

CENTRAL WASATCH VISITOR USE STUDY – PHASE I REPORT

Jordan W. Smith, Ph.D. October 20, 2021



INSTITUTE OF

OUTDOOR RECREATION AND TOURISM

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





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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 I Findings

4. Planning for Phase II

- 1. Ecological and Physical Assessments
- 2. Social Assessment
- 5. Questions

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- The purpose of this study is to explore how outdoor recreation use and its associated impacts can be quantified and monitored over time within the canyons.
- Our goal is to establish a set of indicators that are collaboratively generated and grounded in the best-available science and reflect the unique needs and concerns of the diverse stakeholders and interest groups who use, manage, and depend on the canyons.

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Our vision for this project is to establish scientifically grounded and collaboratively informed indicators of the ecological, physical, and social characteristics of distinct types of outdoor recreation settings within the Central Wasatch.

ECOLOGICAL

PHYSICAL

SOCIAL



INTERAGENCY VISITOR USE MANAGEMENT COUNCIL

Elements and steps of the Walter Use Management Framework

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- 1. Carify project purpose and result Review the area's purpose
- and applicable legislation. agency policies, and other reprospongeri direction.
- Assess and summarize and Information, prof. current excellent.
- Develop a propert action plan.

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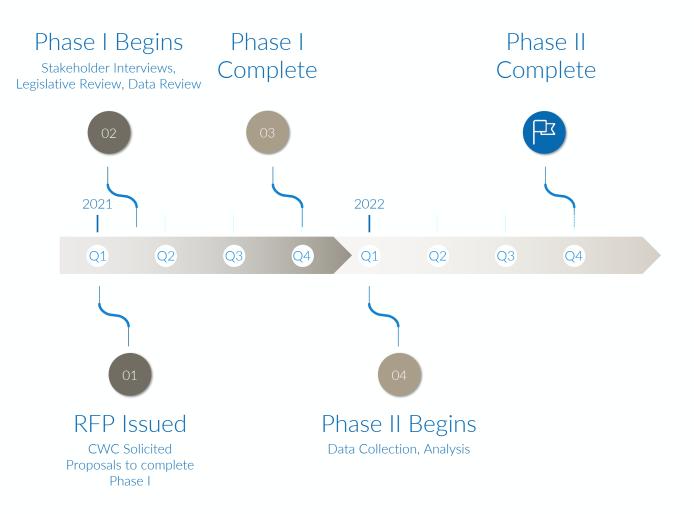
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Phase I Tasks

1. Conduct a knowledge gap analysis of current outdoor recreation research and monitoring in the Uinta-Wasatch-Cache National Forest and gathered stakeholder perspectives on key indicators;

LITERATURE REVIEW

STAKEHOLDER INTERVIEWS

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DATA COMPILATION

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LEGISLATIVE AND POLICY REVIEW

4. Scope and assess potential indicators of ecological, physical, and social characteristics of recreation settings within the Central Wasatch.

INDICATOR ASSESSMENT

4. Phase I – Findings

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LITERATURE REVIEW

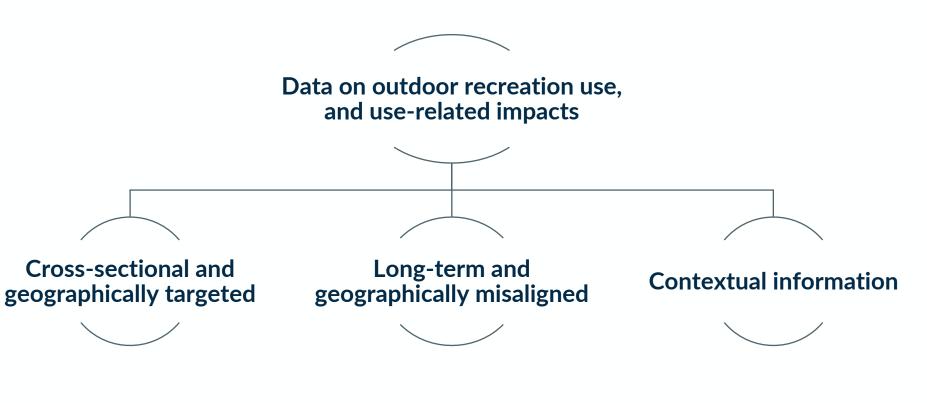
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STAKEHOLDER INTERVIEWS

COMMON THEMES:

There is <u>a need to balance use and development</u> of the Central Wasatch with protecting the ecosystem, watershed, diversity of experiences, and other things that make the Central Wasatch such a special and important place for people to live in/near and visit.

Concern about the fact that <u>we do not have a good idea of how many people are visiting</u> the Central Wasatch in general, not to mention where people are going, how they are recreating and experiencing the canyons, and what impacts they may be causing.

Sense that some people want the study to determine the number of people that should be allowed in the canyons at any given time. Other interviewees expressed a <u>concern that a visitor use study will be</u> <u>used to restrict numbers of visitors or certain kinds of visitation</u> in the Central Wasatch, such as to limit how many people can go to a trail head or how many people can go to a ski area on any particular day

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DATA COMPILATION

USDA Forest Service National Visitor Use Monitoring Program

Central Wasatch Visitor Use Study

> Salt Lake Climbers Alliance Surveys

Wasatch Backcountry Alliance and USDA Forest Service Trail Counters

> Utah Department of Transportation Traffic Counts

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	satch Visitor Study						
	Salt Lake Climbers Alliance Surveys						
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	Utah Department of Transportation Traffic Counts						

Year (Fiscal)	Canyon	Site Days Sampled	Settings Surveyed	Survey Responses
2017	Big Cottonwood	25	9	360
2017	Little Cottonwood	11	7	280
2017	Millcreek	24	15	334
3292.83	State States and the	60	31	974
2012	Big Cottonwood	22	7	346
2012	Little Cottonwood	11	8	112
2012	Millcreek	14	7	177
		47	22	635
2007	Big Cottonwood	10	2	65
2007	Little Cottonwood	6	3	34
2007	Millcreek	10	8	34
		26	13	137

Because the sampling frame for the National Visitor Use Monitoring program is created based upon sites across the entire forest, we cannot generate any inference about use levels or perceptions of use at spatial resolutions smaller than the entire Uinta-Wasatch-Cache National Forest.

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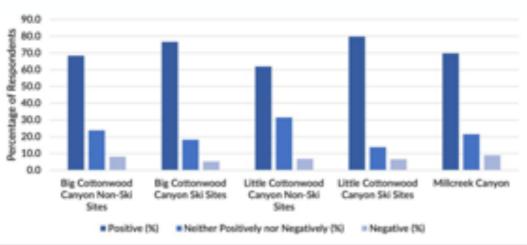
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DATA COMPILATION

Canyon	Site Days Sampled	Settings Sampled	Survey Responses		
Big Cottonwood	92	16	1,183		
Little Cottonwood	104	14	1,711		
Millcreek	111	10	839		
Total	294	40	3,733		

Data on possible social indicators include:

- Socioeconomic and demographic characteristics of visitors within each canyon.
- Types of outdoor recreation activity happening within each canyon.
- Desired outdoor recreation experiences of visitors within in each canyon.
- Displacement out of the canyons because of crowding and density of use.



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LEGISLATIVE AND POLICY REVIEW

What mechanisms exist to either monitor or manage recreational use of the canyons?

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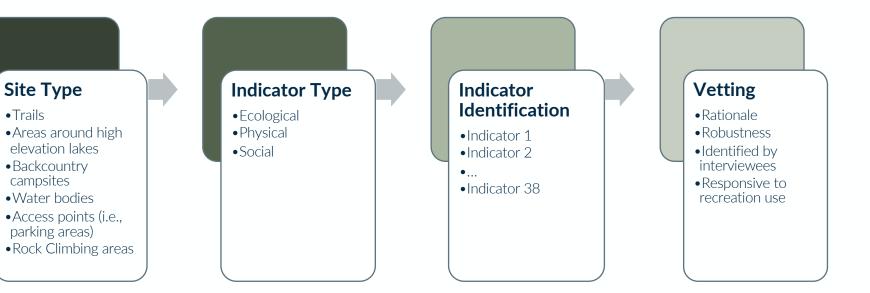
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INDICATOR ASSESSMENT

Trails

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- Informal trail proliferation and condition
- Trail condition
 - Trail width; linear extent
 - Trail condition class; linear extent
 - Trail depth (incision); linear extent

Areas around high elevation lakes

Disturbed shoreline

Backcountry campsites

- Campsite proliferation; campsite number and location
- Campsite area
- Campsite condition

Water bodies

- Water quality
 - E. coli/coliforms; counting of indicator organisms
 - Nitrate
 - Dissolved organic Carbon
 - Particulate Carbon
 - Suspended sediment
 - Total dissolved Nitrogen

Access points (i.e., parking areas)

- Roadside vegetation disturbance
- Parking
 - Developed and roadside parking use
 - Average time a car is parked

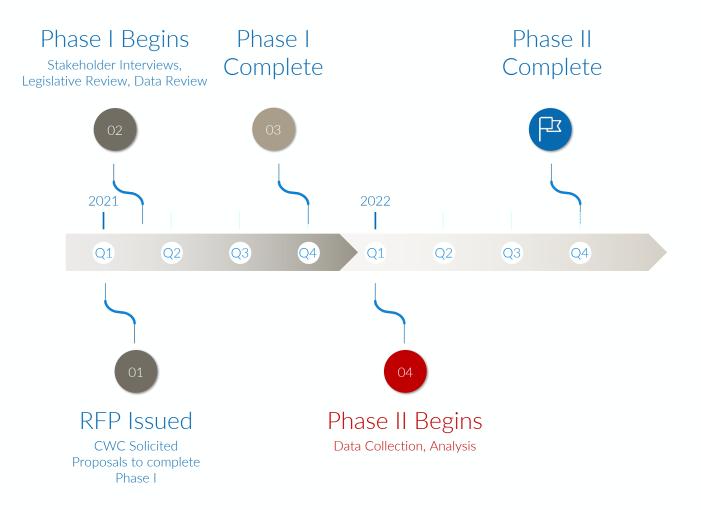
Rock climbing areas

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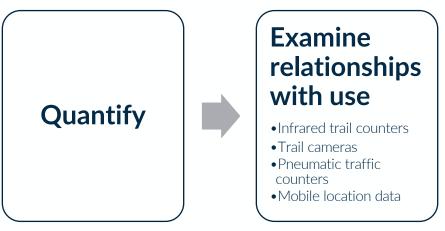
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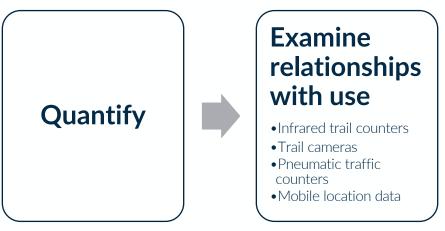
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• Mobile location data

GOALS OF PHASE II

Develop a scientifically grounded understanding of:

- the spatial and temporal dynamics of current and projected outdoor recreation use;
- the extent to which outdoor recreation activity within the canyons affects key indicators of ecological and physical resource conditions; and
- the likely changes in ecological and physical resource conditions under projected levels of use.

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