



Managing the Masses: Recreation Management on Pikes Peak

by Hannah Rider, 2017-18 State of the Rockies Project Fellow

Introduction

Rising high above the eastern plains of Colorado, Pikes Peak occupies a unique place in the interface between wilderness and civilization. While Zebulon Pike, the man contracted to explore this area of the Louisiana Purchase, once thought it to be unclimbable, Pikes Peak is now the most accessible fourteen-thousand-foot mountain in the country. As a result, it is the mountain with the highest rate of visitation in the U. S. (Pikes Peak America's Mountain, 2016). In the past few decades, the demand on Pikes Peak's resources has been increasing. As more people move to the Front Range of Colorado and demand for recreational opportunities increases, current management practices and infrastructure will not be able to keep up with the influx of visitors. In 2016, nearly one million people accessed Pikes Peak through the major access points: the Pikes Peak Highway, the Cog Railway, the Barr Trail and other connected hiking trails, the Manitou Incline, and Barr Camp (see fig. 1).

It is clear that increasing numbers of visitors have been coming to the Pikes Peak area, and it can be reasonably expected that these numbers will continue to rise. One reason for this is the proposed Ring the Peak Trail, a loop trail encircling Pikes Peak. The trail, largely comprised of sections of other trails, is nearly completed, except for a section on the south side that faces ecological and private property complications. In 2016, it was identified by Governor Hickenlooper as a "16 in 16" project, and he believes that "once Ring the Peak is done it will be a national and ultimately an international destination" (Healy 2016). Currently, a consulting firm, hired by the Trails and Open Spaces Coalitions and funded by a Great Outdoors Colorado (GOCO) grant, is developing a plan

for completing the ring (Davies 2017). When this trail is completed, it will draw even more visitors to the area, and will put even more pressure on the peak's fragile ecosystem.

The necessity of sound management is multifaceted due to the social and economic impacts of outdoor recreation. Recreation on public lands is an important economic driver in the West. According to Outdoor Industry Association's economic report, Colorado outdoor recreation annually generates \$28 billion in consumer spending, \$2 billion in state and local taxes, \$9.7 billion in wages and salaries, and 229,000 direct jobs (Outdoor Industry Association 2012). From estimates of visitors to Pikes Peak and estimates of user spending on recreation, Pikes Peak generates around \$117 million for the local economy (see fig. 2). While many cities are embracing this economic trend, Colorado Springs and other communities in the Pikes Peak region have not fully capitalized on Pikes Peak's economic potential.

In order to avoid the negative impacts of overuse and leverage the possible benefits of the Pikes Peak recreation area, a comprehensive management plan is necessary. By examining effective management in other recreation complexes around the country, successful practices can be applied to the Pikes Peak region. The purpose of this study is to estimate future usage of the peak's recreational opportunities, and propose a management plan that will retain accessibility and the overall quality of visitor experience, while maintaining the ecological integrity of this ecosystem.

Pikes Peak Recreation Complex

The Pikes Peak Recreation Complex is defined as the area above 8,500 feet elevation on Pikes Peak's eastern

Hannah Rider is a Student Fellow for the 2017-18 State of the Rockies Project. From Carmel Valley, California, she developed an appreciation for the outdoors growing up in the coastal mountains of Big Sur, California, which has influenced her academic interest in environmental issues. She will graduate in 2018 with an Environmental Policy degree and a minor in Philosophy.

slope that is also south of US Route 24, east of Colorado Highway 67, and north of Gold Camp Road. This specific area was chosen to comprehensively include all activities that directly affect the peak, while excluding adjacent attractions that only have indirect ecological and economic effects, such as the Garden of the Gods or city parks. This designation includes attractions, such as the Cog Railway, the Pikes Peak Highway, and the top of the Manitou Incline, as well as backcountry uses, such as the Barr Trail, the Ring the Peak Trail, backcountry skiing, Off Highway Vehicle (OHV) use, and more. The complex can be accessed through frontcountry portals like the Pikes Peak Highway or backcountry portals like Cheyenne Canyon State Park.

Ring the Peak Trail

The Ring the Peak Trail is a proposed loop trail encircling Pikes Peak that is currently under development. The trail, largely comprised of sections of other trails, is nearly completed except for an 8-mile section on the southwest side that faces ecological and private property complications, and a 5-mile section on the northeast side whose construction is already permitted and funded. In 2016, Colorado Springs Trails and Open Space Coalition received a GOCO grant to hire a consulting firm to develop a plan for completing the ring. GOCO, or Great Outdoors Colorado, is born of a constitutional amendment that “redirected lottery proceedings being used for capital construction projects to projects that protect and enhance Colorado’s wildlife, park, river, trail, and open space heritage (Great Outdoors Colorado 2013). The organization provides grants for conservation of public land, maintenance of recreation areas, and expanded access to these areas (Great Outdoors Colorado 2016). The Ring the Peak Trail was also identified as one of Governor Hickenlooper’s “16 in 16” trails, of which he stated, “once Ring the Peak is done it will be a national and ultimately and international destination” (Boster 2016).

Friends of the Peak, a volunteer-based non-profit dedicated to enhancing recreation and education on Pikes Peak, has been the driving force behind the Ring the Peak trail up to this point. They were inspired by Design Workshop Inc.’s Pikes Peak Multi-Use Plan, a 1999 report that envisioned a long-term plan for the future of the Pikes Peak region (Design Workshop, Inc., 1999). This report

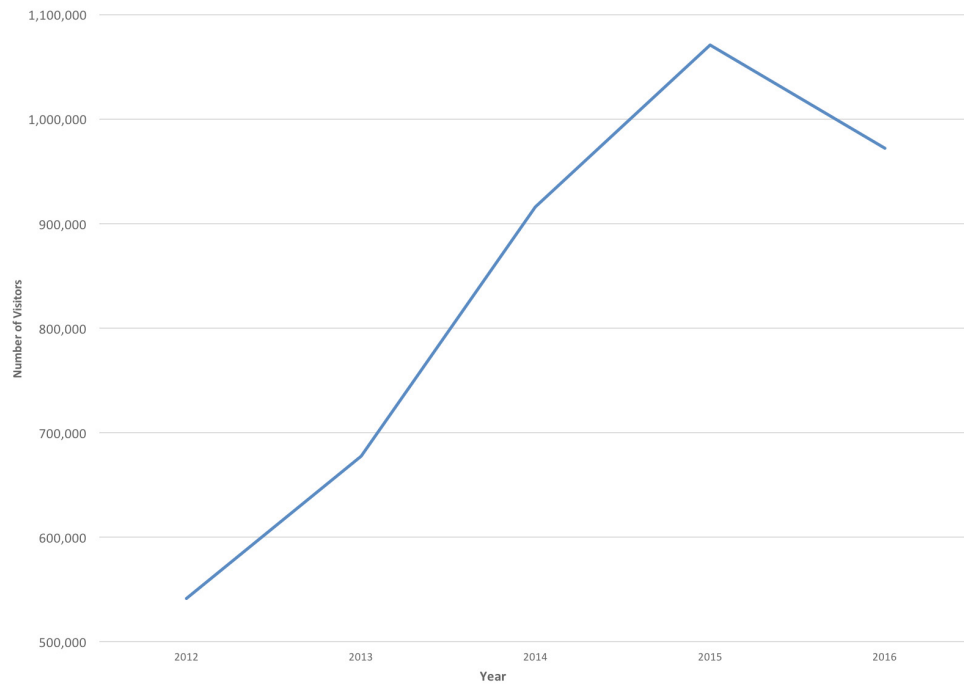
recommended a 60 to 70-mile loop trail around Pikes Peak, consisting of mostly currently existing trails with some new connecting segments (Strub 2015). With the support of the city and guidance from Design Workshop, Inc.’s plan, Friends of the Peak began to connect existing trails and to build new segments where necessary. Through this work, they were able to construct about 80% of the loop. However, the unfinished section on the south side of Pikes Peak is much more complicated than the other portions of the trail. The area through which the trail needs to pass is a complicated patchwork of private property, municipal water sources, and protected bighorn sheep breeding ground. The job of the consulting firm, N.E.S. Inc., is to fully understand the political and ecological landscape, meet with stakeholders, and produce a comprehensive plan to finish the trail that benefits all stakeholders. The Ring the Peak team began working on this project in July of 2017, and expects to conclude the project in the summer of 2018.

Past and Current Visitation of the Pikes Peak Recreation Complex

Between increasing usage and the added draw of the Ring the Peak Trail, the Pike Peak Recreation Complex will continue to be threatened by overuse. When there is more concentrated human activity in an area, there are more impacts to the ecosystem. At a certain point, that impact surpasses the resilience of that ecosystem and creates irreparable damage. High alpine ecosystems are particularly sensitive to human disruption. Erosion, improper disposal of waste, feeding animals, and other disruptions each have negative effects, but multiplied by increasing visitation, Pikes Peak is at risk of permanent ecosystem damage.

In order to understand the current visitation to the Pikes Peak Recreation Complex, data was collected from all attractions located within the complex as defined above. This required collecting usage data from each of the separate managing agencies and aggregating the numbers to estimate overall usage of the Pikes Peak Recreation Complex. While the time span of usage data varied from multiple decades to only a few years, it was possible to obtain data for all known recreational visitation between 2012 and 2016. In this timeframe, there was a significant increase in usage.

Figure 1: Visitation to the Pikes Peak Recreation Complex from 2012-2016



This graph demonstrates the increase in visitors to the Pikes Peak Recreation Complex through the most accessed points: the Pikes Peak Highway, the Cog Railway, the Barr Trail, and the Manitou Incline, as well as large events such as the Pikes Peak Hill Climb and the Pikes Peak Marathon. This does not include backcountry use or access through less popular portals on the perimeter of the recreation complex.

Current Management

The peak is managed by a combination of public and private stakeholders, ranging from the federal to the local level. Each of these agencies is responsible for separate areas and has different goals for their jurisdictions (see **Figure 2**). While this disperses the burden, it allows for gaps in management and does not account for the interaction between the different sections.

United States Forest Service (USFS): The majority of Pikes Peak is part of the Pikes San Isabel National Forest. The Pikes Peak Ranger District manages 230,000 acres which support “recreational opportunities, water, fish and wildlife, timber, grazing, and scenic beauty for the American people” (United States Forest Service). Recreationally, the Pikes Peak Ranger District manages most of the backcountry trails and activities. This includes major trails, such as the Barr Trail and the Craggs Trail.

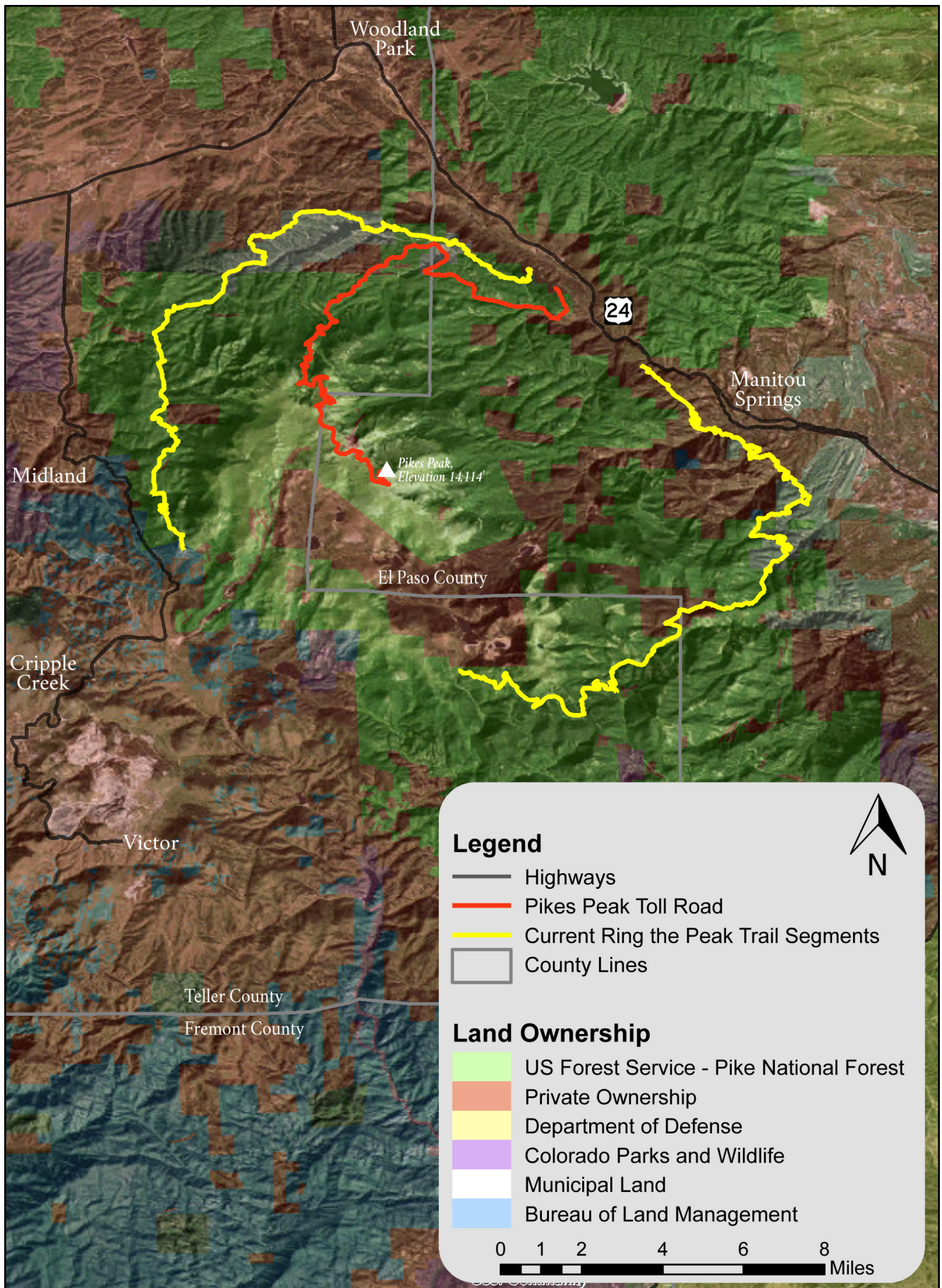
Bureau of Land Management (BLM): The BLM manages small areas of land on the south side of Pikes Peak. While most of the BLM’s land holdings in this area fall outside the boundary of the recreation complex, their land is important in finishing the Ring the Peak Trail.

Colorado Parks and Wildlife (CPW): CPW is responsible for the bighorn sheep populations that inhabit this area. They are mostly located on the south slope of Pikes Peak, and their breeding grounds are protected to ensure the continued survival of the population (Davies 2017).

Colorado Springs Utilities (CSU): Some of the water for the City of Colorado Springs and the surrounding area is collected and stored in reservoirs on Pikes Peak. Around 70% of water serving the Colorado Springs area is imported from western Colorado, and is transported through pipes across the Continental Divide. This water is moved to reservoirs and water treatment on both the north and south slopes of Pikes Peak (Colorado Springs Utilities 2016). These reservoirs and associated infrastructure is vital, and CSU manages these areas to ensure their safety and efficacy.

City of Colorado Springs: Colorado Springs operates the Pikes Peak Highway, the most common visitor experience on Pikes Peak. They hold a contract with Aramark, which operates the Summit House (Davies 2017). Due to the concentration of visitation along this corridor, mitigation efforts were instated in 2001 to

Figure 2: Map of Pikes Peak Recreation Complex



Pikes Peak and the surrounding region is comprised of a fragmented patchwork of different land owners and managers.
 Source: Colorado Ownership, Management and Protection Dataset, USGS National Elevation Dataset, ESRI, Trails and Open Space Coalition

prevent degradation. These efforts specifically focus on erosion and runoff concerns (Resource Information Group, United States Forest Service 2001). Established sightseeing areas and the entrance fee also serve to prevent negative impacts.

The Broadmoor: The Broadmoor operates the Pikes Peak Cog Railway, which has been open since 1891 (see **Figure x**, Cog Railway 2017).

Beyond the agencies that directly manage the land on Pikes Peak, there are many other entities that are stakeholders in the management of this area: Colorado Springs, Manitou Springs, Cripple Creek, Woodland Park, Victor, El Paso County, Teller County, and non-profit organizations dedicated to preserving this area (Design Workshop Inc. 2001).

While each of these agencies operate and manage their areas, there is no umbrella agency responsible for maintaining the ecological sustainability of the whole peak. One result of this fragmented management structure is a lack of conclusive usage numbers.

Economic Impact and Potential

While outdoor recreation has obvious ecological impacts, there is also significant untapped economic potential in the burgeoning outdoor recreation industry. According to the Outdoor Industry Association, Americans spend around \$887 billion on recreation products and services, and the industry brings in an average of \$65.3 billion in federal tax revenue and \$58.2 billion in state and local tax revenue annually (Outdoor Industry Association 2017). This industry is the third largest in revenue nationally, only surpassed by financial services and insurance, and outpatient healthcare (Outdoor Industry Association, 2012). Sources of revenue go beyond gear and guiding services. They include transportation, lodging, food, and many other facets of local economies.

Currently, Colorado Springs does not account for recreation spending as separate from tourism, so the magnitude of economic impact is unclear. Without understanding the extent of the economic benefits of outdoor recreation in the Pikes Peak region, there is little incentive to invest in the industry and increase connectivity between urban areas and the wilderness.

Figure 3: Top of the Cog Railway and the Pikes Peak Summit House



Tourists exit the Cog Railway, one of the three main ways to reach the summit of Pikes Peak. The Cog Railway runs from Manitou Springs to the summit, providing a unique experience of reaching the top of a 14,114' peak by train. Source: Jonah Seifer

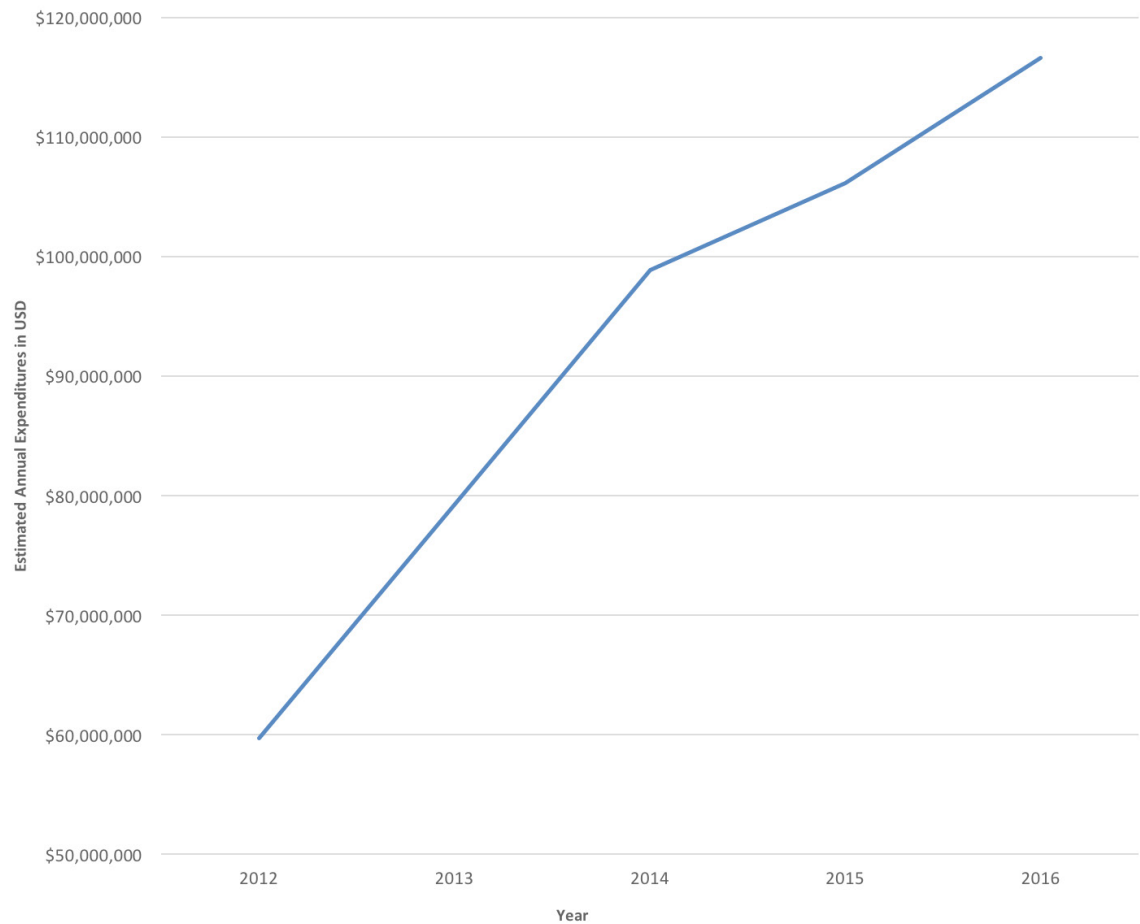
In order to estimate how much profit the Pikes Peak Recreation Complex brings to the area, we calculated the spending of Pikes Peak visitors through averages collected in a study of all national forest public lands. This study categorized National Forest visitors into types, from sightseeing to backcountry overnight use, and further divided these categories into local and non-local. With these divisions, the study estimated the amount that each type of user spends on average. Based on the methods established in this study, it is estimated that in 2016, \$116,636,878 was spent in the Pikes Peak Recreation Complex. While this figure is an estimate, it proves that a significant amount of money is generated by the Pikes Peak Recreation Complex and thus outdoor recreation is a significant sector of Colorado Springs' economy. As demonstrated in Outdoor Industry Association's study, outdoor recreation is becoming an increasingly important industry.

Case Studies

To understand recreation management in general and find solutions for capacity issues in the Pikes Peak Recreation Complex, we selected other recreation complexes as case studies of effective management. These recreation complexes were selected because of similarities to the Pikes Peak region, in size and variety of activities, as well as the effective strategies they have in place.

Arkansas Headwaters Recreation Area is a river corridor between Leadville, Colorado and Pueblo, Colorado. Recreation is focused mostly on river activities, such as kayaking, rafting, and fishing, but the area includes opportunities for hiking, biking, climbing, camping, OHV, and skiing. It is managed through a Cooperative Management Agreement between Colorado Parks and Wildlife, the Bureau of Land Management, and the U. S. Forest Service. A Cooperative Management “engages

Figure 4: Estimated Annual Recreation Expenditures within the Pikes Peak Recreation Complex



This chart shows the average spending of different types of users in National Forest public land, as estimated by White and Stynes in “National Forest Visitor Spending Averages and Influence of Trip-Type and Recreation Activity”. These estimates, multiplied by visitation numbers from 2012 to 2016 and adjusted to 2017 dollars, produced an estimate of visitor spending in the Pikes Peak Recreation Complex.

Figure 5: Artificial Wave in the Arkansas Headwaters Recreation Area



This wave is formed by an artificial hydraulic structure anchored to the bed of the Arkansas River in Salida, Colorado. The town has capitalized on river recreation, constructing a variety of whitewater features to promote tourism in the Arkansas Headwaters Recreation Area. Source: Jonah Seifer

Figure 6: Hecla Junction in the Arkansas Headwaters Recreation Area



Hecla Junction Campground is located on the banks of the Arkansas River next to Browns Canyon National Monument. Source: Alex Harros

the sustained involvement of the local host community residents and their governments, recreation-tourism business and industry, and public land management agencies” (Design Workshop, Inc. 2001). In this case, stakeholders divided up responsibilities between themselves, and established that agreement in a document. This ensures the continuity and feasibility of management.

Figure 7: Summary of Arkansas Headwaters Recreation Area Management

Types of Use	Hiking, whitewater rafting, kayaking, fishing, camping, climbing, biking, OHV, sightseeing, cross country skiing, snowmobiling, horseback riding
Management Structure	Public-private partnership: Cooperative Management Agreement between Colorado Parks and Wildlife, Bureau of Land Management, and United States Forest Service.
Stakeholders	Colorado Parks and Wildlife, United States Forest Service, Bureau of Land Management, Citizen's Task Force
Financial Structure	Colorado Parks and Wildlife collects fees within the recreation area that are directed into management and improvement of the area.
User Restrictions	Boating capacities are established, and camping is restricted to designated sites.

10th Mountain Division Huts are located in Colorado between Leadville, Vail, and Aspen, and offer an alternative to camping for backcountry activities such as hiking, biking, and skiing. They are located on United States Forest Service land, but are managed by the 10th Mountain Division Hut Association, which maintains the facilities and manages use.

Figure 8: Summary of 10th Mountain Division Hut Management

Types of Use	Hiking, backpacking, snowshoeing, cross country skiing, backcountry skiing
Management Structure	Public-Private Partnership: 10 th Mountain Division Hut Association with the United States Forest Service
Stakeholders	10 th Mountain Division Hut Association, United States Forest Service, private hut owners
Financial Structure	10 th Mountain Division Hut Association manages the hut system and fees for overnight stays
User Restrictions	While there is no limit for day use, the hut permit system limits visitors and minimizes their impact.

The Colorado Trail is a 500 mile thru-hike stretching from Denver to Durango. The trail crosses through six different Forest Service Districts, and is maintained by the Colorado Trail Foundation, based out of Golden, Colorado. This complex supports day hiking, backpacking, biking, OHV, equestrian, hunting, and fishing.

Figure 9: Summary of Colorado Trail Management

Types of Use	Day hiking, backpacking, biking, OHV, hunting, fishing, horses
Management Structure	Public-Private Partnership: Colorado Trail Foundation and United States Forest Service
Stakeholders	Colorado Trail Foundation, United States Forest Service - Pike San Isabel National Forest, White River National Forest, Gunnison National Forest, Rio Grande National Forest, and San Juan National Forest, Denver Water
Financial Structure	The Colorado Trail Foundation is a non-profit that does trail maintenance. Through grants and fundraising, they are able to fund maintenance.
User Restrictions	While most of the trail is unregulated, there are permits for the wilderness areas that the trail crosses through. Also, Waterton Canyon is managed by Denver Water and users are restricted to the trail.

The Appalachian Trail is the second longest trail in the United States and runs north-south along the east coast. Completed in 1937, it is one of the most well-known and heavily traveled thru-hikes. This complex is managed by the Appalachian Trail Conservancy, which has a public-private partnership with the Forest Service, state parks, and the National Park Service.

Figure 10: Summary of Appalachian Trail Management

Types of Use	Hiking, camping, backpacking
Management Structure	Public-Private Partnership: Appalachian Trail Conservancy with the National Park Service
Stakeholders	Appalachian Trail Conservancy, state governments
Financial Structure	The Appalachian Trail Conservancy is a non-profit that maintains the trail through grants and volunteer work.
User Restrictions	There are free and uncapped permits in wilderness areas along the trail, but generally there are no restrictions.

The Wonderland Trail in Mount Rainier National Park is a loop trail encircling Mount Rainier in Washington. Activities on and around the Wonderland Trail include day hiking, backpacking, fishing, boating, climbing, biking, skiing, and snowshoeing. Since it is within a National Park, the complex is managed solely by the National Park Service, with no private component to management.

Figure 11: Summary of Wonderland Trail Management

Types of Use	Day hiking, backpacking, fishing, boating, climbing, biking, skiing, snowshoeing, sightseeing
Management Structure	Public: National Park Service
Stakeholders	National Park Service
Financial Structure	The National Park Service has more funding for recreation management than other agencies, and fees return to the park's management.
User Restrictions	The park has an entrance fee, and every activity besides day hiking and sightseeing requires a permit.

Vail Pass Winter Recreation Area is a specified area within the White River National Forest that is used for backcountry skiing, cross country skiing, and snowmobiling. Managed by the Forest Service, this area has an effective permit system that manages number of visitors and minimizes conflict between motorized and non-motorized users.

Figure 12: Summary of Vail Pass Winter Recreation Area Management

Types of Use	Backcountry skiing, cross country skiing, snowmobiling
Management Structure	Public: United States Forest Service
Stakeholders	United States Forest Service - White River National Forest
Financial Structure	Users can pay daily fees or purchase a season pass between the months of November and May.
User Restrictions	Within the recreation area, there are designated motorized and non-motorized areas. Each user must stay within their area.

The Tahoe Rim Trail is a loop trail around Lake Tahoe in California. This trail is used by day hikers, backpackers, bikers, skiers, runners, equestrians, and snowshoers. This trail is managed by the Tahoe Rim Trail Association, which works with the Forest Service, as well as California and Nevada state parks, employing a similar management structure to that of the Appalachian Trail.

Figure 13: Summary of Tahoe Rim Trail Management

Types of Use	Day hiking, backpacking, biking, trail running, horses, snowshoeing, cross country skiing
Management Structure	Public-Private Partnership: Tahoe Rim Trail Association with United States Forest Service, California state parks, and Nevada state parks
Stakeholders	United States Forest Service, state governments
Financial Structure	The Tahoe Rim Trail Association is a non-profit that fundraises and provides volunteer trail work. They have an "Adopt a Mile" program, where individuals or companies can be featured as supporters of the trail.
User Restrictions	Camping is restricted to designated areas in the state parks.

Results

From these case studies, we found that, while public management works in some cases, the most effective management strategy is a public-private partnership. The public agencies own a large portion of the land and have the resources for basic management. However, adding private elements to management allows for an overarching vision across jurisdictional boundaries and over a longer period of time. The Appalachian Trail, the Tahoe Rim

Trail, the Colorado Trail, the 10th Mountain Division Huts, and the Arkansas Headwaters Recreation Area all have public-private partnerships within their management structure. While the specific roles of the public and private stakeholders differ in the different complexes, the cooperation of both is essential to success.

For sustained financial stability, most of these complexes leveraged the fundraising capabilities of their non-profit partners. While public agencies have budgets for maintenance of existing infrastructure, inclusion of a dedicated fundraising team can more readily support new projects or proactive management strategies. These areas attempted to keep fees to a minimum, only charging for activities that are costlier to manage. Since necessary funds can be raised through private donations or corporate partnership, activities can be free or accessed following payment of a non-prohibitive fee.

Another lesson from these case studies is that different uses require different intensities of management. Day hiking, for example, only requires low-intensity management, as long as infrastructure, such as bathrooms and parking, are already in place. Walking on trails has little ecological impact, and places easily accessible for day hiking usually have durable trails in place. OHV and equestrian use, on the other hand, have a much bigger impact and erode the trail more quickly. In this case, limitations can be used to keep use at a sustainable rate, and fees can be levied to fund maintenance. In all cases, however, it is important to know the number of users visiting the recreation complex. Whether through a permit system or trail counters, understanding visitation quantity and type is crucial to successful management.

Management Proposal

Visitation data in the Pikes Peak region and the case studies of other similar recreation complexes informed a proposal for recreation management in the Pikes Peak Recreation Complex.

Management Structure

Due to the diverse group of stakeholders in the area, a non-profit management model would be most effective for sustainable management of the Pikes Peak Recreation Complex. The non-profit model features just

one organization with the long term goal of overseeing all management. As defined by Design Workshop Inc.'s report, the non-profit model:

“involves the formation of a volunteer board of directors, who raises money from grants and corporate donations, and hires an Executive Director. The Executive Director would spearhead the non-profit visioning and fundraising, in concert with the board of directors, as well as develop budgets and implementation strategies to realize the vision” (Design Workshop Inc. 2001).

The managing non-profit will create a Cooperative Management Agreement, which delegates responsibilities to each party. This will be created through a collaborative process involving all involved agencies. Agencies currently holding land jurisdiction continue to manage their sections, but there is oversight by the non-profit which prevents fragmentation in management between the different organizations and manages the complex as a continuous system. Within this structure, management responsibilities would be designated as follows:

Non-profit: Responsible for coordinating the Cooperative Management Agreement, creating the management plan, tracking visitation, and fundraising.

United States Forest Service: Responsible for maintenance of National Forest areas, and implementation and enforcement of permit systems.

Bureau of Land Management: Responsible for maintenance of BLM land, and enforcement on that land.

Colorado Parks and Wildlife: Responsible for monitoring of big game populations, and the implementation and enforcement of permit systems in their areas.

The major stakeholders would meet to update the management plan in order to continue working towards the overall vision. The Arkansas Headwaters Recreation Area case study exemplifies the success of this model. This case exemplified dynamic management without increased burden on the current agencies involved. There are collaboratively established goals to guide future management while external sources of funding allow for preventative and proactive management.

Long Term Financial Support

A major challenge for recreation areas is the inconsistency of funding. Grants for specific projects can fund construction, but rarely are they given with consistent annual funding for maintenance. Similarly, government agency funding is not sufficient to fund every project, so maintenance becomes secondary to fire management and other immediate needs. A first step for financial stability is directing fees collected in the recreation complex to maintenance and monitoring of the area. This was done in the Arkansas Headwaters Recreation Area. All stakeholders agreed to put fees towards operations, executed by Colorado Parks and Wildlife.

Within the non-profit management model, a maintenance endowment can be created, which holds funds for maintenance over time. The endowment fund would have funding sources from both local and non-local users. For local users, the Pikes Peak Recreation Complex could have a membership, which is purchased annually and has benefits to members. These benefits can be events, free gifts, and priority access to permits in permitted areas. This system would build on the 10th Mountain Division Hut Association's model. Priority permits allow guaranteed access to members without excluding non-members from using the system. The 10th Mountain Division Hut Association gives members first access, but then issues the remaining permits by a lottery system. The membership allows for a revenue source from those willing and able to pay, while still allowing fair access through a lottery.

In order to capitalize on the economic benefit of increased visitation, there could be a voluntary 1% tax in industries associated with the recreation complex. People would have the option to opt out, but that tax would directly go to maintenance and allow visitors to give back. This strategy is used in Buena Vista's South Main Development, an area of the town located on the banks of the Arkansas River.

Another potential source of funding is the outdoor recreation industry. Since public lands are the foundation for the industry, it is in businesses' best interests to contribute to their stewardship. Many outdoor gear

companies donate to trails and complexes such as this one (see appendix A). One strategy, employed by the Tahoe Rim Trail Association, is to allow companies or individuals to “Adopt a Mile” or “Adopt a Vista”. This allows for their involvement and benefits them by advertising their contribution.

Once the Ring the Peak Trail is completed, there is potential for a campground or hut system. Having managed sleeping areas for a fee will reduce the ecological impact of dispersed camping, while funding the management of these areas. Similar to the 10th Mountain Division Huts, fees would directly pay for maintaining these areas.

User Restrictions

For this area, day hiking should remain a free activity. Dispersed camping should require a free permit for visitation numbers, and fees for campgrounds and huts will be instituted if these systems are put in place. OHV and equestrian usage should be restricted to durable areas that will not be degraded by this use. Fees for these uses will be required due to the increased cost of managing for these uses. Trail hardening and frequent monitoring is necessary to prevent negative impacts from these activities. Similarly, all other backcountry activity should have monitoring systems, such as permits. These restrictions would be collaboratively agreed upon and enforced by the members of the Cooperative Management Agreement.

Trail Amenities and Signage

Visitation data should inform what types of amenities and signage are necessary. Improvement of this infrastructure will decrease the impact on the areas and reduce future maintenance. The managing non-profit can designate, fund, and delegate the construction and maintenance of these amenities.

Conclusion

At one time in American history, recreation was characterized by individual experiences in the wilderness, without any rules or regulations, a true representation of freedom. However, as population continues to grow in Colorado’s Front Range, and visitors flock from

around the world to Colorado’s open spaces, recreation management is playing an increasingly important role. The Pikes Peak region’s natural beauty and unparalleled accessibility make proactive management necessary. While many specific lessons can be learned from case studies of recreation management, the most important lesson is the necessity of effective collaboration. With different agencies and organizations working together, there is greater efficiency and preferable management outcomes without overburdening any of the individual stakeholders. Creating a management plan for the Pikes Peak Recreation Complex will ensure that future generations can experience the natural beauty of the Pikes Peak region in perpetuity.

Bibliography

Appalachian Trail Conservancy. "2015 Annual Report", 2015.

Boster, Seth. "Hickenlooper: Colorado's Ring the Peak Trail 'Will Be an International Destination'". coloradosprings.com, 2016, <http://www.coloradosprings.com/hickenlooper-colorados-ring-the-peak-trail-will-be-an-international-destination/article/1586950>.

Bureau of Economic Analysis. News Release: Outdoor Recreation Satellite Account, 2018, <https://www.bea.gov/newsreleases/industry/orsa/orsanewsrelease.htm>.

"City of Colorado Springs Parks System Master Plan", City of Colorado Springs Parks, Recreation, and Cultural Services, 2014.

Colorado Springs Utilities. "Colorado Springs Water Supply System", 2016.

Colorado Trail Foundation. "Comments on San Juan National Forest Draft Land Management Plan", 2008.

Daniels and Marion. "Visitor Evaluations of Management Actions at a Highly Impacted Appalachian Trail Camping Area", *Environ Manage.* 38(6). 2006.

Davies, Susan. "TOSC Interview." In-person interview. 8 June 2017.

Dodge, Ben. "Ben Dodge: 10th Mountain Division Hut Association." Interview by phone. 21 June 2017.

"The economic benefits of parks and recreation in Colorado Springs", The Trust for Public Land, 2017.

El Pomar Foundation. "Mountains Matter to Millennials White Paper: 2016 Survey and Roundtable Results Summary", Pikes Peak Recreation and Tourism Heritage Series, 2017.

"Federal Outdoor Recreation Trends: Effects on Economic Opportunities." National Center for Natural Resource Economic Research, 2014.

Great Outdoors Colorado. 2016 Annual Report, 2016. www.goco.org/report.

Great Outdoors Colorado. "History", 2013, www.goco.org/about-us/history.

Healy, Eileen. "Ring the Peak Wins State '16 in 2016' Designation." TOSC, 2016, www.trailsandopenspaces.org/2016/01/20/ring-the-peak-wins-state-16-in-2016-designation/.

"History." Cog Railway, The Broadmoor, 2017, www.cograilway.com/about-the-train.asp#history.

Manning, Bill. Bill Manning: Colorado Trail Foundation." Interview by phone. 13 June 2017

Marion, Jeffrey and Yu-Fai Leung. "Environmentally Sustainable Trail Management" Patuxent Wildlife Research Center, US Geological Survey, Virginia Tech/Forestry, Blacksburg, Virginia, 2004.

Outdoor Industry Association. "The Outdoor Recreation Economy", 2012. https://outdoorindustry.org/pdf/OIA_OutdoorRecEconomyReport2012.pdf.

"Pikes Peak- America's Mountain." Pikes Peak America's Mountain, 2016, parks.coloradosprings.gov/ppam.

"Pikes Peak Highway Recreation Corridor Master Plan", BRW, Inc., City of Colorado Springs, 1992.

"Pikes Peak Multi-Use Plan: Colorado Springs to Cripple Creek", Design Workshop, Inc., 1999.

"Pikes Peak Ranger District." Pike and San Isabel National Forests Cimarron and Comanche National Grasslands- Districts, United States Forest Service. www.fs.usda.gov/detail/psicc/about-forest/districts/?cid=fsm9_032731.

- "Pike San Isabel National Forest's Job and Income Contributions for 2014". United States Forest Service, 2014, [www.fs.fed.us/emc/economics/contributions/documents/at-a-glance/published/Rocky Mountain/AtaGlance-Pike-SanIsabel.pdf](http://www.fs.fed.us/emc/economics/contributions/documents/at-a-glance/published/RockyMountain/AtaGlance-Pike-SanIsabel.pdf).
- "Pike and San Isabel National Forests and Cimarron and Comanche National Grasslands Annual Monitoring Report for Fiscal Year 2013", United States Forest Service- Rocky Mountain Region, 2015.
- Pitts, Jim. "Jim Pitts: District Ranger, Salida." In-person interview. 6 July 2017.
- Potteiger, Laurie. "Laurie Potteiger: Appalachian Trail Conservancy." Interview by phone. 21 June 2017.
- "Revenue and Expenditure Graphs for CPW", Colorado Parks and Wildlife. <https://cpw.state.co.us/Documents/Financial-Sustainability/Where-the-Money-Goes.pdf>.
- Strub, Jim. "Ring the Peak Trail." Friends of the Peak, 2015, www.fotp.com/35-about/beginnings/ring-the-peak-by-jim-strub.
- Tahoe Rim Trail Association. "Tahoe Rim Trail Association", www.tahoerimtrail.org/.
- "Trail Management Plan: Tahoe Rim Trail System", United States Forest Service- Lake Tahoe Basin Management Unit, 2010. https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprd5238370.pdf.
- "Vail Pass Winter Recreation Area." White River National Forest, www.fs.usda.gov/recarea/whiteriver/recarea/?recid=40891.
- White, Eric and Daniel Stynes. "National Forest Visitor Spending Averages and Influence of Trip-Type and Recreation Activity." *Journal of Forestry*, vol. 106, no.1, 2008.
- White, Rob. "Rob White: Colorado Parks and Wildlife, Salida." In-person interview. 7 July 2017.
- "10th Mountain Division Huts." 10th Mountain Division Hut Association, 2014, www.huts.org/#.
- "13-19 Aramark Contract Review." Office of the City Auditor, Colorado Springs, 2013.
- "2014 Colorado Statewide Comprehensive Outdoor Recreation Plan", Colorado Parks and Wildlife, 2014. <http://cpw.state.co.us/Documents/Trails/SCORP/SCORPOnlineReport.pdf>.
- "2015 Visitor Report", Longwoods International, City of Colorado Springs, 2015.