gravel Pits camping area, adjacent to state park land. These paths are connected to trails that lead to Fish Pond. A path exists along the western side of Fish Pond, allowing for shoreside fishing access (Figure 7.3).

### OPPORTUNITIES FOR TRAIL AND RECREATION DEVELOPMENT

Harriman East presents an opportunity to serve as a passive recreation area situated within a unique sage meadow and lodgepole pine landscape. South of the Henry’s Fork, an opportunity exists to formalize the existing loop trail adjacent to the river and the Pinehaven neighborhood to provide an additional section of the Harriman Trail System in an area with no publicly advertised trails. Given the presence of features like the fence and small gate adjacent to the Osborne Bridge and the structure of the gravel parking loop, the formalized route would likely be logistically burdensome for horseback riding and better suited for activities like walking and bicycling. As

the trail is already mostly informally developed, a minimal level of new trail development is required; however, formalization of the trail with a hand or machinery crew is recommended. To maintain its presence primarily on state park land and to avoid direct contact with private land, a ~2,000-foot trail would need to be developed near the southern end of the property. The northwestern section of the potential trail crosses through U.S. Forest Service land, and therefore collaboration with the U.S. Forest Service is necessary if the route were to be formalized. Formalizing this trail would require additional monitoring of trail conditions and visitor use in Harriman East by park staff. Resultingly, Harriman State Park's trail managers should evaluate the level of staff capacity and resources to maintain an additional ~3.5 miles of trails before formalizing the trail and adding it to Harriman State Park's official trail maps.

North of the Henry's Fork, an opportunity exists to connect the Osborne Bridge boat launch and parking area with Fish Pond by formalizing unofficial paths that weave through State Park property and the Gravel Pits camping area. Formalizing this route would provide non-motorized access to Fish Pond via the Osborne

Bridge parking area and connect the Osborne Bridge boat launch area with the Gravel Pits camping area, further linking Harriman East's recreational assets. Two options exist to connect the Osborne Bridge parking area with the Gravel Pits camping area. A gravel route that cuts east from the double-track path stemming from the Osborne Bridge connects to the campsite to the north; however, this route is utilized by motorized recreators and poses risks for negative interactions between motorized and non-motorized users. To minimize potential interactions with motorized users, a single-track route exists that immediately turns east after crossing the Osborne Bridge. This route follows the north bank of the Henry's Fork and leads directly to the Gravel Pits camping area. Both routes would require formalization by the Idaho Department of Parks and Recreation and likely installation of drainage features and water crossings, given the path's proximity to the Henry's Fork and crossing of a stream near the campground. Once connected to the Gravel Pits camping area, users could access Fish Pond by utilizing Forest Road 20362 and 297 – both of which are relatively well-maintained gravel roads.



Photo Credit: Brett Rannow

At Fish Pond, opportunities exist to formalize the area and increase public awareness and visibility of the site. Firstly, enhancing roadside signage along the Mesa Falls Byway via adding additional, larger signs identifying the location could increase awareness of Fish Pond, as only one small sign exists along the Byway that indicates the site's presence. Performing

maintenance work on Forest Road 297 could provide smoother gravel road conditions and facilitate access to a wider range of vehicle types. It should be noted that Forest Road 297 and Fish Pond's parking area exist on U.S. Forest Service land, and therefore collaboration with the agency to perform any maintenance, roadside signage enhancements, or site

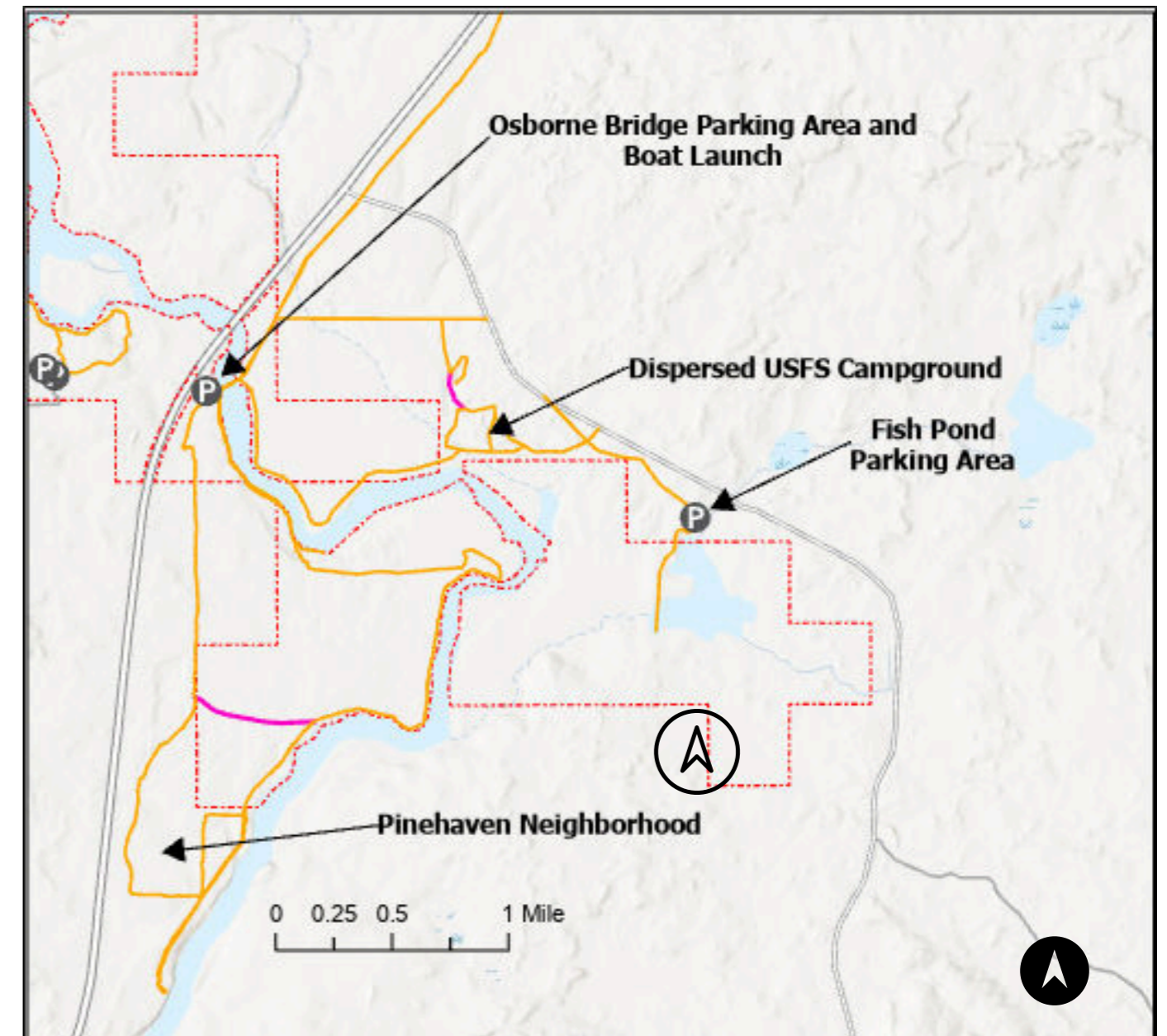


Figure 7.3: Overview of existing and potential trails in Harriman East. The map identifies Harriman's boundary (red), points of interest, existing informal paths (orange), and potential new paths to develop and enhance trail recreation opportunities in the eastern section of the park (pink).

rehabilitation work is necessary. Lastly, formalizing existing social trails along the western side of Fish Pond could enhance shore-based fishing opportunities and provide a nearly half-mile out-and-back hiking trail in a lodgepole pine, lakeside setting. Most of this potential trail lies on state park property and therefore could be developed by Harriman State Park's trail managers with minimal restrictions.

## REGIONAL TRAIL CONNECTION OPPORTUNITIES

### BACKGROUND

Even though the existing conditions assessment is rooted in Harriman State Park's internal trail system, examining the network in a regional context is valuable for understanding how the park can connect to Island Park's broader recreation network. Identifying opportunities to link the Harriman Trail System to nearby regional systems would expand recreational opportunities for visitors, offering longer-distance routes that extend beyond the park boundaries. These connections can strengthen regional tourism and support local economies by drawing visitors to nearby communities. They also enhance ecological and cultural connectivity by linking landscapes, watersheds, and historic corridors across jurisdictions. Highlighting potential regional connections in this assessment helps illustrate how the Harriman Trail System might fit within a larger, interconnected network that serves residents, regional visitors, and destination travelers. For any possible trail connection, however, additional collaboration between Harriman State Park, the U.S. Forest Service, IDFG, and other relevant management agencies is necessary to determine their realistic feasibility, user demand, and potential wildlife/environmental impacts.

### BRIMSTONE CROSS-COUNTRY SKI TRAIL

#### WHERE IS THE TRAIL LOCATED?

The Brimstone Cross-Country Ski Trail is located on the northeast side of the Harriman Trail System and is directly connected to the Big Bend Loop in the winter. The trail intersection is specifically located at intersection #14, when referring to Harriman State Park's existing trail maps. During the winter, the Brimstone Trail provides a 10.8-mile groomed one-way connection to Ponds Lodge in Island Park from Harriman.

#### HOW WOULD THE TRAIL CONNECT TO HARRIMAN?

The Brimstone trail already connects to Harriman State Park from Ponds Lodge, a resort alongside the Buffalo River on Highway 20 in Island Park; however, this connection is only open during the winter. A possible opportunity exists to keep this corridor open year-round, connecting Harriman to a summer tourism hub and providing additional long-distance, non-motorized summer recreation opportunities.

#### WHAT ASSETS WOULD BE CONNECTED TO HARRIMAN?

Maintaining the Brimstone Trail during the summer would provide a direct off-road connection to Harriman State Park from Island Park through U.S. Forest Service land. Through this route, the Harriman Trail System would connect to natural assets like the Targhee National Forest, Island Park Reservoir, Box Canyon, the Henry's Fork, and the Buffalo River. If connected in the summer, the route would also connect the Harriman Trail System to lodging options like Ponds Lodge, Buffalo Campground, and numerous private lodges along the Buffalo River and Highway 20 corridor.

This trail connection would primarily benefit long-distance non-motorized recreation groups like gravel bikers, joggers, and horseback riders.

#### WHO WOULD FACILITATE THE CONNECTION?

Given its location, the U.S. Forest Service would likely be responsible for maintaining a summer connection from Harriman State Park and Island Park via the Brimstone Cross-Country Ski Trail. Given the Targhee National Forest Plan's trail density objectives and the U.S. Forest Service's priorities to maintain existing, more commonly used summer trails in the region with limited existing resources, opening and maintaining nearly 11 additional miles of summer trails is likely a low priority and possibility for the agency at this time. Additionally, reroutes to higher elevations and drier trail conditions or installation of hydrology management features would likely be needed for summer access, given the presence of wetlands throughout the existing trail corridor, potentially requiring NEPA analyses and further complicating trail development. Given the hypothetical summer trail's presence within the Harriman Wildlife Refuge, further consultation with IDFG would be necessary to ensure that trail use and related development would not adversely impact spring, summer, and fall wildlife habitat security.

Ultimately, while possible, creating a summer trail connection to the Harriman Trail System through the Brimstone Cross-Country Ski Trail corridor would be a complex, multi-agency endeavor outside the scope of Harriman State Park's management purview.

### BOX CANYON TRAIL

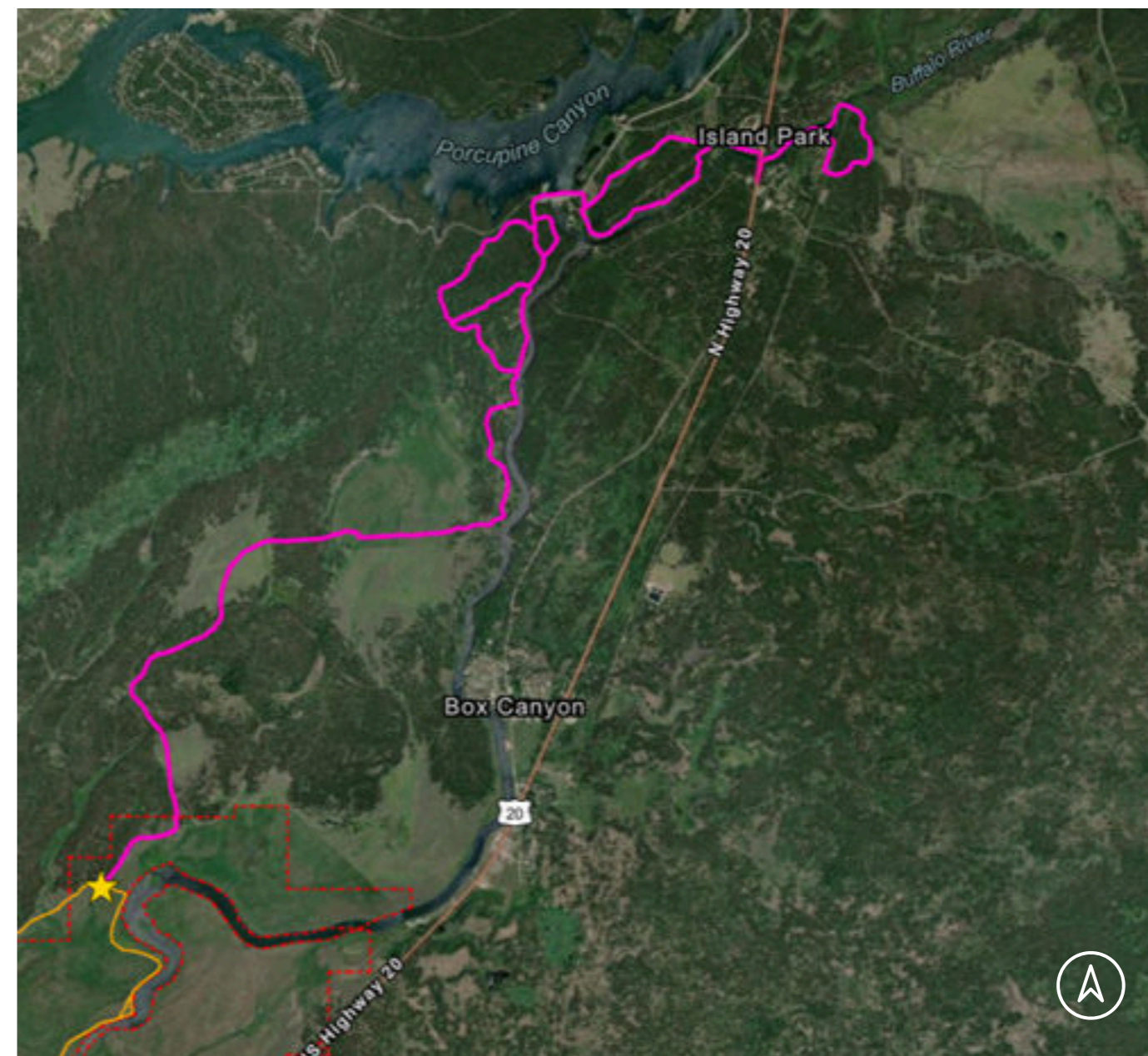


Figure 7.4: Examination of Summer Connection Opportunity Between Trails Identified on Harriman State Park Land (orange trails, red boundary) and the Brimstone Trail (pink).

#### WHERE IS THE TRAIL LOCATED?

The Box Canyon Trail is located northeast of Harriman State Park and follows the Henry's Fork from the north end of Box Canyon to the Box Canyon Trailhead at Rosie's Waterfall. The north end of the trail is accessed from the Box Canyon Trailhead, and the south end of the trail is accessed from either Quartz Lane or Old Highway 191 (e.g., Box Canyon Road). Both the northern and southern trail access points possess parking areas.

#### HOW WOULD THE TRAIL CONNECT TO HARRIMAN?

This route would provide a summer connection to the Harriman Trail System's Big Bend Loop and broader network via the Bing Lempke Trail and East Gate Trail. Given the level of development and private property between the Last Chance Fisherman Access Site and the Box Canyon Trail's southern access point from

either Quartz Lane or Old Highway 191, an off-road trail connection is not feasible; rather, connecting the two trails through a designated on-road connection via Old Highway 191 is likely necessary.

#### WHAT ASSETS WOULD BE CONNECTED TO HARRIMAN?

Through formalizing a connection with the Box Canyon Trail, Harriman State Park would directly connect to natural assets north of the park, like the Henry's Fork, Buffalo River, Box Canyon, Rosie's Waterfall, and Targhee National Forest. The connection would also provide access to population and tourist hubs like Box Canyon, Last Chance, and Island Park. Numerous lodging options would be connected through this route, including the Box Canyon Campground,

TroutHunter Lodge, Angler's Lodge, and other private lodging options adjacent to the Henry's Fork.

This hypothetical connection would primarily benefit long-distance non-motorized summer users like joggers, horseback riders, and gravel bikers. It should be noted that this route would require on-road connections, creating risks for interactions with motorists.

### WHO WOULD FACILITATE THE CONNECTION?

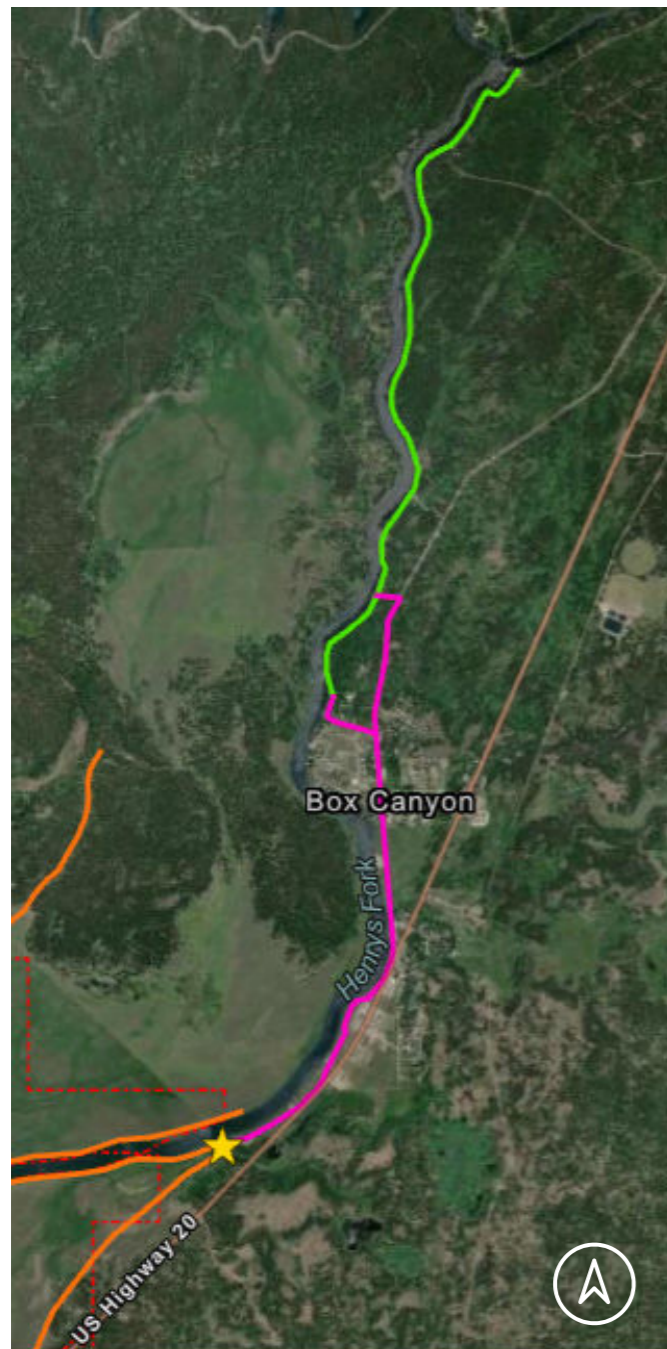


Figure 7.5: Examination of Connection Opportunity Between Trails Identified on Harriman State Park Land (orange trails, red boundary) and the Box Canyon Trail (green) via a Primarily On-Road Route (pink).

Creating this connection would rely on developing designated on-road routes, particularly along Old Highway 191, rather than building new trails. To make this possible, collaboration across Harriman State Park, the City of Island Park, the U.S. Forest Service, and local businesses is necessary. The main effort would focus on establishing a formal on-road route and ensuring accurate, consistent public information about it. Once agreed upon and developed, the City of Island Park would be responsible for managing on-road signage and wayfinding along the city's roads. Harriman State Park, the City of Island Park, and the U.S. Forest Service would also need to update maps, signage, and visitor communication strategies to effectively advertise the route to the public. In addition, coordination with TroutHunter would be required to allow the route to pass through the business's property, ensuring a safe connection from the Last Chance Fisherman's Access Site to Old Highway 191 without using Highway 20.

### GREATER YELLOWSTONE TRAIL WHERE IS THE TRAIL LOCATED?

The Greater Yellowstone Trail is an ambitious, conceptual long-distance trail system that traverses three states, two national parks, three national forests, and one state park. Beginning in Coulter Bay, Wyoming, passing through Idaho towns like Victor, Driggs, Teton, and Ashton, and ending in West Yellowstone, the Greater Yellowstone Trail utilizes a collection of existing trails and proposed routes to stitch together a 130-mile corridor that connects visitors to the unique Greater Yellowstone Ecosystem and local rural economies. The [Greater Yellowstone Trail Concept Plan](#), developed by Alta Planning + Design in 2015, provides an in-depth analysis of the route and projects necessary to complete the trail's development. According to the concept plan, "The Greater Yellowstone Trail presents an amazing opportunity to enhance quality of life, improve access to recreation and public lands; and generate economic opportunities for residents of eastern Idaho, southwestern Montana and western Wyoming."

Within the expansive network, Corridor I-9 (also known as the Yellowstone Branch Line Trail), "Bear Gulch Trailhead to Montana State Line," is the section of the Greater Yellowstone Trail most relevant to the Harriman Trail System. This section is a 35.2-mile existing gravel trail located approximately eight miles east of Harriman State Park, near Pineview.

### HOW WOULD THE TRAIL CONNECT TO HARRIMAN?

While the connection is possible, it should be noted that the most direct access route, which minimizes off-road access, from Harriman State Park's Osborne Bridge to the I-9 corridor is approximately nine miles in length one-way. This is exceptionally long for an

access trail. Therefore, developing new trails purely for the purpose of connecting the Harriman Trail System to the Greater Yellowstone Trail is not advised; rather, options to connect the two assets via existing routes are recommended.

An access route through U.S. Forest Service land would be required to connect the I-9 corridor of the Greater Yellowstone Trail to the Harriman Trail System. According to the [Idaho State Park Online Trails Map](#), the most feasible connection would stem from linking Harriman State Park's trail network to the I-9 corridor via Eccles Road (e.g., Forest Road 20112), a 6.3-mile dirt road managed by the U.S. Forest Service. Connecting the Harriman Trail System to Eccles Road is possible through utilizing existing but unnamed trails and dirt paths found on Harriman State Park's eastern area (e.g., Harriman East) and U.S. Forest Service lands, with access starting at the Osborne Bridge and traversing a large informal campground via Forest Road 20362. Unless new trails are developed on U.S. Forest Service land for the purpose of linking the Harriman Trail System to Eccles Road, the connection would require traversing nearly one mile of the paved Mesa Falls Highway. An opportunity exists to access Eccles Road without traversing the Mesa Falls Highway; however, this route would add nearly four miles to the access route instead of the one additional mile when using the highway.

### WHAT ASSETS WOULD BE CONNECTED TO HARRIMAN?

This connection would link the Harriman Trail System to the expansive, multi-state trail Greater Yellowstone

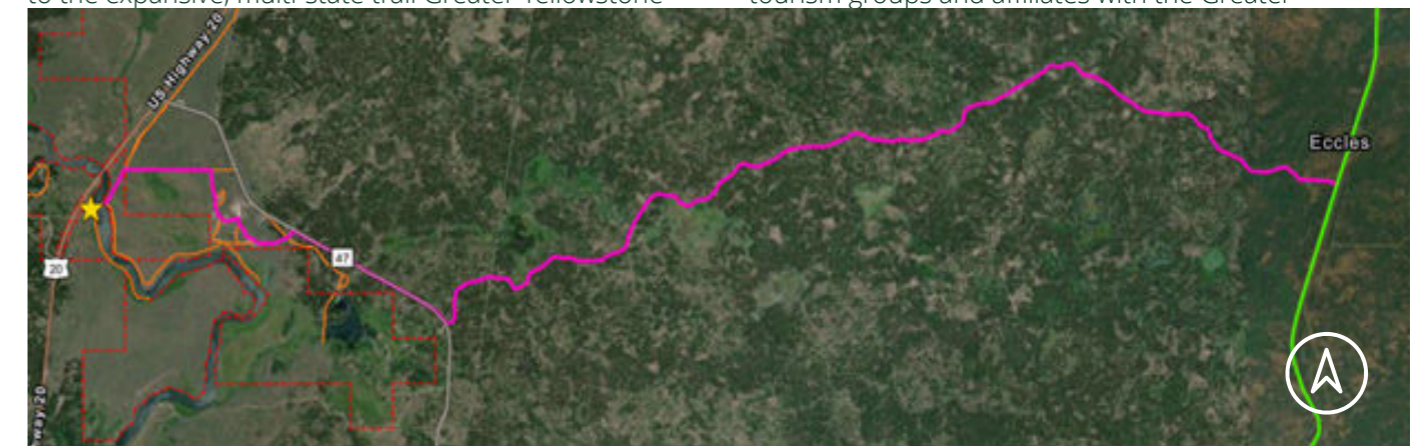


Figure 7.6: Examination of Connection Opportunity Between Trails Identified on Harriman State Park Land (orange trails, red boundary) and the Greater Yellowstone Trail I-9 Corridor (green) via a route on unmarked paths, the Mesa Falls Highway, and Eccles Road (pink).

Trail Network, providing opportunities for stopover tourism and further entrenchment into the region's outdoor recreation landscape. Connecting to the Greater Yellowstone Trail Network provides direct access to southern towns like Warm River, Ashton, and Marysville while unlocking numerous opportunities to explore and experience the primitive landscape of the Caribou-Targhee National Forest.

This hypothetical connection would primarily benefit long-distance non-motorized summer users like gravel bikers and horseback riders. It should be noted that this route would require on-road connections, creating risks for interactions with motorists in a highway setting.

### WHO WOULD FACILITATE THE CONNECTION?

Formalizing and developing this connection would require collaboration between Harriman State Park and the U.S. Forest Service. After the Osborne Bridge, the near entirety of the connector route exists on U.S. Forest Service property and, as such, U.S. Forest Service holds ultimate decision-making power surrounding the connector path's formalization. While the route to access the I-9 Corridor from the Osborne Bridge Parking Lot exists without needing to develop new trails, formalizing unmapped paths is required. Updating information sources, signage, and visitor communication strategies to effectively communicate the route to the public would also be necessary for both the U.S. Forest Service and Harriman State Park management. Additional collaboration with regional tourism groups and affiliates with the Greater

# 8 TRAIL FUNDING OPPORTUNITIES

## TAKEAWAYS

- Managers and stakeholders of the Harriman Trail System can draw from numerous local, state, national, and federal funding sources to support trail maintenance and development.
- Grants can greatly assist in supplementing limited operating budgets for trail-related projects. Available grant programs range from small community-based funds to major federal infrastructure grants.
- Application cycles, matching requirements, and funding priorities change regularly. Any prospective applicants should re-check the grant application requirements before starting the application process.
- Events such as races or community gatherings can generate additional funding and public awareness for trail initiatives.
- Selling trail-branded merchandise offers an avenue for raising money and building visitor engagement.
- Partnerships with local businesses, nonprofits, and schools can provide financial, material, or volunteer support.
- All fundraising and event activities should consider Harriman State Park's ecological sensitivity and visitor capacity limits.
- Combining grants, community fundraising, and partnerships can create a diversified and sustainable funding approach for the Harriman Trail System.



Photo Credit: *Harriman State Park of Idaho Instagram @harriman\_state\_park\_of\_idaho*

## FUNDING OPPORTUNITIES FOR THE HARRIMAN TRAIL SYSTEM

### GRANTS

Grants can play a critical role in trail maintenance and development by providing funding that may not be available through regular operating budgets. They can help cover the costs of trail construction, maintenance, and improvements through supporting activities like resurfacing, equipment procurement, signage development, and accessibility upgrades. Grants provide additional funding to support the Harriman Trail System in staying safe, sustainable, and enjoyable for visitors. State parks themselves and non-profits can leverage additional funding obtained through grants to expand Harriman State Park's trail-based recreation opportunities and strengthen the longevity of existing ones.

The project team performed a thorough evaluation of available local, statewide, national, and federal grants and identified ones relevant to supporting management recommendations for the Harriman Trail System. These grants are described below. While this section provides information about relevant grant opportunities for the Harriman Trail System, it should be noted that components like award amounts, application windows, match requirements, and priority criteria may change after the publication of the Existing Conditions Assessment Report. As such, reviewing a grant provider's website before committing to applying for a funding resource is recommended. Links to each described funding opportunity are included at the end of the section.

### IDAHO-SPECIFIC GRANTS RECREATIONAL TRAILS PROGRAM (RTP)

Administered through the State of Idaho and the Federal Highway Administration, RTP provides approximately \$1.5 million annually for motorized, non-motorized, and mixed-use recreational trail projects across the state. At least 30% of the total funding is reserved for non-motorized recreation. A 20% local match is required, and applications are typically due in late January. This is a key funding source for trail construction, maintenance, and rehabilitation.

### LAND AND WATER CONSERVATION FUND

This grant, a federal-state partnership between the State of Idaho and the National Park Service, supports outdoor infrastructure, public access, and conservation projects. Award amounts vary by project scope, and a 50% match is required. Applications are due in late January. It is ideal for large-scale projects

that preserve open space or enhance outdoor recreation facilities.

### CUTTHROAT PLATE FUND

Administered by the Idaho Department of Parks and Recreation and funded through sales of Idaho's Cutthroat license plates, this grant supports construction and maintenance of non-motorized boating access and facilities benefiting anglers. While award amounts vary depending on funding availability, a 5% match is required. Applications are accepted in late January. This fund is especially relevant for improving water access infrastructure.

### MOUNTAIN BIKE PLATE FUND

Also supported by specialty license plate sales and administered by the Idaho Department of Parks and Recreation, this fund is aimed at preserving, maintaining, and expanding recreational trails that allow mountain biking. Grants can provide up to \$10,000 for motorized equipment and an unspecified amount for hand tools. A 5% match is required, and there are restrictions on how motorized equipment can be used. Applications are due in late January.

### TARGHEE WOMEN'S CLUB GRANTS

This local grant program funds community-benefit projects specifically in Island Park and Fremont County. Funding levels vary, and there is no match requirement. Applications are typically due in late August. The grant is well-suited for small-scale, locally driven projects that align with community needs.

### FOREVER IDAHO GRANTS

Forever Idaho Grants are administered by the Idaho Community Foundation and support a broad range of projects that enhance land use, outdoor access, waterway protection, and public space beautification. Awards can reach up to \$25,000, with no match required. Most grant awards range between \$3,000 - \$8,000. Applications are accepted in mid-June. This flexible funding stream is suitable for environmental and public land stewardship projects.

### IDAHO WOMEN'S CHARITABLE FOUNDATION GRANT PROGRAM

This Idaho Women's Charitable Foundation grant focuses on environmental initiatives, including parkland improvements, environmental education, wildlife conservation, and reclamation. Awards range from \$20,000 - \$30,000 and, while no match is required, applicants must have at least \$50,000 in annual revenue and seek to fund new or expanded programs, rather than supporting ongoing costs and operations. The application cycle opens in late September/October and closes in early January.

### IDAHO GIVES

Idaho Gives is an annual statewide fundraising campaign that enables nonprofits to raise unrestricted funds through public donations. Though not a

traditional grant, it presents a valuable opportunity to raise money for projects like trail maintenance, infrastructure, or accessibility improvements. The campaign occurs each May, and participation is open to registered nonprofits. This may be a good fit as a fundraising opportunity for Friends of Harriman State Park.

## **NATIONAL GRANTS CLIF FAMILY FOUNDATION**

The Clif Family Foundation, overseen by Clif Bar, supports projects that expand access to safe places to enable healthy physical activity and improve mental health. Grants range from \$5,000 to \$50,000, last for one year, and do not require a match. Applications are accepted twice annually, with deadlines on March 1 and August 1. This grant is well-suited for organizations enhancing trail access, community engagement, or conservation initiatives.

## **LEGACY TRAILS PROGRAM**

This grant is administered by American Trails and supports trail projects on U.S. Forest Service lands that are focused on habitat restoration, preserving access, removal or decommissioning of unauthorized routes, and infrastructure improvements. Small awards range from \$5,000 to \$20,000, and large awards can reach up to \$100,000. A 20% match is required, and in-kind contributions are acceptable. The cycle typically runs from early November through Mid-December. Projects must have full support and ongoing approval from U.S. Forest Service staff, and outcomes must be reported to the INFRA database.

## **PAYDIRT – SANTA CRUZ BICYCLES**

Santa Cruz Bicycles funds cycling-related trail access, development, maintenance, and infrastructure projects through their PayDirt program. There is no formal award cap listed, and no match is required. The next application cycle is expected to open in early 2026. This grant is flexible and ideal for expanding mountain biking opportunities or trail systems that support bikes.

## **RTC TRAIL GRANT – RAILS TO TRAILS CONSERVANCY**

The Rails to Trails Conservancy's RTC Trail Grant typically funds between \$5,000 to \$25,000 for activities such as coalition building, securing matching funds for other grants, mapping, land acquisition strategies, and public engagement for multi-use trails. No match is required. The last cycle opened in mid-June, though timing for the next round is currently uncertain.

## **TRAIL ACCELERATOR GRANT**

Administered by the International Mountain Bicycling Association, this grant supports the planning and design of mountain bike trails; however, multi-use trails are also supported through the program. Awards

range from \$10,000 - \$30,000, with a one-to-one match required. This is not a cash grant; rather, the grant awards organizations with half the cost of professional planning and design services. The application window typically runs from January 15 to March 15. Typical project outcomes include conceptual plans for new or expanded trail networks; detailed design and field flagging of trail alignments; assessment of existing trail networks reviewing trail sustainability, trail improvements, and/or network expansion; community-wide feasibility studies analyzing multiple land parcels or large landscapes; planning/design of urban bike parks.

## **TRAIL TRUST**

Fox Factory's Trail Trust grant provides funding to support responsible recreation, trail building and maintenance, and expanding trail access for all, particularly regarding mountain biking and other power sports. Awards range from \$2,500 to \$20,000. No match is required. The next application cycle is expected to open in early 2026. Great for trail and access improvement projects that align with enhancing outdoor recreation access for all.

## **TRAILS CAPACITY PROGRAM**

American Trails' Trail Capacity Program provides a range of \$2,000 to \$10,000 to support stewardship training, trail maintenance on state and local lands, and research and education, with a focus on non-U.S. Forest Service lands. No match is required, but some match is preferred. The application period typically occurs between October to December. Especially beneficial for youth engagement programs such as YEP, maintenance projects, and other projects involving volunteer coordination and training.

## **TREK FOUNDATION**

The Trek Foundation funds projects that help preserve land in perpetuity, offer trails that are open to the public, and support plans to activate trails in local communities. Award amounts vary, and applications are accepted on a rolling basis. There's no match required, making this a flexible and accessible funding stream for trail conservation or development.

## **TWO FOR THE TRAILS**

This Athletic Brewing Company grant funds shovel-ready outdoor recreation and land protection projects, not planning efforts. Awards range from \$500 to \$50,000, with an average of \$5,000 to \$10,000 per grant. No match is required. The grant cycle typically opens in August and runs through September. Projects must be approved by land managers and ready for immediate implementation.

## **BICYCLE ADVOCACY GRANT – NEW BELGIUM BREWING**

This grant from New Belgium Brewing provides \$500 to \$5,000 to support projects that break down barriers

and foster support for riders, focus on increasing daily ridership, and promote bicycle accessibility in communities facing historical and systemic inequities. No match is required. The next cycle is expected in early 2026. While smaller in size, it's a good fit for community outreach, education, or bike-related events and initiatives.

## **FEDERAL GRANTS BETTER UTILIZING INVESTMENTS TO LEVERAGE DEVELOPMENT (BUILD)**

Administered by the U.S. Department of Transportation, the BUILD grant, previously known as the RAISE program, provides \$1 million to \$25 million for surface transportation infrastructure projects with significant local or regional impact. Matching requirements vary by project location (urban vs rural), and applications are due in late January. This grant is best suited for large-scale projects, such as those that connect Harriman State Park to nearby communities or integrate trails into broader transportation networks; resultingly, utilization of this grant would likely be part of a larger regional project managed by an entity other than the Idaho Department of Parks and Recreation.

## **RECREATION ECONOMY FOR RURAL COMMUNITIES**

Offered by the Environmental Protection Agency, this program does not provide direct funding but offers technical assistance to help rural communities develop economic plans centered around recreation. While it does not offer monetary support, this grant is valuable in providing strategic planning to integrate Harriman State Park's recreation assets into the surrounding recreation economy. There is no match required, and application timing varies.

## **RIVERS, TRAILS, AND CONSERVATION ASSISTANCE PROGRAM (RTCA)**

The National Park Service offers the RTCA program to assist communities and public land managers in developing or restoring parks, conservation areas, rivers, and wildlife habitats, as well as creating outdoor recreation opportunities and programs that engage future generations in the outdoors. While no direct funding is awarded, recipients benefit from expert guidance in project planning, partnership building, and public engagement. There is no match requirement, and applications are typically due in early March. Consulting an National Park Service state program manager before the application deadline is a requirement to help identify how the agency's expertise can complement the project and to answer questions regarding the application. This program could assist in providing recreation and trail-based planning at Harriman and the surrounding wildlife refuge.

## **SURFACE TRANSPORTATION BLOCK GRANT PROGRAM (STBG)**

Managed by the Federal Highway Administration, the STBG provides flexible funding for a variety of transportation-related projects, including recreational trail development, provided the trail serves a transportation function and not a purely recreational purpose. Award amounts vary, and no match is required in Idaho. The application cycle is typically in April. This program is best suited for trail segments that connect Harriman to nearby towns or other transportation infrastructure.

## **EVENTS**

Events like trail-based races and walks, festivals, and performances can serve as tools to support funding for trail maintenance and development. Events draw participants and vendors that can support the Harriman Trail System through sponsorships, donations, and merchandise sales. Events can also highlight the economic and recreational value of the Harriman Trail System and encourage partnerships between the park and local businesses, tourism boards, and outdoor organizations.

Given Harriman State Park's ecological sensitivity, staffing capacity, and existing infrastructure, it is essential to carefully assess each proposed event's complexity, financial return, and potential environmental impacts before moving forward. Activities such as trail-based walks, runs, or small community gatherings may be appropriate within the park, provided they align with the park's parking lot capacity. Event planning should prioritize keeping attendance levels within what existing parking can reasonably accommodate, ensuring that visitor experience, safety, and natural resource protection are not compromised. Larger events that host more people than the park's infrastructure can support, like concerts or festivals, are likely best held off-site to reduce strain on park resources and minimize disturbances to wildlife and natural resources. The 'Wine in the Woods' event hosted by Friends of Harriman State Park is a good example of an event that can be supported at Harriman State Park.

## **TRAIL-SPECIFIC MERCHANDISE**

Trail-specific merchandise can provide a sustainable and visible source of funding for the Harriman Trail System. Items such as branded apparel, water bottles, patches, towels, stickers, or trail-named souvenirs can be sold online, at visitor centers or local businesses, or during programs and events to generate direct revenue dedicated to trail projects. Merchandise specific to the Harriman Trail System can strengthen the connection between visitor purchases and tangible park improvements, instilling a sense of pride among visitors and regular trail users. Partnerships

with local artisans, outfitters, or conservation organizations can further expand this connection. It is important to carefully assess the cost-benefit of producing and selling merchandise to ensure that production, inventory, and staffing costs do not outweigh the financial returns generated for trail development and maintenance.

## PARTNERSHIPS AND SPONSORSHIPS

Collaborations with businesses, nonprofits, and community organizations are another option to diversify funding sources to support the Harriman Trail System. Corporate sponsors, for example, may provide funding, construction materials, or volunteers in exchange for recognition on signage or promotional materials, while tourism agencies, hotels, and restaurants can contribute through event sponsorships or visitor packages that highlight Harriman State Park's unique trail-based recreation opportunities. Outdoor retailers, rental shops, and gear companies can support through donations, word-of-mouth advertisement, or "round-up for the trails" programs. Additionally, educational partnerships with universities and schools can support through research, mapping, and service-learning programs. Businesses, colleges/schools, and non-profits located in areas like Island Park, Ashton, Rexburg, and Idaho Falls are ideal candidates for this type of collaboration.

## LINKS TO FUNDING AND ASSISTANCE OPPORTUNITIES

### IDAHO-SPECIFIC GRANTS

RECREATIONAL TRAILS PROGRAM (RTP)  
[bit.ly/IDPR\\_Grants](https://www.idpr.org/grants)

LAND AND WATER CONSERVATION FUND  
<https://www.doi.gov/lwcf/about>  
[bit.ly/IDPR\\_Grants](https://www.idpr.org/grants)

CUTTHROAT PLATE FUND  
[bit.ly/IDPR\\_Grants](https://www.idpr.org/grants)

MOUNTAIN BIKE PLATE FUND  
[bit.ly/IDPR\\_Grants](https://www.idpr.org/grants)

TARGHEE WOMEN'S CLUB GRANTS  
<https://www.facebook.com/groups/407066354932931/>

FOREVER IDAHO GRANTS  
<https://www.idahocf.org/forever-idaho-funds.php>

IDAHO WOMEN'S CHARITABLE FOUNDATION GRANT PROGRAM  
<https://www.iwcfives.org/information-for-grant-seekers/>

IDAHO GIVES  
<https://www.idahogives.org/>

**NATIONAL GRANTS**  
CLIF FAMILY FOUNDATION  
<https://cliffamilyfoundation.org/>

LEGACY TRAILS PROGRAM  
<https://www.americantrails.org/legacy-trails-program>

PAYDIRT – SANTA CRUZ BICYCLES  
<https://www.paydirt.earth/>

RTC TRAIL GRANT – RAILS TO TRAILS CONSERVANCY  
<https://www.railstotrails.org/grants/eligibility/>

TRAIL ACCELERATOR GRANT  
<https://www.imba.com/programs/trail-accelerator-grants>

TRAIL TRUST  
<https://www.trailtrust.com/>

TRAILS CAPACITY PROGRAM  
<https://www.americantrails.org/the-trails-capacity-program>

TREK FOUNDATION  
[https://www.trekbikes.com/us/en\\_US/trek-foundation/](https://www.trekbikes.com/us/en_US/trek-foundation/)

TWO FOR THE TRAILS  
<https://athleticbrewing.com/pages/two-for-the-trails-grant>

BICYCLE ADVOCACY GRANT – NEW BELGIUM BREWING  
<https://www.newbelgium.com/company/mission/small-grants-details/>

**FEDERAL GRANTS & ASSISTANCE**  
BETTER UTILIZING INVESTMENTS TO LEVERAGE DEVELOPMENT (BUILD)  
<https://www.transportation.gov/BUILDgrants>

RECREATION ECONOMY FOR RURAL COMMUNITIES  
<https://www.epa.gov/smartgrowth/recreation-economy-rural-communities>

RIVERS, TRAILS, AND CONSERVATION ASSISTANCE PROGRAM (RTCA)  
<https://www.nps.gov/orgs/rtca/index.htm>

SURFACE TRANSPORTATION BLOCK GRANT PROGRAM (STBG)  
[https://apps.itd.idaho.gov/apps/manuals/Program\\_Update\\_Manual.pdf](https://apps.itd.idaho.gov/apps/manuals/Program_Update_Manual.pdf)

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# EXISTING CONDITIONS REPORT



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