



ECOKEEPING

reciprocity in outdoor recreation



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reciprocity in outdoor recreation

CATEY PATROLIA
UNIVERSITY OF UTAH
MULTI-DISCIPLINARY DESIGN

IN PARTNERSHIP WITH
THE BUREAU OF LAND
MANAGEMENT



The image features a landscape photograph of a mountain range with a central circular graphic overlay. The mountains are dark and silhouetted against a lighter sky. The circular graphic consists of a solid dark brown circle in the center, surrounded by a thin white solid line and a dashed white line. The text "RESEARCH & OBSERVATIONS" is centered horizontally across the middle of the image, overlaid on the circular graphic and the landscape. The overall color palette is muted, consisting of various shades of brown, tan, and beige.

RESEARCH & OBSERVATIONS

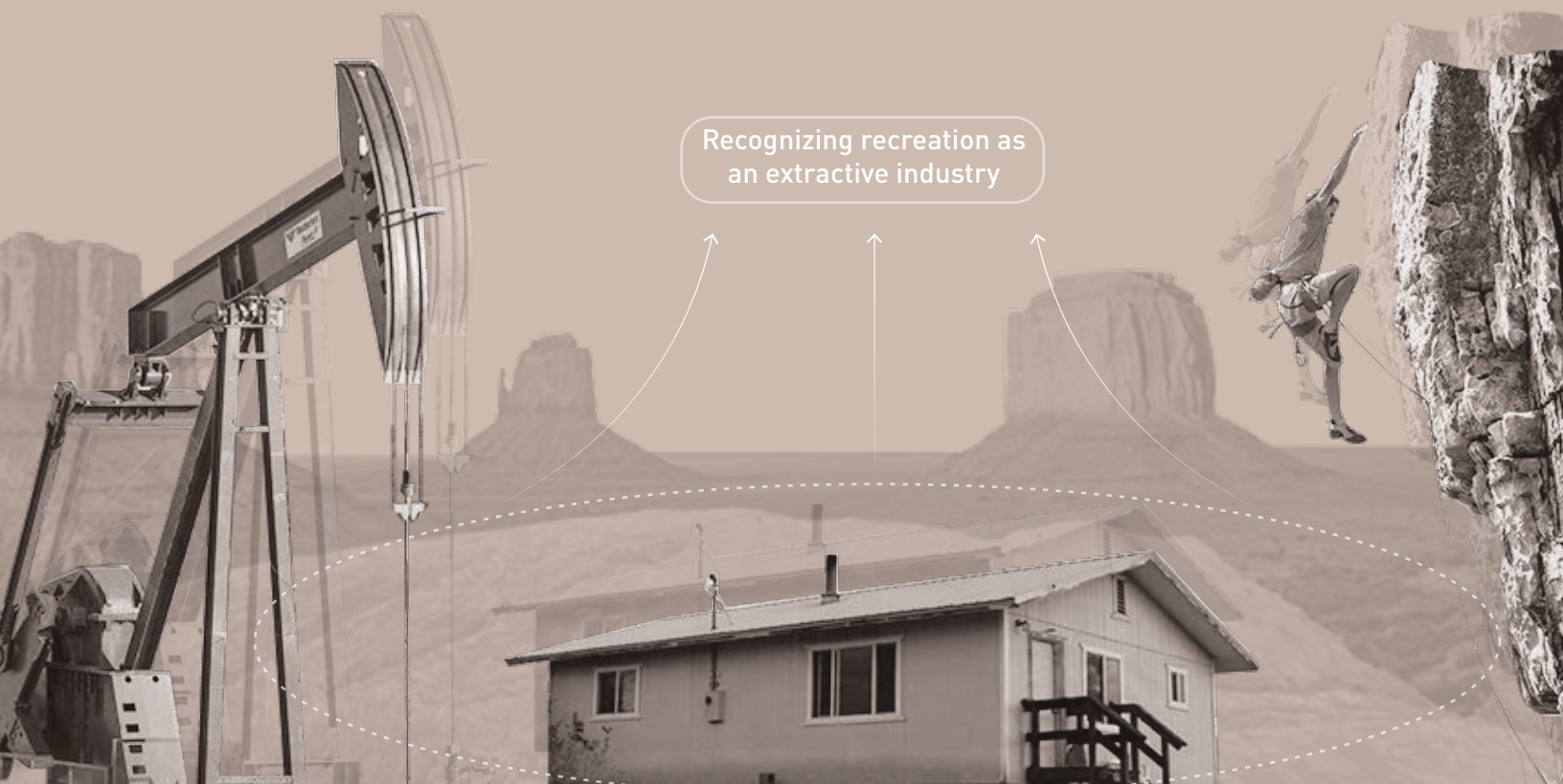
INITIAL INSIGHTS

“Late carbon-based society has tended to render and define rural areas as post-modern consumption spaces; places which individuals can choose for residence, business, or play.”

- Lawrence Kitchen and Terry Marsden

My initial research began with identifying the problems faced in rural areas that have negative impacts on the environment. Modern society emphasizes consumption to a massive extent, and rural areas often face the consequences of this consumption. From oil drilling and mining to building roads and businesses, the land degradation caused is often irreversible.

The quote above brought a new insight that led me to define recreation as an extractive industry. Bears Ears National Monument is becoming more and more popular as an outdoor recreation destination and it is important to recognize the ways in which we can respect and preserve the land that provides us with incredible experiences through recreation.



IMPACTS OF RECREATION

We live in a consumer society that is geared towards mass consumption, and outdoor recreation is no exception. It can place heavy demands on the natural environment and resources, especially energy. Site and trail proliferation is a problem in the Bears Ears region, which occurs because, as use shifts across the landscape, the rate of deterioration is much higher than the rate of recovery. Trampling caused by outdoor recreators damages and kills plants, displaces soil, and compacts mineral soils. This process alters the entire ecosystem and can have widespread impacts.

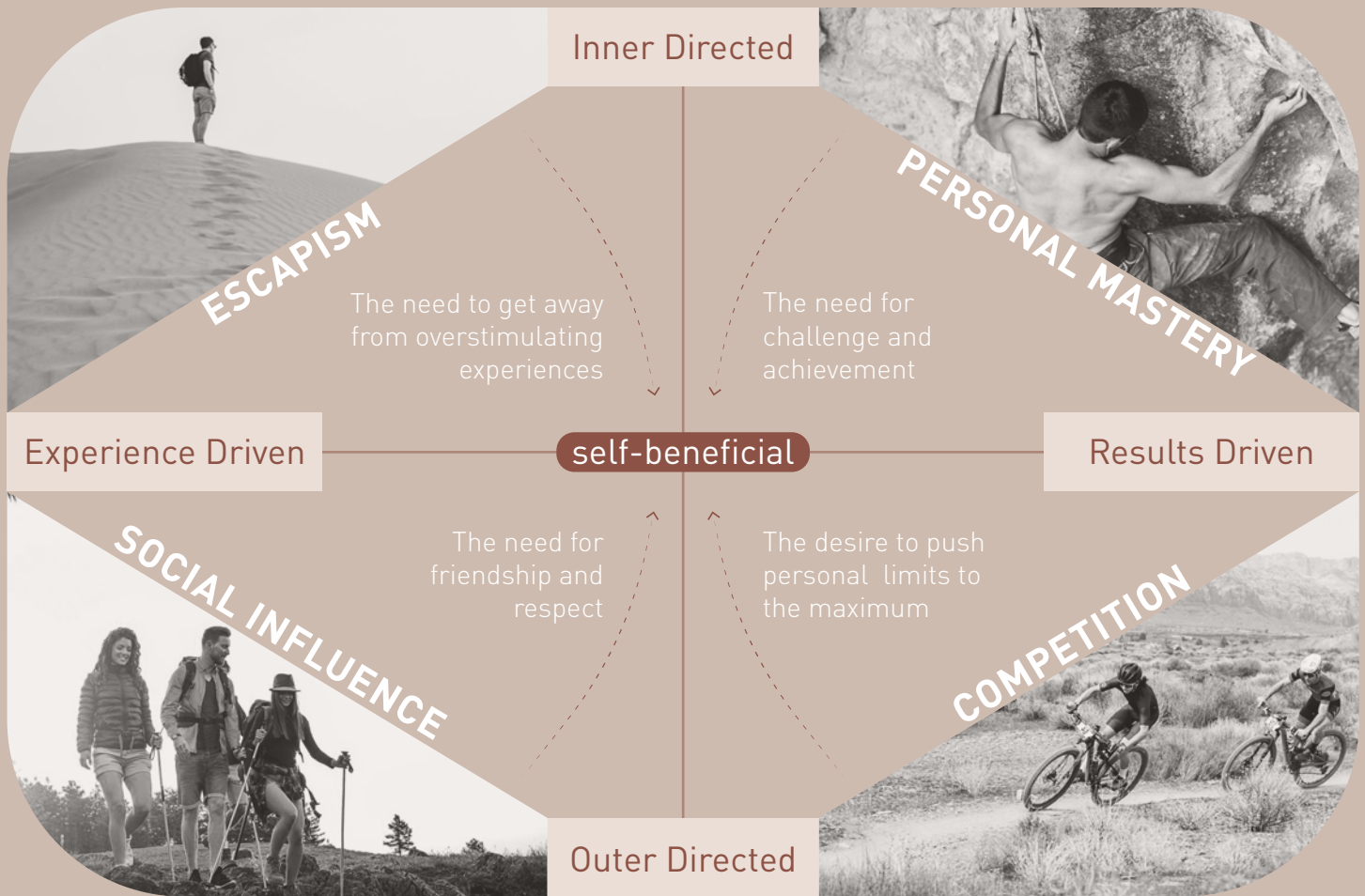
“Although often considered to be a nonconsumptive use, outdoor recreation inevitably alters attributes of the environment in which it occurs: soil, vegetation, animals, and water bodies.”

- Edgar L. Jackson



Involvement in outdoor recreation activities helps people to develop an awareness of environmental problems, creates a commitment to the protection of valued recreation sites, and cultivates a taste for 'natural' environment. However, many people who recreate consider themselves environmentalists, but do nothing to contribute other than spend time outdoors. An opportunity can be seen here to facilitate a mindset shift about our relationships to the land we use for outdoor recreation, and our responsibility to protect it.

WHY DO PEOPLE RECREATE?



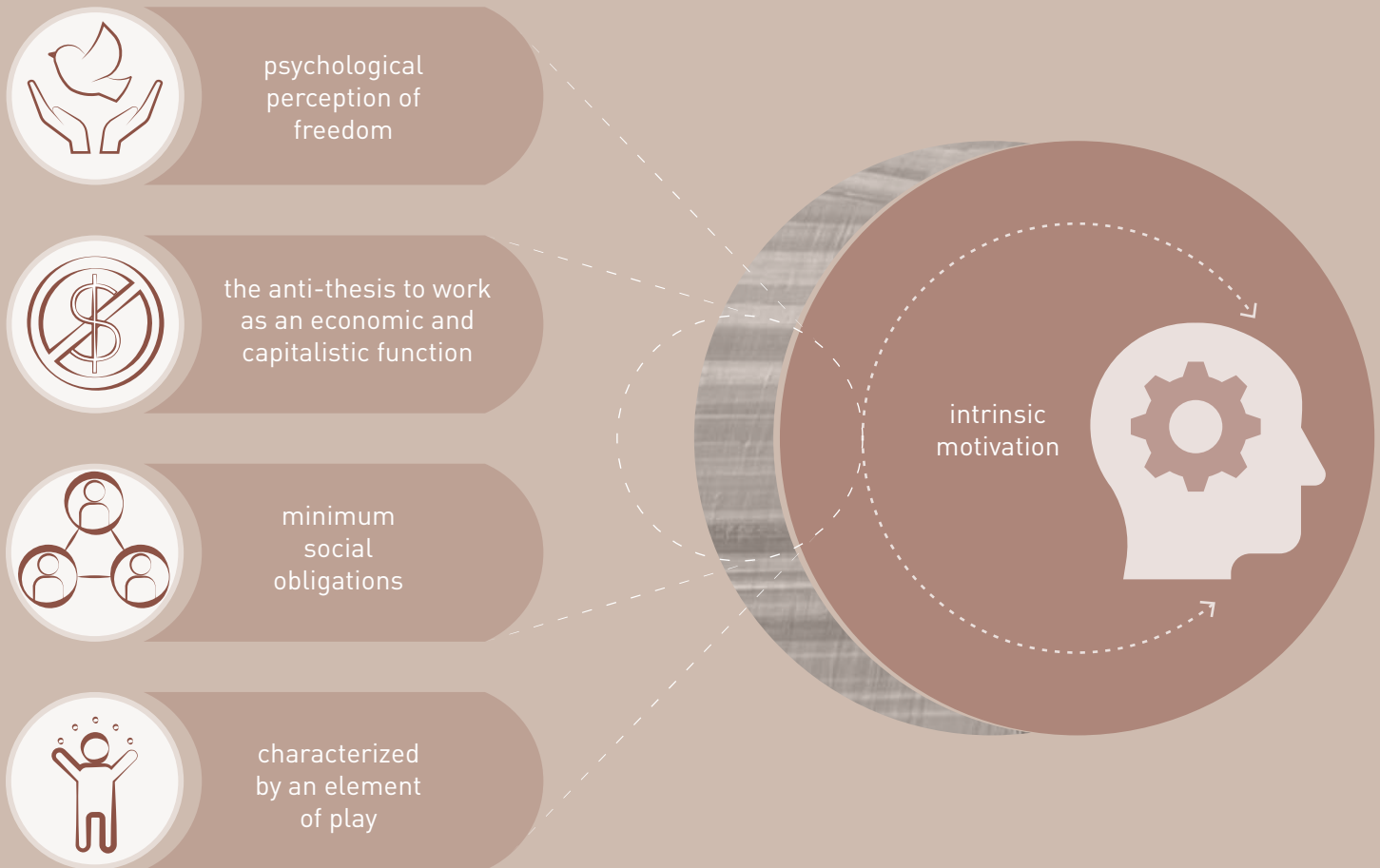
This information was derived from a research study at the University of Houston Downtown, studying the core values and motivations of recreation. The authors explore the elements that are essential to answer the question of 'why people recreate' by using qualitative and quantitative research methodology.

The diagram highlights the four primary motivators of recreation: escapism, personal mastery, social influence, and competition. These elements can be categorized across one axis based on activity participation: self directed versus with others. Along the other axis, they can be categorized based on the benefit attained: experience driven versus results driven. This maps out a broad variety of motivators, but concludes that these all come down to self-beneficial means.

INTRINSIC MOTIVATION

These recreational motivation factors the intrinsic motivation of recreators, which provides an opportunities to translate these principles into a framework to facilitate reciprocal relationships between people and place.

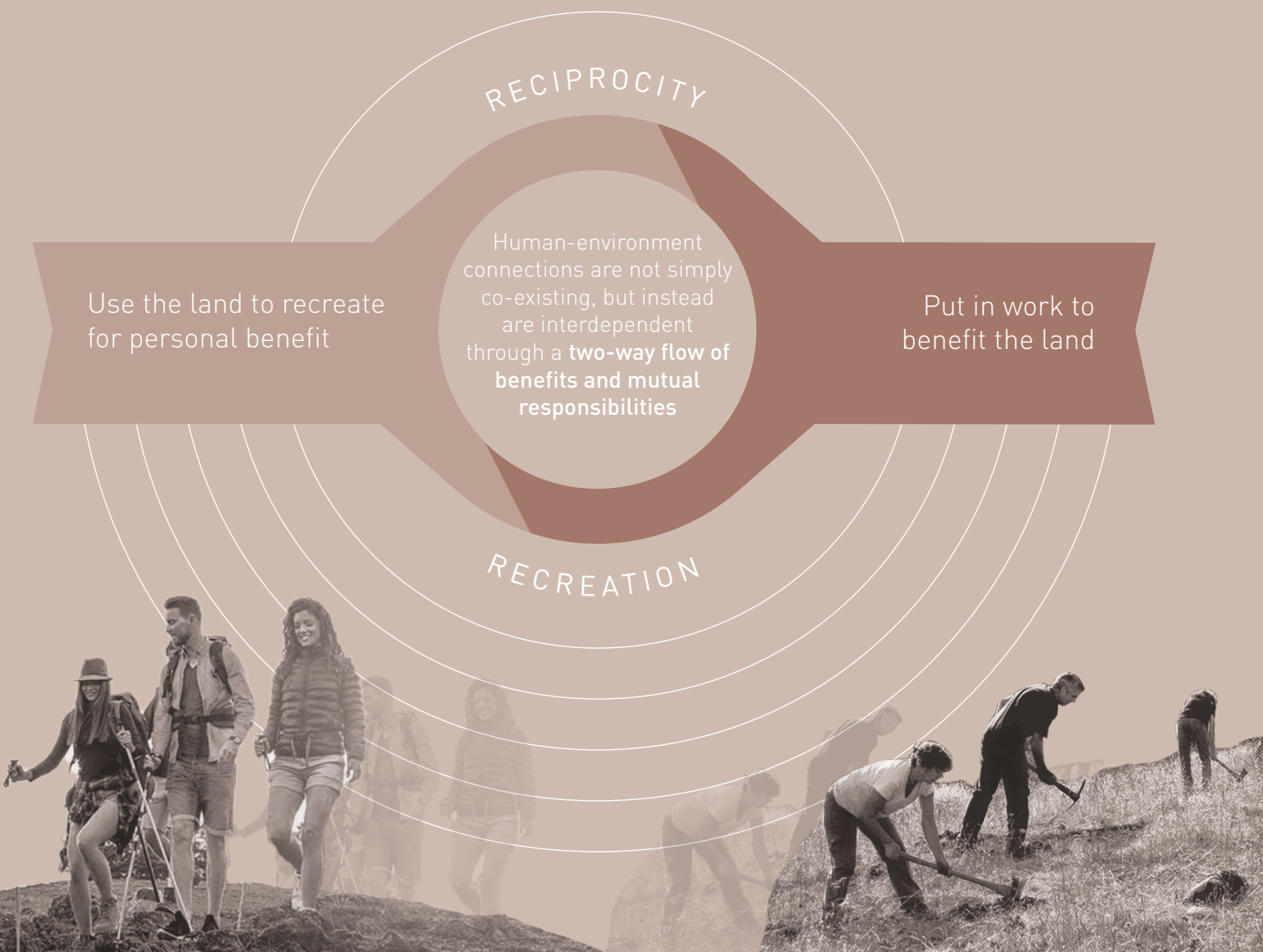
Intrinsic motivation refers to the spontaneous tendencies to be curious and interested, to seek out challenges and opportunities to exercise and develop skills and knowledge, even in the absence of tangible or monetary rewards. It is defined by self-determination and inherent satisfaction.



RECIPROCAL RELATIONSHIPS

Reciprocity in human-environment relationships revolves around a mutual care taking between people and place. This is a critical dynamic in the context of the sacred land in Bears Ears National Monument because the land possesses deep significance for native communities. Facilitating reciprocal relations in the recreation community can set a foundation for local practices and governance policies to increase access and protection of land and resources. Reciprocity can be beneficial in the context of community well-being and environmental sustainability.

“Current community efforts to maintain, restore, and create place-based relationships are often unfolding in the context of increasing globalization, industrial development, and resource extraction.” Reciprocal relationships invoke intimate, mutual obligations between people and place, recognizing the social norms that encourage people to pursue environmental care taking, and the socio-political factors that lead people to fall short on such responsibilities.



INDIGENOUS VALUE OF RECIPROCIDTY

Reciprocal relationships with the land are an ancient practice and value of indigenous communities, carried across many generations. The foundation of this is that their survival depends on the survival of the environment. Reciprocity is defined as a circle in which two parties indefinitely care for one another, without an endpoint in mind.

“It is a sacred and reciprocal relationship; the land and water give life and they, in return, offer gratitude, care and protection.”

- John McIlwain

On the contrary, the dominant approach of capitalism perceives land for its economic benefit, prioritizing profit over the devastation of landscapes. The modern world has cut us off from the sacred connection to the land, leading people to feel free to abuse it for their own self-beneficial means.



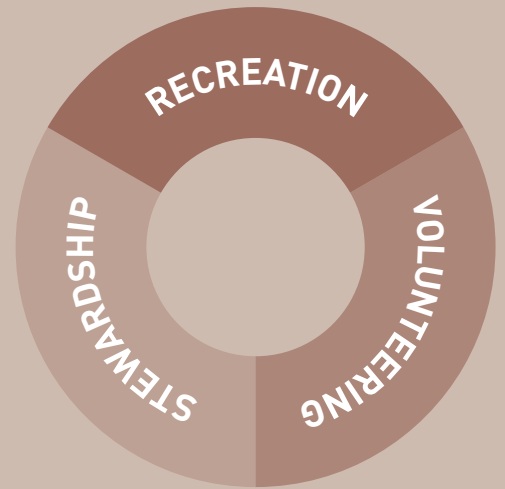
The image features a landscape photograph of a mountain range with a central circular graphic overlay. The mountains are dark and silhouetted against a lighter sky. The circular graphic consists of a solid white circle in the center, surrounded by a dashed white line, and a larger, semi-transparent white circle that encompasses the entire scene. The text "OPPORTUNITY & PARAMETERS" is centered horizontally across the middle of the image, overlaid on the circular graphic.

OPPORTUNITY & PARAMETERS

OPPORTUNITY

I discovered my opportunity in the intersections of recreation and reciprocity. Many problems can be solved by building relationships in which we give back to the land in exchange for what it provides to us.

In order to facilitate a more meaningful sense of place among recreators visiting the sacred land in San Juan County, a digital platform could be used to mobilize people who are already visiting the area for outdoor recreation and identify opportunity areas for them to give back to the land in some way while visiting.



PARAMETERS

The constraints and considerations of this project are derived from various aspects of the research. The goals set aim to incentivize people to visit the sacred land with respect, support rural communities, and steer away from the mindset that rural areas are “post-modern consumption spaces.” The primary objective is to bridge the gap between recreation and reciprocity



The image features a landscape photograph of a mountain range with a central circular graphic overlay. The mountains are dark and silhouetted against a lighter sky. The foreground shows a valley with some vegetation. The circular graphic consists of a solid white circle in the center, surrounded by a dashed white line, and a larger, semi-transparent brown circle that overlaps the landscape. The text "DESIGN PROCESS" is centered within the white circle.

DESIGN PROCESS

PRECEDENTS

I looked at a few different mobile apps as reference for ideas and inspiration, and these four were the most influential in my process. Geocaching, Questival, and Pokemon Go all have some sort of game-like aspect and they require physical engagement to complete some sort of mission or task. The Arch Monitor app is a platform that is already used in Bears Ears, and I referenced this to build on its ideas and concepts through my design process.



GEOCACHING



COTOPAXI QUESTIVAL



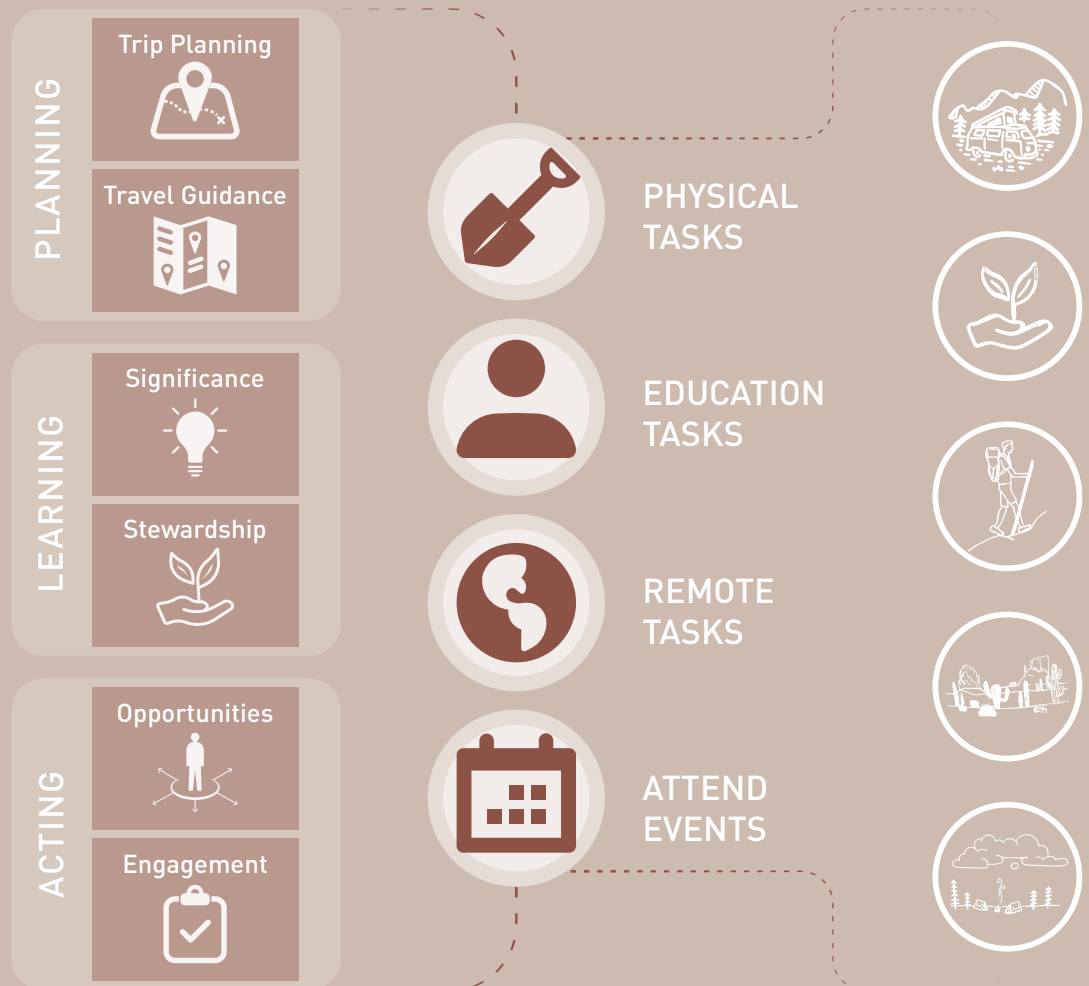
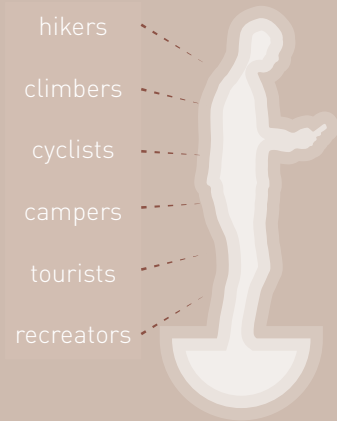
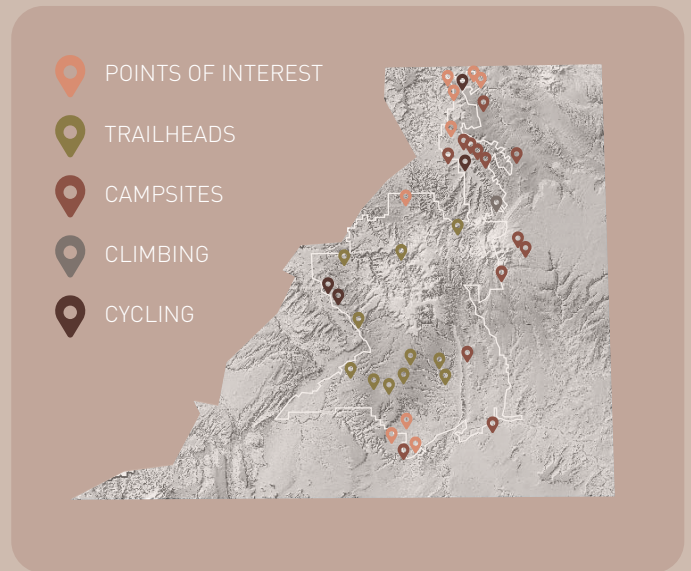
POKEMON GO



ARCH MONITOR (FOCM)

PLATFORM OUTLINE

This led me to the idea of a mobile app that would help users plan trips for outdoor recreation, learn about the significance of the land and how to visit respectfully, as well as identify opportunities to benefit the land in some way. Users of the app will complete tasks across 4 different categories: physical tasks, educational tasks, remote tasks, and organized events or service projects. These typically coincide with the location of relevant places on the map. After engaging in various ways, the user will earn badges that can add up to rewards for their stewardship.



USER GROUPS

User groups for this platform could vary greatly, because it could include anybody who is interested in learning more about the sacred land and/or completing service work in the area or remotely. However, the platform is mainly targeted towards people planning to visit Bears Ears National Monument for outdoor recreation purposes.



PRIMARY USERS

People traveling to Bears Ears National Monument for outdoor recreation

engagement before, during, and after travel

SECONDARY USERS

San Juan County residents

reciprocal relationships with the land they call home

People who are unable to travel to the area

contributing from a remote perspective

PARTNERS

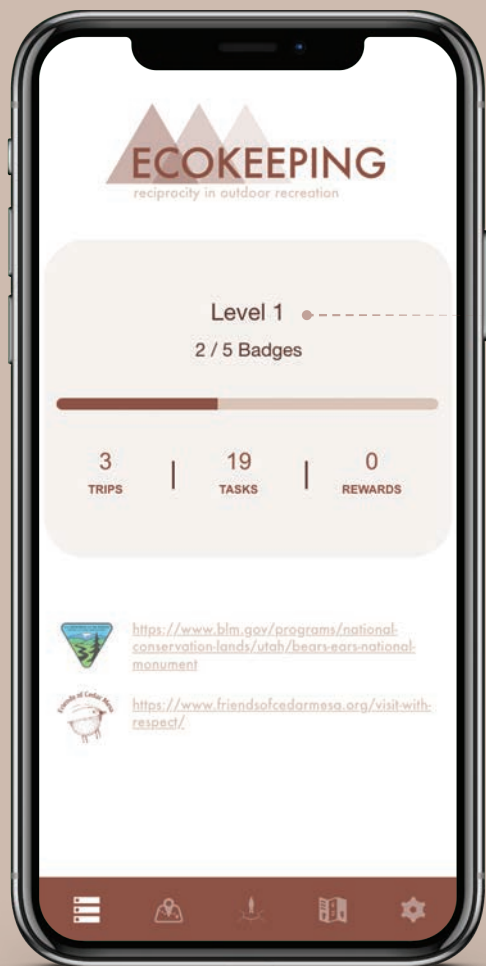
Non-governmental organizations that are working in the area

Deploy tasks for recreators to complete and share important information with users

A landscape photograph of a mountain range with a central circular graphic overlay. The mountains are dark and silhouetted against a lighter sky. The foreground is a flat, open area. The entire image is framed by a large, semi-transparent circle with a dashed border. The text 'PRODUCT OUTCOMES' is centered over the image in a white, sans-serif font.

PRODUCT OUTCOMES

MOBILE APP OVERVIEW

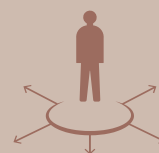


This shows the dashboard of the EcoKeeping mobile app, where users can navigate through different features, view their progress, and link to informational sites regarding Bears Ears National Monument. The implementation of the app would thrive with facilitation and management from organizations working in the area, identifying meaningful projects and tasks for recreators to complete, and sharing important information for visitors. The platform engagement is characterized by a game-like element in that the user moves through different levels by completing a variety of tasks. Each level completion leads to a reward. In order, these include a sticker, a badge, a pair of socks, a water bottle, a T-shirt, and a beanie.



TRIP PLANNING

view past and upcoming trips and input new trip information



OPPORTUNITIES

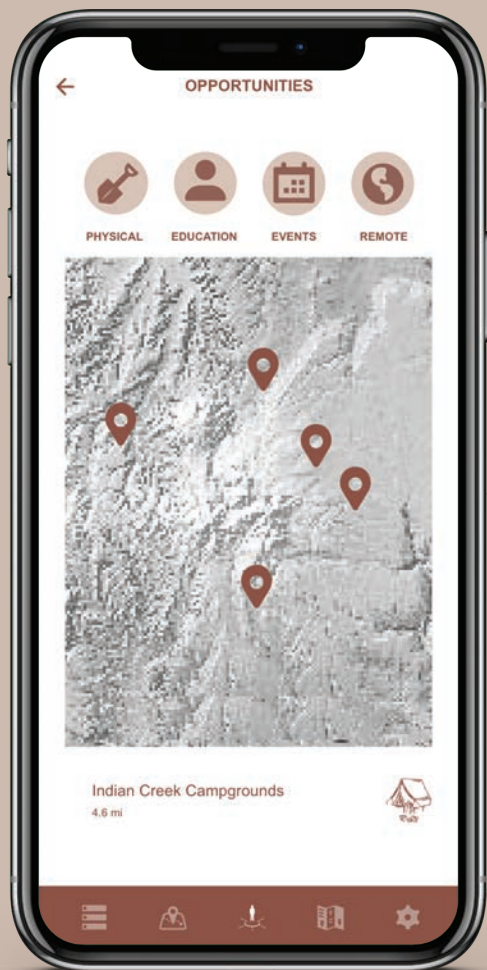
explore the many different opportunities available to you



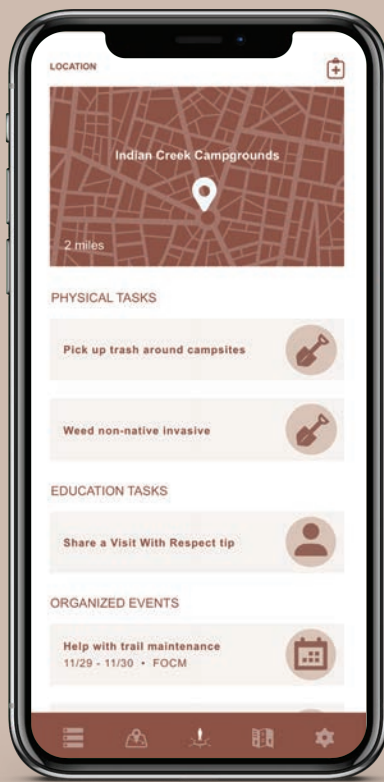
REFLECTIONS

view an activity feed with user posts as well as organizer posts.

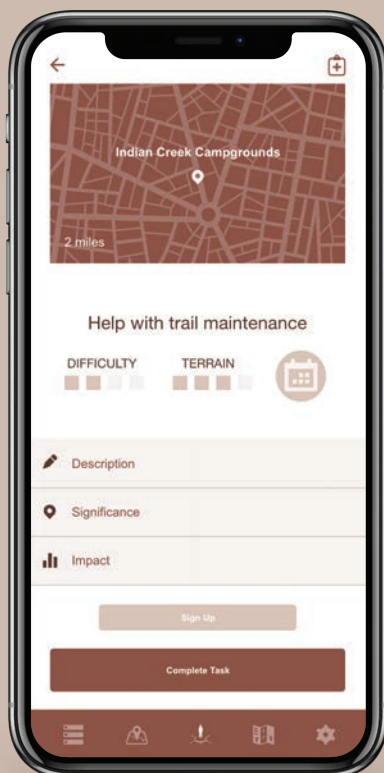
USER ENGAGEMENT



The opportunities panel of the platform displays a map of all of the points of interest that coincide with the location of a planned trip, including trailheads, campsites, and climbing areas. This page can also be explored without trip parameters to view the full map, and can be limited to only tasks that can be completed remotely as well.



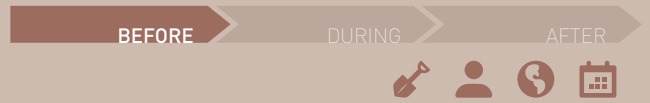
After the user taps on a pin corresponding to a location they want to visit, they will be able to see everything they can do at that location. They are organized by the type of task: physical, educational, remote tasks, or organized events. The user can add tasks to a clipboard to download info to use when internet is not available.



Each task will have information to be viewed before completing, including the description and instructions needed, historic or cultural significance of that particular area, and the impact of the task. The information here is generated by the organization deploying the task, and they can provide as little or as much training information as they see necessary.

USER JOURNEY MAP

This shows a potential journey map of a user who is very motivated for stewardship. He begins by downloading the app and after exploring the possibilities, he immediately begins to complete some remote tasks. Many of the remote tasks are simple ways to become more educated on the history of Bears Ears as well as the importance of protecting it.



Other tasks that can be completed before a trip could include signing up for volunteer and educational events, researching the visit with respect guidelines, collecting donation supplies, and finding some local businesses to support while visiting.



USER JOURNEY MAP

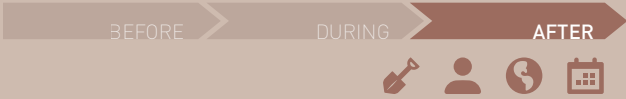
There are many different tasks that can be completed while the user is on a trip to the area for outdoor recreation. These can be very simple things that can be done simultaneously while hiking and exploring. They can also include organized events with non-profits in the area, visiting local businesses, and helping with conservation efforts.

Through this hands-on experience, the user begins to learn about the land in ways they would not have otherwise been able to. It creates a unique sense of place and a more meaningful travel experience.



USER JOURNEY MAP

After the trip, the user records his completed tasks in the app, posts photos and reflections about the experience, and earns coinciding badges for those tasks. This could be completed while still at Bears Ears, but it is flexible due to service issues in the area. After recording his progress, he moves to level 2 and receives an EcoKeeping sticker in the mail. This game-like aspect of the platform encourages users to continue engaging with the app, completing acts of service, becoming more educated on the topic, and advocating for the protection of Bears Ears.



Another enticing possibility of this platform is its ability to motivate people to get more involved and take on more responsibilities through roles such as a Visit With Respect Ambassador or Site Steward.



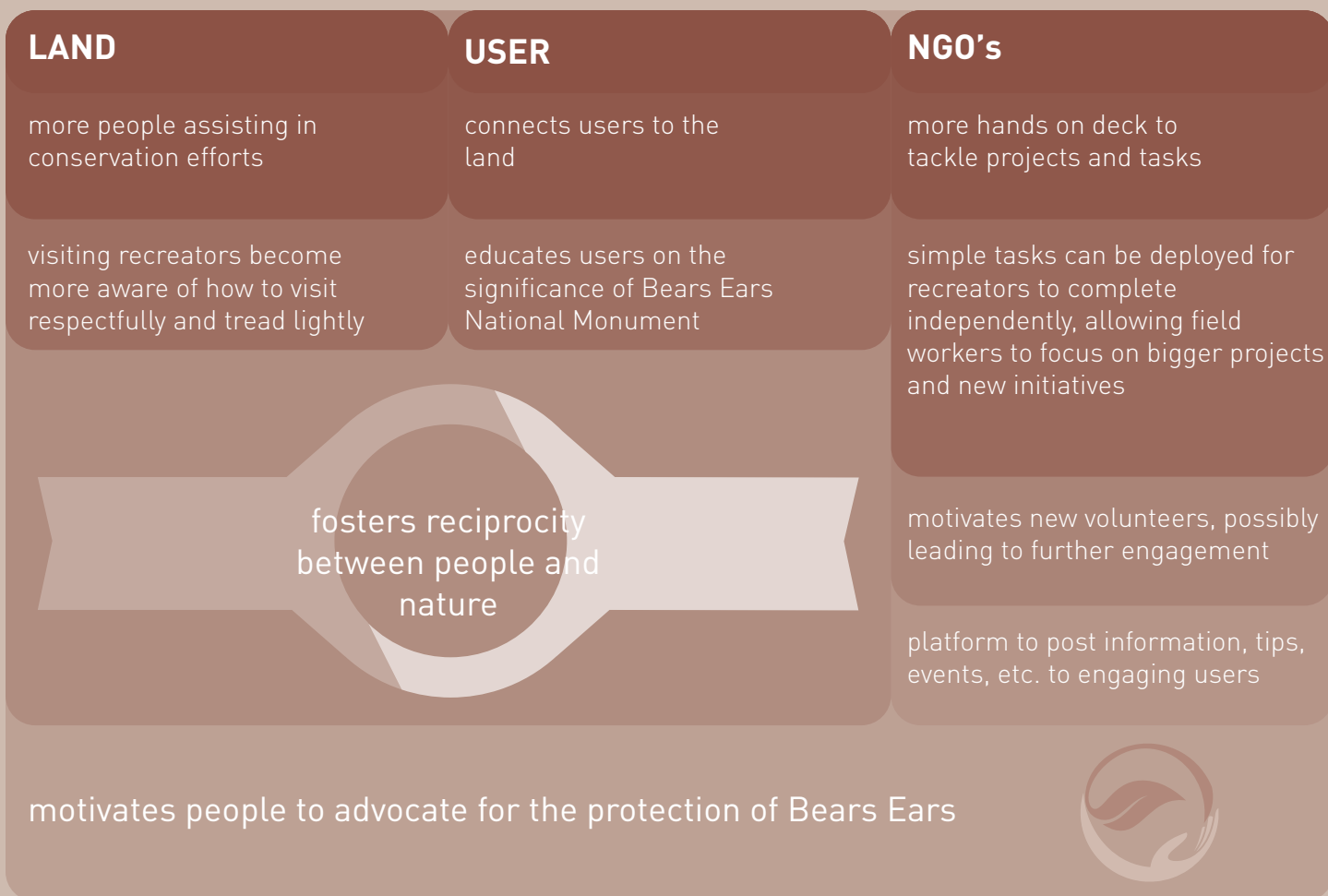


IMPACT

IMPACTS OF PLATFORM

The impacts of this app would benefit the users, the land, and the organizations involved. It gets more people involved in conservation efforts and educates more of the visitors on how to visit respectfully. The user is given an opportunity to connect to the land in a unique way by giving back to the it. This fosters reciprocity between people and nature in the recreation industry.

NGO's can benefit from this by having access to more volunteers for projects, and deploying people visiting the area to work on smaller tasks while they focus on bigger projects and initiatives. Overall it is beneficial in a way that helps motivate people to advocate for the protection of the sacred land.





THANK YOU!

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