Proposal Title: Managing Outdoor Recreation in Grand County, Utah: Conflict, Dispersal, and Displacement, Across City, County, State and Federal Lands

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Proposal

Managing Outdoor Recreation in Grand County, Utah: Conflict, Dispersal, and Displacement, Across, City, County, State and Federal Lands

USU Moab in Cooperation with the Institute for Outdoor Recreation and Tourism

About USU Moab
USU Moab is part of the USU statewide campus system and is dedicated to serving the needs of the Moab community. Recreation Resource Management is an integral part of the curricula offered through USU Moab and with support of the USU Environment and Society Department, provides degrees from the B.A. to Ph.D. Professor Wayne Freimund, who has considerable experience with research and education in Recreation Resource Management anchors that program in Moab.

About the Institute of Outdoor Recreation and Tourism at Utah State University
The Institute of Outdoor Recreation and Tourism at Utah State University was founded in 1998 by the Utah State Legislature through the Recreation and Tourism Research and Extension Program Act (S.B. 35). The Institute is mandated to focus on:

1) tourism and outdoor recreation use;
2) the social and economic tradeoffs of tourism and outdoor recreation for local communities; and
3) the relationship between outdoor recreation and tourism and public land management practices and policies.

The purpose of the Institute is to provide better data for the Legislature as well as municipal, county, state, and federal agencies in their decision-making processes on issues relating to tourism and outdoor recreation. Through our research, we provide a base of information and expertise to assist community officials as they attempt to balance the economic, social, and environmental tradeoffs in tourism development. We also cultivate an interdisciplinary approach towards the study and management of outdoor recreation and tourism through undergraduate and graduate degrees in Recreation Resource Management, which we offer through the Department of Environment and Society at Utah State University.

Experience in dealing with similar projects
The Institute has a long history of conducting research focused on solving pressing visitor use management challenges throughout Utah. For over 20 years, we have worked collaboratively with federal and state management agencies, local elected leaders, transportation officials, user groups, and resorts to develop and implement research projects focused on visitor use management. Our work has been focused on developing a better understanding of: 1) how many visitors use specific outdoor recreation settings; 2) who those visitors are (i.e., their sociodemographic characteristics, activity preferences, etc.); 3) the temporal and spatial distributions of outdoor recreation activity; and 4) users’ attitudes towards both use levels and transportation issues. Our past work within the state most directly relevant to the transportation challenges faced by Moab include a year-long survey effort to quantify the spatial and temporal distribution of discrete types of non-motorized and motorized recreation throughout the Central Wasatch. This effort included on-site surveys to solicit information about perceptions toward transportation planning and possible alternative transportation projects. We also currently manage visitor use monitoring efforts for eight national forests across 17 million acres throughout the Intermountain West; this includes
Proposal

the Manti-LaSal National Forest. And finally, we are currently working on a grant funded by the National Science Foundation to quantify and visualize tourism flows through neighboring San Juan County.

Introduction and Project Justification

Utah is a national leader in outdoor recreation, having established the first Office of Outdoor Recreation in the country, and hosting a diverse array of outdoor recreation opportunities on the state’s stunning natural landscapes (Sausser et al., 2019). Participation in outdoor recreation and nature-based tourism within Utah has increased notably over the past decade. The 2013 launch of the Office of Tourism and Film’s “Mighty 5” marketing campaign spurred large increases in visitation to Utah’s five National Parks (Drugova et al., 2020). Visitation to state parks have also escalated in recent years. Visitation reached 10.6 million in 2020, an approximately 33% increase over the previous year, and has more than doubled since its previous peak of just over 5 million visitors in 2012 (Utah State Parks 2021). The increased demand for outdoor recreation opportunities has also spread to county lands, which provided Utah residents with a welcome opportunity to get outside while staying close to home during the COVID-19 pandemic (Price et al., 2020). Recent research and informal reports indicate the unprecedented nature of 2020 demonstrated the importance of public lands for human well-being (Lesser et al. 2020, Jackson et al. 2020, Rice et al. 2020).

An important portion of Utah’s outdoor recreation activity occurs around Moab. The city and the surrounding area are famous for providing a wide range of outdoor recreation opportunities and attracting tourists from Utah, across the country, and across the globe. The region is noted for providing an abundance of unique opportunities for mountain biking, rock climbing, and motorized off-highway vehicle (OHV) use. OHV use in particular has become a focus of local elected officials, county planners and tourism officials, business leaders and the Utah state legislature (Podmore, 2021). OHV users use Moab city streets to access trailheads adjacent to town; these trails cross multiple federal, state, and county jurisdictions making managing the recreational activity particularly difficult. The visitor use monitoring efforts of individual land management agencies (e.g., the Bureau of Land Management or the USDA Forest Service) are only focused on collecting data within particular administrative boundaries, creating silos of information about OHV use and OHV users. Cross-jurisdictional research is needed to generate a more comprehensive and regional understanding of the activity.

There is no denying that OHV users are an important recreation group within Utah. There are nearly 214,000 OHVs registered in the state (OHV Program Utah State Parks 2020), and 15% of Utahns use OHVs (UDNR and UDPR 2019). OHVs provide important benefits to users (Mann & Leahy 2010) and can generate significant economic impacts for local communities (Jakus et al., 2010). However, conflicts are not uncommon between motorized and non-motorized recreationists (Kil et al. 2012), and motorized recreation can have considerable negative impacts to arid ecosystems (Switalski 2018). Collaborations between user groups exist, such as supporting the creation of new infrastructure for multiple-use recreation. On trails surrounding Moab, recreationists are encouraged to stop and ask if others need help when they see other users on the trail. The concept of appreciative inquiry (Copperrider et al. 1995) has proven a useful tool in rural tourism, particularly in gateway communities, and has helped participants initiate positive outcomes for themselves (Joyner et al. 2019). We propose to apply this concept to multiple use recreation areas around Moab, by identifying existing and potential collaborations...
between user groups. Identifying these collaborations can help practitioners build understanding between these groups that might reduce known conflicts.

Further expanding opportunities for outdoor recreation within the Moab region, the Utah legislature recently passed a bill to create Utahraptor State Park west of Arches National Park approximately 15 miles from Moab. This future park is proposed to have multiple campgrounds and trails of all kinds, including trails for OHVs. Creating designated campgrounds could alleviate ecological impacts to the arid landscape resulting from the widely-dispersed camping which currently occurs in the area. Built infrastructure can also make the area more accessible for some user groups. However, as state parks charge entrance and camping fees, and regulate activities within their boundaries, this designation has the potential to displace people currently using the newly-designated parklands for outdoor recreation. Understanding use of the area before and after construction of the new park will provide an opportunity to quantify user displacement. This information can help managers understand and manage shifts in recreational use across the region. Furthermore, understanding the importance of land designation and management strategies can inform future landscape planning.

Vision

Moab and its surrounding public lands provide unparalleled outdoor recreation opportunities to the city’s residents, thousands of Utah residents who regularly flock to the region, and millions of visitors who travel to the state to spend time in southeastern Utah. Unfortunately, the past decade has seen increases in outdoor recreation use so substantial that they may threaten the ecological integrity of the region’s ecosystems, the area’s built and recreational infrastructure, and the quality of experiences that visitors have come to expect and enjoy. Quantifying the amount and diversity of outdoor recreation and tourism occurring throughout the region is an important component to establishing municipal ordinances, public land management decisions, and state legislation that preserves the unique character of the region and the integrity of visitor experiences. Our goal through this proposed work is to begin the process of establishing a long-term visitor use monitoring program for the city and region. Through the proposed work detailed below, the City of Moab will gain a clear understanding of the total volume and timing of non-local visitation to recreation destinations within the city. How many non-local visitors come to Moab and its surrounding destinations each year? When do they come? And where are they coming from? Our work will also provide the City with a scientifically grounded understanding of the amount of non-local visitors who use utility vehicles (UTVs). How many non-local visitors use UTVs on their trips to Moab and what are the spatial patterns of their use through and around Moab?

The purpose of this study is to provide a comprehensive assessment of outdoor recreation use on state, county, and federal lands surrounding Moab and how Moab itself serves as the hub of that activity. Our project activities are guided by three primary objectives:

1. Quantify and characterize outdoor recreation activity and distribution in and adjacent to Moab.
2. Identify perceptions of conflict and areas of possible collaboration between OHV users and other outdoor recreationists.
3. **Understand how the creation of Utahraptor State Park might displace or attract recreational user groups.**
4. **Determine the dominant route paths from and through the city to selected popular recreation areas used by UTVs in the area.**

**Scope of Work**

**Objective 1: Quantify and characterize outdoor recreation activity and distribution in and adjacent to Moab.**

*Data Collection and Measures.* We will administer an on-site survey to visitors within recreation areas adjacent to Moab. In a preliminary phase, we will work with local recreation practitioners to select sampling locations such as trailheads, rock climbing walls, parking areas, camping areas, or visitor centers. Our sampling design will be stratified geographically to target a variety of user groups, including both motorized and non-motorized recreationists. Our sampling design will be further stratified by morning/afternoon to help ensure the survey captures diversity in the types of recreation activities individuals are participating in, and by weekend/weekday to capture both local and non-local visitors.

We anticipate selecting approximately five locations in which to conduct surveys, and plan to have two field technicians administer the survey over a seven-month period extending from April to October of 2022, with a total of 50 sampling days. We will consult with local professionals to choose times within that window to collect a representative sample of the targeted recreational activity user groups in Moab. A long time period for sampling will cover a variety of popular seasons for different user groups and reduce the potential of resampling visitors by spreading data collection out over a long period of time. We anticipate this sampling design will allow us approximately 2,000 total completed surveys (40 surveys per day for 50 sampling days). These sample sizes are conservative estimates based on our previous experience sampling in parks and protected areas.

The on-site survey will solicit a variety of information on outdoor recreationists’ trips to the Moab area. The data collected to characterize outdoor recreation activity in and adjacent to Moab will include: 1) the frequency of visits to the area, 2) the participant’s primary recreational activity, 3) secondary recreational activities on this trip, 4) motivations and goals for their visit, 5) settings sought in their recreational experience, and 6) amount of time they plan to spend out on this recreational trip. Given a trail map of the area, participants will also be asked to indicate locations they plan to visit. Background information such as demographics, home zip code, and group size will also be collected.

Survey data will be paired with two measures of geographic distribution in the area, including: 1) mobile location data, and 2) trail cameras. The research group has access to state-wide location data from mobile devices which we plan to analyze to better understand the use of trails adjacent to Moab. We will position trail cameras at trailheads and key trail intersections, to capture the type of recreation occurring across the landscape.
Analysis. Survey responses will be compiled and summarized to understand the proportion of different recreational activities occurring in the study area, the frequency of different recreational groups trips, the motivations for their trip, and the settings sought during their trip. We will use both basic descriptive and inferential statistics (e.g., ANOVAs, Chi-squares) to identify significant differences in motivations, settings sought, and trip frequency across different recreational user groups (e.g., OHV users, mountain bikers, rock climbers). Such analyses will improve the knowledge of how the area surrounding Moab is used for recreation.

We will combine measures from all three data collection methods (i.e., survey, mobile location, and trail cameras) to create a map of recreational use across the study area surrounding Moab. To quantify the proportion of use these trails receive from different user groups, we will use photos taken by motion-triggered field cameras. For example, if camera data indicates that at a particular trail intersection, 50% of use is by ATVs, 25% is by motorized bikes, 20% is on mountain bikes, and 5% is on foot, we will be able to apply those values, and similar values at other intersections and trailheads, to mobile location data to create a map indicating the spatial distribution of various user types across the landscape.

Objective 2. Identify perceptions of conflict and areas of possible collaboration between OHV users and other outdoor recreationists.

Data Collection and Measures. The same survey will be used to collect information regarding recreationists’ perceptions of conflict with and benefits from other recreational user groups. This portion of the survey will be developed in consultation with local recreation practitioners, to identify potential sources of conflict and benefits between target user groups. This section of the survey will ask respondents to: 1) indicate the degree to which they experience a range of possible conflicts from other user groups, 2) indicate the degree to which they benefit from other user groups in a range of areas, and 3) provide open-ended suggestions regarding additional ways different user groups could benefit from each other’s presence on the landscape. This portion of the survey will present questions designed to better understand conflicts and benefits for the user group that the participant identifies as their primary activity on this trip.

Analysis. Survey responses will be compiled and summarized to understand the degree to which different user groups experience the range of listed conflicts and benefits from other users. Using descriptive and inferential statistics (e.g., regression, ANOVAs), we will identify differences in the importance of conflicts and benefits between groups (e.g., user groups, demographic groups, primary motivations, settings sought). Additionally, we will identify themes within open-ended responses regarding ways that user groups benefit from each other’s presence in the area. Survey responses regarding conflict between user groups will be analyzed spatially to highlight zones where conflict may be high, which will have direct management implications. This analysis will improve our understanding of how user groups interact on the landscape, and support future collaborations between user groups.

Objective 3: Understand how the creation of Utahraptor State Park might displace or attract recreational user groups.
Proposal

Data Collection and Measures. We will use the same survey and geospatial methods described under Objective 1 to collect data to understand if outdoor recreationists experienced displacement following the creation of Utahraptor State Park in the land west of Arches National Park. Provided maps with land management designations before and after the creation of this new park, this portion of the survey will ask respondents to: 1) describe their current use of this area, 2) describe their past use of the area, and 3) state preference for three realistic scenarios regarding the amenities provided and fees required, and 3) indicate if the new park designation and/or amenities provided were important for their trip. These questions will be designed in collaboration with local land managers.

Analysis. Responses regarding recreationists’ past and present use of the new Utahraptor State Park area will be analyzed spatially to better understand how recreational use affected different user groups. This spatial analysis will consider a range of respondent attributes collected through the survey, such as activities, demographics, motivations, and preferred setting attributes (e.g., RV hookups, picnic tables, etc.). We will use inferential statistics (e.g., ANOVA) to detect significant differences between groups regarding the importance of park designation and amenities. These results will build a deeper understanding of the value of land management designation and park planning (i.e. provision of amenities such as campgrounds, trails, visitor center, etc.) for different user groups.

Objective 4: Determine the volume and dominant route paths from and through the city to selected popular recreation areas used by UTVs in the area.

Data Collection and Measures. This objective will be completed by oversampling the Moab road grid with the mobile device data. This will enable us to analyze the origins of visitors to destinations (for example the Sandflats or Gemini Bridges areas). We will add further resolution to this understanding by monitoring the proportion of visitors that are travelling via different forms of transportation (e.g., car, bike, UTV, vehicle pulling a trailer) via direct observation.

Analysis.

The specific methods used to address each of these questions is summarized in Table 1.

<table>
<thead>
<tr>
<th>Questions and Tasks</th>
<th>Type of Data Collected</th>
<th>Timeline (2021)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Question 1: What is the total volume and timing of non-local visitation to the city and to major recreation destinations throughout the region?</td>
<td></td>
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</tr>
<tr>
<td>1.1 Use anonymized cellular phone data to quantify and visualize the amount of non-local visitation to Moab (tourist trips)</td>
<td>Cellular phone data (already procured by our research team)</td>
<td>July 1 – September 30</td>
</tr>
<tr>
<td>1.2 Validate non-local visitation counts through on-site sampling of visitors at select destinations within and around Moab (e.g., Sand Flats Recreation Area, etc.)</td>
<td>On-site observation and survey data</td>
<td>September 1 – November 15</td>
</tr>
<tr>
<td>Question 2: What are the amounts and spatial patterns of non-local visitors who use UTVs?</td>
<td></td>
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<tr>
<td>2.1 Use motion-triggered cameras on public roadways and trails to quantify the volume of non-local traffic (answered in Question 1) using UTVs.</td>
<td>Motion-triggered camera data</td>
<td>September 1 – November 1</td>
</tr>
<tr>
<td></td>
<td>On-site survey data and GPS data</td>
<td>September 1 – November 15</td>
</tr>
</tbody>
</table>
Proposal

Research Team
We plan to execute on our vision by leveraging an experienced research team with demonstrated capabilities in establishing visitor use monitoring programs and conducting scientifically credible research on the management of outdoor recreation and tourism systems.

I would recommend that you and Anna take care of the total volume question and camera trap part and develop that part of the report. Me and a student could take care of the origin-destination to specific places and proportion of vehicles in selected places that are OHVs or are pulling them and onsite observations.

Project team

Wayne Freimund, Ph.D. – Professor, Utah State University – Moab
Dr. Freimund is a nationally recognized expert in visitor use management. He has over 30-years of experience with collaborative efforts focused on park and protected area management and people’s connection to place. He has facilitated or developed and conducted long-term visitor monitoring programs in national parks such as Glacier and Yellowstone. He recently moved to Moab from Clemson, South Carolina, where he was chair of the Department of Parks, Recreation and Tourism Management. Dr. Freimund will support data collection, analysis, and reporting efforts and also ensure that the project interfaces with other visitor use monitoring and management efforts in the region (e.g., data collection efforts of the Bureau of Land Management). Dr. Freimund will lead the coordination and execution of all project activities, be the primary point of contact between the project team and the City of Moab, and lead the writing and development of all project reports.

Jordan W. Smith, Ph.D. – Director, Institute of Outdoor Recreation and Tourism, Utah State University
Dr. Smith leads the Institute of Outdoor Recreation and Tourism, which was created to provide data to the Legislature as well as municipal, county, state, and federal agencies in their decision-making processes on issues relating to tourism and outdoor recreation. Dr. Smith’s work uses big data analytics and geospatial technologies to develop an understanding of how outdoor recreation is changing across Utah and the broader American West.

Anna B. Miller, Ph.D. – Assistant Director of Research and Operations, Institute of Outdoor Recreation and Tourism, Utah State University
Having previously worked for the USDA Forest Service, Dr. Miller brings a wealth of knowledge on the agency’s policies, practices, and priorities. Dr. Miller is a recreation ecologist by training and has recently completed a systematic review on the impacts of outdoor recreation on wildlife across the U.S. (5). Dr. Miller will lead the collection of motion-triggered camera data and on-site survey data.

Communication
Our project team will hold bi-weekly project update meetings to coordinate all proposed project activities and ensure they are on schedule. The project team will also organize monthly project update meetings, beginning with a project kick-off meeting in early April, to ensure the City of Moab is aware of the current status of the project and all upcoming tasks.

Equipment
No equipment is requested to complete the proposed work. All required equipment will be provide by the Institute of Outdoor Recreation and Tourism at Utah State University.
Proposal

Project Schedule and Timeline

Table 1. Project timeline

<table>
<thead>
<tr>
<th></th>
<th>2021</th>
<th>2022</th>
<th>2023</th>
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<tbody>
<tr>
<td></td>
<td>J A S</td>
<td>D J F</td>
<td>A M J</td>
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<tr>
<td>Project discussions with Moab city &amp; Grand County</td>
<td>x</td>
<td></td>
<td>X X</td>
</tr>
<tr>
<td>Sampling strategy, site visits, and survey developed</td>
<td>x x x</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Calculate total use in Moab area</td>
<td>x</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Analyze travel patterns with the city</td>
<td>x</td>
<td></td>
<td>x x</td>
</tr>
<tr>
<td>IRB submission &amp; approval</td>
<td></td>
<td>x x x</td>
<td></td>
</tr>
<tr>
<td>Data collection</td>
<td></td>
<td>x x x</td>
<td></td>
</tr>
<tr>
<td>Statistical analysis</td>
<td></td>
<td>x x x</td>
<td></td>
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<tr>
<td>Technical report preparation</td>
<td></td>
<td>x x x</td>
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<tr>
<td>Manuscript preparation</td>
<td></td>
<td>X x</td>
<td></td>
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<tr>
<td>Fact sheet dissemination</td>
<td></td>
<td>x</td>
<td></td>
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<tr>
<td>Workshop</td>
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<td></td>
<td>X</td>
</tr>
</tbody>
</table>

Expense Breakdown

**Budget Request to City of Moab**
This request will secure the resources for Objective four (a detailed look at travel patterns within the city of Moab) and provide matching support for the additional three objectives.

**Senior Personnel – Total request: $22,437.75**
Funds are requested for 6 days of summer salary for PI Freimund ($4,250.00), 2 weeks of salary support for Co-PI Smith ($3,500.00), and 3 weeks of salary support for Co-PI A. Miller ($3,500.00).

**Other Personnel – Total request: $5,000**
Funds are requested to support a wage-hourly position to collect data on-site.

**Fringe Benefits – Total request: $5,646.25**
Senior Personnel ($5,231.25) – Fringe benefits are requested for all senior personnel based upon Utah State University’s standard benefits rate for faculty (FY22: 46.5%).
Proposal

Other Personnel ($415.00) – Fringe benefits are requested for stipend supplement supporting the project’s funded wage-hourly employee. Fringe benefits are calculated at Utah State University’s standard benefit rate for students (FY22: 8.30%).

Other Direct Costs: $3,250.00

Travel ($3,250.00) – Funds are requested to cover travel for the wage-hourly research assistant and research team to travel to data collection sites, set up cameras, and administer on-site surveys.

Total Direct Costs: $25,146.25

Indirect Costs: $11,567.28

Total Amount Requested: $36,713.53

Matching support:

Support from the city of Moab will be matched with contributions from three additional organizations. Based on a commitment of match from the city of Moab and the Moab travel council (see appendix A), the Public Land Initiative awarded professor Freimund $50,965. The USU Moab campus has also provided the initial subscription of mobile device data that will be used in the study at the cost of $17,200.

<table>
<thead>
<tr>
<th>Organization</th>
<th>Amount</th>
<th>Primary focus</th>
<th>Primary expenditure</th>
</tr>
</thead>
</table>
| Public Land Initiative      | $50,965 | Provides funding for the Visitor use survey in the region | • Graduate student to oversee the study  
• Staffing for data collection  
• Analysis |
| Moab Travel Council         | $17,200 | Mobile device data for the analysis of use levels, patterns and origins. | • Data subscription |
| USU Moab                    | $17,000 | Mobile device data for the analysis of use levels, patterns and origins. | • Data subscription |
| Total                       | $85,369 |                                                    |                                                         |

Appendix A. Letters of commitment to match on Public Land Initiative Grant

References


Healthy Parks Healthy People Programs. *Recreation, Parks, and Tourism in Public Health, 4*, 5–14. https://doi.org/10.2979/rptph.4.1.02


March 15, 2021

The College of Agriculture and Applied Sciences and the Quinney College of Natural Resources at Utah State University and Utah Agricultural Experiment Station

Dear PLI Grant reviewers,

I am pleased to write this letter in support of Professor Freimund and colleagues’ application for a Public Lands Initiative grant. Professor Freimund is bringing much needed expertise on visitor management to the Moab community at a critical time for our planning. Moab and the surrounding area have undergone considerable growth in tourism related visitation over the past decade. We have also absorbed rapid growth of new activities such as UTV use. While we are grateful for the economic benefits of our popularity, this rapid escalation in visitation has resulted in numerous conflicts between visitors and among community members. We are working with Dr. Freimund to develop a study of the routes OHV riders use to access the surrounding public lands form within the city. OHV traffic and its related sound have emerged as a prominent issue for the community.

Professor Freimund with support of USU Moab and the Institute for Outdoor Recreation and Tourism can provide us with data to better understand both volume and route patterns and how UTVs or other off road vehicles move through the area. The survey and validation work that will be possible with the PLI grant will enable us to better understand visitor behavior, conflicts, and the effectiveness of potential management and policy actions that we can take to manage the situation. This data will also greatly inform our planning for improved and increased infrastructure in the area. To that end we are working with Dr. Freimund to develop a proposal for me to take to the City Council for approval. That proposal will be for up to $40,000 and given the immediacy of the issues, preliminary conversations indicate the project has a high probability of adoption. The effectiveness of our investment would be greatly improved by a matching PLI project.

Please contact me at mayor@moabcity.org with any questions or concerns relative to this highly worthy project.

Sincerely,

Emily S. Niehaus
Mayor of Moab City
March 12, 2021

The College of Agriculture and Applied Sciences and the Quinney College of Natural Resources at Utah State University
and Utah Agricultural Experiment Station

Dear PLI Grant reviewers,

I am pleased to write this letter in support of Professor Freimund and colleagues’ application for a Public Lands Initiative grant. Professor Freimund is bringing much needed expertise on visitor management to the Moab community at a critical time for our planning. Moab and the surrounding area have undergone considerable growth in tourism related visitation over the past decade. We have also absorbed rapid growth of new activities such as UTV use, van camping in distributed areas, mountain biking, paddleboard use etc. While we are grateful for the economic benefits of our popularity, this rapid escalation in visitation has resulted in numerous conflicts between visitors and among visitation and community members. We have also seen increased challenges in managing ecologic impacts and a broadening of the visitation footprint onto the surrounding landscape, including state lands. While the development of the new Utahraptor State Park will provide some much-needed management to one region of the community, we do not have the data to understand how the visitation system will change when the dispersed camping in the area is replaced by designated management.

Professor Freimund with support of USU Moab and the Institute for Outdoor Recreation and Tourism can provide us with data to better understand visitation patterns in the area and how tourism is perceived by both the community members and the tourists themselves. To that end we are willing to match this PLI project with $17,200 in financial support for mobile device data that will help professor Freimund’s team begin developing some of the answers to our many questions. Knowing that this is a relatively new technology, we will also commit staff time to the project but are unable to estimate the actions amount of time that will be needed.

Please contact me at 435-259-1370 with any questions or concerns relative to this highly worthy project.

Sincerely,

Elaine Gizler

Elaine Gizler, Executive Director
Economic Development and Tourism
Grand County, Utah
Subject: Public Lands Initiative Grant Proposal  
Date: Thursday, May 6, 2021 at 4:56:19 PM Mountain Daylight Time  
From: Chris Davies  
To: Wayne Freimund  
CC: Chris Lant, Chris Luecke, Darlene Orduno  
Attachments: Freimund PLI Grant Comments 2021.pdf

Dear Wayne:

Thank you for submitting your grant proposal titled, *Managing Outdoor Recreation in Grand County, Utah: Conflict, Dispersal, and Displacement across State, County, and Federal Lands*, in response to the 2021 RFP of the Utah Public Lands Initiative (PLI). The PLI Advisory Board met recently to evaluate proposals. I am pleased to inform you that your proposal was approved for funding at a level of $50,965. You can be proud of this accomplishment, due to limited funds, we weren’t able to fund all the proposals that we wanted to fund. I have attached the reviewers’ comments so that you can see how they viewed your proposal. Congratulations on developing an excellent project.

As a PLI Grant recipient, you will be expected to provide the Utah Agricultural Experiment Station (UAES) with a brief progress report after the first year and a comprehensive final report. Failure to provide these reports in a timely fashion or lack of progress on your project, may result in termination of your PLI grant funding. In the near future, Darlene Orduno ([darlene.orduno@usu.edu](mailto:darlene.orduno@usu.edu)) will send you a UAES project number and the directions for establishing a new UAES project in Digital Measures. You will use your UAES project number in Digital Measures to identify papers or activities associated with your project, and to file your project initiation, annual and final reports. Please complete the Project Description (AD416) portion of your grant report within the next 30 days. **Please notify me when your Project Description is ready for review** at [chris.davies@usu.edu](mailto:chris.davies@usu.edu) and copy Darlene Orduno at [darlene.orduno@usu.edu](mailto:darlene.orduno@usu.edu). The other expectation is that after you complete your project, you will present the results at an appropriate venue here in Utah.

Bryan Arnell or Dora Brunson will establish an account for your project and will let you know the index number once your account has been created. You can start spending against your account when you receive your index number. However, funds won’t be available for transfer into your account until July 1, 2021. Consequently, you will be carrying a negative balance until the start of the new fiscal year. All funds must be expended during the grant period and, except under extraordinary circumstances, no funds will be carried forward into the next fiscal year. Any funds remaining in your account at the end of the grant will be returned to the PLI for reallocation.

Thank you very much for your proposal. We appreciate your willingness to develop the relationships necessary to carry out a successful project of this nature. Also, thank you for your hard work on behalf of Utah State University.

Best regards,

Chris

Christopher J. Davies, DVM, PhD  
Director, Center for Integrated BioSystems  
Associate Director, Utah Agricultural Experiment Station