



CENTRAL WASATCH VISITOR USE STUDY – PHASE II UPDATE

Jordan W. Smith, Ph.D.
January 9, 2023



INSTITUTE OF
**OUTDOOR
RECREATION
AND TOURISM**
UTAH STATE UNIVERSITY

ABOUT

- Founded in 1998 by the Utah State Legislature
- Housed in Extension
- Mission:
 1. Provide data for the Legislature and state agencies in their decision-making processes on issues relating to tourism and outdoor recreation
 2. Assist community officials as they attempt to balance the economic, social, and environmental tradeoffs in tourism development
 3. Lead interdisciplinary approach of research and study on outdoor recreation and tourism

SERVICES



Visitor Use Monitoring and
Management



Mobile Location Analytics



Needs Assessments



Recreation Economics

OUTLINE

1. Objectives

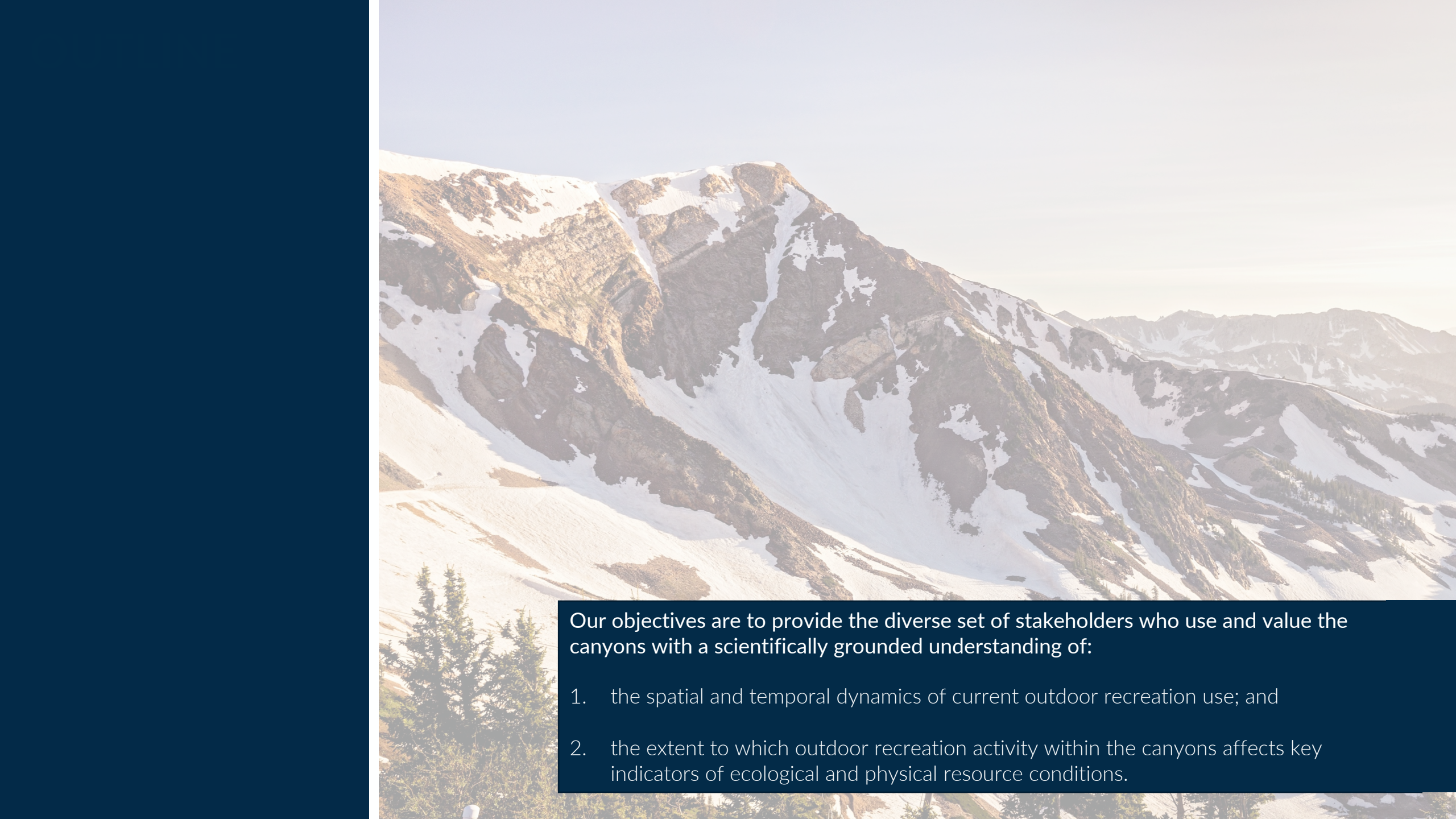
2. Overview of the VUS

1. Phase I – Scoping
2. Phase II – Assessments

3. Phase II – Findings

1. Trail Use

4. Questions



Our objectives are to provide the diverse set of stakeholders who use and value the canyons with a scientifically grounded understanding of:

1. the spatial and temporal dynamics of current outdoor recreation use; and
2. the extent to which outdoor recreation activity within the canyons affects key indicators of ecological and physical resource conditions.



Ecological Conditions

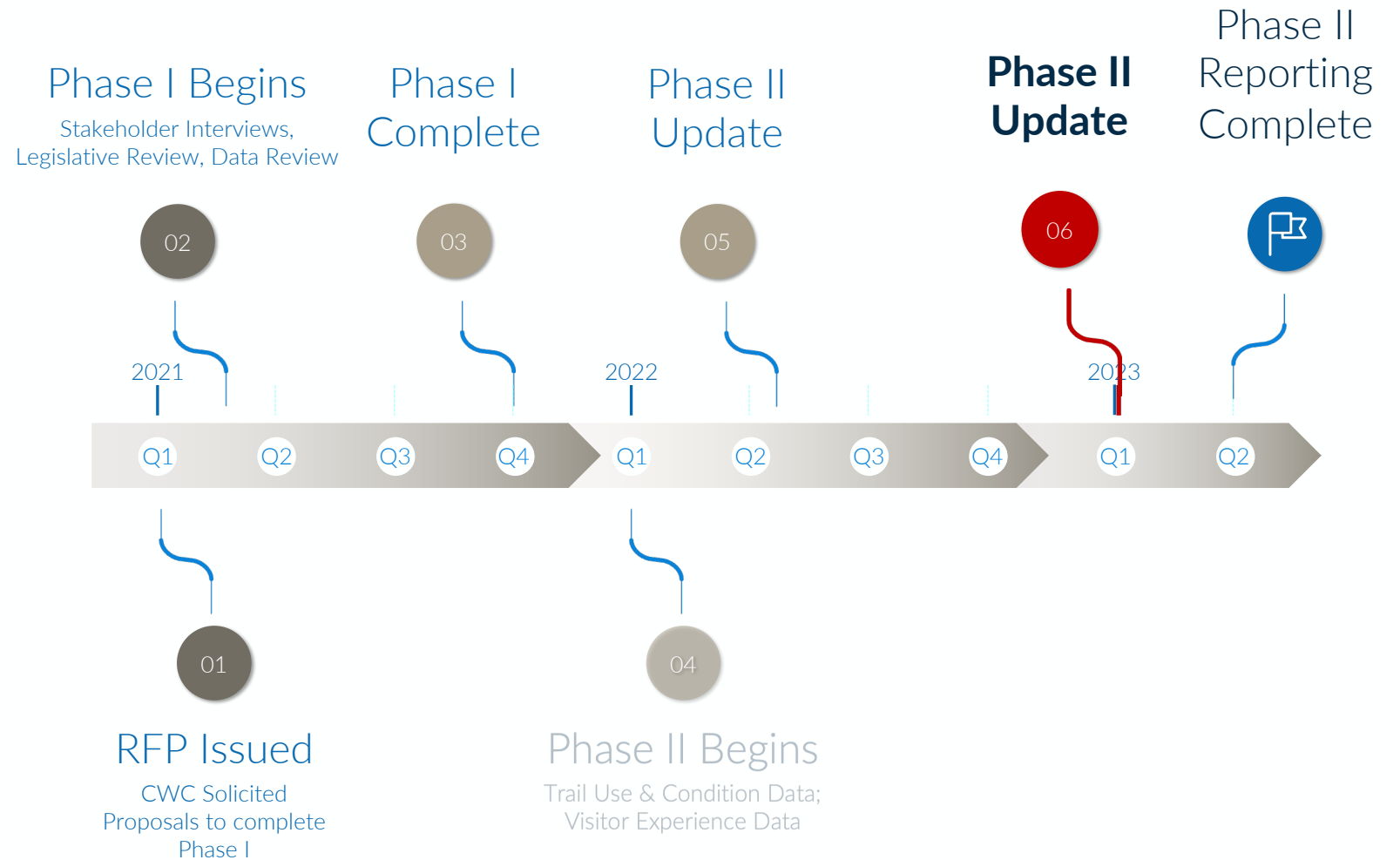
(e.g., trail conditions, habitat,
water quality, etc.)


Social Conditions

(i.e., use, economic
benefits, satisfaction,
etc.)

Physical Conditions

(i.e., parking, restroom
facilities, etc.)





EXTENSION PUBLICATIONS

EXTENSION
UtahStateUniversity

ALL CURRENT PUBLICATIONS

Outdoor Recreation Use and Indicators of the Ecological, Physical, and Social Characteristics of Recreation Settings in the Central Wasatch: Phase 1 Interim Report

[Jordan W. Smith, Utah State University](#)[Follow](#)

[Anna B. Miller, Utah State University](#)[Follow](#)

[Chase C. Lamborn, Utah State University](#)[Follow](#)

[Christopher Monz, Utah State University](#)[Follow](#)

[Danya Rumore, University of Utah](#)[Follow](#)

Document Type
Report

Publisher
Institute of Outdoor Recreation and Tourism


Publication Date
7-15-2021


First Page
1

Last Page
84

[Download](#)

130 DOWNLOADS
Since July 16, 2021

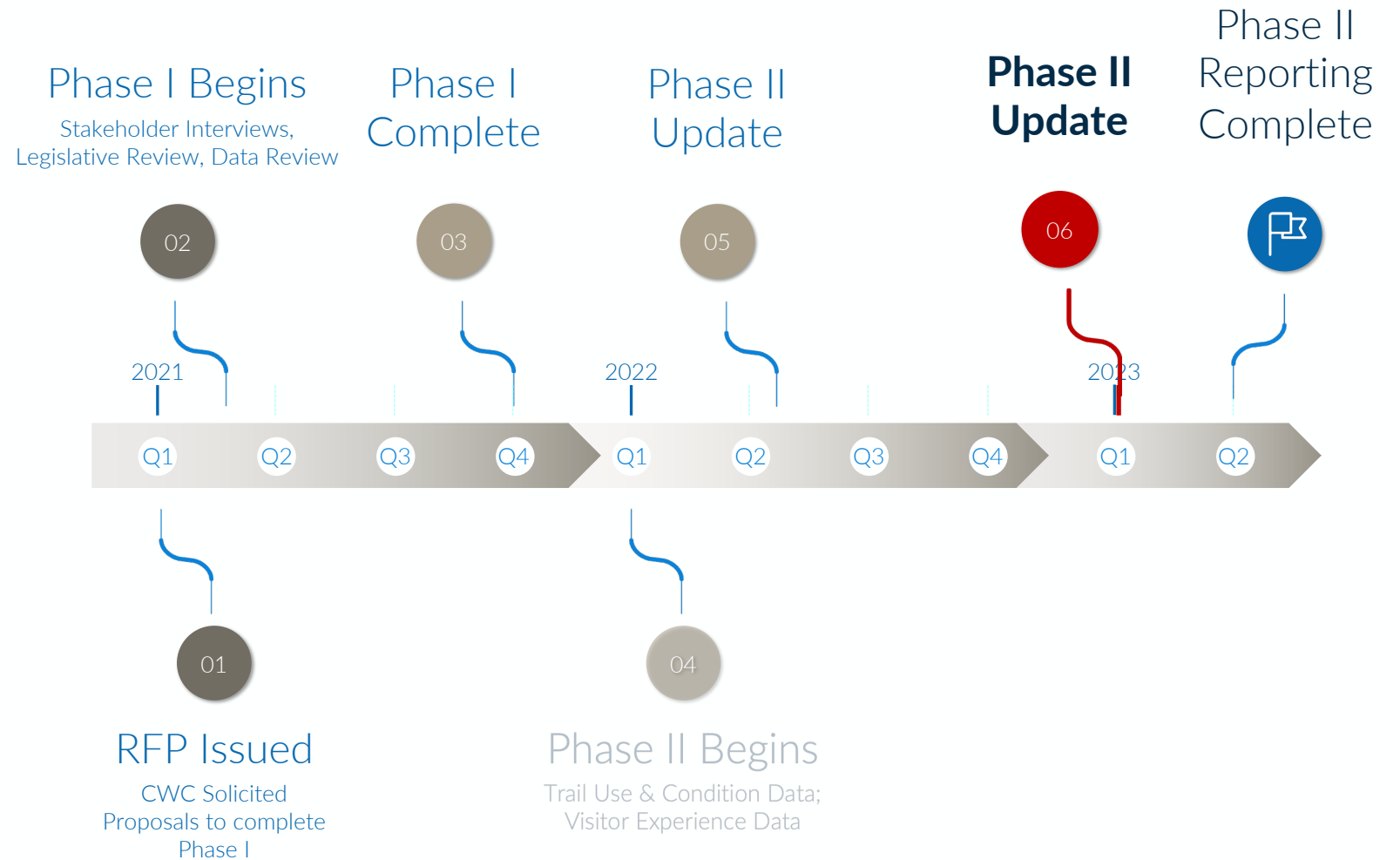
 **PLUMX METRICS**

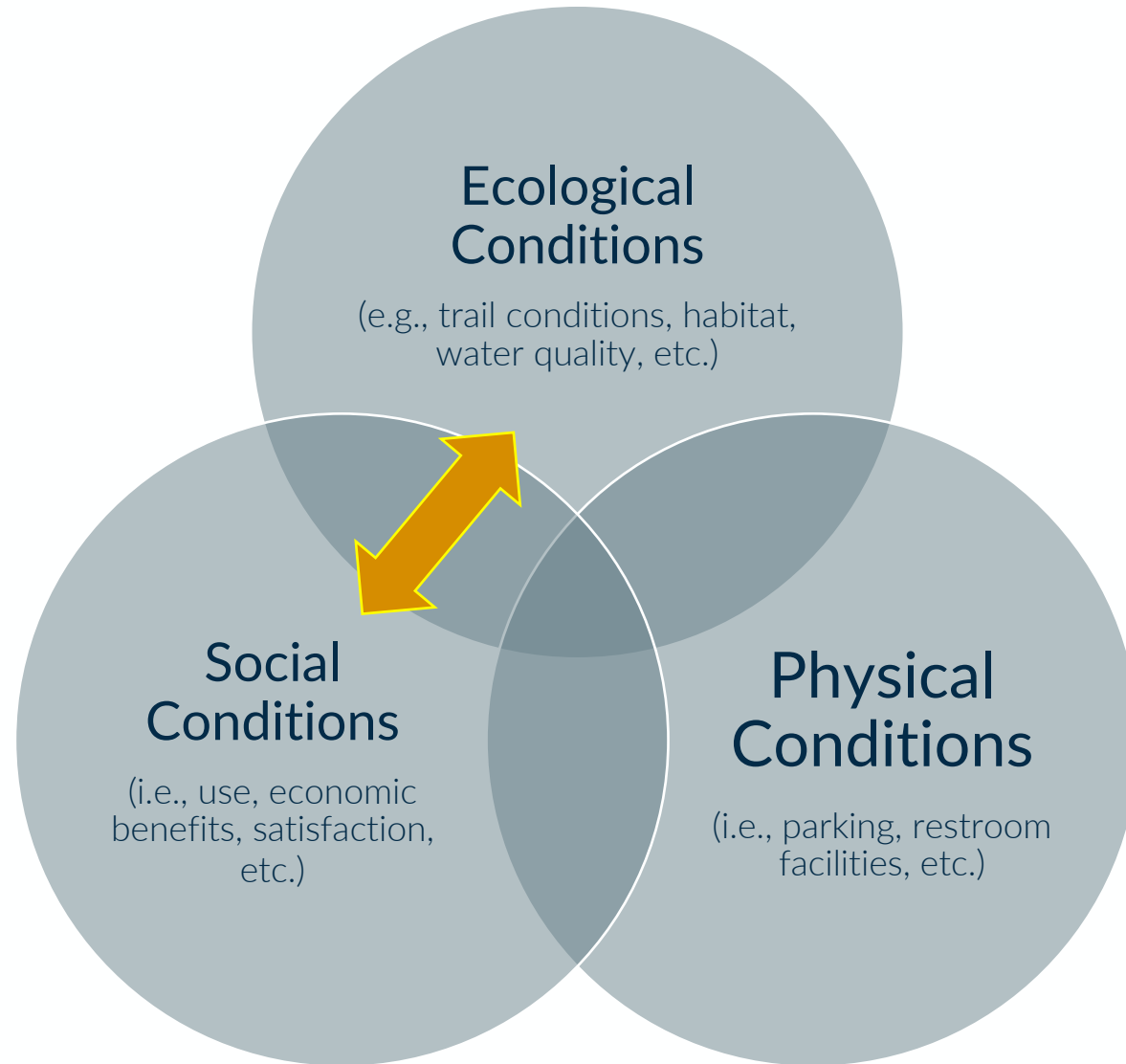
 **INCLUDED IN**
[Business Commons](#), [Life Sciences Commons](#)

SHARE
[f](#) [t](#) [in](#) [e](#) [+](#)

Phase 1 Report Available Here:

https://digitalcommons.usu.edu/extension_curall/2206/



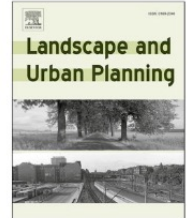




Contents lists available at [ScienceDirect](#)

Landscape and Urban Planning

journal homepage: www.elsevier.com/locate/landurbplan



Factors influencing informal trail conditions: Implications for management and research in Urban-Proximate parks and protected areas

Bettina S. Spornbauer^{a,b}, Christopher Monz^{a,b}, Ashley D'Antonio^c, Jordan W. Smith^{a,b,*}

^a Institute of Outdoor Recreation and Tourism, Utah State University, Logan, UT 84321, USA

^b Department of Environment and Society, Utah State University, Logan, UT 84321, USA

^c Department of Forest Ecosystems and Society, Oregon State University Corvallis, Oregon 97331, USA

H I G H L I G H T S

- Informal trail networks in urban-proximate parks can cause extensive resource impacts.
- Rapid assessment trail data can be analyzed with predictor effect plots.
- Visitor use should be concentrated considering factors influencing trail conditions.
- Sampling protocols for more precise indicator measures on informal trails are needed.

Effects of use on informal trails around high-elevation lakes:

<https://doi.org/10.1016/j.landurbplan.2022.104661>



A Venn diagram consisting of three overlapping circles. The top circle is light blue and labeled 'Ecological Conditions'. The bottom-left circle is orange and labeled 'Social Conditions'. The bottom-right circle is light blue and labeled 'Physical Conditions'. The intersections of the circles are shaded in a darker color, representing the combined impact of the conditions. The background of the slide is dark blue on the left and white on the right.

Ecological Conditions

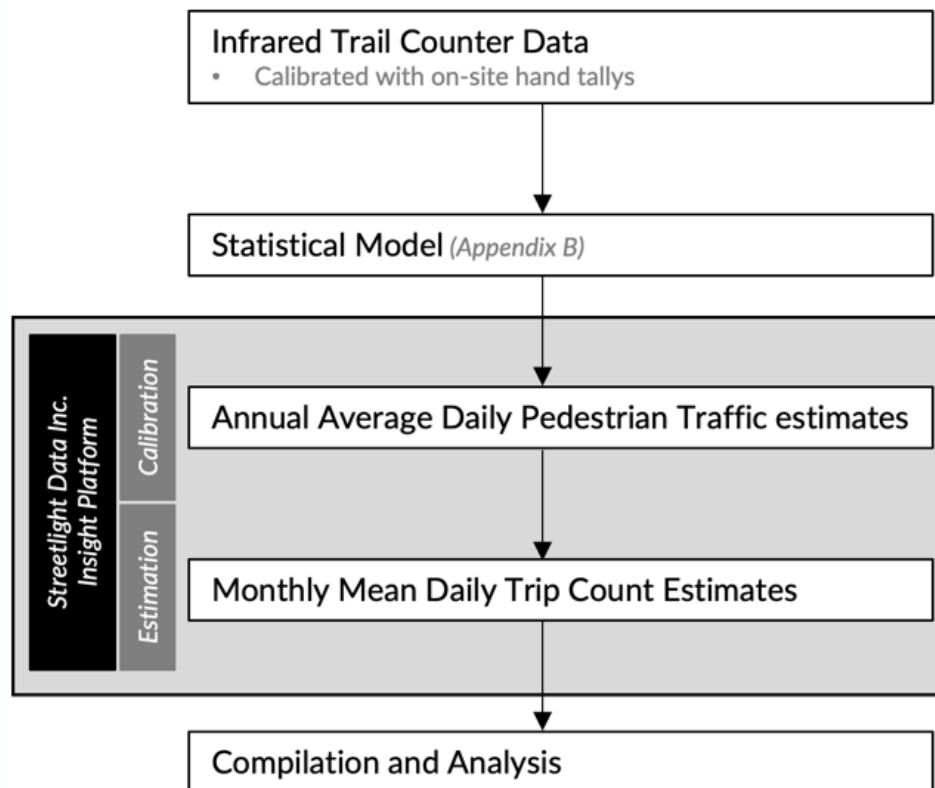
(e.g., trail conditions, habitat,
water quality, etc.)

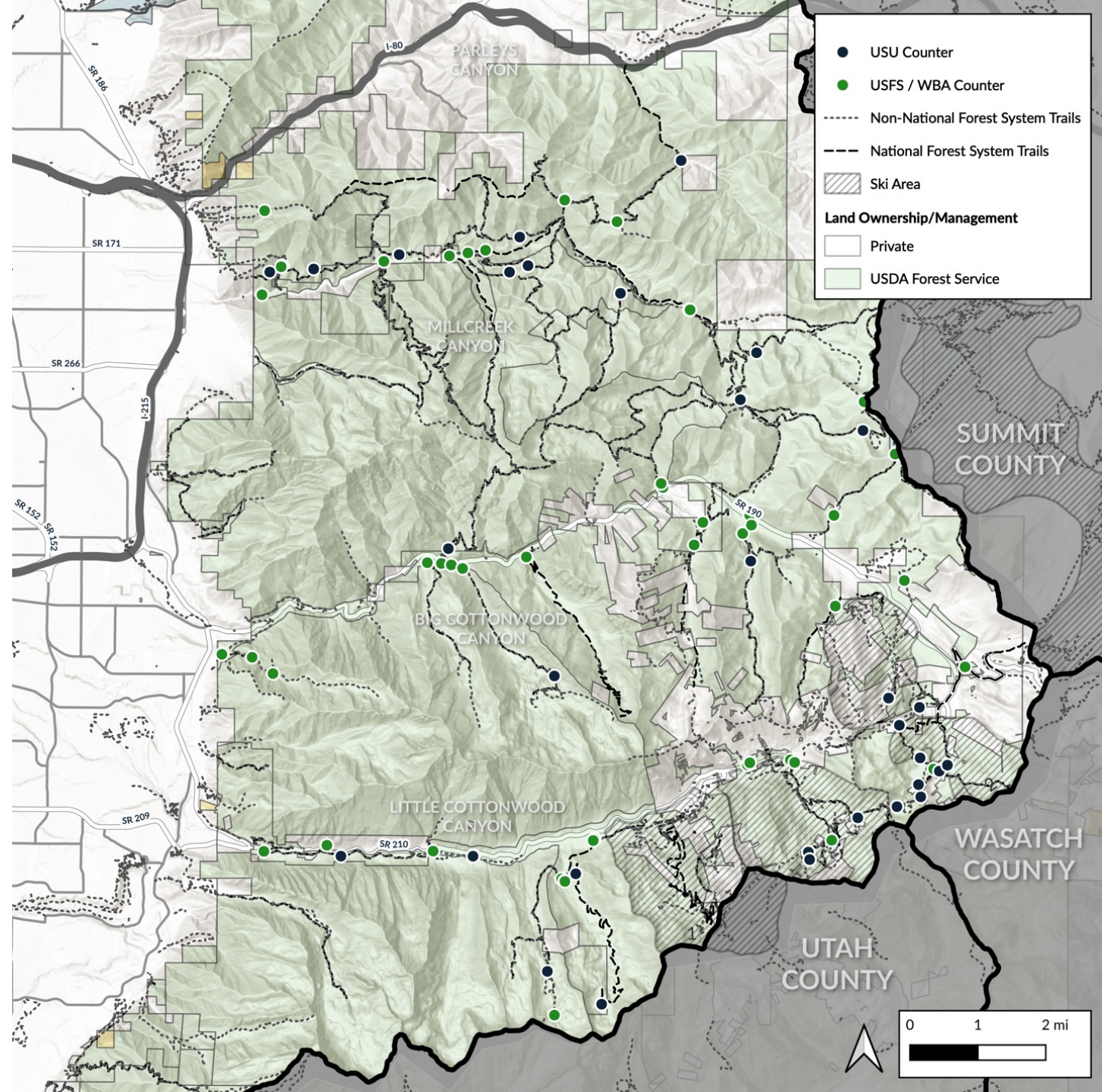
Social Conditions

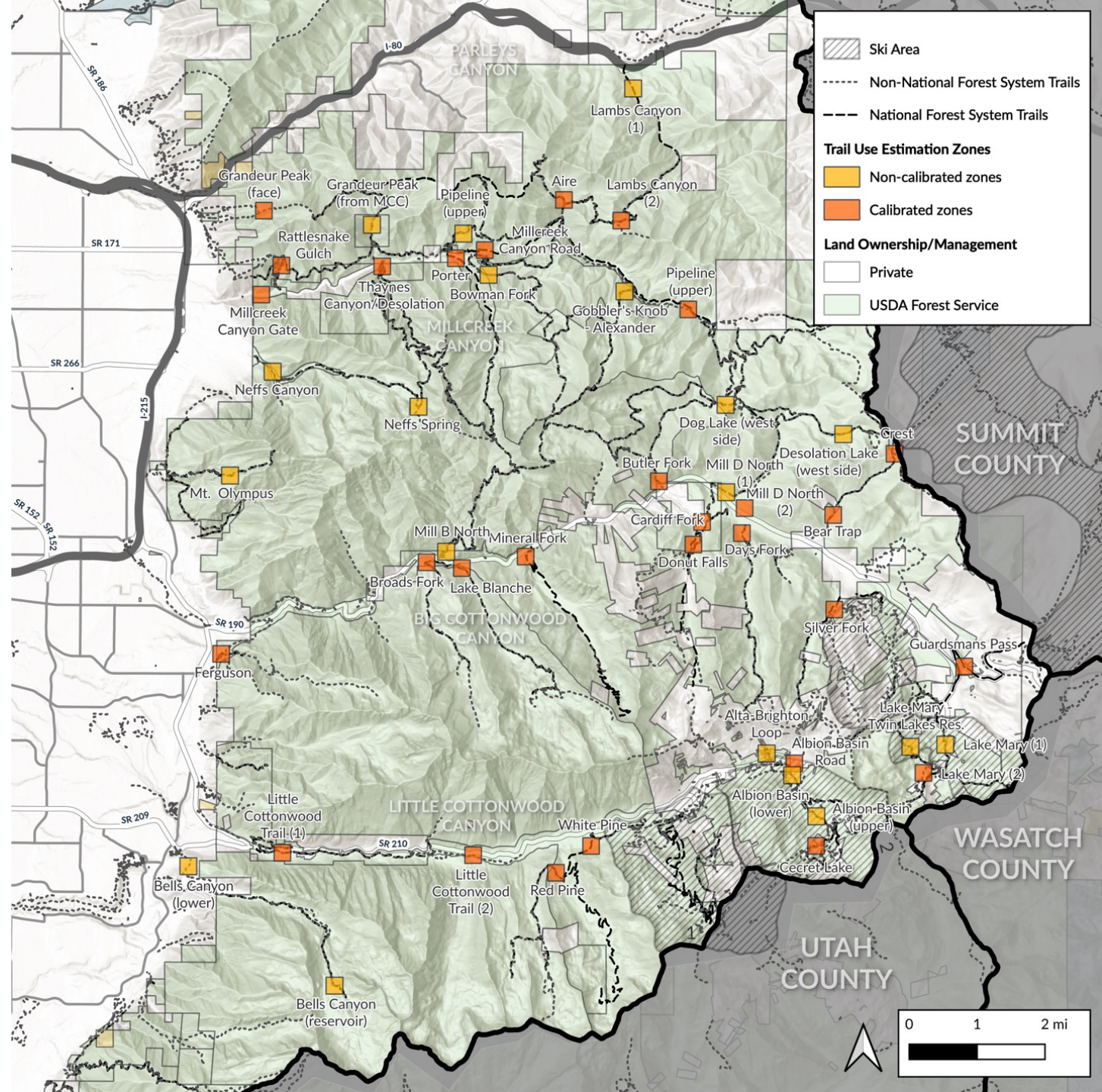
(i.e., use, economic
benefits, satisfaction,
etc.)

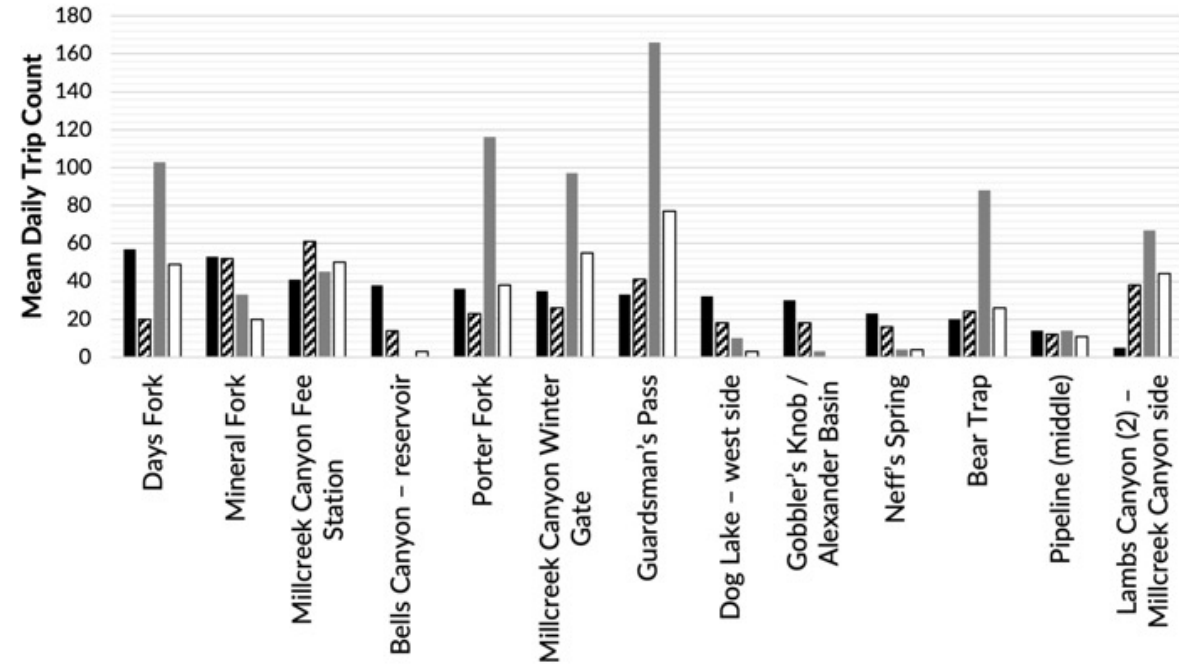
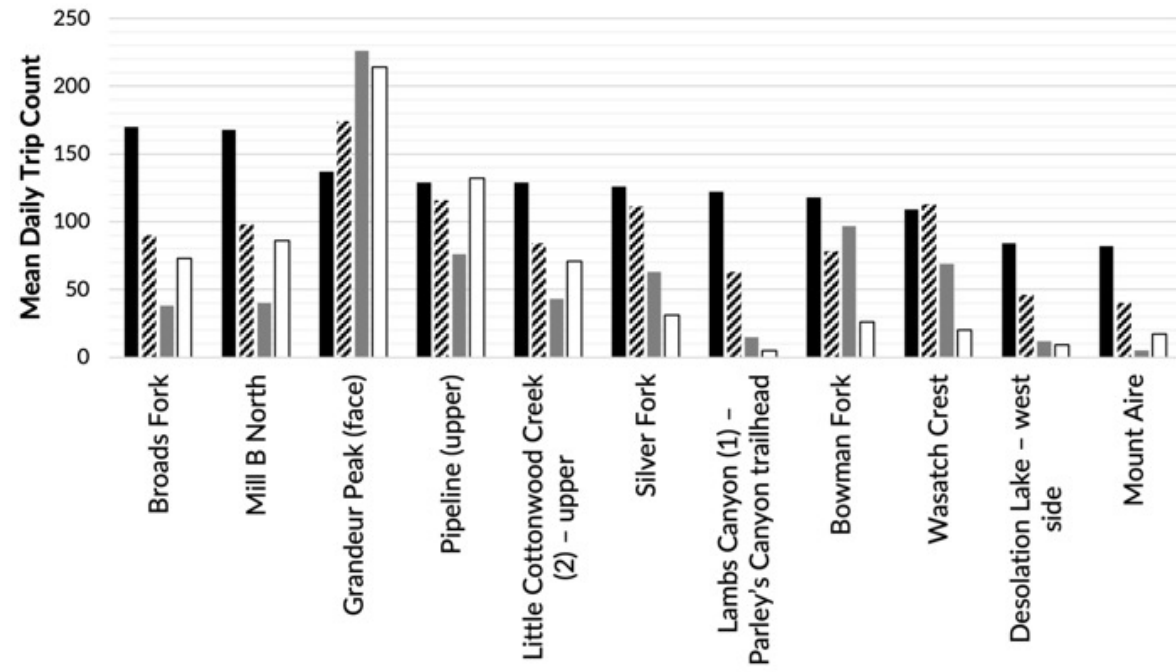
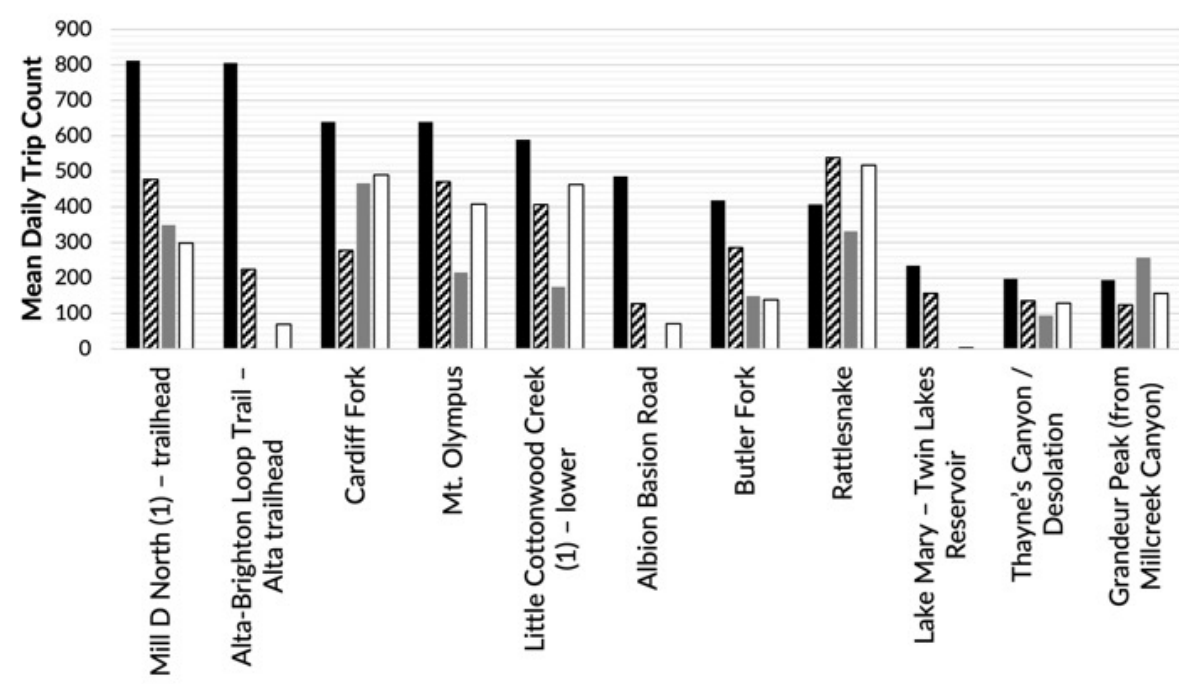
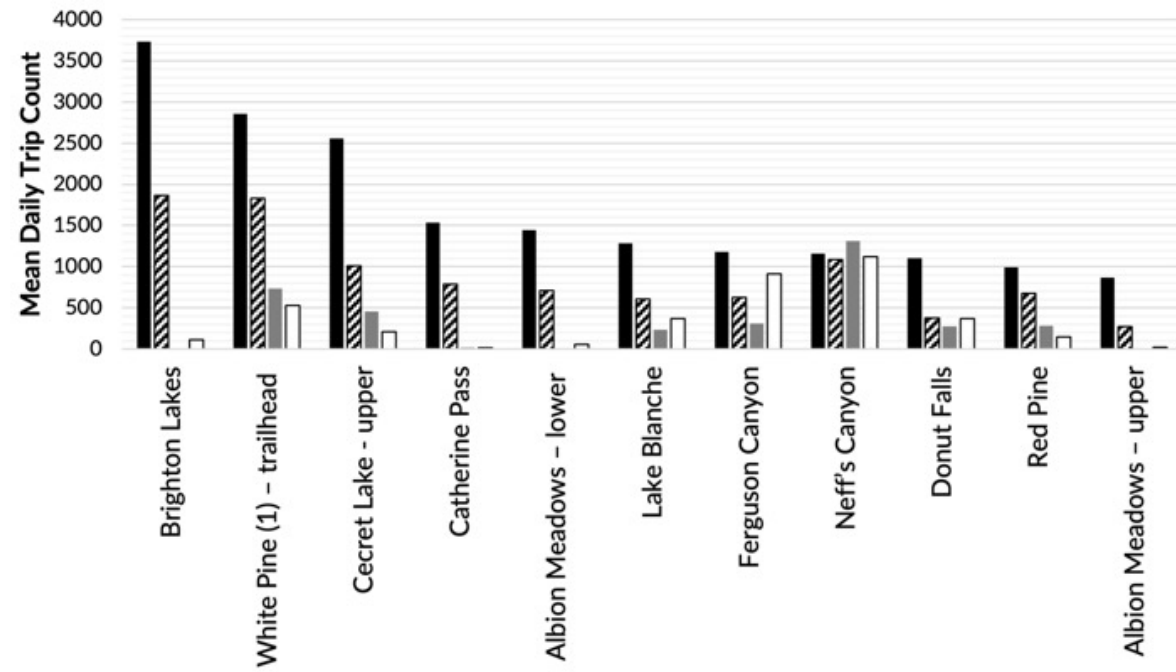
Physical Conditions

(i.e., parking, restroom
facilities, etc.)

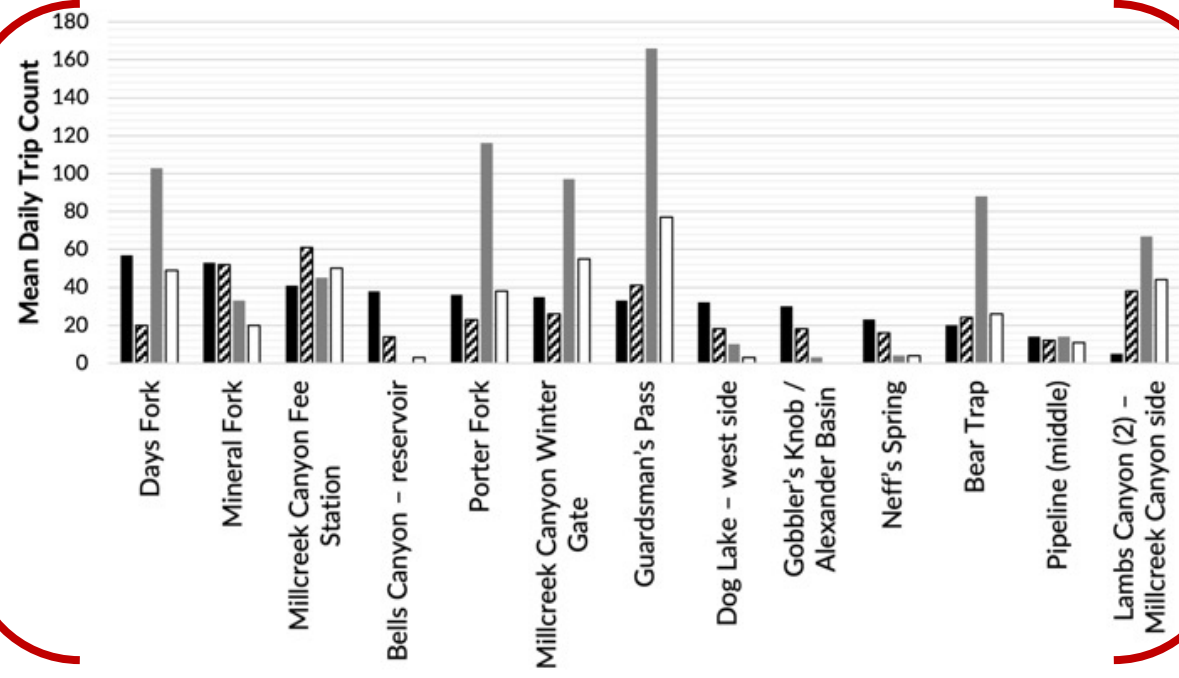
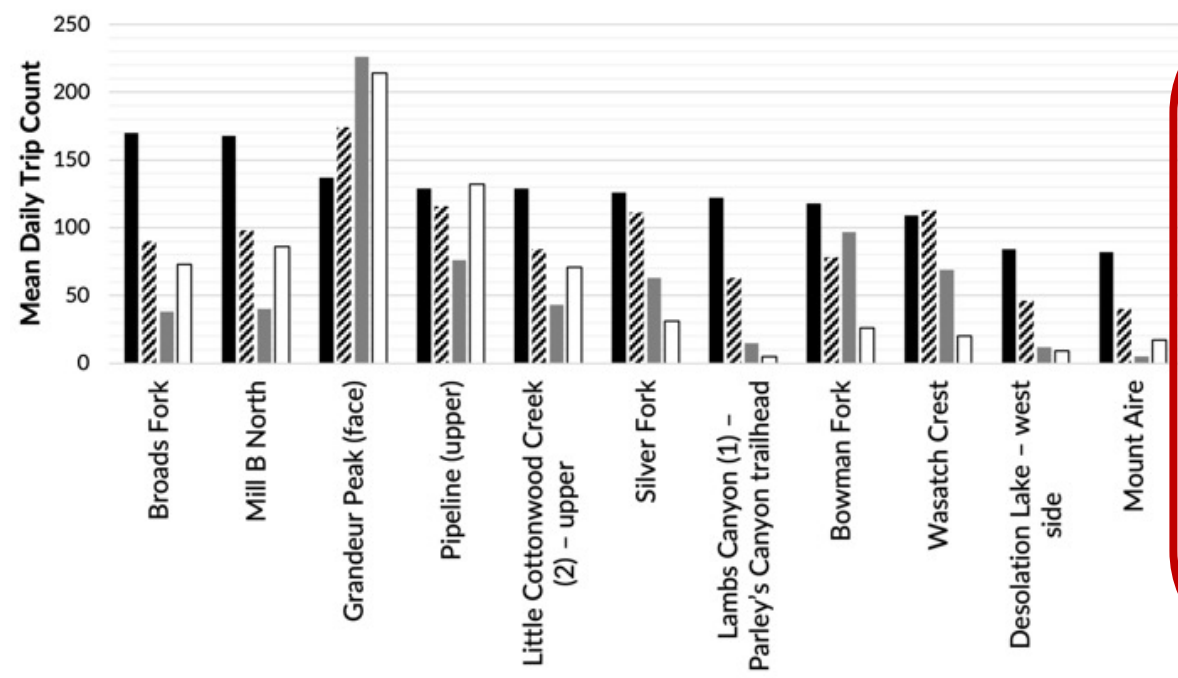
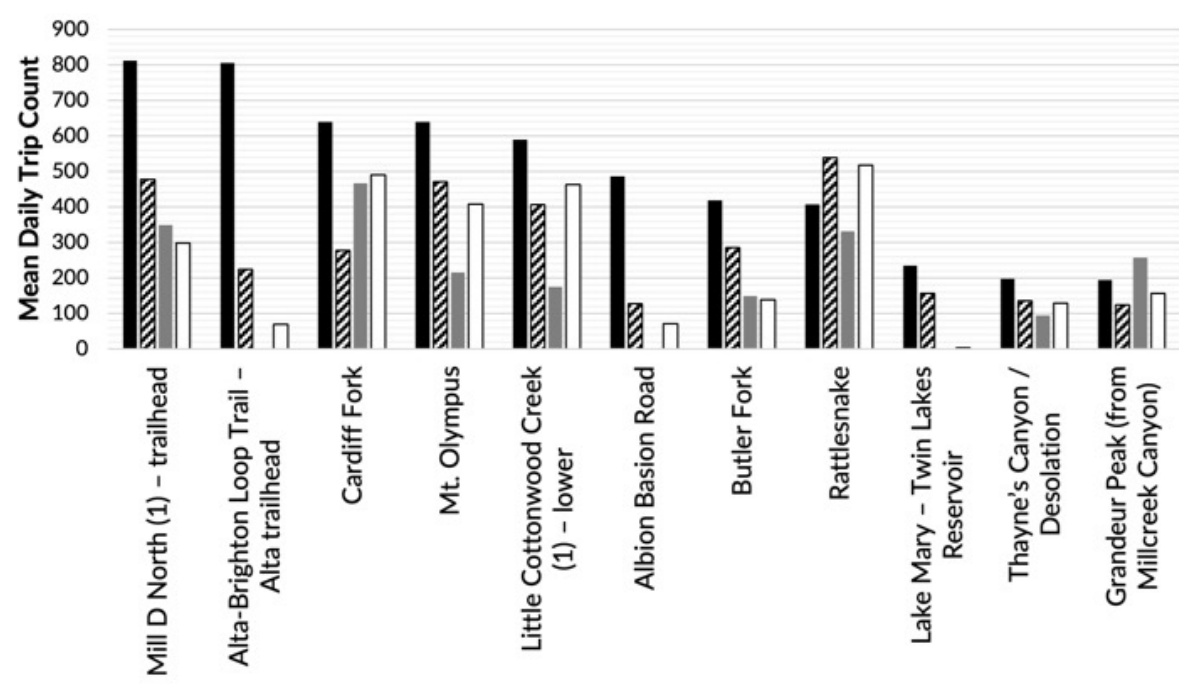
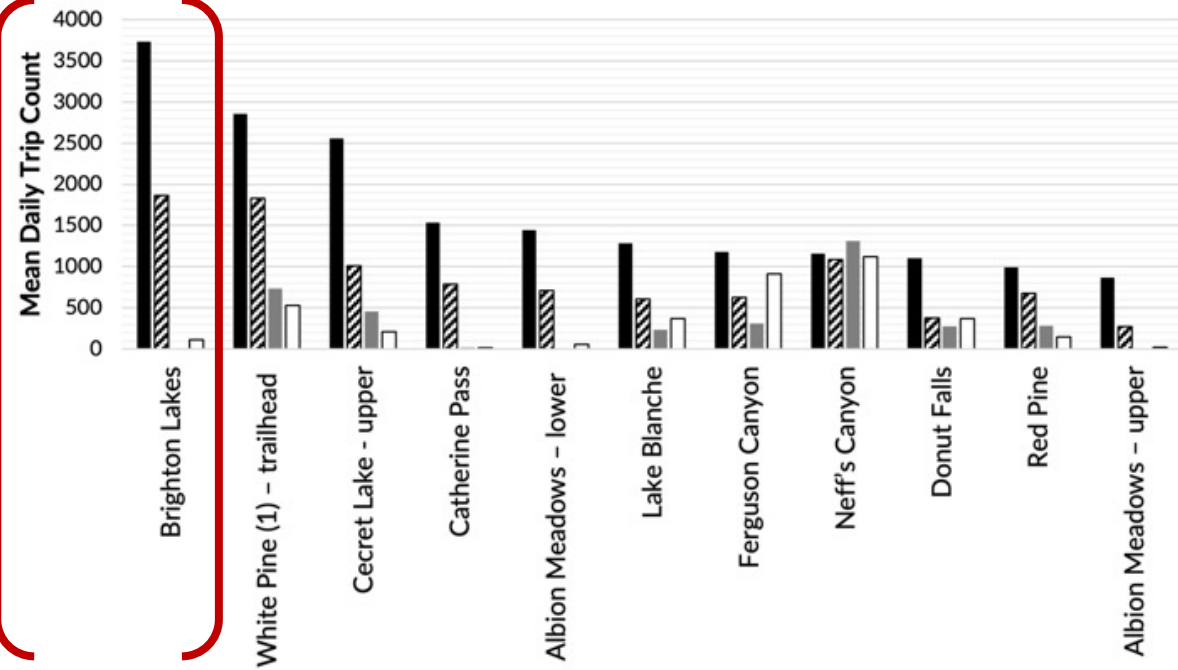




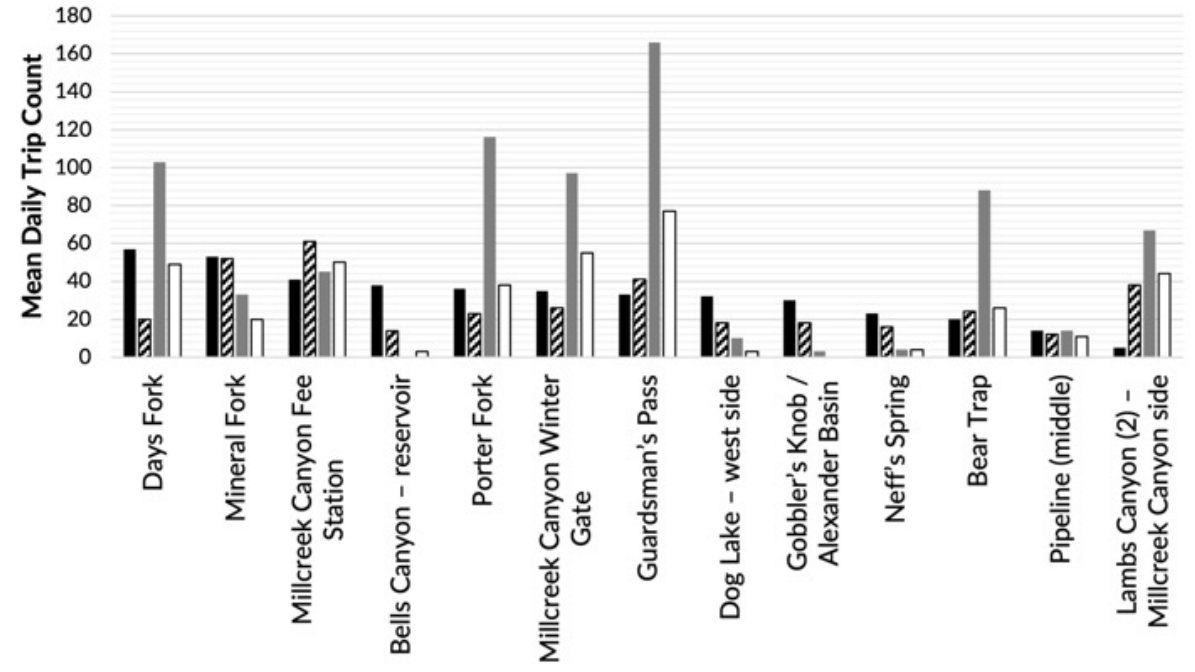
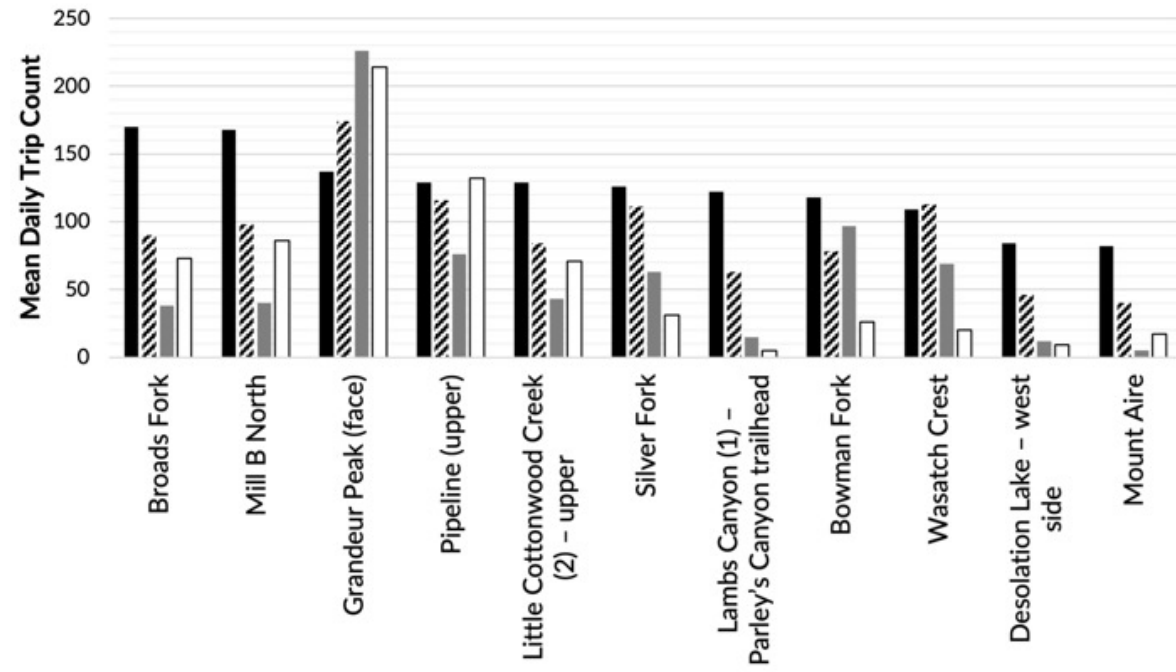
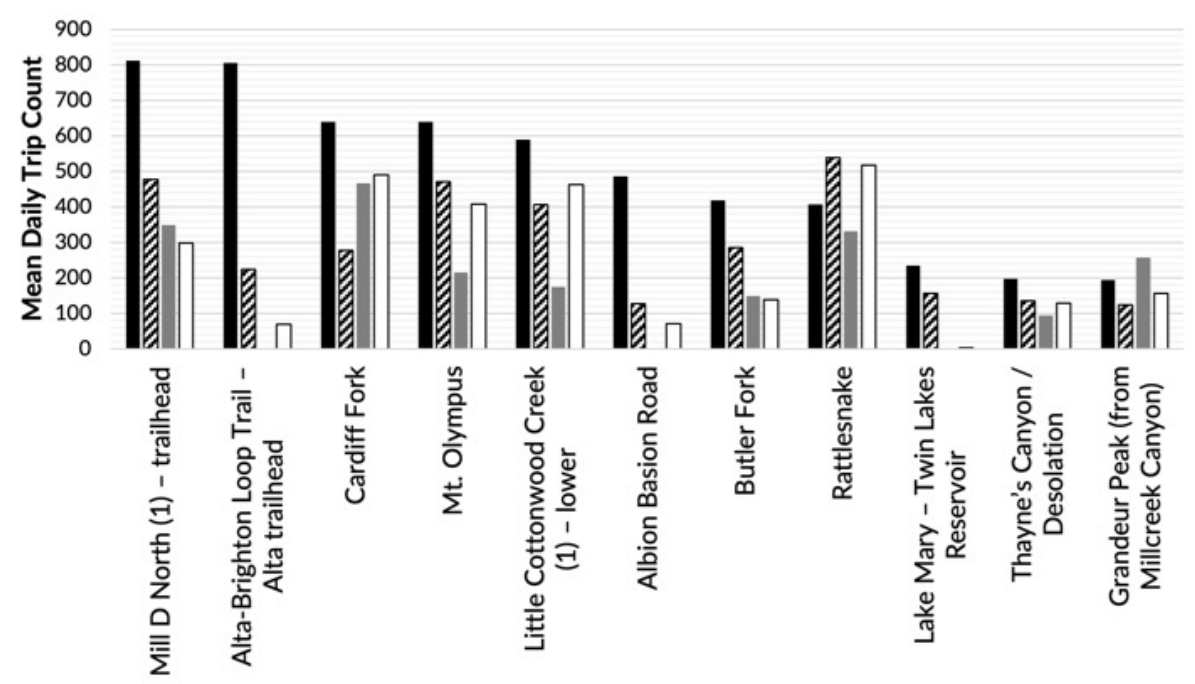
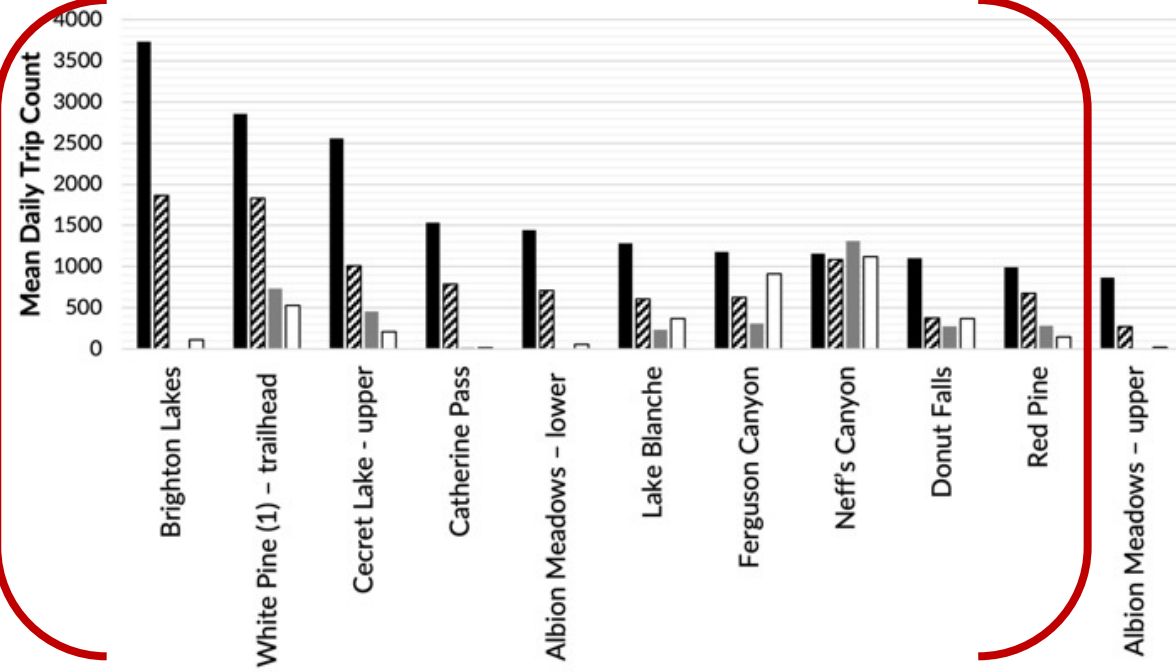




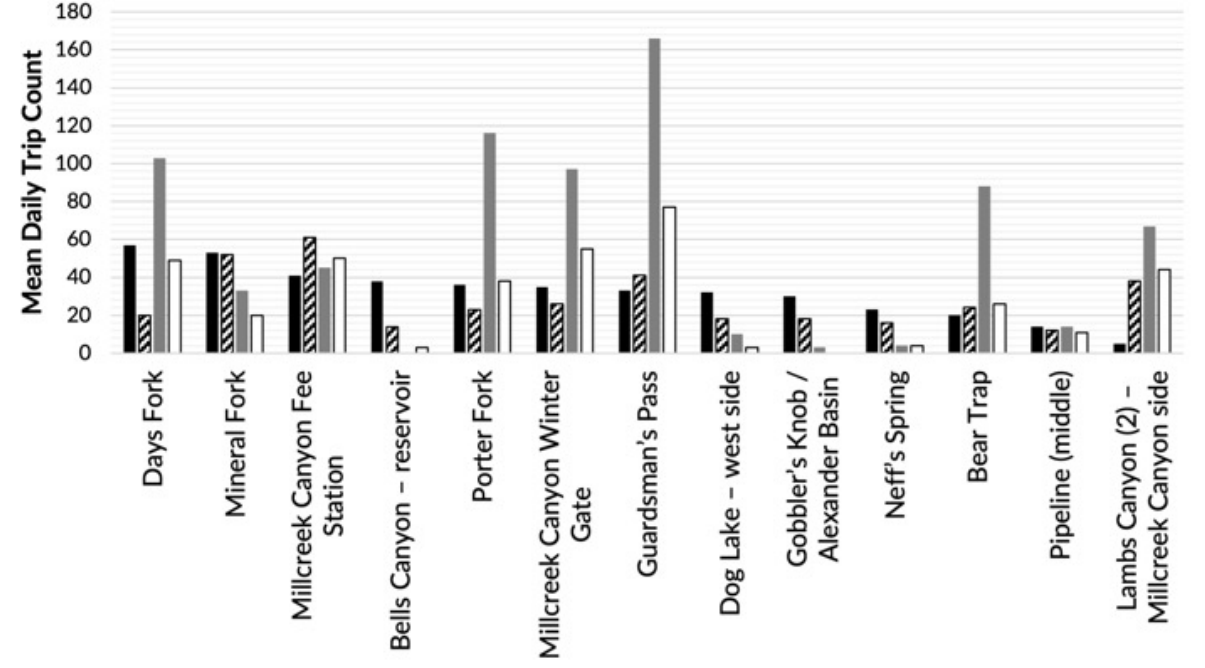
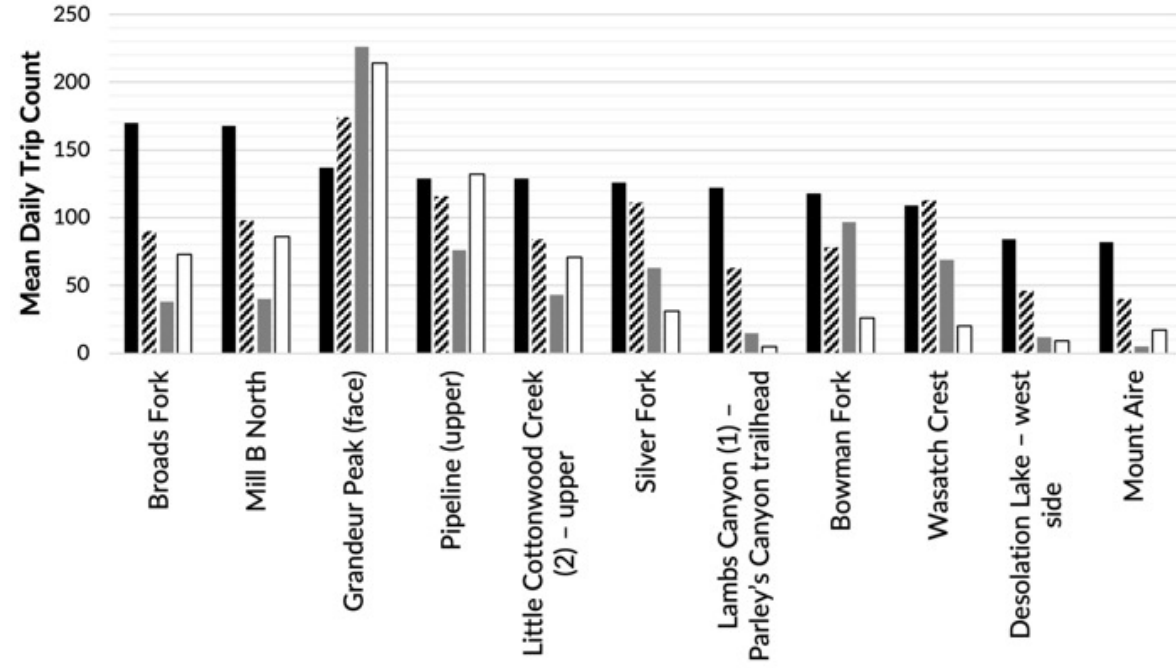
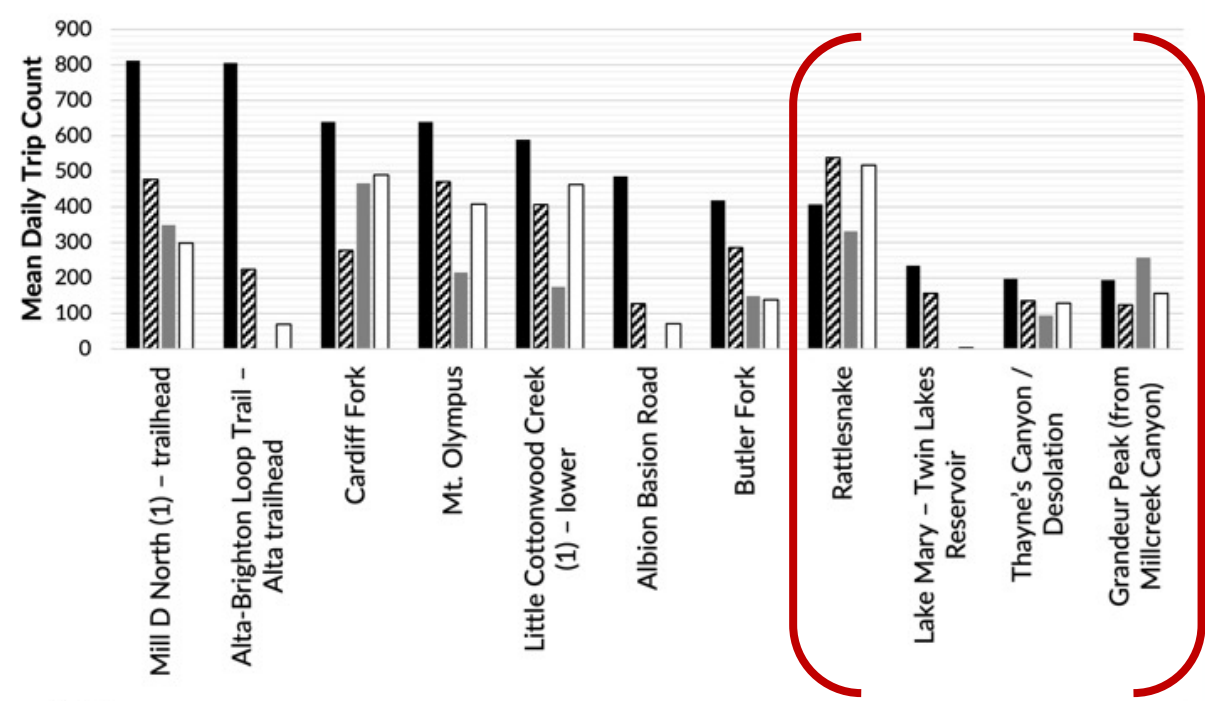
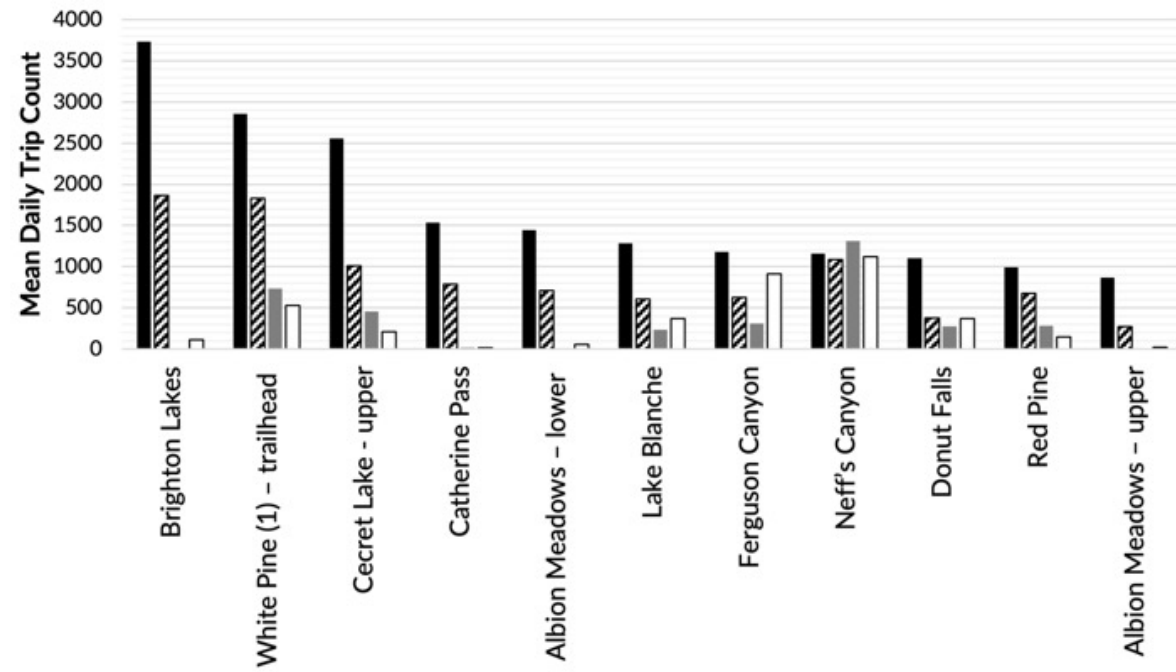
■ Summer ■ Fall ■ Winter □ Spring



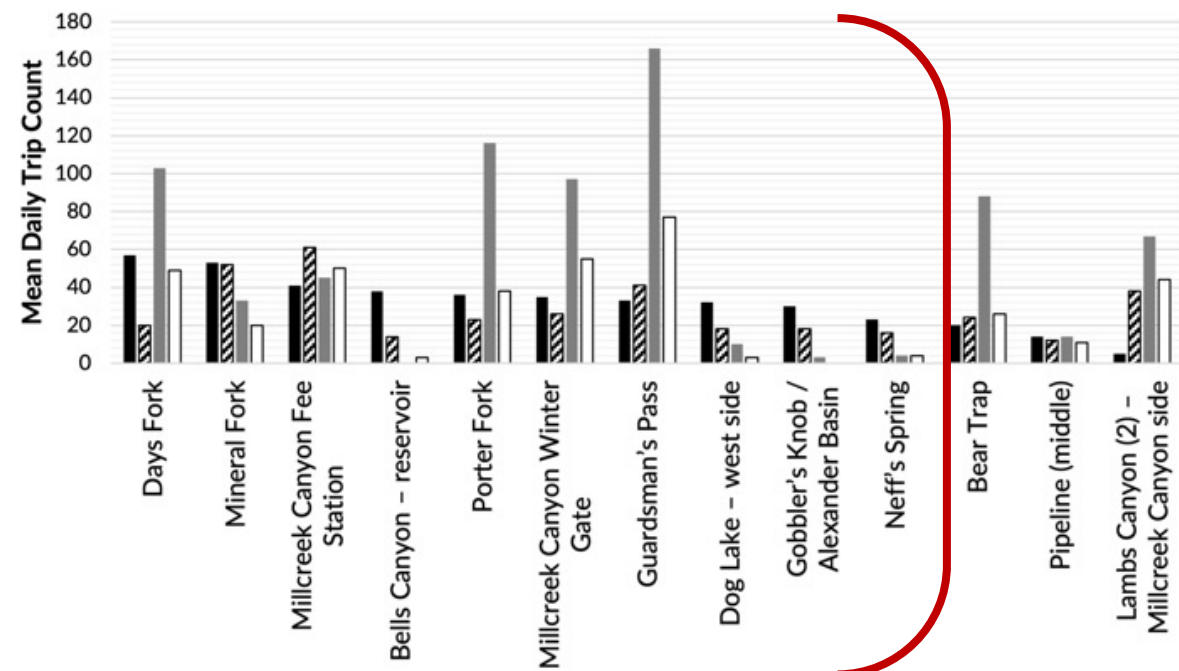
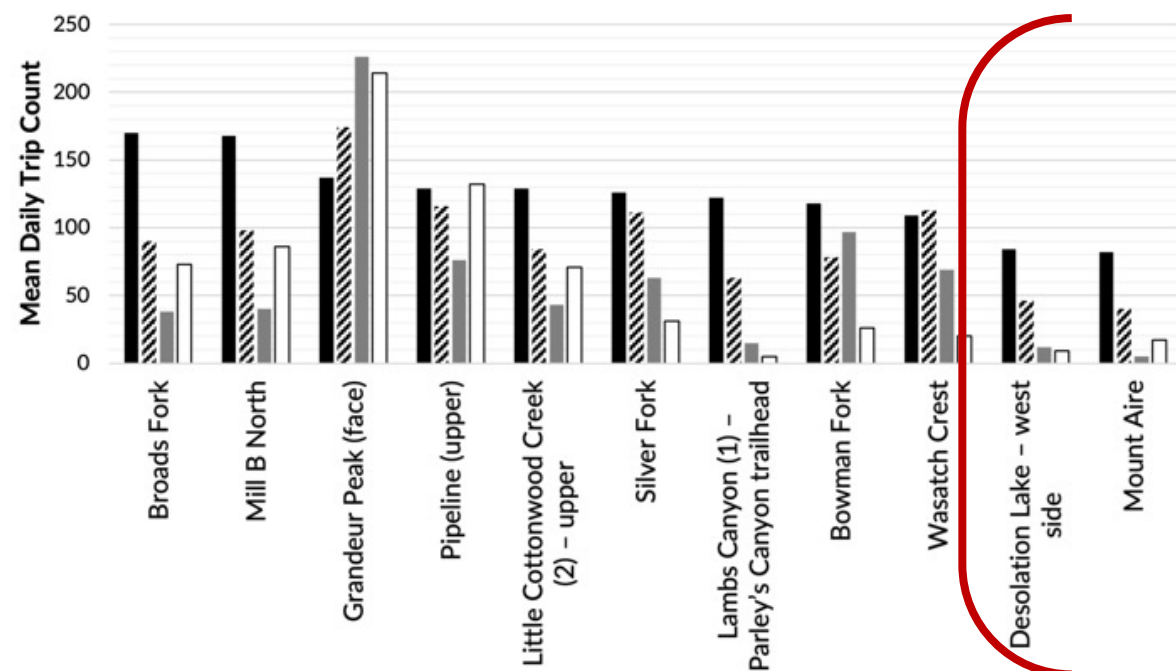
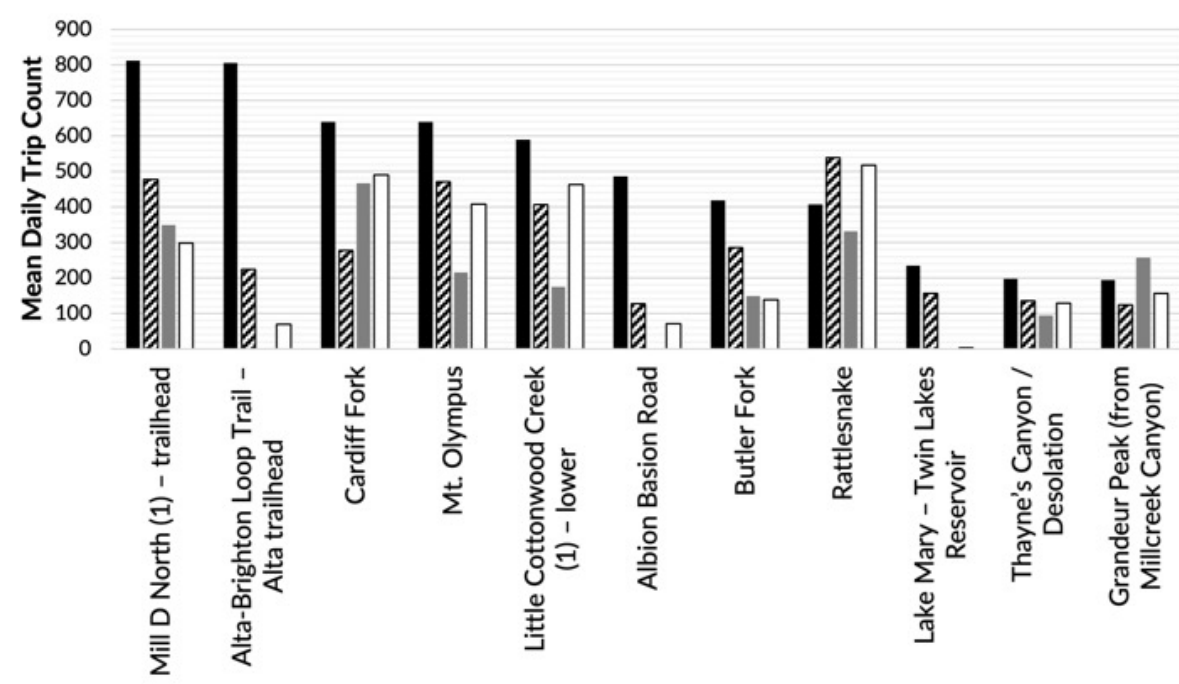
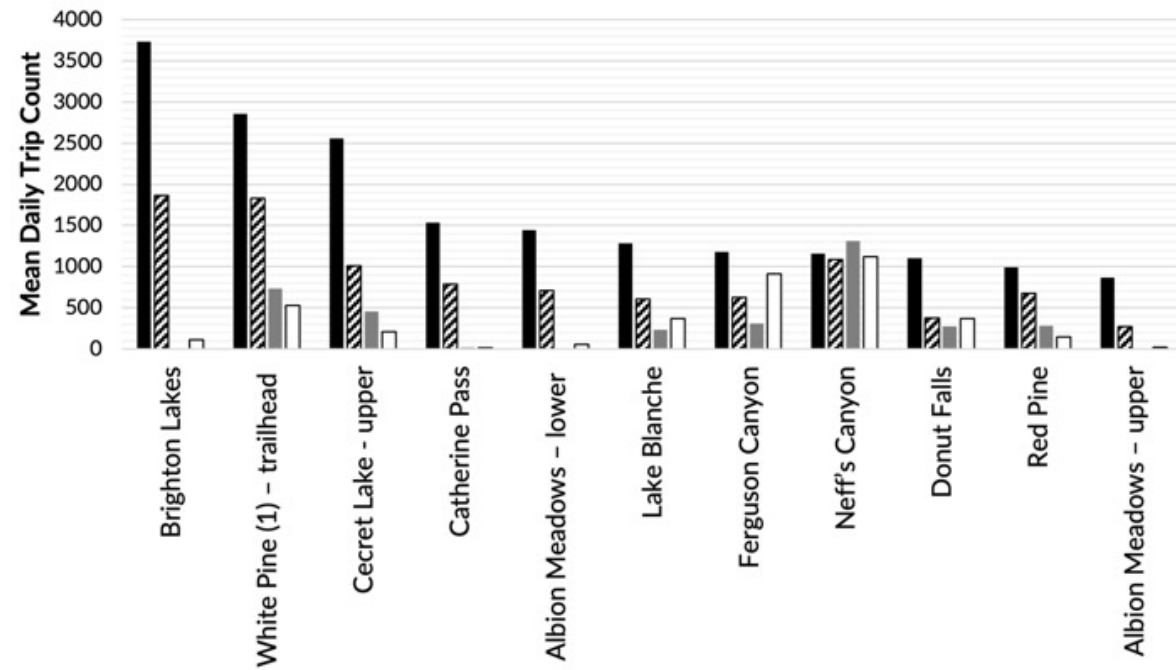
■ Summer ▨ Fall ■ Winter □ Spring



■ Summer ▨ Fall ■ Winter □ Spring

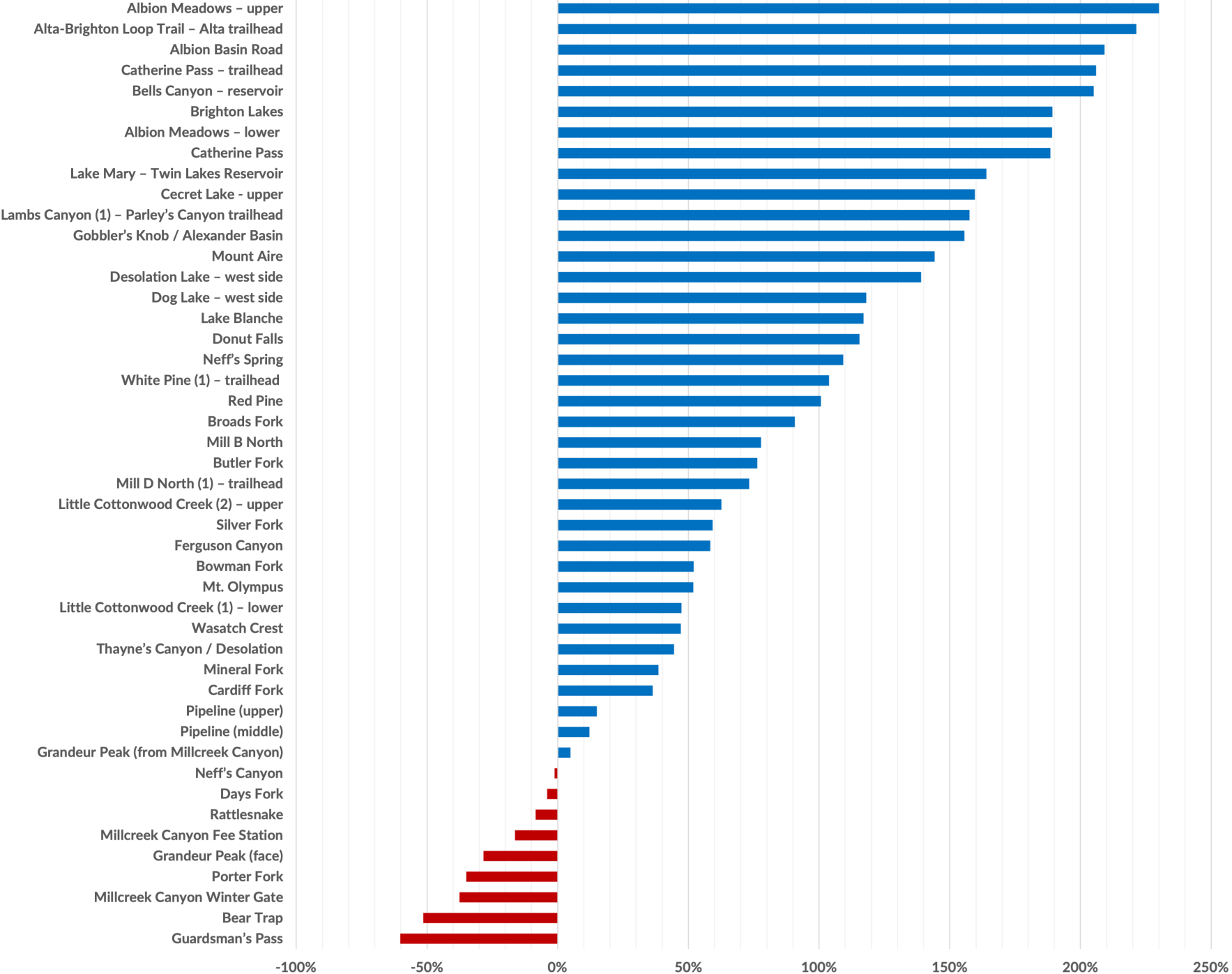


■ Summer ▨ Fall ■ Winter □ Spring

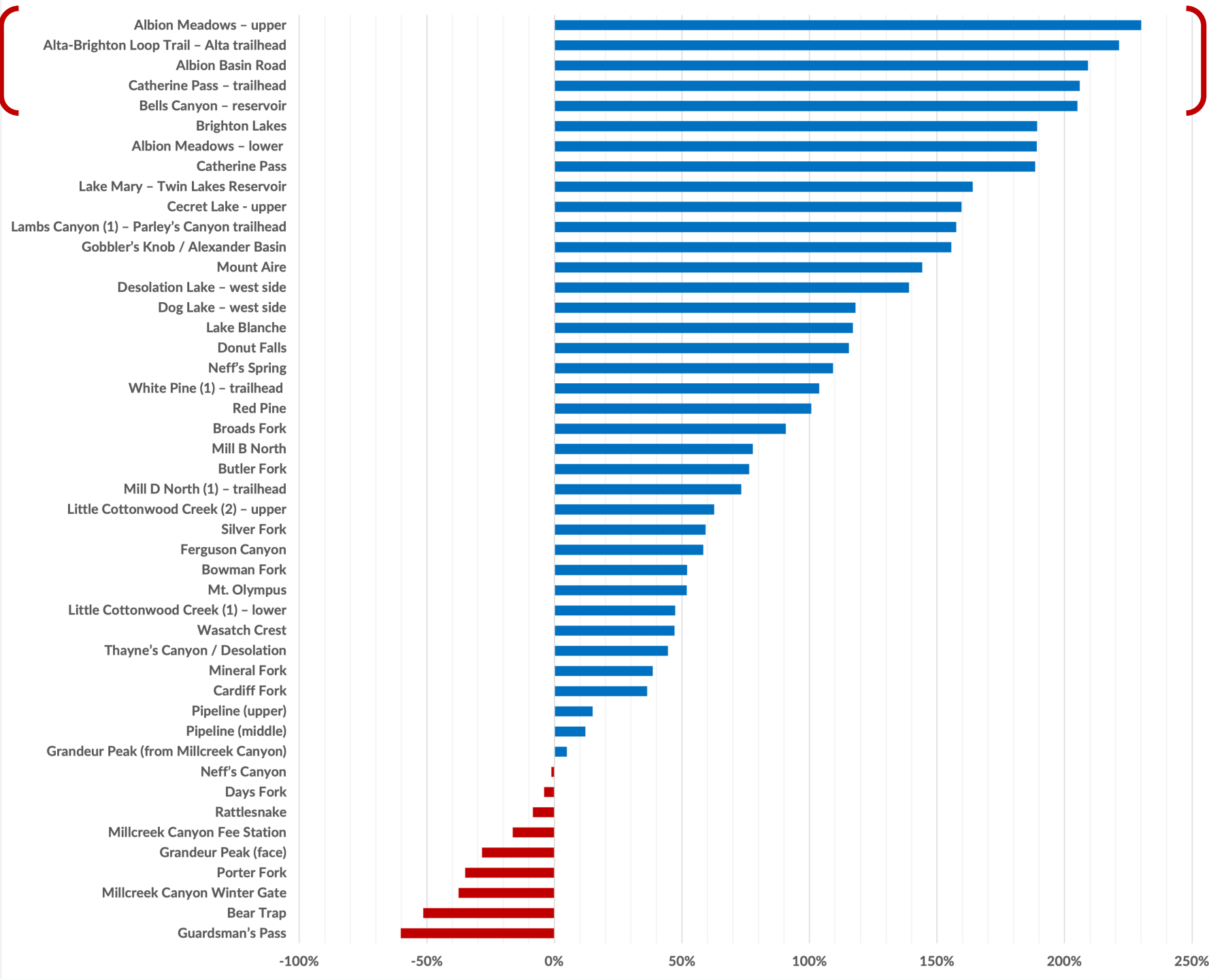


■ Summer ■ Fall ■ Winter □ Spring

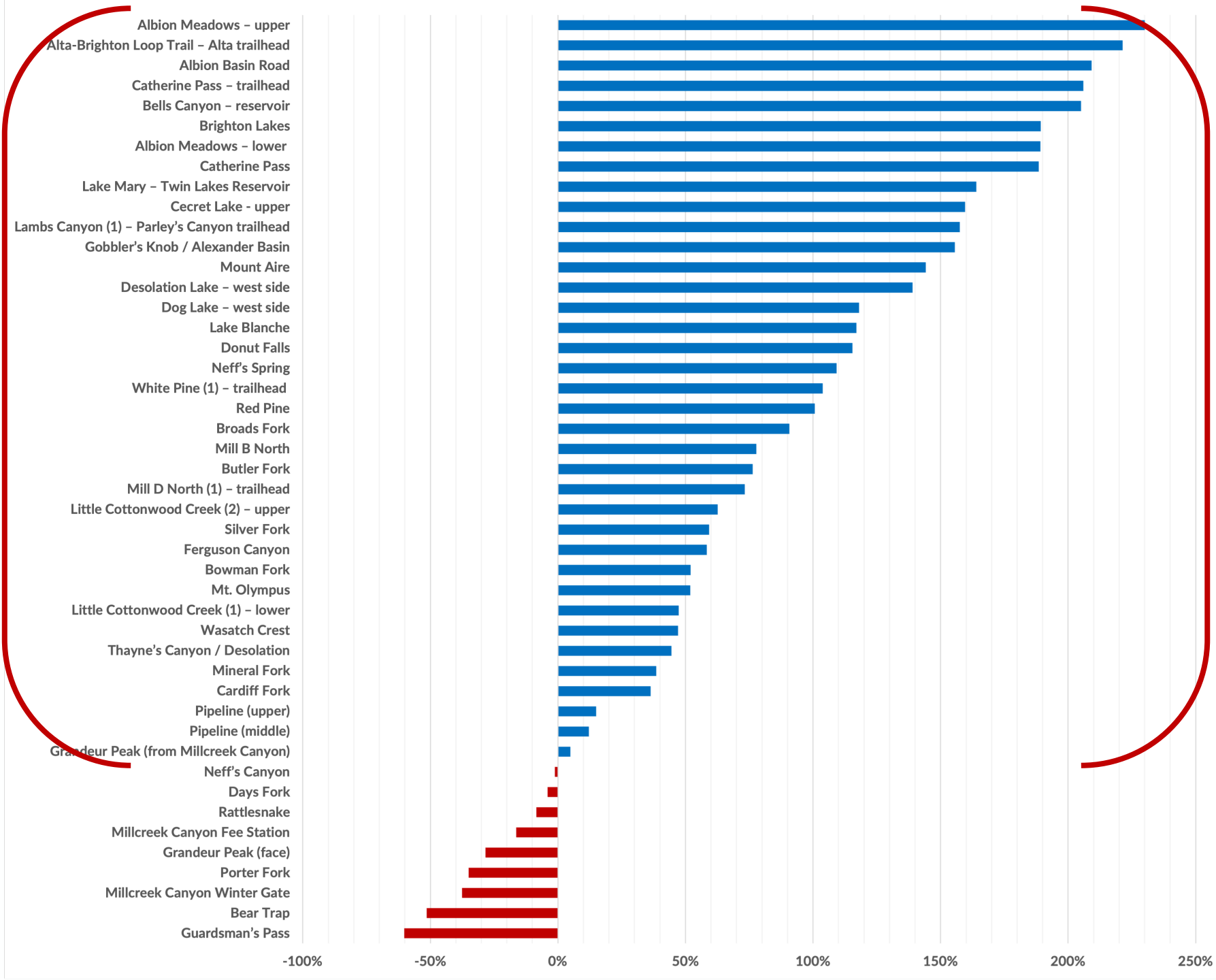
Summer use relative to annual average



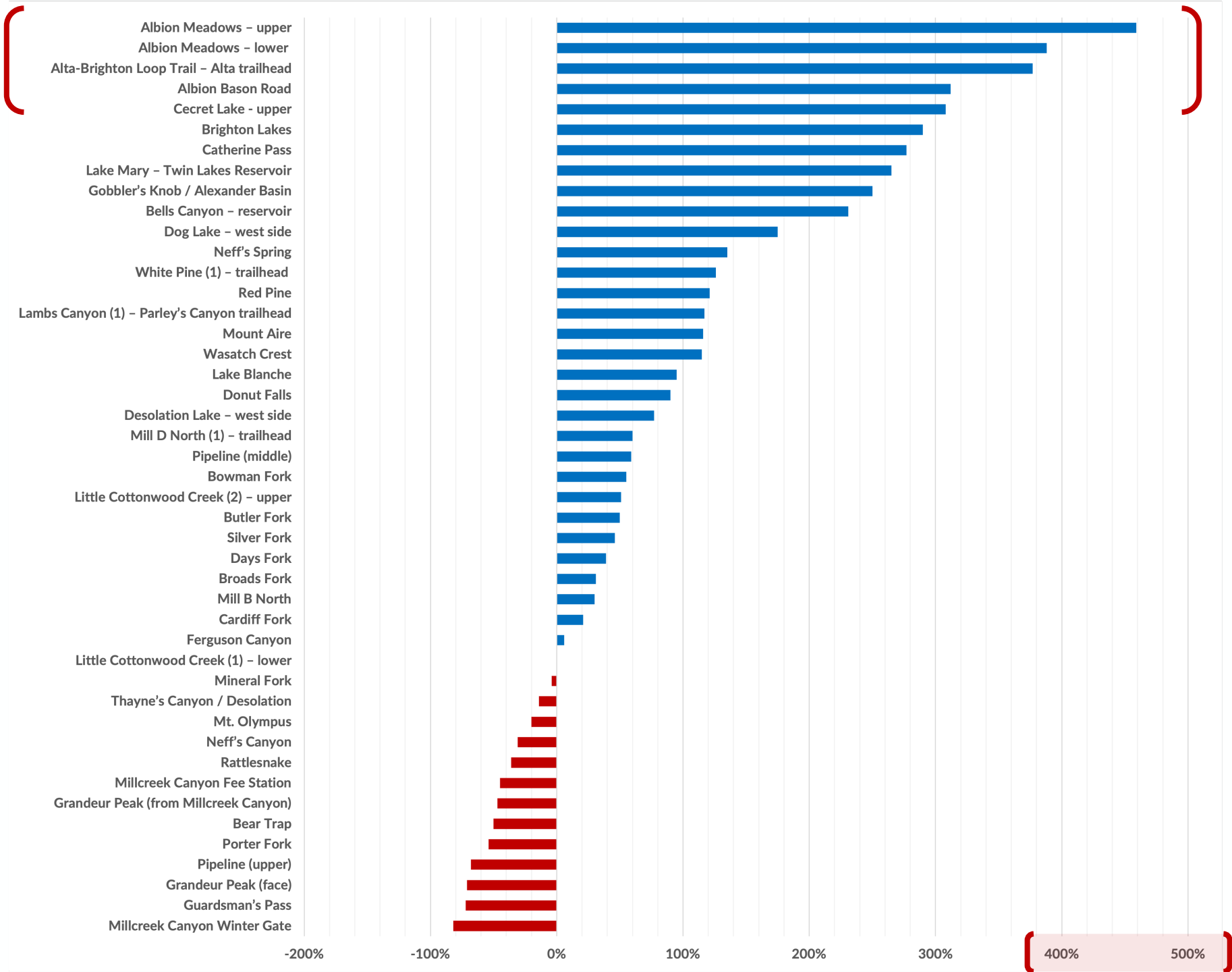
Summer use relative to annual average



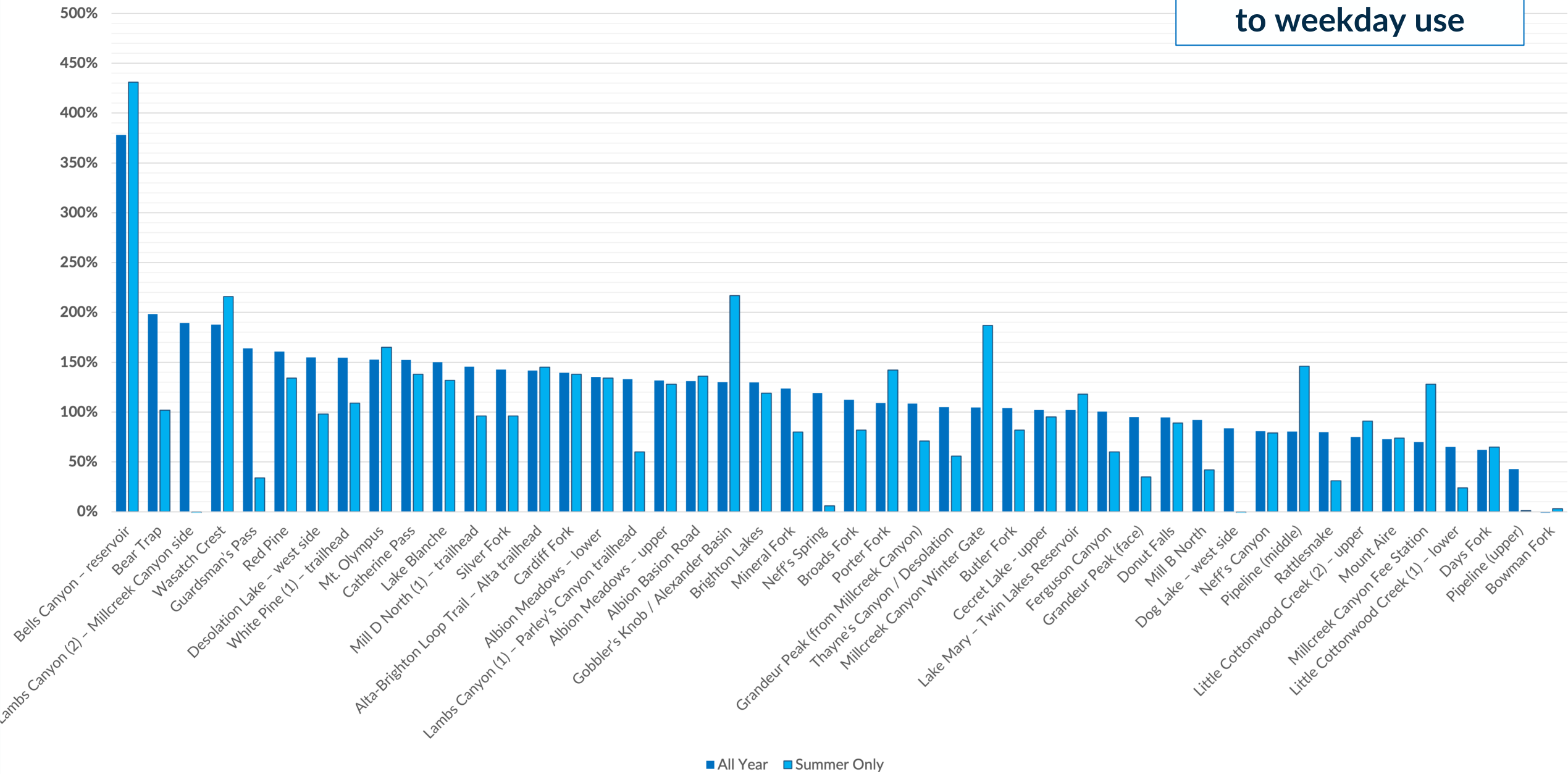
Summer use relative to annual average



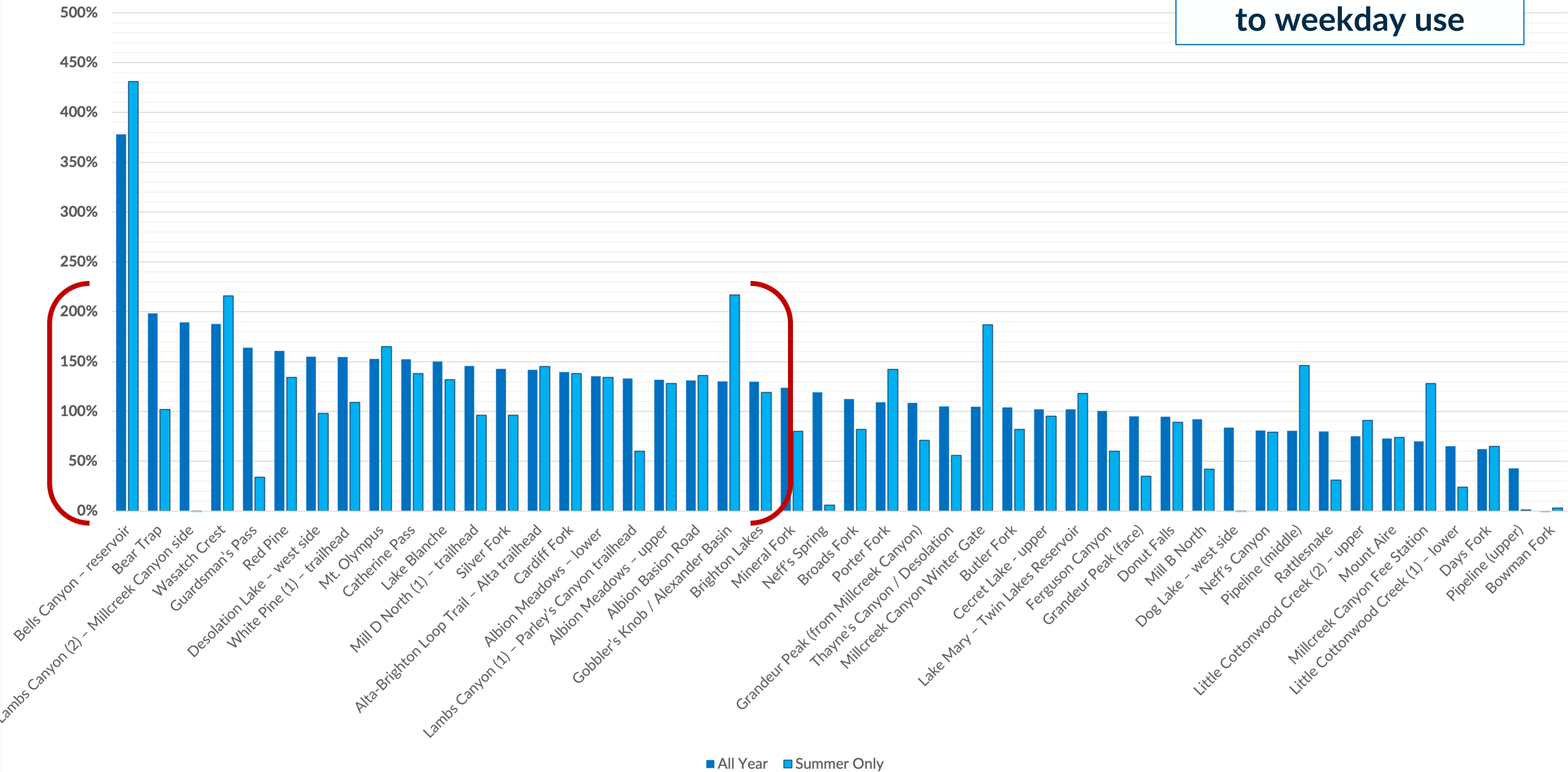
July use relative to annual average



Weekend use relative to weekday use

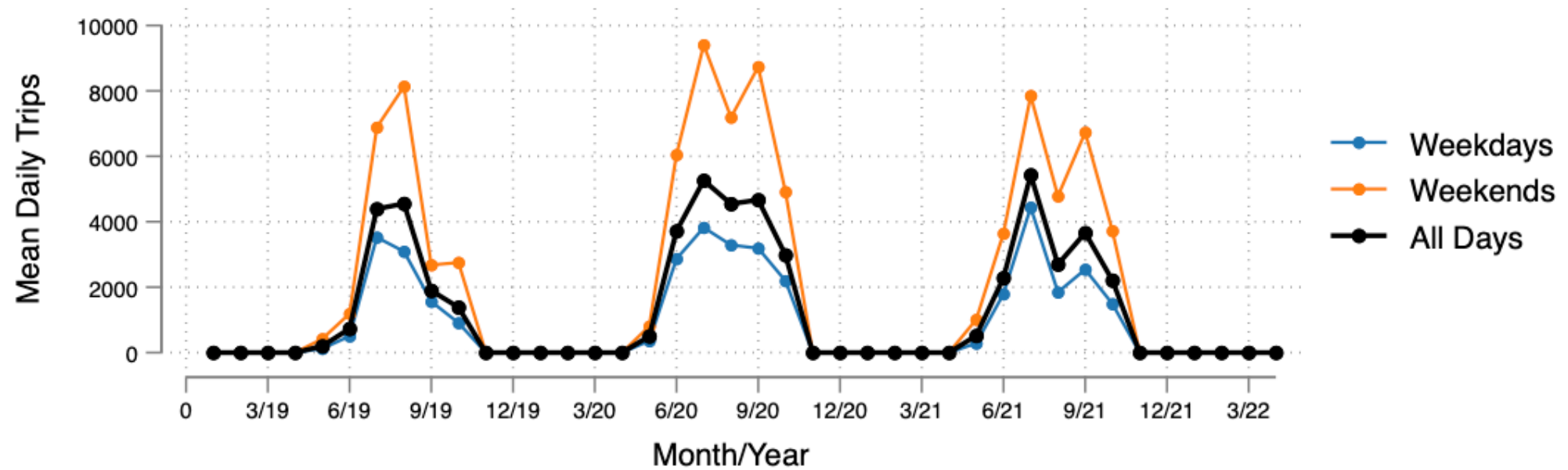


Weekend use relative to weekday use



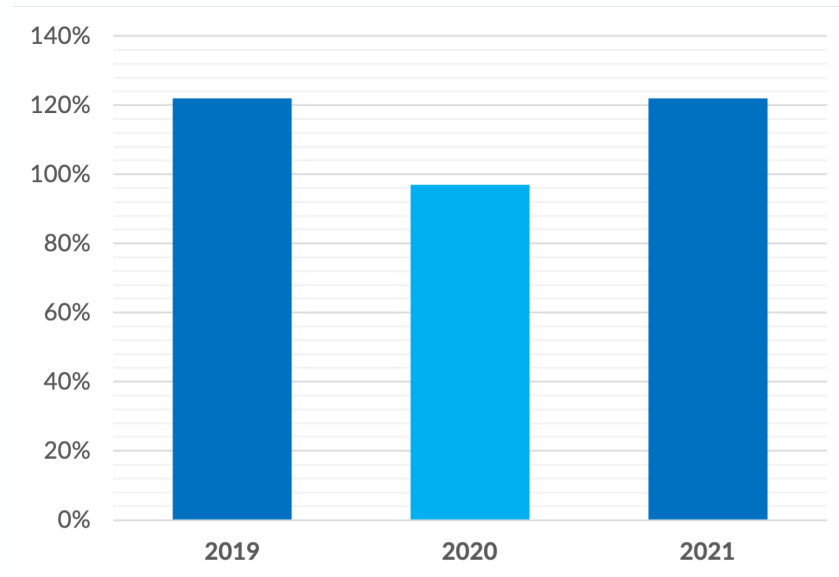
Use distribution by type of day

Brighton Lakes

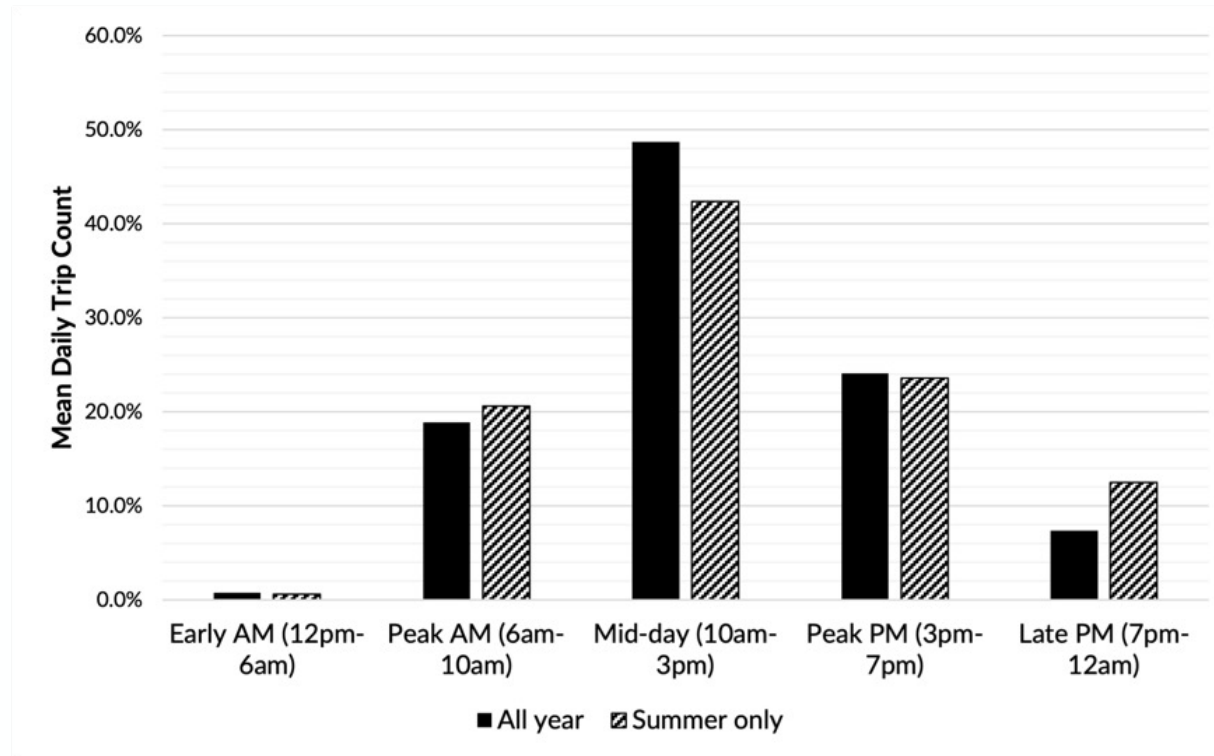


Weekend use relative to weekday use

*aggregated across all trails
by year*

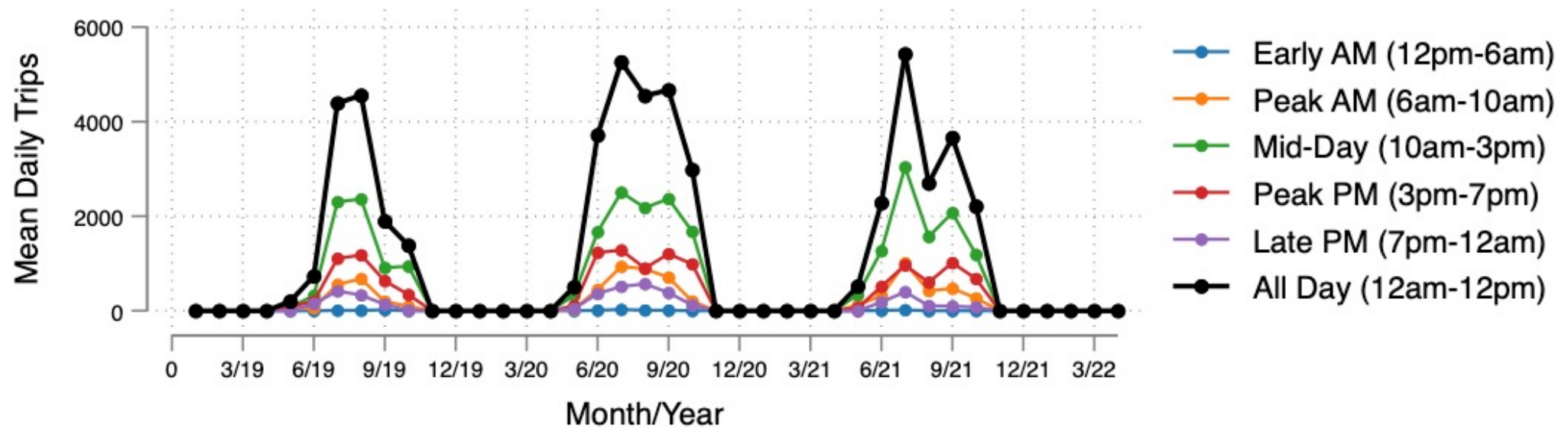


Use distribution across the day



Use distribution across the day

Brighton Lakes



There is an exceptional amount of variation in summer trail use



The trail use numbers documented in this report show that with regards to the social characteristics of **trails in the Central Wasatch**, there are is a wide variety of recreation experiences to be had.

Trails that terminate at a high-elevation lake tend to receive the highest levels of use.



It is not surprising to see the highest trail use numbers for the approach trails used to access the region's iconic high-elevation lakes.

The question for managers, as well as other stakeholders, is **whether these numbers are approaching levels that are too high to maintain a desired quality of visitor experience** and limit potential impacts to vegetation, water quality, and wildlife.

The data presented in this report suggest **current levels of use on trails terminating at high-elevation lakes are not altering the diversity of outdoor recreation opportunities provided within the canyons**

Existing trail use patterns within the Central Wasatch offer opportunities to spatially concentrate and temporally disperse use to accommodate more use without degrading recreation experiences.



A principle of sustainably managing outdoor recreation in a way that limits resource impacts is to take actions that **reduce the amount of impact each individual recreationist has** (Hammitt et al., 2015).

Managers can do this by **spatially concentrating** use to those areas where it is already high, so that a smaller proportion of the entire resource area is impacted than if use were deliberately dispersed (through use restrictions at high-demand locations, outreach efforts, etc.).

This strategy must be accompanied by efforts to ensure there is **adequate and appropriate infrastructure** at those recreation settings where use is being concentrated.

QUESTIONS

Jordan W. Smith – jordan.smith@usu.edu



