

Case Study of Infrastructure and Accessibility at Aoraki/ Mount Cook National Park

Jason Fahey

Student ID: 24251931

Supervisor: Professor Heike Schänzel

Dissertation submitted to

Auckland University of Technology

To fulfill the requirements for the degree of

Masters of International Tourism Management

School of Hospitality and Tourism

Faculty of Culture and Society

July 2026

Abstract

This research project focuses on the experience of visitors at Aoraki/Mount Cook National Park (AMCNP). Recent changes at the national park, such as the implementation of paid parking and the reconstruction of one of the major swing bridges at the park, in addition to increases in visitation, instigate the need to analyze how visitors view these changes and the overall park facilities. In addition, many of New Zealand's national parks are understudied in comparison to their counterparts in Europe and North America, with most research coming from the New Zealand Department of Conservation (DOC). There is a lack of literature regarding New Zealand's national parks infrastructure and accessibility. Understanding these national parks' strengths and weaknesses allows park management to make the necessary changes to better protect the parks and improve visitors' experiences.

To address this gap in research, this project employed qualitative methods to explore and understand visitors' experiences at AMCNP. The data were gathered through a combination of collecting online reviews and observation. Thematic analysis was utilized to analyze the online reviews, while the observation data verified the claims gathered.

The findings suggest that with the continual increases in visitation, partially caused by photography and social media, management of the park needs to proactively expand already insufficient infrastructure. This expansion should be reflected in more accessible trails and either a larger parking lot or improved bus service to the park. These changes are ideal for decreasing crowds and increasing visitors' safety and satisfaction.

Acknowledgements

I would like to thank the people who provided me with assistance and guidance while working on this research project. First, I would like to thank my supervisor, Heike Schänzel, who advised and supported me through this journey. Her assistance allowed me to greatly improve the quality of the research project through constructive critique and insights into tourist behavior.

I would like to acknowledge the reviewers who left their comments about their experience at AMCNP, as none of this project would be possible without their assistance.

Lastly, I would like to share my gratitude with Auckland University of Technology and their instructors for helping me develop my academic writing and develop the tools to conduct this research project.

Table of Contents

Abstract	i
Acknowledgements.....	ii
Table of Contents	iii
List of Figures	ix
Attestation of Authorship	xi
Chapter One: Introduction.....	1
1.1 Personal Background.....	1
1.2 Background to Research Project.....	2
1.3 Research Aims and Objectives	4
1.4 Importance of Study	5
1.5 Structure of Dissertation.....	6
Chapter Two: Literature Review	7
2.1 Introduction.....	7
2.2 Management of National Parks.....	7
<i>2.2.1 Benefits of National Parks</i>	7
<i>2.2.2 Infrastructure in National Parks</i>	10
<i>2.2.3 Accessibility of National Parks</i>	13
<i>2.2.4 Funding of National Parks</i>	17

2.3 National Parks in the New Zealand Context	18
2.4 Infrastructure, Accessibility, and Revenue Management at AMCNP.....	23
2.4.1 Infrastructure at AMCNP.....	23
2.4.2 Accessibility at AMCNP	26
2.4.3 Funding at AMCNP.....	29
2.5 Chapter Conclusion	30
Chapter Three: Methodology.....	32
3.1 Introduction.....	32
3.1.1 Research Goals	32
3.2 Research Philosophy	33
3.2.1 Research Paradigm	34
3.2.2 Ontology	36
3.2.3 Epistemology.....	37
3.2.4 Axiology	37
3.2.5 Similarities to Interpretivism	38
3.3 Methodology.....	38
3.3.1 Netnography Method.....	39
3.3.2 Case Study Approach.....	40
3.3.3 Data Collection.....	41

3.3.4 Data Sources	42
3.4 Thematic Analysis	45
3.4.1 Step 1: Familiarization with the Data.....	46
3.4.2 Step 2: Generating Initial Codes	46
3.4.3 Step 3: Searching for Themes.....	46
3.4.4 Step 4: Reviewing Potential Themes	47
3.4.5 Step 5: Defining and Naming Themes	48
3.4.6 Step 6: Writing the Report	50
3.5 Ethics.....	50
3.5.1 Reflexivity.....	51
3.6 Limitations	52
3.7 Chapter Conclusion	54
Chapter Four: Findings	55
4.1 Introduction.....	55
4.2 Infrastructure.....	56
4.2.1 Campgrounds.....	57
4.2.2 Parking.....	59
4.2.3 Maintenance	60
4.3.4 Costs	61

4.3 Accessibility	63
4.3.1 Wheelchair Use	64
4.3.2 Fitness	64
4.3.3 Family Use	66
4.4 Cultural Services	67
4.4.1 Relaxation	68
4.4.2 Photography	69
4.4.3 Social Media	70
4.5 Crowding	71
4.5.1 Availability	72
4.5.3 Satisfaction	75
4.6 Rule Breaking	77
4.6.1 Sign Location	78
4.6.2 Language	81
4.6.3 Off-Trail Use	81
4.6.4 Fines	83
4.7 Chapter Conclusion	84
Chapter Five: Discussion	86
5.1 Introduction	86

5.2 Mono-Themed Comments and Challenges	86
5.2.1 Infrastructure Critique	87
5.2.2 Family Use and Fitness.....	88
5.2.3 Planning Around Cultural Services	88
5.2.4 Carrying Capacity	89
5.2.5 Communication of Rules	90
5.3 Poly-Themes Comments and Challenges	92
5.3.1 The White Horse Hill Campground Experience	92
5.3.2 Disability Accessibility.....	94
5.3.3 Decreasing Quality of Experience.....	96
5.3.4 Touristification of AMCNP.....	97
5.3.5 Rule Breaking	97
5.4 Chapter Conclusion	99
Chapter Six: Conclusion	100
6.1 Introduction.....	100
6.2 Answering Research Project's Research Questions.....	100
6.2.1 Short-Term Suggestions.....	104
6.2.2 Long-Term Suggestions.....	105
6.3 Reflection.....	107

6.4 Limitations	107
6.5 Conclusion	108
References	110

List of Figures

Figure 1. Map of DOC Protected Areas in Aotearoa/New Zealand	19
Figure 2. Timeline and Size of New Zealand's National Parks	20
Figure 3. Map of AMCNP	26
Figure 4. Topographical Map of AMCNP	28
Figure 5. Research Philosophy Framework	34
Figure 6. The Six Steps of Thematic Analysis	45
Figure 7. Merging of Themes into the Cultural Services Theme	48
Figure 8. Screenshot of Thematic Analysis Data Spreadsheet	49
Figure 9. Thematic Framework of Reviewers' Experiences at AMCNP	56
Figure 10. Sub-Themes of Infrastructure	57
Figure 11. Sub-Themes of Accessibility	63
Figure 12. Sub-Themes of Cultural Services	68
Figure 13. Sub-Themes of Crowding	72
Figure 14. Curbside Parking at White Horse Hill Campground	74
Figure 15. Sub-Themes of Rule Breaking	77
Figure 16. Photo of Sign Distance from Parking Lot	79
Figure 17. Photo of The First Swing Bridge Over Capacity	80
Figure 18. Sign Prohibiting Off-Trail Use	83

Figure 19. Google Maps Satellite Image of Curbside Parking Hazard Zone	94
--	----

Attestation of Authorship

I hereby declare that this submission is my own work and that, to the best of my knowledge and belief, it contains no material previously published or written by another person (except where explicitly defined in the acknowledgements), nor used artificial intelligence tools or generative artificial intelligence tools (unless it is clearly stated, and referenced, along with the purpose of use), nor material which to a substantial extent has been submitted for the award of any other degree or diploma of a university or other institution of higher learning.

Signed:

Name: Jason Bennett Fahey

Date: 29/7/2026

Chapter One: Introduction

1.1 Personal Background

Growing up, I have always had an appreciation for nature and a strong desire to explore.

This led me to want to explore and show others how they could enjoy finding themselves through adventuring in natural environments. This involved working at various public parks and taking care of the land visitors used for recreation. In many instances, this made me realize the challenges many people faced when trying to explore nature. Some accessibility challenges were due to disabilities, whereas others were from transportation, social, or other limiting factors.

Public parks are some of the few free or relatively cheap spaces left where people can socialize without the expectation of buying something. With more people becoming increasingly isolated and lonely (Buecker et al., 2021), I see these natural spaces as bastions of socializing. For this reason, I feel as though access to the natural environment ought to be considered a human right, and it is one I would like to cultivate and protect. I acknowledge the possible bias in my perspective, and wish to share the services provided by the environment.

This dissertation explores the perspectives of visitors to Aoraki/Mount Cook National Park (AMCNP) to understand how best to improve the park and share its services with whoever wants them. It will analyze the park's accessibility and infrastructure from these perspectives and offer suggestions on how these issues can best be managed. In doing so,

I wish to increase the quality of the visitor experience while assisting the park's management.

1.2 Background to Research Project

New Zealand has become a hub of nature-based tourism, with over half of international tourists visiting a national park during their trip (DOC, 2025a). Among these, AMCNP is the second most visited in the country from January through June 2025 (DOC, 2025a).

Considering the importance of national parks to the New Zealand tourist economy and ecology, an analysis of how these areas accommodate large numbers of visitors is increasingly relevant. Tourist satisfaction plays an important role in ensuring more visitors contribute to the New Zealand economy through repeat tourists and the attraction of new tourists (Danaher & Arweiler, 1996). This is highly relevant to New Zealand's mountain parks, which serve as strong pull factors for tourism (Pan & Ryan, 2007). Excessive visitor numbers in environmentally protected areas can degrade flora and fauna without proper precautions (Ward et al., 2002), although with intentionality, tourism can play an important role in protecting wildlife in New Zealand (Zhang et al., 2021).

In April 2025, a large storm caused erosion along the rivers of the Hooker Valley Trail at AMCNP, causing a partial trail closure while the second swing bridge on the trail is being repaired (DOC, 2025b). This trail was the most popular and accessible route within the national park, making its closure especially impactful. Additionally, DOC (2025c) has recently started charging visitors for parking at the White Horse Hill Campground at the national park, with parking now costing visitors five dollars an hour or \$25 per day.

Considering the popularity of the national park, these recent changes prompted this research project. These changes serve as an additional incentive to reexamine how operational infrastructure functions, especially in the presence of large groups of visitors.

Although the satisfaction of nature-based tourists visiting New Zealand is highly relevant to the country's tourism success, these tourists' perspectives on their trip only receive a moderate amount of research, with most of this research being conducted through the DOC, the same organization responsible for protecting and managing the country's national parks (Higham & Espiner, 2019 ; Fehnker et al., 2021; DOC, 2025a). In comparison, North American and European countries have a much higher saturation of literature on this topic coming from a variety of sources (Slabbert & Du Preez, 2021; Donici & Dumitras, 2024). This creates both a need for verification of existing data and a research gap that this research project addresses.

Considering the recent changes being made to AMCNP's infrastructure and accessibility, this research project addresses the gap in literature. This improves the facilities at the national park and adds to the broader discussion about how accessibility and infrastructure are planned around it. Doing so does not completely fill the research gap, as it is too large to be addressed by a single study, but it contributes to the much-needed body of research on visitor perspectives on New Zealand's national parks. Thus, this research project wishes to highlight unheard perspectives on the services these natural, recreational areas provide.

As this research project involves discussion of various types of accessibility, defining accessibility language is essential for clear communication. As such, for the purposes of this research project, accessibility at AMCNP will be defined as the design of the park's infrastructure and services enabling use by as many people as possible. This includes physical accessibility: design of the manmade and natural areas of the park, and cognitive accessibility: design of the communication methods the park utilizes.

1.3 Research Aims and Objectives

The aims of this research project include understanding how infrastructure at AMCNP assists visitors, especially during crowded conditions when it is strained. Additionally, this research project aims to study how accessible the national park is for visitors from a variety of backgrounds and ability levels. Lastly, the research project aims to investigate how visitor management can be improved. To achieve these aims, the research project will answer the following three questions:

RQ1: What are the visitor perspectives of the infrastructure at AMCNP?

RQ2: Do visitors perceive any accessibility challenges while visiting AMCNP?

RQ3: How can DOC better manage visitation at AMCNP?

To answer these questions the research project employs a netnography methodology in combination with observational data to verify results. This methodology researches social and cultural behaviors while overcoming geographical challenges (Jonsson & Roos, 2025). Data was collected from publicly available Google online reviews due to their availability (Sprague, 2023). The reviews were analyzed using thematic analysis to understand how

themes interacted and discover new patterns in the data (Braun & Clarke, 2006). Following this, the observations either verified or rebutted claims made in the data and discovered additional information that is used to answer the research questions.

1.4 Importance of Study

This research project is relevant because it analyzes unheard voices of the many park visitors who are significant stakeholders in the protection and utilization of New Zealand's national parks. In addition to the significant contributions that tourism brings to the New Zealand economy, national parks can promote regional economic growth in the often-rural areas in which they are located, in addition to the expansion of related infrastructure (Lu & Pan, 2025). The national parks benefit visitors' mental well-being (Li et al., 2024; Smith & Turner, 2023) and can contribute to the local community while protecting the natural environment (Sarhan et al., 2025).

Although this research project focuses on the case of AMCNP, many of the suggestions and related literature apply broadly to other national parks. Infrastructure suggestions such as those which decrease hiking trail crowding can apply to many of the other highly visited national parks across New Zealand especially as visitation to these parks increases over time (DOC, 2025a). Accessibility concerns and suggestions also broadly apply to other national parks to improve the parks' visitation and further increase inclusion of under-represented people.

1.5 Structure of Dissertation

This dissertation is separated into six chapters, each with a specific purpose, to address the aims and objectives of the research project. The Introduction describes a succinct overview of the topic and outlines the research project's goals and objectives. The second chapter offers a thorough overview of the relevant literature with particular attention paid to national park infrastructure and accessibility. The third chapter describes the research methodology, including the research paradigm, its components, and the qualitative research methods utilized. Chapter four presents visitors' experiences at the national park, divided into discovered themes and sub-themes. Chapter five provides an analysis of the findings through the lens of prior literature. The final chapter recaps the aims and objectives of the research project, providing suggestions for the national park and further lines of inquiry.

Chapter Two: Literature Review

2.1 Introduction

This literature review starts by examining the services that National Parks and other green spaces provide for both humans and the environment. This will be followed by a detailed overview of the uses of infrastructure, accessibility considerations, and funding for National Parks globally. Then, to understand the local relevance of this research, this chapter will summarize why national parks are relevant to the country and local culture. The literature will conclude by examining the infrastructure, accessibility, and funding challenges for AMCNP in order to better illustrate the relevance of this research to the contemporary management challenges facing the Park.

2.2 Management of National Parks

The management of national parks is essential for their operation. Proper management of these protected spaces provides benefits to visitors and the surrounding community through infrastructure and maintenance, allowing the space to be well utilized by the public. Management on site and broader departmental policy impacts the infrastructure, accessibility, and funding for the parks. These important factors directly affect visitors' access and experiences at the parks.

2.2.1 Benefits of National Parks

National parks serve the countries and communities in which they are located. There are collective benefits ranging from cultural heritage conservation to environmental protection that reinforce the need to create protected areas (Boley & Green, 2016). Many national

parks are cultural identifiers that exemplify the local environment and often inspire poetry, music, and other works of art (Bravo & Silverman, 2024; Baker & Hover, 2024). In some places, these parks are used to tell national stories that bring people together through a shared history connected with nature (Bell, 2019). These places allow stories and culture to be shared with the community they are native to, and to share with international travelers.

People travel to national parks to meet a wide variety of needs. One of the most intuitive needs these parks satisfy is proximity to nature, as many people camp and hike in national parks as a form of recreation to deepen their interconnectedness with nature (Hassell et al., 2015). Many other people visit these parks for sightseeing, social gatherings, and many other personal reasons. Regardless of the reason, Buckley (2020) found that visiting natural parks often makes people happier, reduces stress, and sometimes changes their worldview.

There are supposedly numerous health benefits from national parks. According to Sancho-Pivoto et al. (2024), there are benefits to visitors' health. Other researchers, such as Takenaka et al. (2025), suggest that because of the health benefits of parks and green spaces, hospitals should work more closely alongside them to better address the needs of the park and visitors' health. Other studies suggest that nature has positive calming effects (Kuo & Sullivan, 2001). Though nature seems to impact the brain in a multitude of ways, Smith and Turner (2023) theorize that natural spaces often create peaceful stimuli allowing focus toward emotional processing. These studies support research by Olson et al. (2020), who found that the calming effects of nature cause decreases in brain activity in the

prefrontal cortex, which allows the decision-making parts of the brain to rest, creating positive mental health benefits.

National parks have the potential to generate revenue that can be used to fund the park and contribute to the local community. Rylance (2016) found that conservation efforts can increase tourism revenue. This often results in further developing the regional infrastructure in communities around the national parks, allowing for increased growth (Lu & Pan, 2025). Many of the economic benefits tend to stay in the communities rather than be extracted and spent elsewhere (Hunt et al., 2014). In most instances, locals report economic benefits from their proximity to national parks, with only a small number of primarily farming locals hurt by that proximity (Ghoddousi et al., 2018).

National parks and other protected areas play a large role in protecting the environment. Langhammer et al. (2024) found that conservation efforts, such as national parks, had a positive impact on biodiversity decline but were not sufficient to stop it. Protected areas are of particular importance as decreasing funding or quality of these areas results in a significant decrease in biodiversity in the surrounding areas (Li et al., 2024). National parks can also conserve art and culture, particularly for indigenous people, such as in the case of Mutawintji National Park in New South Wales, where cultural heritage conservation efforts protect indigenous rock art (Dragovich & Amiraslani, 2023). Many national parks have deep ties to indigenous peoples and can even help protect their cultures and traditions, such as through regulated indigenous hunting on national park grounds (Stevens et al., 2025). This holds particular importance for AMCNP and its connections to the indigenous Māori people.

2.2.2 Infrastructure in National Parks

Infrastructure can mean many different things, depending on the context. For national parks, infrastructure needs to meet the needs of the stakeholders, management, and national regulations (Ferretti-Gallon, 2021), in addition to infrastructure that minimizes safety risks such as for natural disasters, animal attacks, diseases, and in some instances, poachers (Reindrawati et al., 2022). From there, any piece of infrastructure can be rated by how well it meets these needs and how it does not interfere with other needs being met.

The number of people who visit a park per day greatly determines how much infrastructure is needed. The greater the number of people who come to the park and the higher their level of interaction with the environment, the greater the maintenance required. Too many people in one specific place in the park can cause unintended damage to the area and decrease visitor satisfaction (Manning, 2002). According to Manning (2002), the ideal maximum should be 30 visitors in one area of the park. One solution to this problem is limiting the capacity of the park and requiring people to book in advance or be let into the park on a first-come, first-served basis; although these systems can favor visitors from higher economic backgrounds, who will book further in advance (Rice et al., 2024). Another work around involves spreading out visitors across the park. This can be difficult or impossible depending on the size and terrain of the park, as the harder-to-reach areas will have fewer visitors (Kohlhardt et al., 2017).

Transportation becomes a key consideration, as many national parks cover a large expanse of land. Roadways and rail systems negatively affect surrounding soil and plants (Bhuiyan

et al., 2021). This infrastructure may still be necessary, but it should be kept to a minimum with a few small parking lots dispersed around the park to reduce pedestrian density. Ideally, the roads should be in areas of the national park with less plant matter vulnerable to injury. In some instances, such as in mountain parks, the cost of creating these would be too high and cause too much damage to the environment to be practical. In these environments some parks, such as Mount Kilimanjaro National Park, have created a cable car to decrease negative transportation impacts and get people into less accessible places (Chitaunga et al., 2025).

Walking and cycling trails provide recreational opportunities that have minimal environmental impact if combined with fences, proper signage and environmental information (Park et al., 2024). It should be noted that the current cultural zeitgeist around national parks comes with some drawbacks, such as safety risks – including increased off-trail hiking and dangerous photography practices at “selfie-worthy” but hazardous locations (Cornell et al., 2025). Directional signs need to be posted occasionally as a deterrent to stop off-trail travel. This decreases the environmental impact of human travel through the park as off-trail travel harms vegetation, increases maintenance costs, and increases risks to visitors (Goh, 2023; Park et al., 2022). In addition, signs act to keep visitors informed of any hazards in the local area, such as animals or terrain hazards (Saunders et al, 2018) and to reduce littering behavior (Selvaag & Evju, 2025).

Cultural and historic structures play a large role in the iconography of national parks. These structures deepen the visitor’s connection with the park, its history, and the nation’s culture (Szczesny et al., 2022). Visitor centers are typically used as an all-purpose building

that serves the needs of visitors, such as toilet facilities, information about the park and trail systems, and a breakdown of the culture and history, as well as shelter from adverse weather (Zube et al., 1978). These centers are a way to provide the public with information and resources dictated by park management and national recommendations.

Maintenance is required for all national parks to ensure their long-term sustainability. Litter, erosion, overgrowth, and other forms of infrastructure degradation are a natural part of a constantly changing environment. Physical repairs to infrastructure such as bridges, roads, and buildings, in addition to more regular maintenance such as rubbish removal, account for a large share of maintenance costs (Sprinkle, 2017). Maintenance is necessary because it keeps the parks safer (Zube et al., 1978), more desirable (Selvaag & Evju, 2025), and avoids potentially higher costs and problems in the future (Park et al, 2022). In addition, maintenance is required to maintain the park's high quality. This increases tourism to the park, thereby investing in local communities and stakeholders, and potentially back into the park – depending on how funding is allocated (Taff et al., 2019).

Accessibility ensures that everyone can enjoy these recreational areas regardless of their background. This study will attempt to address the disparities among visitors so that all visitors can enjoy the facilities to the best of their abilities, regardless of age, physical or mental abilities, athleticism, income, parental status, language proficiency, or any other limiting factor. Weiler et al. (2025) Identifies that many studies on national parks only consider able-bodied visitors, but research has shown that many of the challenges some visitors face can be addressed through proper planning and park management.

One such challenge is the cost of enjoying national parks, which can be higher than initially imagined. Many activities, such as skiing, backpacking, camping, and so on, require equipment that can be costly for many people (Nading et al., 2009). In addition, transportation costs, including airfares or petrol, can at times be high given the long distances one must travel to reach many parks (Beal, 2024). These costs are in addition to any potential costs of entry and related tourism costs.

Deciding to visit a national park can be another barrier, as not all parks have the same amenities or opportunities. Information about the park becomes crucial for visitors with disabilities. To address this, the national park website could address the needs of people with disabilities and give a clear list of which specific amenities are available (Aguilar-Carrasco et al., 2024). This is often overlooked because national park websites are maintained by only a small team, while usually only one of the team is trained in accessibility standards to ensure the park's accessibility (Bianchi et al., 2024).

2.2.3 Accessibility of National Parks

Transportation to and within the parks creates accessibility challenges. The only way to reach many of the national parks is by car. Ideally public transit would be available, allowing people without readily available transportation to access these public parks (Tang, 2015). The infrastructure within national parks also needs to be accessible to allow all people a high degree of park access. To increase accessibility, slopes could be placed on inclines, rather than stairs, to allow better access to wheelchair-bound people in

combination with signage informing visitors of the terrain of the park (Aguilar-Carrasco et al., 2023).

However, not all trails need to be highly accessible. National parks could focus solely on making trails sufficiently accessible to meet the needs of the people who could theoretically use them, because more accessible trails lead to higher perceived crowding, causing visitors to spend less time in these areas of the park such as in The Vatnajökull Volcano where decreased visitor crowding led to longer visitation time and higher satisfaction (Tverijonaite et al., 2018). Visitors who feel crowded have an increased likelihood of going off-trail or creating makeshift trails, leading to higher risks of injury or death (Sim et al., 2018). National parks need wide, paved, and accessible trails for highly trafficked areas of the park, in addition to less accessible trails for visitors who want more secluded experiences. This decreases excessive wear on the trails, increasing their longevity (Adach et al., 2022).

Infrastructure within national parks can create challenges. Structures within the park, such as road curbs and trails, need to be revisited to ensure they are effective. Road curbs should have ramps for wheelchairs, and some trails need to be paved to improve internal park accessibility (Piskin & Akdeniz, 2023). Additionally, many national parks have few washrooms due to their protected historical status. Nonetheless, washrooms within particularly accessible areas need to be accessible to visitors with disabilities – smaller washrooms can be much more difficult to use while wheelchair bound (Stafford, 2022).

Communication about the accessibility of trails and activities through various signs and brochures ensures that visitors are informed about their trip. It has been suggested that these brochures could be made more accessible by distributing the information via audio, either through an app or other electronic method (Oppegaard et al., 2015). This increases access to information for blind visitors or visitors who cannot read the language (if translations are available). Placing QR codes at historical sites to link to an audio format, or translations, through the park's webpage could increase accessibility to information. This method further reinforces the need for a consolidated and organized webpage to give people with disabilities the necessary information they may otherwise not have before coming to the park and during their stay (Aguilar-Carrasco et al., 2022).

Park staff play an important role in ensuring all visitors have the information they need for their visit. Hansen et al. (2017) recommend that staff training and creating standard operating procedures for accommodation services ensures all information is given according to need. Disabled people have the same motivations for coming to national parks, in addition to proving they can experience the same enjoyment as all other visitors (Chikuta et al., 2017); showing extra consideration could greatly improve their experience. As many visitors in national parks utilize it for physical exercise, disabled visitors may be concerned about how they are perceived or treated (Chikuta et al., 2018; Chikuta et al., 2019). This makes staff interactions and support crucial for the enjoyment of all visitors at national parks.

Demographics are another important consideration for visitor accessibility. Weber and Sultana (2013) found that nationals in the United States often draw in ethnic and racial

minorities to the closer and smaller parks, suggesting that these groups are less likely to travel long distances to visit national parks for various economic and cultural reasons. In addition, women often travel to national parks at a similar rate to men; however, they are more often accompanied by another person, focus on enjoying nature rather than physical activity, and are more concerned about their safety than men (Farías-Torbidoni et al., 2024).

Where visitors travel from plays a role in their motivations for visiting. According to DOC (2025a), locals were more likely to spend several days at a time camping in national parks and to travel much deeper into the national parks than international tourists.

Understanding how different demographics utilize national parks helps management to better understand and accommodate their needs, as they can determine what areas need improvement.

The implementation of government accessibility policies often creates concurrent changes in other fields of law, improving accessibility in national parks (Aguilar-Carrasco et al., 2022). Unfortunately, in many situations accessibility law is written without the input from the very people it is intended to serve, consequently often leading to extra unnecessary costs or unneeded changes (Chikuta et al., 2019). Henderson and Fry (2019) suggest that to implement legal changes to accessibility, it is best to first identify which level of government to make the request to, be specific about what changes need to be made and why, and advocate for these changes in tandem with other groups who will also benefit from the positive changes to accessibility policy.

2.2.4 Funding of National Parks

National Park funding primarily comes from taxation within the country, for the United States, the European Union, and many other countries around the world (Sutton et al., 2019; Sikora, 2024). National parks in countries within the European Union are often partially subsidized (Sikora, 2024). Funding for many national parks is supplemented by philanthropic support and groups that wish to see these parks prosper (Gazley et al., 2018). Additional funding can come from direct fees at the national park, such as paid parking or entry fees (Walpole et al., 2001; Ostergren et al., 2004).

Many national parks globally are trying to better understand the extent to which entry fees ought to be implemented. Yamagishi and Sañosa (2025) found that tourists with positive environmental behaviors have a higher willingness to pay ecological fees for natural protected areas. These fees do not influence satisfaction with the visitor experience but may influence their visitation behavior (Yoon & Zou, 2025). As the parks are primarily funded through taxation (Sutton et al., 2019; Sikora, 2024), these international tourists make the least financial contribution. Although this problem is still being discussed globally, increasing the price too much would likely decrease visitation and decrease tourism revenue within the local community that relies on the visitation (Smith, 2023; Schill, 2018). For this reason, it is suggested that national park management work with the surrounding community and other stakeholders to reach an amicable solution (Haukeland, 2011).

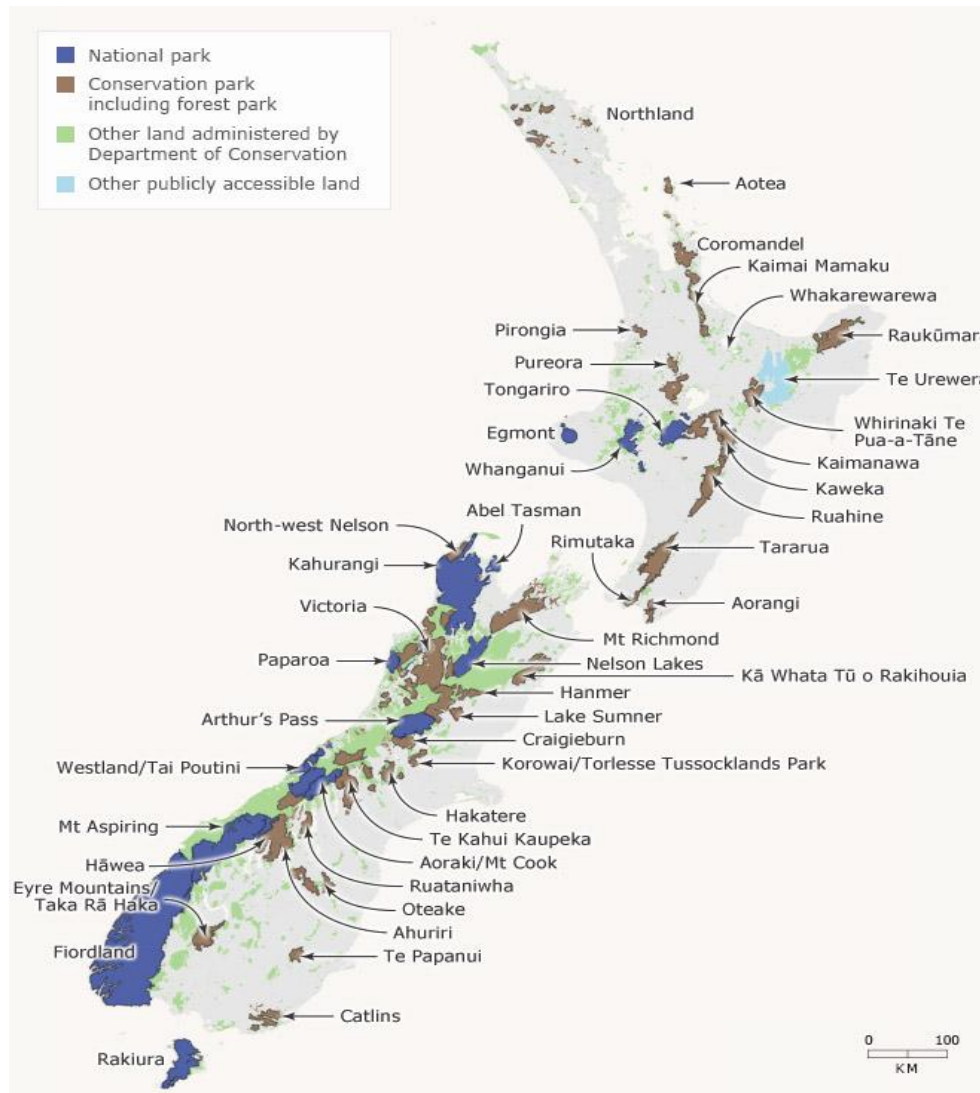
These fees vary significantly by country, as often high-income countries do not require them while low-income countries do, and often require tourists to pay higher prices to reinvest the money in the park (Thirumarpan & Robinson, 2025). Fee structures impact the equity of revenue generation. For instance, a flat hourly parking fee charges for each car rather than the number of occupants. Locals are more likely to visit the park multiple times (Tu et al., 2020) and would consequently pay more frequently for recreational activities unless special accommodations are designed for them. Many of these national parks will run into a capacity problem as an increasing number of people visit them every year, especially after the COVID-19 pandemic (Geng et al., 2025). As these capacity problems increase, Schwartz et al. (2012) suggest dynamic pricing through entry fees that charges more to people who are more willing and able to pay for access. This can limit visitation to an amount that infrastructure can accommodate.

2.3 National Parks in the New Zealand Context

A complete history of national parks in New Zealand goes beyond the scope of this dissertation but is still relevant to understand the needs of interest groups relevant to AMCNP. This sub-chapter gives an overview of the 4 main interest groups invested in the future of New Zealand's national parks. These groups consist of DOC and their relevant legislation, indigenous Māori advocates, the tourism industry, followed by residents residing near national parks.

Figure 1

Map of DOC Protected Areas in Aotearoa/New Zealand



Note. This figure notes the names and locations of all land controlled by DOC, including National Parks depicted in blue. Adapted from Swarbrick (2009).

<https://teara.govt.nz/en/map/14418/national-parks-map>

Figure 2

Timeline and Size of New Zealand's National Parks

New Zealand's national parks and forest parks		
National park	Year established	Area (hectares)
Tongariro	1894	78,618
Egmont	1900	34,170
Arthur's Pass	1929	114,840
Abel Tasman	1942	22,689
Aoraki/Mount Cook	1953	70,699
Fiordland	1952	1,260,742
Te Urewera	1954	212,714
Nelson Lakes	1956	101,872
Westland Tai	1960	127,165
Mt Aspiring	1964	355,522
Whanganui	1986	74,231
Paparoa	1987	38,822
Kahurangi	1996	452,895
Rakiura	2002	139,960
Total		3,084,939

Note. This figure notates the time of creation and size of each national park in New Zealand. Adapted from Nathan (2009b). <https://teara.govt.nz/en/table/13914/national-and-conservation-parks>

DOC monitors and maintains the ecology and landscaping at National Parks and other nature reserves around New Zealand (DOC, 2024a). Their main responsibilities consist of ecological conservation of protected areas, which make up around thirty per cent of the country's landmass, in addition to overseeing infrastructure such as the maintenance of the huts and campsites (Booth & Cullen, 2001). DOC is also responsible for much of the tourism in New Zealand, as many visitors come to New Zealand for many types of nature-based tourism contributing to the New Zealand economy (Higham & Espiner, 2019;

McCleave et al., 2006). Through the efforts of DOC, the country has enforced strict ecological restrictions encouraging the propagation of native plants and animals while banning and removing invasive species (Hulme, 2020; Russell et al., 2015). This has allowed species near extinction to reinhabit their native lands, in addition to inspiring global initiatives (Simberloff, 2019). All these responsibilities made DOC a very large and bureaucratic organization (Kappelle, 2001). Many residents believe their regional workers within DOC are doing a great job, however the sheer size and bureaucratic nature of the department leaves many in local communities frustrated, hindering the relationship between DOC and the community (McCleave et al., 2006).

The Māori relationship with DOC has improved significantly compared to its historical state (McCleave et al., 2006). However, some argue that the only way to truly restore Māori self-determination is through having historically Māori land decoupled from past legislation and instead be managed through an indigenous organization, believing it would better reinforce the connection between the Māori people and their historical land (Quigg & Russell, 2025). This controversy has developed for many reasons, including the historical oppression of the Māori, but more recently growing social and economic changes and the erosion of the tradition of free access to public land toward increased commodification and privatization of these natural spaces (McIntyre et al., 2001). In summary, Māori hold legal, cultural, and spiritual ties to the ancestral lands on which many of the national parks are situated, making them both a key stakeholder in the outcomes of these parks and a resource to improve them.

Organizations and businesses invested in the success of tourism are also stakeholders in the success of national parks because they attract many international tourists who contribute to both the local and national economies. According to the DOC Visitor Insights Report (2024/2025), 52% of international tourists visited at least one national park, with Fiordland and MCNP the most visited, with 23% and 21% respectively. As international tourism visitation is projected to continue increasing, a total of 12.5 billion NZD was added to the New Zealand economy in 2025 (Tourism New Zealand, 2025). According to Tourism New Zealand (2025), 75.9% of international tourists visited New Zealand for its landscapes and scenery. Many tourism businesses are large stakeholders in the success of national parks and therefore wish to have an influence on the practices at these parks, to further capitalize on their revenue. However, both actors representing the tourism industry and locals' preferences can lack decision making power or influence, creating conflict (Sarhan et al., 2025).

As the current DOC system is generally centralized, many local residents find it difficult to change or influence the policies regarding national parks due to bureaucratic hurdles and inconsistent government support (Sarhan et al., 2025). Government regulations restrict land and resource use and leave local residents feeling as though they have no voice in changing these policies (McCleave et al., 2004). Many locals do appreciate the work DOC does to protect their local environment and to bring economic opportunity, but find government control frustrating (McCleave et al., 2006). Additionally, residents are much more likely to be repeat visitors to national parks because they live in closer proximity than tourists (Pan & Ryan, 2007). Consequently, they are significantly impacted by policy

changes and are more likely to have stronger feelings on policy. For this reason, McCleave et al. (2006) argue that a greater degree of decentralization is necessary to take local preferences into account. In this way, all stakeholders could have greater influence over future changes to national parks.

2.4 Infrastructure, Accessibility, and Revenue Management at AMCNP

Infrastructure, accessibility, and revenue management are three key components to properly operating any national park. This sub-chapter draws on literature and online sources to develop a deeper understanding of the inner workings of the national park. This information is crucial because, in combination with data generated from this research project, it allows for improvements for both visitor experience and management.

2.4.1 Infrastructure at AMCNP

The literature on the infrastructure of AMCNP broadly falls into two categories. The first category consists of academic articles relating to climate change and safety concerns within the park. Allen et al. (2009) show that many huts and walking tracks are close to steep ice, and with the continuation of climate change monitoring of the ice becomes increasingly important in order to minimize harm risks and damage to infrastructure. In addition, Allen et al. (2008) show that lakes in AMCNP have been expanding, increasing the risks of mass movement-induced outburst flooding. Large storms, such as the extreme storm in July 2022, have caused erosion of manmade structures; a diversion berm was constructed in 2018 to minimize harm to Aoraki/Mount Cook Village (Sheppard et al., 2026). The Mueller Rockslide has the potential to worsen this, as debris could block

waterflow to the downstream valley and damage nearby alpine huts (Cody et al., 2018).

Ironically, even though many of these issues are affected by climate change and tourists are highly aware of it, aircraft are increasingly being used to access remote locations within MCNP (Purdie et al., 2020).

The second category of literature on AMCNP infrastructure comprises plans and updates from DOC and reports from local media outlets. According to Recreation Construction (2021), many huts around Aoraki/Mount Cook have required considerable effort to build because their remoteness makes materials difficult to transport. The huts have heavy usage because many hikers who do not pay for the huts use the bathrooms, exceeding their designed capacity of 28 users per day; consequently, the Mueller Valley Trail has been shut down in the past (Bywater, 2024) (see Figure 3). According to DOC (2024b), the huts require specialty equipment to dispose of waste, and the department looks after over 2,000 toilets nationally.

Another large infrastructure project is the recently completed Hooker Valley swing bridge, which is 189 meters long and began construction in August 2025 after the previous bridge was closed due to erosion (DOC, 2025d). Since this new bridge has been under construction, the Hooker Valley Trail has been closed beyond the bridge, however many visitors to the park have been ignoring the signs and breaching the closed-off construction areas (DOC, 2025e). Around 15-20 people per day have ignored the trail closure since construction began in August 2025, causing delays for construction workers and creating safety risks for visitors (DOC, 2025e).

AMCNP is one of the most visited parks in New Zealand, making it a major tourist destination. The Hooker Valley Trail closure blocks access to one of the main tourist hot spots: the beautiful views at Hooker Lake. Cornell et al. (2025) found that many tourists who visit popular national parks often lack awareness of responsible tourism practices and engage in risky behavior, often for selfie experiences. Blocking the only passage to the lake almost ensures conflict between tourists' interests and management's interests. The popularization of Mueller Hut has a similar implication for the infrastructure. Strain on the infrastructure is already evident (Bywater, 2024). If trails are closed for an extended period to improve infrastructure, tourists are likely to stray from established trails to capture unique social media images, disregarding conservation efforts and their own safety (Cornell et al., 2025).

Figure 3

Map of AMCNP



Note. This figure depicts a map of AMCNP with Mueller Hut and the closed second swing bridge indicated in a green circle. The map has been adapted from DOC (2025f).

<https://www.doc.govt.nz/parks-and-recreation/places-to-go/canterbury/places/aoraki-mount-cook-national-park/things-to-do/tracks/hooker-valley-track/>

2.4.2 Accessibility at AMCNP

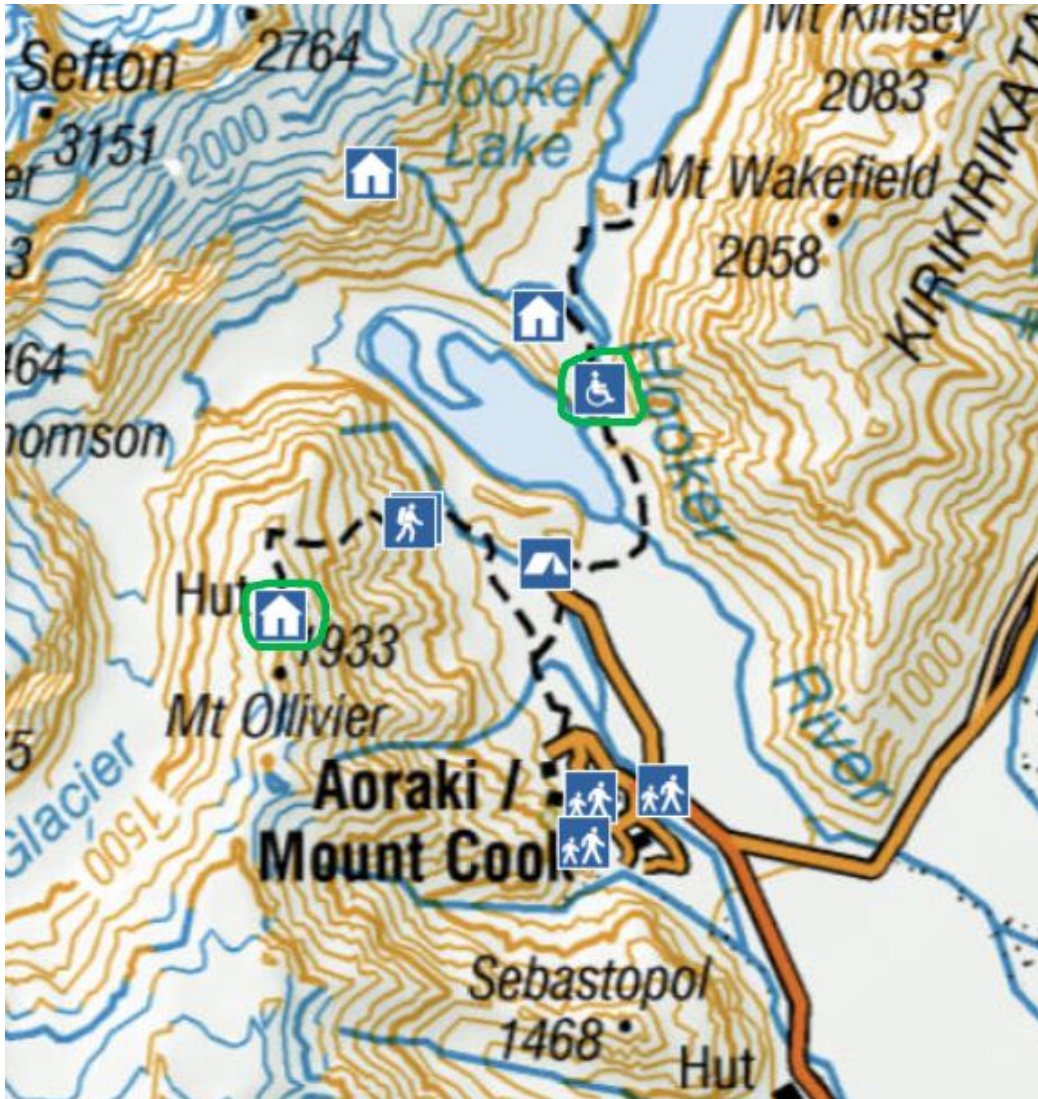
In terms of accessibility, AMCNP faces many challenges: its highest peak is 3,724 meters above sea level, it has potentially dangerous glaciers, and snowfall varies depending on the

time of year (Lang, n.d.). While viewing a topographical map, it can be seen that a majority of the national park is on relatively steep inclines, other than around the basins of Mueller Lake and Hooker Lake (see Figure 4). This limits the accessible areas of the park; however, many trails were created around the areas with steeper inclines, allowing more able-bodied visitors to veer off into more remote locations. This increased visitor distribution therefore makes visitors feel less cramped and provides longer, more satisfactory hiking opportunities. (Tverijonaite et al., 2018).

DOC (2025g) has put in place infrastructure at the national park to improve accessibility, including huts, which provide visitors with restrooms and shelter for overnight stays. Park brochures at the visitor center detail the difficulty, trail elevations across the park, and information about the huts (Lake et al., n.d.). This information can be accessed online to ensure that people of all abilities know what to look forward to.

Figure 4

Topographical Map of AMCNP



Note. This figure depicts a topographic map of AMCNP with Mueller Hut and the closed second swing bridge indicated by a green circle. The map has been adapted from DOC, 2025f (<https://www.doc.govt.nz/parks-and-recreation/places-to-go/canterbury/places/aoraki-mount-cook-national-park/things-to-do/tracks/hooker-valley-track/>)

The Hooker Valley Trail is the most accessible trail in the park, as it is a flat, gravel path that takes roughly one hour to complete (DOC, 2025f). This part of the park has been designed to be the most accessible, with a restroom at the campground that leads to the trails (Graham, 2024); although the toilet has received complaints that it is inappropriate for wheelchair users (Aurélié, 2017). Wheelchairs and strollers can be used on the first section of the trail only (Graham, 2024; Aurélié, 2017). Due to the current construction on the bridge, the most accessible trail is temporarily closed, leaving some visitors limited in their accessibility options. More expensive options, such as helicopter tours, become one of the few remaining choices for families, the elderly, and the disabled to see more of AMCNP.

Many aspects of the park's management plans are available to the public but are not organized in a way that can be easily understood. The most extensive information on the infrastructure at AMCNP can be found in the national park's online management plan (McCarthy & Rünaka, 2004) and the more recent amendment (DOC, 2012), which details exactly what the park manages, how it is managed, and in some instances how the public should interact with the infrastructure. The original document (McCarthy & Rünaka, 2004) comments on how cars should only be parked in the allotted parking areas in the national park and within Mount Cook Village. Another important comment the amendment (DOC, 2012) highlights is the high maintenance costs for roads and huts within the national park.

2.4.3 Funding at AMCNP

Funding for AMCNP primarily comes from DOC, although the total annual operating expenditure figures have not been publicly released. It is known, however, that the Ministry

of Business, Innovation, and Employment (MBIE, 2016) subsidises national parks, including Aoraki/Mount Cook, using revenue from the International Visitor Conservation and Tourism Levy (IVL). According to the most recent Annual Performance Report 2024-2025, expenditure included several million dollars for hut maintenance at several New Zealand national parks, subsidies for conservation efforts, trail maintenance, and the creation of the user-pays pilot parking scheme at three South Island visitor hotspots, including AMCNP. (Ministry of Business, Innovation, and Employment, 2025).

The user-pays pilot parking scheme started on December 15, 2025 and charges \$5 per hour or \$20 per day for non-locals, while locals pay a \$10 annual fee or a \$60 fee for repeat users who do not meet the criteria (DOC, 2025h). The estimated revenue from the three pilot parking lots is \$1.5 million over the seven-month period from December 2025 to June 2026 (DOC, 2025c). In addition to generating revenue, the implementation of this policy should help alleviate overcrowding and support ecological conservation (Thirumarpan & Robinson, 2025; Schill, 2018). With the implementation of this new policy, DOC has asked for feedback from the local community and stakeholders; the feedback period ended on August 10, 2026 (DOC, 2025c).

2.5 Chapter Conclusion

This literature review on Aoraki/Mount Cook and other national parks broadly explains why many people are invested in these protected areas. These lands provide many services, including mental health benefits (Sancho-Pivoto et al., 2024), cultural and social spaces for visitors to enjoy (Dragovich & Amiraslani, 2023), and ecological benefits (Langhammer

et al., 2024). The infrastructure at these parks improves the quality of the services they provide by creating trails, restrooms, and information centers. Accessibility increases the number of people who can utilize these services through thoughtful consideration and planning. Within the New Zealand context, these lands hold cultural and sometimes spiritual importance, and their protection upholds the traditions of the Māori peoples who have lived here for several generations. AMCNP draws a wide range of tourists every year; however, it creates a strain on the parking, trail, and hut infrastructure. Management of the infrastructure without proper forethought can, unfortunately, limit access to the services the park provides, and lead to unintended consequences such as safety concerns or increased off-trail hiking. In summary, this research project determines whether, and how, services provided to visitors are being limited, and how best to alleviate these problems.

Chapter Three: Methodology

3.1 Introduction

The primary purpose of this chapter is to describe the research goals and explain the methodology for meeting these goals. The underpinning philosophy of the research, including the research paradigm, ontology, epistemology, and their connections to broader research paradigms, will be covered. Then the chapter will explore the qualitative research methods used to examine public perception of the infrastructure and accessibility at AMCNP. It explains why the data collection methods were used and how these specific sources of information provide valuable insights into the experiences of visitors to the park. The final sections of the chapter will address the ethical concerns and limitations of the research, as well as the potential ramifications of its outcomes, to ensure the research was conducted in a responsible manner.

3.1.1 Research Goals

With the importance of New Zealand's national parks and the contemporary changes to AMCNP – entailing the creation of a paid parking system and the construction of a new bridge on the Hooker Valley trail detailed in chapter two (DOC, 2025a & h) – a new research opportunity has emerged. With these new changes, reports are already emerging about the challenges in their implementation, such as increased off-trail hiking (DOC, 2025e). This research project aims to better understand visitors' perceptions of the infrastructure, accessibility, and contemporary changes at AMCNP. Specifically, the research questions for this dissertation are:

RQ1: What are the visitor perspectives of the infrastructure at AMCNP?

RQ2: Do visitors perceive any accessibility challenges while visiting AMCNP?

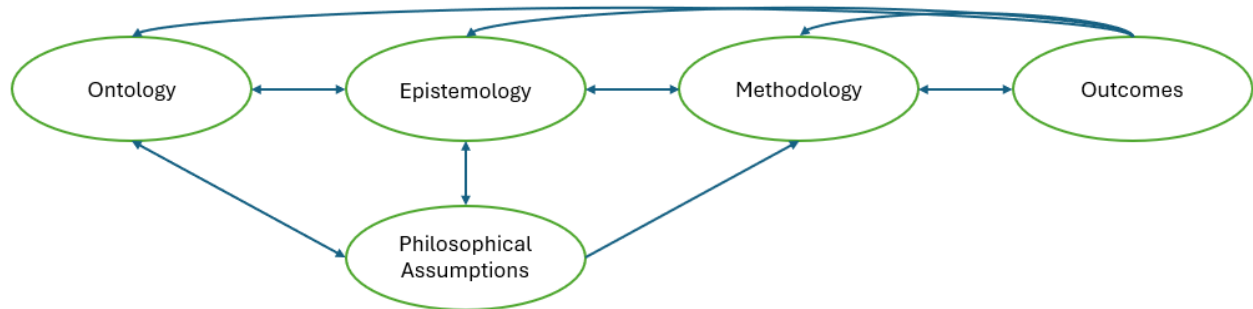
RQ3: How can DOC better manage visitation at AMCNP?

3.2 Research Philosophy

This section outlines the overarching framework and describes the background philosophy behind the collection and analysis of data. The classification of research philosophies is often incoherent, with overlapping meanings or ideas among researchers (Mkansi & Acheampong, 2012). This section will explain the ecosystem services (ES) paradigm to be used, followed by the underlying ontology and epistemology, and how this paradigm aligns with a broader interpretivist paradigm. The methodology will be described in detail below. Understanding this research project's assumptions about existence or reality (ontology) and assumptions about what kind of knowledge can be known (epistemology) are crucial as they affect the methodology and thus what the outcomes of the research questions could be. In turn, the outcomes can then have an impact on the philosophical assumptions of the researcher (Cua & Garrett, 2009). See Figure 5 for further understanding.

Figure 5

Research Philosophy Framework



Note. This framework was adapted from Cua and Garrett (2009)

3.2.1 Research Paradigm

This research project evaluates the effectiveness of the services provided to the public at AMCNP. The ES paradigm was chosen to evaluate the services that ecosystems provide to the public – an increasingly vital component of the management of natural environments (Choné et al., 2017). The role of the ES paradigm in this project was to focus the decisions made during the research process to best evaluate the services to visitors provided by AMCNP and recommend changes as needed. The infrastructure at national parks, such as trails, bridges, and restrooms, is put in place to amplify the services provided by the natural environment. Historically, this paradigm has primarily been used to evaluate material products, as outlined in Yu et al. (2020), who defined ES as, “direct and indirect goods and services that human obtained from nature, such as water, timber, and agricultural products that human life and industrial production are deeply depended on.” The ES paradigm has been defined in many ways, depending on the research at hand (Choné et al., 2017). Within the last two decades, ES has been broadened to include cultural services such as

recreation and community spaces and other less monetarily evaluable services (Chan et al., 2012). This research project is primarily concerned with the cultural services provided to visitors by AMCNP, as these services are the primary driver behind most human infrastructure and accessibility decisions in New Zealand's national parks. Although infrastructure changes may have downstream impacts on other services, research on these impacts are beyond the scope of this research project.

Although this paradigm allows for the evaluation of cultural ES, which are typically a priority in national parks globally, it does have a few limitations. Cultural ecosystems services are non-material services that are provided by the ecosystem, such as recreational or cathartic experiences. The first limitation is that cultural services are difficult to quantify (Gao-Di et al., 2006). Unlike monetary or economic services, cultural services are intangible and cannot be easily expressed in monetary terms; even if they could be, the price would be highly subjective and culturally dependent. This then limits most research on cultural ES to qualitative methods. Another limitation of ES is that some services, such as spirituality, can have inelastic value, making them difficult to compare with other ES, as some ecosystems are priceless and irreplaceable to some groups of people (Winthrop, 2014). This is particularly relevant for many indigenous communities globally, who have spiritual connections to the land they and their ancestors have inhabited for many generations. This is specifically relevant to AMCNP because, according to legend, the indigenous iwi Māori tribe are descended from Aoraki, who became the mountain (DOC, n.d.). This spiritual connection is not a realistically measurable service within the ES paradigm or in this

research project, but it must still be taken into great consideration when making decisions about the management of the national park.

3.2.2 Ontology

Ontology refers to the researcher's understanding of reality and is broadly divided into two categories: realism and relativism (Pretorius, 2024), although other ontologies exist beyond research perspectives. Realism refers to the idea that the researcher seeks objective, universal truths, whereas relativism holds that reality is subjective (Pretorius, 2024). The ontology of the ES paradigm in this research project will follow a relativistic approach, as when analyzing cultural services the values placed on those services are subjective according to the people who receive them. Relativism is particularly useful when applied to differing perspectives and cultural insights, as it rejects the idea of a single unified truth (Rassokha, 2021). This research aims to understand the differing perspectives of visitors at AMCNP to offer ideas and solutions to the problems the park may be facing; therefore, a relativistic ontology is ideal for this research.

The ES paradigm does not always follow a relativistic ontology, because in many instances the services provided are material goods such as food, water, lumber, and fresh air, which can be objectively measured. In some research, realist ontology is preferred for this reason. The purpose of the paradigm is to consider all ES to make well informed decisions about ecosystem management and its relationship to people (Choné et al., 2017). ES best aligns with an anthropocentric ontology, which refers to the idea that these services are valued based on their instrumental usefulness to humans (Mylius, 2018).

3.2.3 Epistemology

In a research context, epistemology concerns the nature of knowledge and how, or whether, it can be known (Pretorius, 2024). This research project will employ an interpretivist epistemology focused on understanding how knowledge is constructed through the experiences of park visitors. This epistemological perspective views knowledge as being socially constructed around a subjective reality (Cuthbertson, 2020). One key advantage of this epistemology is that it takes culture and differing past lived experiences into account when forming knowledge (Mogashoa, 2014). This is particularly relevant when studying accessibility, as different people will have varying degrees of ability to enjoy the services of the park. In terms of infrastructure, different cultures will adapt differently to inadequate or inoperable systems. Through interpretive epistemology, these differing perspectives are considered and can be utilized to adapt to the needs and desires of visitors.

3.2.4 Axiology

This research project adopts some elements of pragmatic axiology. Pragmatic axiology focuses on the idea that knowledge is valued based on its ability to solve the problem at hand (Nkomo, 2024). Although pragmatism is rarely paired with a relativistic ontology (Gobo, 2023), one objective of this research is to address the difficulties DOC faces in serving its visitors. This research values the knowledge gathered for its usefulness in addressing resource and visitor management at AMCNP. Themes generated from the data help to identify visitors' needs and desires. Theoretically, addressing those needs should then help to alleviate infrastructure and accessibility challenges.

3.2.5 Similarities to Interpretivism

The research project employs an interpretivist paradigm. Interpretivism recognizes that research problems often arise in social contexts where strict numerical analysis is either not possible or impractical due to research involving social constructs or shared meaning (Gichuru, 2017). For this reason, interpretivists rely on qualitative methods to answer questions about human understanding of the world (Cuthbertson et al., 2020). Similar to interpretivist research, the current research involves understanding the visitors' perspectives and personalized experiences. In many ways, the current paradigm, although still primarily focused on optimizing ES for park visitors, adopts an interpretivist ontological and epistemological perspective while adopting a pragmatic axiology to best serve the research goals.

3.3 Methodology

As the research project involves understanding human perspectives, a qualitative research methodology was chosen, as it enables the generation of insights into the problems facing the park. This will allow more detailed descriptions of visitor experiences and a better understanding of how visitors interpret their environment, going beyond what quantitative data can provide (Hancock, 2018). Qualitative research allows for more nuanced and complex information to be gathered, allowing for an understanding of the motivations of the targeted group that is not constrained by the rigidity of a numerical data set (Lim, 2024).

The data was collected through a netnographic case study approach that incorporates elements of traditional netnography and case study methods. The research requires

elements of both research methods, as the data is collected online over a six-month period, using netnographic methods and drawn from a particular group of people who have visited the park. Following data collection from online reviews of AMCNP, thematic analysis was conducted. Thematic analysis is particularly useful as it can summarize key features of large bodies of data, identify key similarities and differences, and identify unanticipated insights (Braun & Clarke, 2006).

3.3.1 Netnography Method

Netnography has become a particularly useful tool for researchers since its creation in 1997, as human lives are increasingly integrated into online spaces (Bartl et al., 2016).

Netnographies are similar to ethnographies but use social media and other online spaces to research digital communities and culture (Whalen, 2018). User interfaces to the internet exist in a multitude of ways, including text, audio and video recordings, and live streaming. Thus, netnography does not have a “one size fits all” solution and must be adapted to fit the interface being researched and the needs of the researcher (Paoli & D’Auria, 2025). Using netnography enables researchers to access human thoughts and perspectives in real time while overcoming geographic limitations, allowing observation of social and cultural environments as they evolve (Jonsson & Roos, 2025).

Regarding the current research, a netnographic method enables data collection remotely, saving time and costs while providing access to information from both those who experienced the event immediately and from visitors who waited before uploading their reviews (Li et al., 2020). This research project would be considered netnographic as it

studies an online community sharing their experience of visiting AMCNP. Using publicly accessible information, such as reviews in this case, reduces the need for ethical consideration, as the information has already been posted with the intention of expressing their thoughts and opinions to a public audience. Different platforms offer diverse types of information on this topic.

This research employed the “lurker method” in netnography. This method allows the researcher to observe natural interactions without interference, insertion of personal opinions, or bias (Sun et al., 2014). In addition to the lack of interaction with the communities, this method captures the communities’ changes over time (Takahashi et al., 2002), which will be particularly useful for this research, which aims to study contemporary changes at AMCNP. This method should enable better insights into current attitudes and their comparison with past attitudes regarding both changes to paid parking and opinions on the partial closure of the Hooker Valley Trail due to construction. Methodologies and research methods that involved interviewing visitors before and after the recent changes to AMCNP would have either required interviews with visitors long after their trip, making their memories of parts of the park less reliable, or conducting interviews over a long period of time. This was unable to be done due to the lack of resources and funding for the research.

3.3.2 Case Study Approach

A case study approach is used in this research because, instead of studying a broad group, it focuses on the perception of specific facilities at AMCNP. According to Coombs (2022, para. 1), a case study is defined as, “a methodological research approach used to generate

an in-depth understanding of a contemporary issue or phenomenon in a bounded system.”

A case study is used when there is a need for an in-depth understanding of a contemporary issue or real-life phenomenon (Crowe et al., 2011). To address infrastructure and accessibility at AMCNP, a detailed analysis of the park's specific circumstances is necessary to understand its unique challenges. The contemporary changes implemented at AMCNP alter the specific needs and opportunities of the visitors. For all these reasons, a case study that specifically focuses on AMCNP, rather than applying more general park management principles, is needed.

3.3.3 Data Collection

The data collection for this research project is split into two distinct parts. The first part of the data collection process involved collecting visitors' descriptions of their experiences from Google Reviews. Online reviews have become an essential tool for almost everyone: 95% of travelers check them before booking, and 72% of potential customers refuse to purchase products online without access to them (Sprague, 2023). Many people use the internet to plan their vacations, which can be considered a form of online purchasing, making online reviews an ideal tool for analyzing their experiences and expectations. Google reviews were used because they are the most widely used online review platform, accounting for 73% of all online business reviews (Yaquib, 2025).

These statistics make Google Reviews a largely untapped source of netnographic utility, providing researchers with large quantities of detailed consumer perspectives on businesses and tourist destinations. Using online reviews does have some drawbacks. For

instance, the timing of the post is not always immediately after the consumer experience; most mediocre consumer experiences have the largest time gap between when the experience occurred and when it was posted (Li et al., 2020). An additional drawback is that many online reviews are polarized, as consumers with extreme experiences are the most likely to leave reviews (Schoenmueller et al., 2020).

The second part of the data collection was conducted through observation. Observation was used to verify comments made during the thematic analysis and to gain a better understanding of the park's facilities and how visitors use them. Additionally, many claims were made in the online reviews that implied that some visitors were breaking various park rules or were unclear about what those rules were. Considering the observation method allows the researcher to observe participants from a natural perspective (Lashley, 2024), showing how visitors interact with the infrastructure and how they react to unsuitable infrastructure beyond what they may be willing to say or are consciously aware of. The observation method provides the researcher with a direct understanding of a specific case, enabling the identification of patterns, exploration of complex interactions, and enhancement of the validity of other data (Chauhan et al., 2024). In this case, observation was used to further inquire into illicit behaviors that would likely not be self-reported in online reviews and used to verify claims made about park infrastructure.

3.3.4 Data Sources

Google Reviews are primarily associated with Google Maps, where each location has specific reviews. Given that AMCNP spans multiple locations on Google Maps, data was

collected from the areas most affected by the infrastructure changes the park has implemented. These locations consist of the Red Tarns Track Trail Head, White Horse Hill Campground, Hooker Valley Track, Mueller Lake Lookout, First Swing Bridge, Kea Point, Mueller Hut Route, and the Mueller Hut. For a visualization of these locations, refer to Figure 3. Data was directly copied and pasted from google reviews into Microsoft Excel, where the thematic analysis would occur. No data collection software was considered as this process only required a few minutes to complete.

After the locations were chosen, all reviews posted more than six months prior were discarded as they were not relevant to the ongoing infrastructure changes at the park. Then, all online reviews that included only pictures, a rating from 1 to 5 stars with no context, or little relevant information were all discarded. The discarded reviews lacked detail, such that they could not be themed and were often only a few words long. This ensured the data collected was the most relevant to the issues at hand. In addition, pictures were not included in the reviews because many were irrelevant to the research or contained identifiable information about visitors, such as faces. Even though quotes were collected, no user IDs were recorded in order to protect the reviewers' anonymity, as they did not consent to having their personal information collected by a third party. Reviews not written in English were considered, as many contained relevant information, although the translations were generated via Google Translate, which may have introduced minor errors. This then resulted in the collection of 91 reviews containing substantial information, ranging from a few sentences to multiple paragraphs. These reviews consider the perspectives of visitors from a variety of cultures, perspectives, and abilities. Some of the

reviews were left by locals, but many were from international visitors who spent only one or two days at the park. Some reviews also mentioned their personal ability level and accessibility needs while considering the needs of others. Even though 91 data points are above the norm for most qualitative research, as they surpass the saturation point for theme generation (Wutich et al., 2024), collecting all relevant data does create a sample that can be used to indicate the importance of each theme. This assumes that the more a theme is mentioned in reviews, the more relevant it is to visitors' experience – which may not always be the case, but nonetheless it does serve as an indicator to consider.

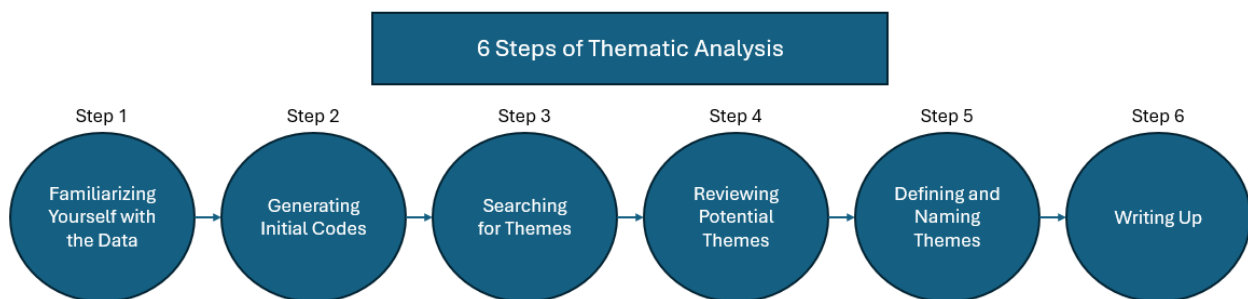
Observation data were collected at four main locations on April 6, 2026. These locations included the White Horse Hill Campground (from 10am to 11am), the Lake Mueller Lookout (from 11:30am to 12:30pm), near the closure point on the Hooker Valley Trail (from 1pm to 2pm), and at Kea Point (from 3pm to 4pm). These locations were chosen to observe parking congestion and restroom cleanliness at the campground, odd or illicit behavior, such as off-trail hiking resulting from the partial closure of the Hooker Valley Track, in addition to any other peculiarities. Pictures were taken when relevant, but visitors' faces were blurred out to protect their privacy. Due to research limitations, observations were conducted near the start of the national park's off-season, which may have reduced overall visitor use. Additionally, my ability to collect data at Mueller Hut was restricted, as snow had already covered parts of the trail to the hut, and adverse weather conditions made traveling to the hut unwise.

3.4 Thematic Analysis

Thematic analysis was conducted, as explained by Braun and Clarke (2006), to address the research questions. The research analysis of online reviews enables omnidirectional movement among the six steps of thematic analysis as new themes are discovered and adjustments are deemed necessary (see Figure 6). As most of the data collected was text with many similarities across reviews, thematic analysis was ideal for interpreting the data and understanding the themes of the datasets. Thematic analysis involves identifying shared ideas between data sets. This is done by identifying keywords or phrases (codes) and fitting them into broader patterns (themes) (Ahmed et al., 2025). Finding these themes and patterns in the dataset allows the researcher to address questions through human lived experience (Christou, 2022; Walters, 2016). This process was divided into six steps by Braun and Clarke (2006) (see Figure 6).

Figure 6

The Six Steps of Thematic Analysis



Note. This figure is an adaptation of the six steps of thematic analysis originally created by Braun and Clarke (2006).

3.4.1 Step 1: Familiarization with the Data

Step one of thematic analysis involves reviewing the data to understand and identify patterns and recurring ideas. This was tricky, as many of these ideas come from various sources and may contradict one another. That said, considering differing viewpoints can yield deeper insights into the research (Naeem et al., 2024). During this research project, this step involved reading reviews to understand the main compliments, complaints, and useful information visitors left.

3.4.2 Step 2: Generating Initial Codes

Step two of thematic analysis involved generating codes to then identify themes in step three. Ordinarily, codes are key words or phrases that occur repeatedly in the data. The core part of a code consists of a complete thought, which includes some codes that can be abstract or obscured through literary techniques (Castleberry & Nolem, 2018). In this case, many of the codes were very explicit, such as “parking,” “trail closure,” or “toilets.” However, because many reviews are written by visitors on their phones, they often include emojis. Interpretation of these codes required the context of the full review and, even though rudimentary, effectively conveyed the ideas of the reviewer and were therefore taken into consideration when used. These codes enabled the identification of themes by grouping together similar ideas.

3.4.3 Step 3: Searching for Themes

With the codes collected, the thematic analysis progressed to step three, searching for themes. This step involved grouping similar codes into broad themes. These themes go

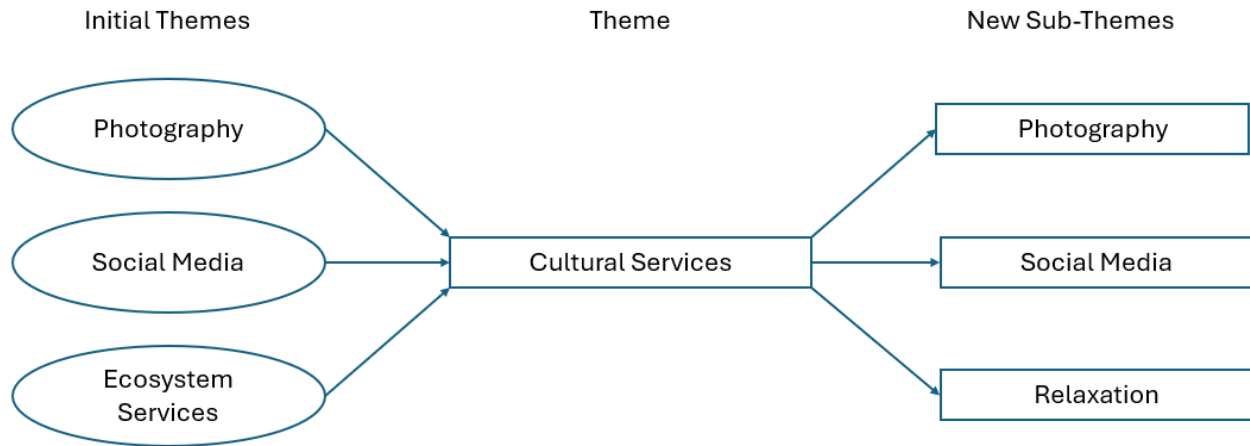
beyond the individual elements of the codes and create abstract meanings that can be used to address the research questions (Naeem et al., 2023). In the research project, the ideas in the reviews primarily concerned parking difficulties, park crowding, trail length and ease, and the second bridge, among other issues.

3.4.4 Step 4: Reviewing Potential Themes

Step four, reviewing potential themes, focused on refining the identified themes. This process involved collapsing themes into a single theme when insufficient supporting data justified the smaller themes, or breaking large themes into smaller ones when this provided greater utility to the research (Braun & Clarke, 2006). This involved analyzing the dataset again and reexamining the meaning of the responses to gain further understanding. In this case, many themes were merged into one: the initial themes of photography, social media use, and ES were merged into Cultural Services, because all these themes focused on the nature of the beauty of the park and how visitors used the visual environment. These initial themes were then transformed into sub-themes. This is depicted below (see Figure 7).

Figure 7

Merging of Themes into the Cultural Services Theme



Note. This figure depicts how the three initial themes of photography, social media, and ES were merged into a single theme called Cultural Services.

3.4.5 Step 5: Defining and Naming Themes

Step five, defining and naming themes, finalizes the themes by attaching a name to a definition that encompasses their ideas. This step includes defining which aspects of the theme are relevant to the research question and why. Defining these themes is essential for understanding and communicating their explicit and underlying meanings (Clarke & Braun, 2017). In this research project, once themes were refined, defining them allowed the ideas to be communicated more effectively to the reader and prompted further research inquiries that needed to be followed up during observation. Once themes were concretely defined, a final analysis of the data was conducted, separating each review into the five discovered themes and indicating which theme each review discussed. Figure 8 details

how this process was conducted in Microsoft Excel, showing information about the review on the left and the themes included in each review on the right.

Figure 8

Screenshot of Thematic Analysis Data Spreadsheet

	A	B	C	D	E	F	G	H	I	J
1	Review Stars	Reviews	age	location	themes:	Infrastructure	Accessibility	Cultural services	Crowding	Rule Breaking
2	5		2 months	Red Tarns Track trail head		1	0	0	1	0
3	4		1 months	Red Tarns Track trail head		0	1	1	0	0
4	5		3 months	Red Tarns Track trail head		0	1	1	0	0
5	5		7 months	Red Tarns Track trail head		0	1	1	0	0
6	5		5 days	White Horse Hill Campground		1	0	0	0	0
7	4		1 week	White Horse Hill Campground		1	0	0	0	0
8	5		2 weeks	White Horse Hill Campground		1	0	1	1	0
9	5		2 weeks	White Horse Hill Campground		1	0	0	0	1
10	5		2 weeks	White Horse Hill Campground		1	0	0	0	0
11	1		13 weeks	White Horse Hill Campground		1	0	0	0	0

Note. This is a screenshot from the Microsoft Excel spreadsheet the data was analyzed with. The reviews are blurred as the accompanying information would make it possible to trace back to the source material. The “review stars” column refers to the rating the location received, from 1 to 5. The “age” column refers to the age of the review relative to when the data was collected on May 2, 2026. The “location” column refers to the Google Maps location from which the reviews were retrieved. The “themes” columns indicate if a theme was present in each review, with a one indicating yes and a zero indicating no.

3.4.6 Step 6: Writing the Report

Step six involves creating the report and sharing the findings with the reader. This process explains why certain themes were chosen, how these themes are used to uncover answers to the research questions, and reflects on the entire research process. In this case, due to the themes uncovered, further research utilizing observation was conducted to validate the themes and examine behaviors hinted at in the data. The observation data acted as a follow-up to the netnographic data through observing how visitors interpreted their experience and why, in addition to identifying possible infrastructure for policy changes. The observation data was supplementary and allowed me to understand how the themes interacted with each other. This is explored further in the findings and discussion chapters. Once all data sources were collected, step six of the thematic analysis was finalized. The thematic framework will be presented in the Findings chapter (see Figure 9).

3.5 Ethics

The ethics committee at Auckland University of Technology (AUT) oversees research conducted at the university. Ethical approval from the committee was unnecessary because there was no direct interaction between the researcher and visitors to the park. All the data collected were publicly available reviews or observable in a public setting. Additionally, no identifiable information was collected from visitors, making all data collected anonymous. This minimizes any risk to visitors whose data was collected. In this way, the research project acts with beneficence while protecting the privacy of visitors, in accordance with basic ethical principles (Greaney et al., 2012). For these reasons, ethical permission was not required under the rules set by the AUT ethics committee. Additionally,

due to the inability to contact the online reviewers, direct quotes are not used in the final research project.

All the reviews were presumable left with the intention of assisting visitors and/or the park. Using publicly available statements in alignment with their intended purpose seems either morally neutral or positive depending on the use of either a deontological or utilitarian moral framework. For this reason, the research project's use of online reviews should have minimal to positive impact on trustworthiness. All quotes are paraphrased to preserve essential information while maintaining the reviewer's anonymity. This ensures that information cannot be traced back to the reviewers.

3.5.1 Reflexivity

Reflexivity is important for this research as reflecting on my position and biases within this research project allows for a better understanding of how the methods were developed. Questioning how I constructed meaning within my research allows further thought beyond dominant narratives and can generate new insights about the target of the research (Alvesson et al., 2008). Additionally, reflecting on who is writing the reviews, how I am interpreting them, and my own prior experience with this subject increases the legitimacy and trustworthiness of the result (Hibbert et al., 2014).

While addressing the research questions, I focused on visitors' motivations and perspectives, given my years of prior work experience within parks and recreation spaces, and the potential for the creation of bias against the competence of some park visitors. By shifting my positionality and understanding park visitors' experiences, this research

mitigates the inherent bias that would arise if I were to address these questions from a managerial perspective. Furthermore, the observational data were in part collected because of contradictory evidence in the netnographic data. This helps eliminate bias by relying on firsthand experience rather than disregarding data that contradicts evolving themes. The observation supplemented the knowledge gained from thematic analysis, deepening my understanding of both the importance and the topic. Observation made me realize that contradictory narratives about issues such as smell or confusion, were personal, subjective interpretations affected by their prior experiences. One visitor's messy bathroom was another visitor's perception of a reasonably clean outhouse with flush toilets. This helped me revise my understanding of the park facilities by viewing them through the lens of experience rather than as an aggregate of the information provided in reviews.

3.6 Limitations

The data collection was limited by several factors. The first limitation was that the netnographic data was collected through Google Reviews. This creates a trade-off between quantity and quality, as there are hundreds of reviews, often with little or no substance. Of the hundreds of reviews, only 91 contained useful data but many of those consisted of only a few sentences or up to a paragraph, and often only detailing a specific theme.

In addition, online travel reviews are often motivated by a desire to help others on their journeys, concerns for consumers, and to reinforce positive self enhancement (Yoo & Gretzel, 2008). This often results in issues, such as parking congestion or accessibility

concerns, that arise frequently but usually lack any critical problem solving that management could employ. The reviews also provide very little information about why visitors made certain decisions, such as which trails they took or whether they hiked off-trail. It is known that off-trail hiking has become an increasing problem (DOC, 2025e), but this issue was discussed only once in over 400 reviews.

An additional limitation for this research and netnographies in general is the rise of artificial intelligence (AI). Although there are indicators that AI can potentially generate reviews, such as higher comprehensibility and lower levels of specificity, exaggeration, and negligence compared to human-generated reviews (Zhao et al., 2025), no AI-generated reviews were found in any of the data analyzed. This may be because there are no AI reviews at AMCNP – this is possible because, aside from the new parking fee, there is no entry fee to the park; therefore, there is no monetary incentive to have fake AI reviews. However, it is equally possible that there are unknown AI reviews in the dataset.

Lastly, the observation was conducted in the month of May. This is during the park's off-season, resulting in fewer visitors. This reduced the opportunity to observe how large groups of people interact, and with fewer people in the park there was a smaller chance of observing rule-breaking behavior such as off-trail hiking. In addition, there was less parking congestion in the park, creating a unique opportunity to observe how the infrastructure operates when the park is not under a high visitor capacity.

3.7 Chapter Conclusion

This chapter explains the various reasons and methods for designing this research project.

This research project aims to understand visitors' experiences at AMCNP, in order to improve their experience and assist with the management of the park. This is done through a paradigm that focuses on access to the park's services. This project consists of qualitative research conducted through netnography and observation. Data was gathered through online Google Reviews and through observation of the park grounds. Thematic analysis was used to identify and analyze the collected data in addition to generating new inquiries. Following this, an explanation of the research ethics and limitations was discussed. The next chapter details the findings of the themes, and sub-themes, and discoveries from the observation.

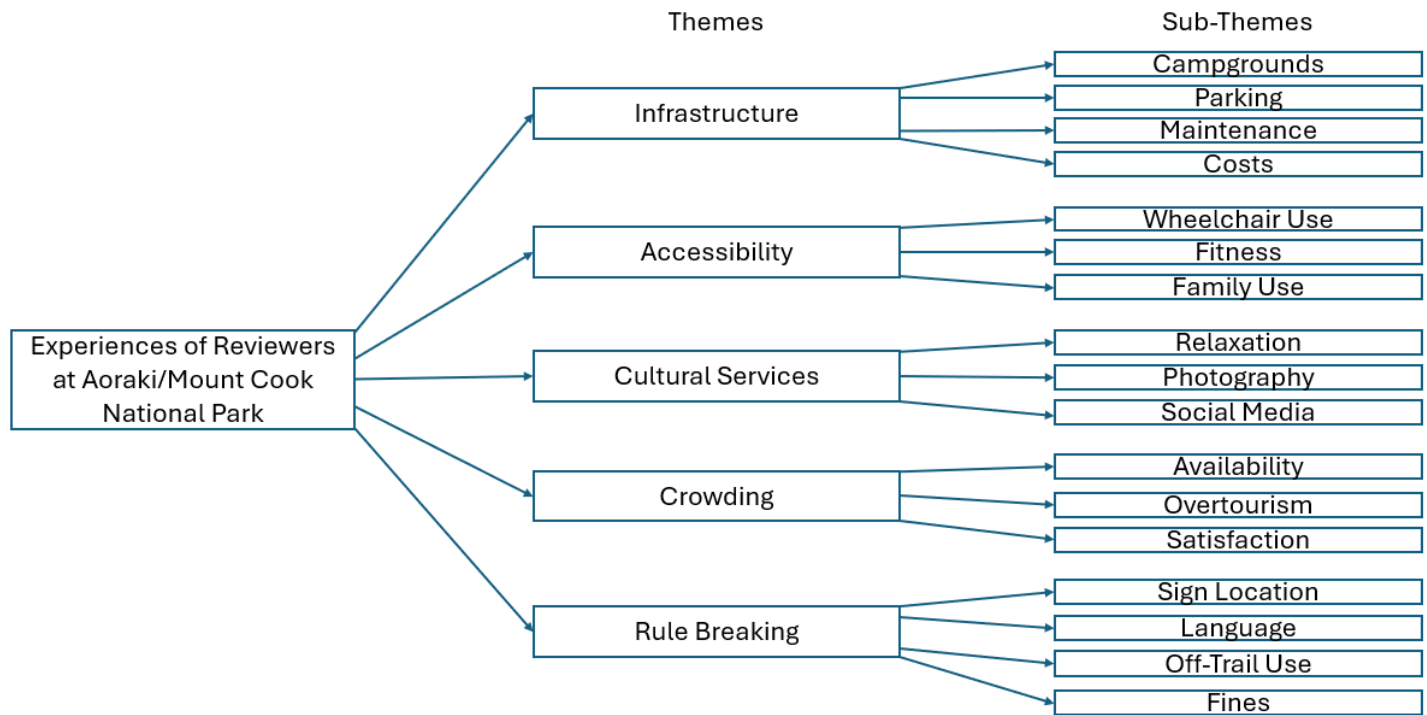
Chapter Four: Findings

4.1 Introduction

This chapter explains the results of the thematic analysis and the observations. The results of the thematic analysis are depicted in Figure 9 below. Each sub-heading explores one of the five themes discovered and details each of the sub-themes with additional reinforcing information discovered through observation. The analysis generated five themes and 17 sub-themes, all based on the experiences of visitors to AMCNP from October 2025 to March 2026. The five primary themes consisted of: Infrastructure, Accessibility, Cultural Services, Crowding, and Rule Breaking. Each of these themes and their sub-themes comprises challenges and / or motivations for either the visitors or the park management. Understanding these themes allows for better park management and furthering DOC's goals while improving the visitor experience at AMCNP. The thematic framework informs the structure of this chapter (see Figure 9).

Figure 9

Thematic Framework of Reviewers' Experiences at AMCNP



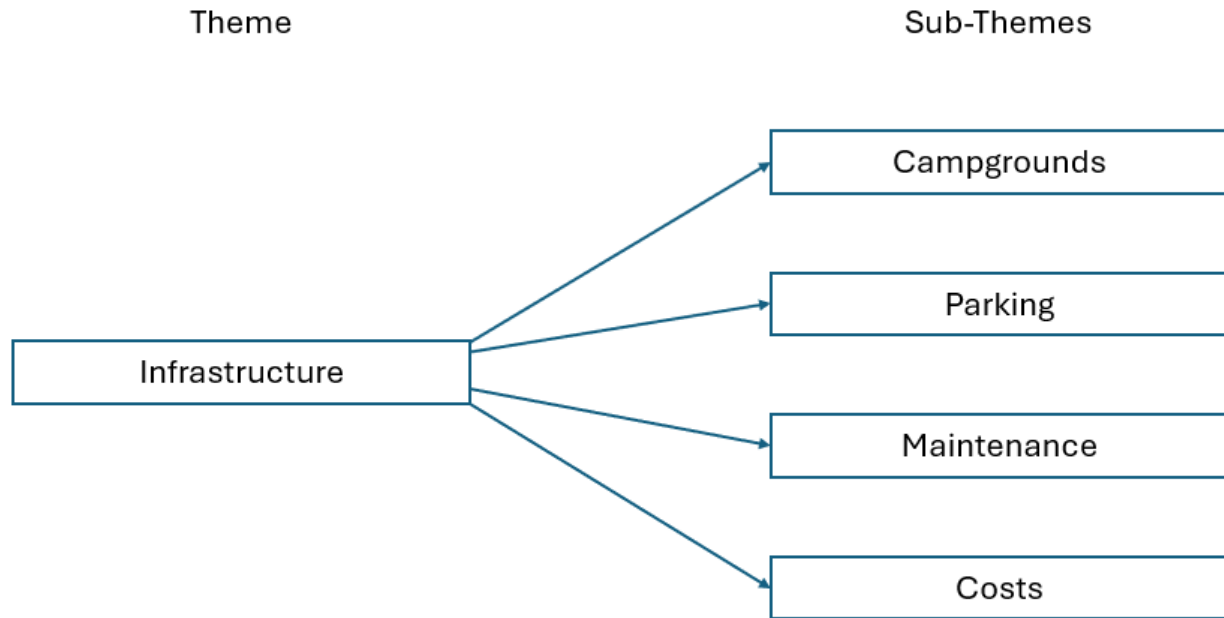
Note. This thematic framework depicts the experiences of reviewers at AMCNP categorized into themes and further into sub-themes.

4.2 Infrastructure

The infrastructure of the park consists of all the facilities and any manmade structures or natural environments maintained by the park. This sub-chapter details the reviewers' thoughts on AMCNP's infrastructure, primarily exploring their views on the four sub-themes: Campgrounds, Parking, Maintenance, and Costs (depicted below in Figure 10). Understanding reviewers' insights allows for the improvement of the infrastructure and visitor experience by taking their critical feedback into account.

Figure 10

Sub-Themes of Infrastructure



Note. This figure depicts the theme of infrastructure and its accompanying sub-themes.

4.2.1 Campgrounds

The Campgrounds sub-category refers to the reviews of the utilities in the White Horse Hill Campground, the surrounding parking lot, and other camping areas in the vicinity. The primary review regarding the campgrounds' sub-theme related to the quality. Many reviewers' experiences reflected the beauty of the surrounding area at the campsite and the cleanliness of the utilities in sight, in addition to describing what the facilities offered visitors. One reviewer was paraphrased, saying [Quote 14]:

“One of the best Campsites I have seen. The beauty was stunning, and the night sky was out of this world. It is right next to the hiking trails with clean toilets and fresh drinking water.”

However, not all the reviewers had positive things to say about the quality, particularly regarding the restrooms. Some reviewers shared similar sentiments, suggesting that the toilets were unclean or smelly, even though they still regarded the campground itself as a positive experience. Overall, the reviewers assessed the campsite's quality alongside mixed reviews of the facilities. One reviewer described the campsite as [Quote 20]:

“The campsite itself was good, but there were no showers, and the toilets were not clean.”

A few reviewers noted that the restrooms were only open during the summer months and closed in winter, but that the price did not change when booking the facilities. Other reviews mentioned that the campgrounds themselves were great, but the utilities were lacking, suggesting that visitors stay in Glentanner Station, as one reviewer suggested [Quote 22]:

“Stay in Glentanner station as it is far cheaper, quieter, and only a short drive away.”

Observation revealed that the facilities were standard relative to other DOC campsites. There were no showers, but the campsite never advertised having one. There was only a slight smell reminiscent of a porta-potty in the restrooms. There were flush toilets whose bowls were clean enough, considering they were in a campground bathroom. The campground is relatively noisy; however, given how popular the location is, this is almost unavoidable.

4.2.2 Parking

The parking sub-theme refers to the parking lot at the White Horse Hill Campground, which implemented a paid parking service charging \$5 per hour or \$25 per day. There are mixed views on the parking system, but the consensus was that it was easy to use and convenient for English speakers, with some non-native English speakers having trouble. The most common posts mentioned that there was free street parking, which is inconsistent with the rules provided by DOC. It seems that fines are only enforced within the parking lot, leading visitors to park on the side of the road. This leads to the idea that there is free curbside parking, which leads to more people parking on the side of the road. One visitor commented [Quote 11]:

“The changes in parking erode the other parts of the park outside the parking lot.”

Many more comments suggested that the parking lot fills up quickly, leading to a full parking lot around 10am, as one reviewer said [Quote 44]:

“We came about 10am and in hindsight it was probably one of the busiest times. Still easy to park, but the car park has long been filled, plenty of space along the road though.”

Another reviewer said [Quote 37]:

“Most hikers park on the roadside. It seems staff are patrolling the area, so parking outside appears to be free.”

Taken together, these comments suggest that the roadside parking effectively serves as an overflow, with little way of preventing visitors from parking there, while the parking lot is too

small to accommodate the visitors to the national park. In addition to the problematic nature of the erosion this causes in the national park, it also leaves visitors confused about what the rules of the park are.

Observation of the parking lot revealed that the car parks were filled by around 10am, although visitors started using the curbside parking far earlier. The curbside parking seemed to be on only half the road, as the other half had a rope railing blocking cars from parking. This implies that the curbside parking intentionally acts as an overflow, as the parking lot is full early in the day.

4.2.3 Maintenance

The maintenance sub-theme refers to the groundskeeping and construction of any infrastructure in the park. The most common reviews involving maintenance notified visitors that the second swing bridge was under construction and only the first half of the Hooker Valley Trail was open. Over one third of the total reviews mentioned the bridge closure in some way and some reviews noted that they were not made aware of the closure until after arrival. This included reviews such as [Quote 28]:

“Such a lovely walk but I didn’t read upon visiting!! Due to construction the second and third bridges are closed so the walk was cut off early. No fault to anyone but us for not reading beforehand!!”

Overall, the reviewers had primarily positive things to say about the trails and environmental maintenance. The only other maintenance-related reviews were about the hut, but very few hut reviews were substantial enough to make it into the dataset. Out of

the substantial reviews, they were almost exclusively positive with remarks commenting on the upkeep of the facilities, such as [Quote 91]:

“Breathtaking sunrises, gas burners, and water, second-floor bunks, dining area, and restrooms provided convenience. I want to go again!”

The maintenance of the campground and surrounding trails were observed to be good quality. The trash bins were at a reasonable level with little overflow, indicating that with the high number of visitors the bins are regularly maintained. On the trails the litter was kept to a minimum. A few wrappers were found on the Hooker Valley Trail; however, that was recent litter as they were still dry in the wet conditions of the trail. No litter older than a few hours or a day was found.

4.3.4 Costs

Costs refer to the payment value to use any of the utilities at the national park, which is split between parking costs and cost of booking the campsite. The most common review in this sub-category described the parking cost which, as previously mentioned, is \$5 per hour or \$25 for 24 hours; and the camping booking, which is \$20 per adult and \$10 per child per night, in addition to a \$10 booking fee if it is done in person. Many reviewers complained about the excessive costs, especially as many people would avoid the costs entirely through curbside car camping or other methods, such as this reviewer who said [Quote 20]:

“We paid the camping fee however, there were many people staying overnight without paying the rather expensive fee, either at the campground itself or on the nearby parking lot.”

Other reviewers also mentioned they were frustrated with the costs for the campground as during the winter season when the utilities such as the toilets were not functional such as this reviewer who commented [Quote 27]:

“Two nights for two people for \$80 is too expensive in winter when the only thing you have is flushing toilets and no light. This should be priced like all the other DOC campsites with no facilities not \$20 base whether you have facilities in the summer or not in the winter.”

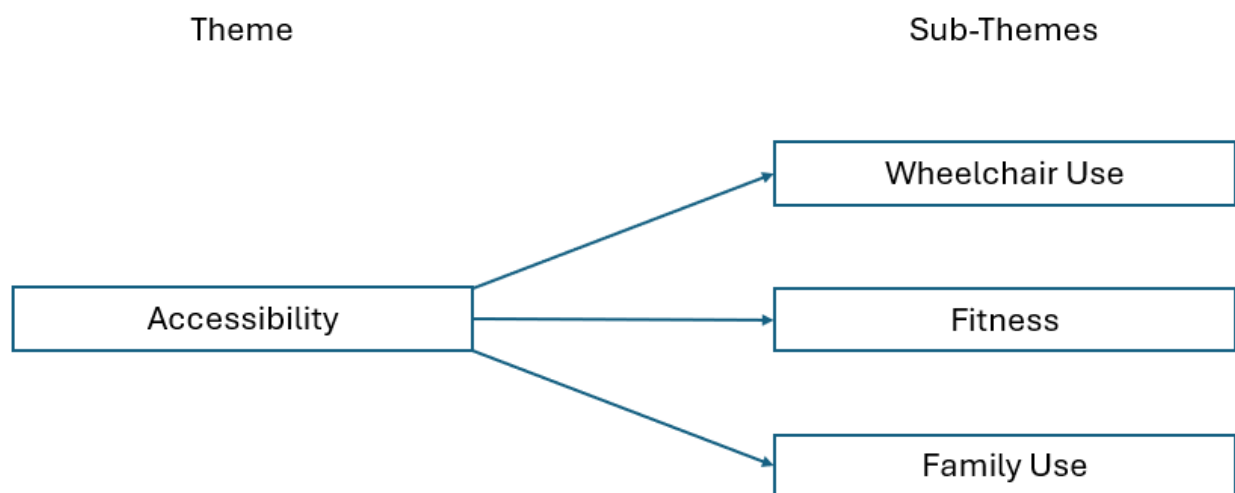
When observing visitors using the campsite it was unclear if all visitors were paying the campsite or parking fees. Many people were curbside parking, avoiding all fees. There were camper vans among the cars curbside parking and in the paid parking rather than the campsite parking, but it was unclear if the visitors in those campervans were car camping and avoiding overnight costs. The campsite filled up quickly and signs were posted asking camping visitors to ask permission from national park employees to park in the paid parking zone if campsite parking is full – this made observations of who paid for what inconclusive without a digital footprint. From the perspective of other visitors, it is understandable that they would think they are paying for unfair parking and camping costs, in combination with the confusion around the curbside parking with \$20 per person per night camping costs or \$5 an hour parking cost.

4.3 Accessibility

The accessibility theme holds that the design and maintenance of the park should be such that as many people as possible can use it, regardless of their individual capabilities. This sub-heading describes reviewers' thoughts on accessibility levels of AMCNP. It explores the sub-themes of Wheelchair Use, Fitness, and Family Use at the park (see Figure 11). As explained in the literature review, not all the trails in the park need to be highly accessible, as the more accessible a trail is, the more perceived crowding there is, and the more visitors want to disperse into less accessible trail systems (Tverijonaite et al., 2018). This sub-chapter reveals the current accessibility challenges facing the park, allowing park management to better meet the needs of all their visitors.

Figure 11

Sub-Themes of Accessibility



Note. This figure depicts the theme of accessibility and its accompanying sub-themes.

4.3.1 Wheelchair Use

Wheelchair use refers to the ability of people who use wheelchairs to enjoy the services at the park. One thing to note is that the national park is highly mountainous, making most of the trails unable to be used by wheelchairs. This includes the popular Mueller Hut Route, making the Hooker Valley Track the only trail remotely suitable for wheelchair use. The few reviews referencing wheelchair use on this trail system were largely mixed, with reviewers saying things such as [Quote 41]:

“Not really suitable for wheelchairs, and you need a level of flexibility to move some sections of the trail.”

In addition to saying things such as [Quote 64]:

“Not difficult to walk. I saw people with wheelchairs along the way.”

Observation revealed that the only part of the national park fit for wheelchair use is the Hooker Valley Trail until the first swing bridge lookout and connecting routes to the rest of the national park, although there was a somewhat steep incline to the lookout, making wheelchair use difficult nearing the lookout. For that section, a powered wheelchair or assistance from someone pushing it may be needed, especially since the gravel would make wheelchair mobility on the entire trail difficult.

4.3.2 Fitness

The fitness sub-theme refers to the variation in physical ability required of visitors to hike certain trails. Although the average visitor at AMCNP is able-bodied, given the mountainous

nature of the terrain, an individual's level of athleticism heavily determines the extent to which they can hike the trails. Many of the trails vary in difficulty, allowing visitors of all athletic abilities to enjoy parts of the park. Many travelers have been transitioning to the Kea Point Lookout Trail for similar levels of elevation gain, while the second swing bridge is under construction and closing half the Hooker Valley Trail. When describing the Kea Point Trail, one reviewer said [Quote 84]:

“Currently, a better option than the Hooker Valley Track because of the partial closure. Kea Point is a good walk that’s about 1hr return from the parking lot with minimal elevation gain (100-150 meters).”

This suggests, as predicted, that the other trails are being utilized more with the partial closure of the Hooker Valley Trail and, as a result, there is a demand for more accessible trails in the national park. Other trails nearby may also be seeing increased usage.

Specifically, the Mueller Hut Route may be seeing increased usage due to the trail closure, leading to a possible increase in the chance that a visitor with less athletic ability and greater difficulty completing the route would use it instead of a more accessible route. One visitor described the Mueller Hut Route as [Quote 91]:

“I found it tiring to walk up the 2200 steps and extremely challenging to hike the slope because there are loose rocks and I worried I might slip (especially on the way down). The end part is a climb over large rocks instead of a path. It’s safe but it takes time. I couldn’t have done the hike in one day and was grateful I managed to book a bed in the hut.”

The constraints of this research project prevent it from determining if this route has seen increased usage during the months of the partial trail closure. Additionally, many routes, such as Kea Point, specifically mentioned the track as an alternative because of the trail closure, but there were no reviews that did the same with the more challenging Mueller Hut Route – suggesting limited or no increase in visitor usage from the Hooker Valley partial trail closure.

Observation revealed the Hooker Valley Trail and the trail to Kea Point to be relatively accessible for any able-bodied person of any fitness level. These two trails had small sections of a 45-degree incline with stairs when reasonable. Steep inclines were sparse, with most of these trails consisting of acute inclines. The Mueller Hut Trail could not be observed due to snow accumulation, in addition to adverse weather and more snow possible on the return hike the following day.

4.3.3 Family Use

The family use sub-theme refers to families visiting the national park having to accommodate the lowest level of ability within the family as, in many cases, children are too young to explore the park on their own and elderly visitors may not be able-bodied enough to safely travel the less accessible trails. This leaves many families confined to the most accessible trails. This primarily consists of the Hooker Valley Trail, with many of the trail reviews specifically mentioning how it is doable for people of all ages, such as this reviewer who said [Quote 54]:

“Easy and enjoyable trail. Can find high mountains near view. Suitable for all ages.”

Other trails, such as the Mueller Hut Route, have also received reviews related to the families using them, although this trail is significantly more difficult, and many of the reviews are surprised at the number of children traveling these trails. One reviewer commented [Quote 88]:

“An eventful hike, but one that requires a certain level of sure-footedness and alpine experience. We were surprised by the number of children we encountered at the hut.”

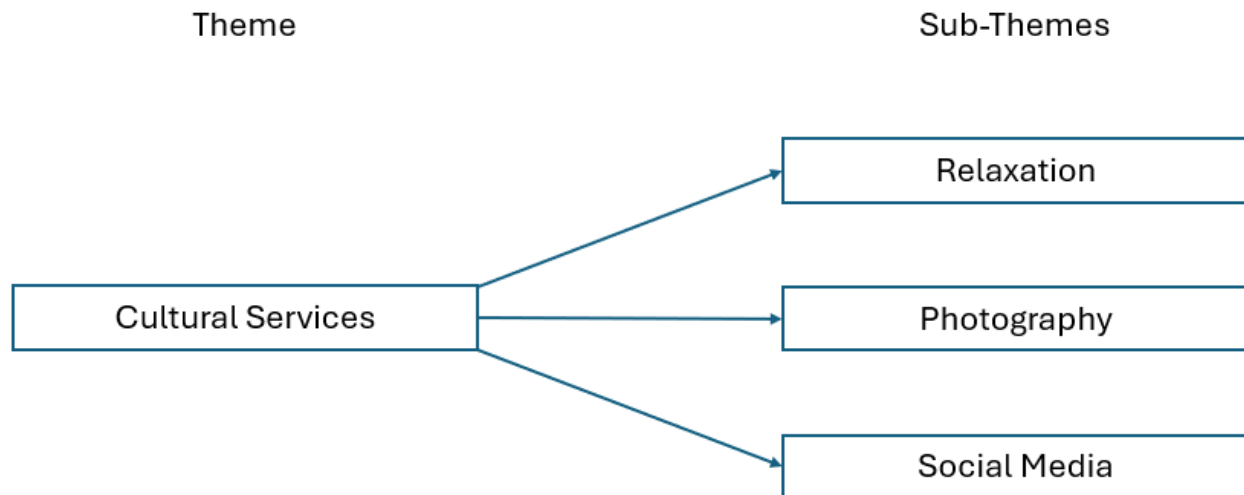
Observation revealed visitors of all ages were using the trails. A field trip with a large group of school children was seen on the Hooker Valley Trail, in addition to many elderly visitors using the trails. Additionally, two hikers with infants were seen descending from the Mueller Hut Trail in heavy rain.

4.4 Cultural Services

The cultural services theme comprises the cultural benefits the park provides through its environment. This is divided into three sub-themes of relaxation, photography, and social media (see Figure 12). By understanding the many reasons people visit the park, management can improve visitor experiences and create better ecological compromises without substantially disturbing visitors. This sub-chapter describes the three main reasons reviewers describe for visiting the national park and their perspectives on these experiences.

Figure 12

Sub-Themes of Cultural Services



Note. This figure depicts the theme of cultural services and its accompanying sub-themes.

4.4.1 Relaxation

The relaxation sub-theme describes the visitors' tendency to enjoy a state of serenity often experienced in the park. As with many natural spaces, visitors look forward to disconnecting from the world and taking in the environment. This is reflected in the results, with many visitors describing the visit they had and the effects the national park had on them, such as one visitor who left a review stating [Quote 5]:

"It's a wonderful place for relaxation, cleansing the mind, body, and restoring health!"

From the descriptions in the reviews, this effect seems to be created at AMCNP for a few reasons, such as the air quality, natural beauty, and peaceful surroundings. Many reviewers shared the common sentiment but often described their experiences differently. One reviewer may focus on the air quality, such as a reviewer who said [Quote 26]:

“The campground is set right in the heart of nature, surrounded by majestic mountains and breathtaking views. Waking up here was truly magical, imagine opening your door to see snow-capped peaks and crisp, fresh mountain air.”

Whereas another may focus on the peaceful nature of the national park, such as the reviewer who said [Quote 56]:

“Amazing views. Peaceful, scenic, and truly awe-inspiring. A must-do!”

Even though each of the reviewers described slightly different feelings, the common sentiment is the same, as well as the common idea that the scenic beauty of the national park helps the visitors to relax and unwind.

4.4.2 Photography

The photography sub-theme refers to reviewers describing themselves taking photos, others taking photos, or good positions to take photos from. Many of the reviews were accompanied by photos of the surroundings at the national park, while others described visitors, often in groups, taking photos of themselves, their groups, or landscape shots. This created situations in which large groups of visitors coalesced to get the perfect photo. One reviewer posted [Quote 61]:

“The view is better from Kea Point, as the second bridge was closed. It's not the site's fault, but it was packed with people taking photos, leaving no room for others.”

In these cases, it seems many visitors take photos for social reasons, or at least the large groups of visitors taking pictures serve as a cue for new approaching visitors. Other reviews

suggest angles and locations to take photos from, as well as other detailed information to create the perfect shot, such as this reviewer who said [Quote 40]:

*“Photography and Visiting Tips * Best Time to Shoot * is at Sunrise or sunset. At dusk, the setting sun paints the peaks of Mount Cook in pinkish-purple or golden, creating a perfect scene.”*

The different descriptions of how and what visitors are taking photos of suggest different intentions, ranging from professional, capturing memories, or reasons relating to the next sub-theme, social media.

Observation across the national park revealed that visitors were taking photos in problematic places, such as in the middle of trails or on the first swing bridge, congesting the walking traffic on the trail and limiting the number of other visitors who could cross the bridge at once. In one baffling instance, I observed a visitor setting up a tripod on the first swing bridge of the Hooker Valley Trail. The man remained there for 15 minutes trying to take a photo while stabilizing the camera on a swinging bridge, taking up much of the space on the walkway. A vast majority of the visitors took photos with their phones or with more expensive cameras. Roughly 75% of observed visitors took photos in some way. They did so primarily at designated locations, such as the ends of trails or lookouts, while only a much smaller number of visitors took photos on the trails or at inconvenient locations.

4.4.3 Social Media

Social media was also a prevalent sub-theme that emerged in some reviews. Many of these reviews described seeing AMCNP online and wanting to come to the park to see the

beautiful photo location in person. The online nature of sharing experiences has seemingly prompted people to take and share these photos, creating a social signifier. One reviewer has said [Quote 62]:

“This world-famous track is all over social media on a blue-sky day, but honestly, it’s just as stunning when the weather turns moody — cloudy or light rain gives the whole valley a dramatic, almost mystical vibe.”

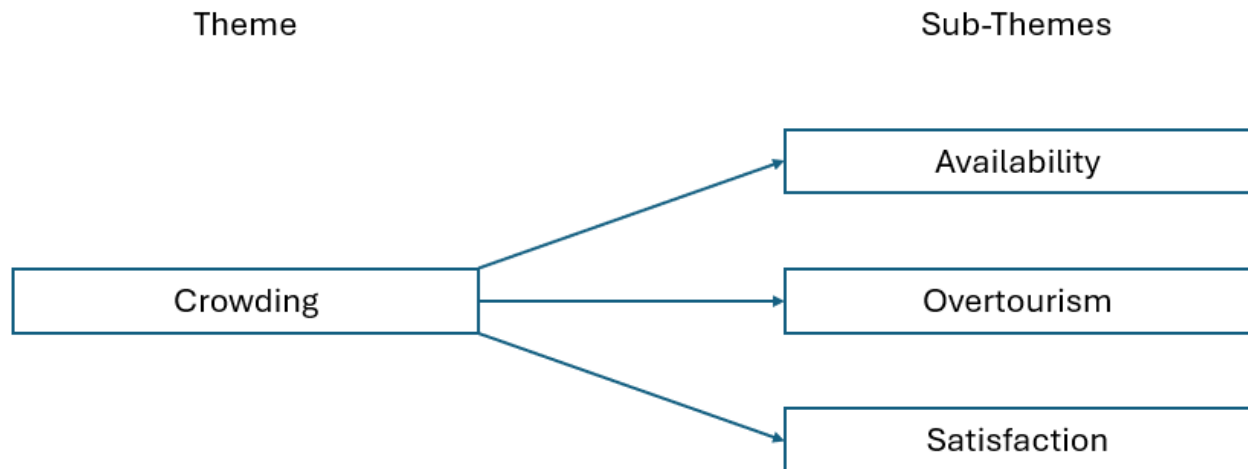
Observation on social media use was limited, given the nature of the theme, but visitors were taking photos of each other individually and as groups. I was asked twice to take photos of passing groups, with at least one person saying they would post them to Facebook later that day. There were also many visitors holding selfie sticks or filming themselves at the national park. Presumably, these photos and videos would be uploaded to social media later.

4.5 Crowding

The crowding theme emphasizes the feeling of compactness that many visitors feel as the large groups disrupt the peaceful atmosphere being generated by the surroundings. This theme is divided into three sub-themes consisting of availability, overtourism, and satisfaction (see Figure 13). As AMCNP is becoming more popular, more visitors will arrive to see it, furthering the problem. This sub-chapter reveals how reviewers feel the park is crowded and how that affects their experience.

Figure 13

Sub-Themes of Crowding



Note. This figure depicts the theme of crowding and its accompanying sub-themes.

4.5.1 Availability

The availability sub-theme describes the lack of physical space within the national park.

This primarily concerns the parking lot but, to a lesser extent, it also refers to the availability of space on trails such as the Hooker Valley Trail. Many reviews mention the lack of available parking at the White Horse Hill Campground, suggesting that visitors secure a parking spot early or park on the side of the road. The parking lot at the campground prompted one reviewer to say [Quote 16]:

“Desperate drivers then repeatedly circle the area searching for a parking space. Resulting in cars often parking on the road in front of the parking area – long before it even comes into view”

This suggests that the parking facilities are insufficient to accommodate the large number of visitors. Many visitors stay only a short time, but the number of visitors creates congestion on the trails. One reviewer commenting on the Hooker Valley Trail said this [Quote 53]:

“The second of the three suspension bridges was closed. This trail is even more crowded, as everyone is crammed into the first third.”

Observation revealed that even on a day with bad weather, the parking lot was full by 10am with a substantial overflow of cars on the curbside. The photo below shows the extent of the curbside parking (see Figure 14). Additionally, the parking lot and many of the trails were flooded with visitors, making driving in the parking lot and meandering through the trail system difficult.

Figure 14

Curbside Parking at White Horse Hill Campground



Note. This photo depicts the usage of the “free” curbside parking at White Horse Hill Campground. Faces are blurred to protect the visitor's identity.

4.5.2 Overtourism

The overtourism sub-theme notes a pattern of how specific locations have seen highly increased use while others have been under-traveled. Locations such as the Hooker Valley Trail have seen the most use, while slightly less accessible locations, such as Kea Point and

Mueller Hut, have shown similar trends to a lesser degree. The implication, although rarely stated outright, is that the overwhelming number of people detracts from the quality of the cultural services the national park provides. One reviewer said this about the Hooke Valley Trail [Quote 46]:

“It was disappointing because of the effects of mass tourism. Many people hiding behind their phones taking as many pictures as they can as quick as they can.”

This contrasts with other trails, such as the nearby Red Tarns Track, which sees fewer overall reviews. Some are saying it is a less crowded alternative, such as this review [Quote 5]:

“Great views + no people on a sunny day 😊”

Observation of these locations revealed that locations such as the Red Tarns Track had overall less visitation, whereas the Hooker Valley Trail and Kea Point were very crowded. Mueller Hut could not be observed due to the weather conditions. In the main tourist locations, such as lookouts or the ends of trails, the number of visitors increased substantially, with many standing or sitting for upwards of 30 minutes before leaving. Many of them were talking loudly over the wind, disturbing the atmosphere, changing these points from a serene natural landscape to a busy tourist site.

4.5.3 Satisfaction

The last key sub-theme concerns the resulting decrease in satisfaction due to crowding. Across all the reviews, people’s experiences were broadly split into being satisfied with the cultural services theme or describing how the crowding in the national park decreased the

quality of their experience. This was a very common occurrence, with many reviewers describing how the large crowds disrupted the peaceful atmosphere and their calming experience. One reviewer's response to the large crowds was saying [Quote 44]:

"Come early to avoid the crowds, can't enjoy the views because there's so many people trying to get past you all the time."

While another said [Quote 52]:

"The biggest downside is how busy it is. It was crammed, both the carpark and the track itself, which was full of people not looking where they're going and not keeping their kids out of other people's way."

These reviews were from the Hooker Valley Trail. All the negative reviews regarding how the large crowds reduced their satisfaction were almost exclusively from this trail, or to a much lesser extent photo locations such as Kea Point. Complaints about overcrowding from other locations were negligible.

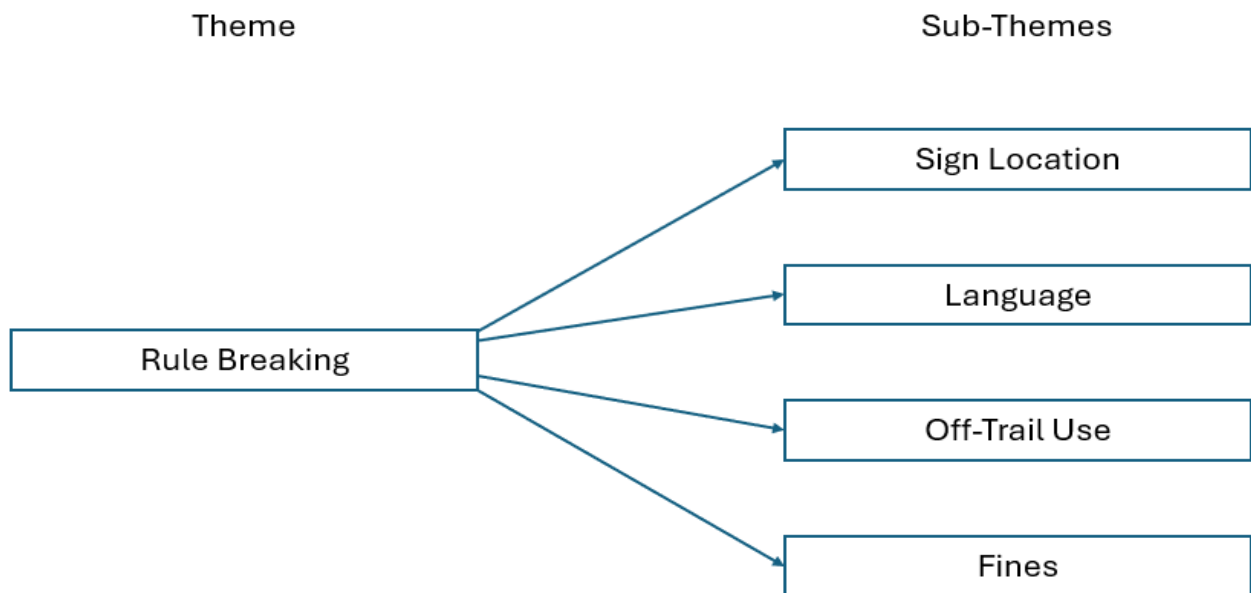
Observation was unable to determine the satisfaction level of visitors, other than a general pleasant demeanor. Extrapolating the visitor perspective from my own experience, the national park hot spots felt more like tourist sites with people packed into small areas seeking photos. It was difficult to feel relaxed in these areas, but walking to less traveled areas, the natural environment felt more peaceful.

4.6 Rule Breaking

The rule breaking theme describes the various rule breaking and confusion that many visitors experience while at the park. This theme is divided into four sub-themes: sign location, language, off-trail use, and fines (see Figure 15). Understanding why visitors break the rules of the national park allows management to adjust their policies to accommodate for both parties, or to more effectively communicate rules to clear up confusion. In some cases, the rules seem arbitrary to visitors while in other cases visitors may not be aware of what is allowed. Through more effective communication such as sign placement, language translations, or explanations as to why the rules exist, management may be able to decrease unwanted visitor behavior.

Figure 15

Sub-Themes of Rule Breaking



Note. This figure depicts the theme of rule breaking and its accompanying sub-themes.

4.6.1 Sign Location

This sub-theme was created as there were multiple reviews complaining about the sign placement, particularly regarding the Hooker Valley Trail, while the second swing bridge is under construction. Some reviews remarked that, as the trail is the main and most accessible location that many of the visitors want to use, it was unfair to notify the visitors of the closure further down the trail after they had already paid for parking. Many of the reviewers also acknowledge that the information was posted online, and they should have checked before they came. An example of one of these reviews is as follows [Quote 33]:

“We discovered that the trek was only open at the beginning. We searched around and only found a relatively distant sign saying that the trek was closed, there was no sign at the entrance/during the trek saying that it was closed. It sucks that we paid a price for a full day's parking...”

Along a similar perspective, another reviewer responded [Quote 51]:

“After you pay for the parking, you will see a sign saying the 2nd bridge is closed 🤔....”

Another sign-related issue was the disregard of the sign at the first swing bridge, limiting the capacity to 20 people. From the reviews recorded, all four of the reviews at the first swing bridge mention how the bridge has a 20-person limit and how no one follows that rule, as this is exceeded regularly. An example of this that best describes this states [Quote 76]:

“The view is also great. It clearly states that the maximum number of people allowed at one time is 20, but no one seemed to care.”

Upon observation, the first sign explaining the trail closure of the second half of the Hooker Valley Trail was well beyond the parking lot, after any visitor would have paid for parking. The photo below depicts the distance from the sign to the parking lot (see Figure 16).

Figure 16

Photo of Sign Distance from Parking Lot



Note. This photo depicts the distance between the first sign describing the closure of the Hooker Valley Trail and the paid parking lot.

Additionally, the signs for the maximum load limit on the bridge are clearly displayed in very large, noticeable letters, with depictions showing the 20-person limit. The sign and its location do not seem to be the reason the bridge's limit is occasionally exceeded. The

photo below shows the bridge over capacity with 23 people on it (see Figure 17). There were three instances of the capacity being exceeded during one hour of observing the bridge.

Figure 17

Photo of The First Swing Bridge Over Capacity



Note. The capacity of the bridge was exceeded by three (people in this picture), while the signs informing the visitors of the capacity are clearly visible to them. Signs exist on both sides of the bridge, but only one is visible from this photo. The faces of visitors are blurred to protect their identity.

4.6.2 Language

The language sub-theme is created from the many reviews which suggest that languages other than English should be posted to better communicate with the public, as many visitors to the national park are non-native English speakers. Many of these reviews were translated into English, and it is unclear how many visitors have difficulty understanding the information. Nonetheless, reviews suggest that translations should be available for languages that make up a large proportion of the international visitors. These reviews include statements such as [Quote 17]:

“All of this is only explained in English. The beautiful hiking trail is closed halfway for construction. It would have been so easy to mention it at the beginning.”

Relative to the total number of reviews, the number that mention language is small. Further observation at the national park revealed visitors speaking various languages, including French, German, Korean, Japanese and, most commonly, Mandarin. Occasionally, other languages that were unidentifiable to me were heard.

4.6.3 Off-Trail Use

The sub-theme of off-trail use emerged from a pattern of comments noting off-trail use by some visitors who bypassed the second swing bridge and continued on the Hooker Valley Trail past its closure point. There were very few comments regarding this; however, given both the safety concerns and disruption to the creation of the bridge (DOC, 2025e) the visitor perspectives on this issue were of particular importance. One important concern that was pointed out regarding the off-trail use was [Quote 38]:

“Strongly recommend avoiding walking off trail due to a high risk factor. It would be better if the signage also included Chinese language translation. Due to the large number of tourists who get off the trail and endanger themselves.”

No other reasons for off-trail use were directly given. Other comments stating that the best view of Aoraki/Mount Cook is past the bridge give credence to the idea that visitors go off trail to both gain a better view of the mountain and to avoid the crowding at the first half of the Hooker Valley Trail.

Observation of the second swing bridge did not reveal any visitors traveling off-trail over the two-hour period from 11am to 1pm; however, additional signage was uncovered on the Hooker Valley Trail prohibiting visitors from traveling off trail (see Figure 18). Several of these signs were posted between the first and second swing bridges, with only one other sign found at Kea Point.

Figure 18

Sign Prohibiting Off-Trail Use



Note. Various signs like this were placed between the first and second swing bridges on the Hooker Valley Trail.

4.6.4 Fines

The fines sub-theme was created because of the large number of reviews mentioning the fines they received from the paid parking system. The number of reviews with this sub-theme may result from bias, as the fines probably resulted in a higher likelihood of leaving a review – reviews are left more often when visitors have more extreme experiences (Schoenmueller et al., 2020). In combination with other information collected, displaying

confusion about the paid parking system, the resulting fines are nonetheless a relevant factor when considering how functional the parking infrastructure is. Some reviewers comment about how frequently the DOC employees check the parking. Additionally, reviews mentioned different amounts for the fines, with values of 70, 75, or even 200 dollars used as fines. Reviews will say things such as [Quote 39]:

“If you park, make sure to leave the exact timeframe you entered. Otherwise, expect to pay a \$70 fine. They track when your car enters and leaves.”

Other reviewers mentioned that the fines are only enforced within the parking lot, creating confusion about where parking is and is not available, or is free. The reviewers generally did not seem sure of the validity of their statements. Rather, they were just deferring to the shared consensus with no signage indicating the rules. One reviewer who exemplified this said [Quote 37]:

“It seems there are staff patrolling the parking lot, so parking outside the area appears to be free.”

4.7 Chapter Conclusion

This chapter examined visitors' experiences at AMCNP, focusing on their interactions with park infrastructure and accessibility. Themes and sub-themes were created based on the comments of the reviewers, primarily focusing on visitor interaction with the park facilities and the services it provides. Information collected from the reviews was investigated through observation, validating or contradicting the experiences presented online. Many of the themes interacted with each other in a variety of ways, creating an interrelated,

multifaceted dynamic between visitor experiences and desires, their interactions with various park infrastructure, and how park management wishes the park to be used. Understanding how these sub-themes relate to one another provides an avenue to address the concerns of both park visitors and DOC. The following chapter discusses how these themes relate to each other and the available literature.

Chapter Five: Discussion

5.1 Introduction

In this chapter, the findings from the previous chapter are connected to relevant literature.

The discussion will uncover how the themes and sub-themes, observed in the previous chapter, when combined with critical thinking and relevant literature can improve visitors' experiences while simultaneously alleviating some of the challenges faced by AMCNP. This chapter will begin by addressing sub-themes derived from a single theme, as they often involve the simplest policy changes. Following this, the chapter will discuss how specific problems incorporate multiple themes and sub-themes to create complex dynamics.

These problems overlap in themes because the visitor motivations, behavior, and outcomes draw from different themes. Through the understanding of how the themes are interconnected, this project will be able to fully address the research questions.

5.2 Mono-Themed Comments and Challenges

This section addresses visitors' comments and national park challenges that are connected to only one sub-theme. Several of these comments are benign and suggest either minor or small changes would be beneficial, while others may have simple, although not easy, changes that ought to be implemented for the betterment and safety of visitors and the environment.

5.2.1 Infrastructure Critique

Reviews regarding maintenance and costs were limited to the infrastructure theme. The park's groundskeeping was mentioned in many overwhelmingly positive reviews, as described in the Findings chapter. This has many implications for the surrounding environment, but it also indicates that the park has positive environmental impacts beyond the scope of this research (Alemu, 2015). Many maintenance reviews referred to the construction of the second swing bridge. The bridge's construction and the partial closure of the trail were disappointing to many visitors, especially as they were unaware of it before their arrival. DOC provides all this information on its website (DOC, 2025d). Even though these trips can often be planned months in advance (Backhaus et al., 2022), information available at the time of planning may be outdated. The construction of this bridge was delayed (Srinivasa, 2025), likely causing inconvenience to visitors who had planned months in advance for the bridge's opening. It is best practice to be precise to avoid these situations.

Cost reviews criticized the relatively high cost of parking. Visitors felt that other visitors getting free parking or camping while they paid was unfair, especially since the camping fees were higher at the park than at nearby campgrounds with similar facilities. This issue is likely compounded by the unclear communication about how the curbside parking operates. Some suggestions, such as those by Pierce and Shoup (2013), recommend seasonal pricing that charges people more when parking spots are in higher demand. This relative decrease in price should help alleviate frustration over high prices during the off-season when the facilities are not fully operational. Other researchers suggest that the

costs of national parks directly affect the number of visitors who come to the park, but if costs are too high they could exclude low-income individuals (Schill, 2018). In this way, the high costs during the busiest parts of the year decreases the excess number of visitors, but by decreasing costs in the off-season the park could increase visitation by favorably targeting visitors with less economic access.

5.2.2 Family Use and Fitness

The sub-themes of fitness and family use functionally act the same in terms of policy implementation. The findings revealed that Kea Point and the Hooker Valley Trail are by far the most used and most accessible trails in the park, with visitors of all ages and fitness levels on them. Other trails, such as the Red Tarns Trail and Mueller Hut Route, have much steeper inclines and were primarily used by physically fit visitors. One consideration in the literature is the walking speed of visitors on trails, as elderly visitors often walk at a much slower pace, leading to greater trail congestion (Schamel & Job, 2018).

5.2.3 Planning Around Cultural Services

Photography and social media follow similar implementation approaches in terms of policy suggestions, as photography is part of the social media experience and partly explains why visitors take so many photos at specific locations. The experience on the more accessible trails felt like a popular tourist attraction rather than a natural environment. This seems to be a major motivating factor for visitors to engage in unusual and unsafe behaviors, and to lack awareness of other visitors around them (Evans, 2018; Cornell et al., 2025). In many ways, AMCNP offers a highly desirable location for photo tourism as its high level of

aesthetic natural environment, infrastructure, recreational resources and uniqueness make it a prime location for this type of tourism (Maslennikova & Vladimirovna, 2020). Unfortunately, for other visitors on the trail, especially on the swing bridges with a weight limit, the significant occurrences of photography blocks people from progressing on the trails.

To make this experience more pleasant for visitors, especially those with different motivations such as recreation and relaxation, building more locations with views overlooking tourist attractions separates visitors who wish to take pictures from other visitors who would be inconvenienced (Maslennikova & Vladimirovna, 2020). The swing bridges have become a major attraction for the national park, making them a key location for this to happen – the congestion of photographers on the bridge prevents people from moving forward and causes an unsafe number of people to move onto the bridge.

5.2.4 Carrying Capacity

Availability has become an issue with the trail systems because there are a high number of visitors across accessible trail systems. While observing there was only congestion at a few key locations, including the bridges, therefore the large number of people across the trails creates a substantial amount of noise detracting from the relaxing environment. This problem raises the question of what the national park's carrying capacity should be, as visitor numbers are likely to continue increasing (Visitor insights reports, 2025). There is no clear answer to this question, as different types of tourists have varying levels of what is too crowded (Pulido-Fernández et al., 2024); nevertheless, the capacity is generally

determined by the level of environmental damage done and by visitor experience, as both are impacted by crowding quality (Chen et al., 2014; Manning, 2001).

5.2.5 Communication of Rules

Signage, language, and fines all relate to how DOC communicates the rules of AMCNP. No level of communicating the rules will fully lead to compliance, but communicating park rules clearly will still increase rule compliance to an extent, in addition to clearly establishing visitor expectations at the park (Selvaag et al., 2022). The first sign of a communication issue was the sign describing the closure of the second swing bridge, which was far beyond the entrance to the park (see Figure 16). Many travelers plan far in advance or read that the bridge should be reopened by the time they arrive, creating disappointment at not being able to see one of the main tourist attractions at the national park. For the partial closure of a trail relevant to visitors to the park, signs should be posted much closer to the park entrance, as the entrance serves as a primary communication point for visitors (Upchurch, 2006).

Another concern regarding sign location is the signs on the first swing bridge, which prohibit more than 20 people from being on the bridge at one time. The signs on both sides of the bridge are very clear, with both words and graphics describing their intent, yet more than 20 people regularly cross the bridge at a time. The graphics help convey the sign's meaning across potential language barriers (Muekthong, 2021) and appear intuitive. The signs are large and directly next to the bridge, making them nearly impossible to miss. For this reason, I think that the sign location or communication is not the issue. According to

Dehaene (2011), the human mind becomes increasingly poor at estimating crowd size: as crowd size increases, as the density of people increases, and when vision is occluded from the person making the estimate. Considering how densely packed the bridge is, and the extremely occluded vision of the visitors because they are in a line, it is likely that the visitors are inaccurate when estimating the number of people on the bridge, therefore causing them to go beyond the bridge's limit.

Language is another important factor to consider to diminish rule-breaking. Many of the signs relevant to the national park's rules were only in English, although they did include figures illustrating the rules, such as Figure 18. The figures with a circle around them and a slash through them act as a universal prohibition symbol, effectively communicating the prohibition to everyone (Murray et al., 1998). The findings show that many of the visitors' native languages vary significantly. Best practices for proper signage often include recommendations for translations (Saunders et al., 2019), although the difficulty instead lies in deciding which languages to translate to, given the limited space on the sign.

One policy expected to be notable was the ban on drones in the area. This research project did not find a single review of drone sightings. Signs were regularly posted around the national park informing visitors of the ban and suggesting that their use is a problem in the area, but with no evidence of this being a challenge, it is unclear how common this issue is or what could be done to address infractions.

5.3 Poly-Themes Comments and Challenges

This section addresses the reviews and challenges within the sub-themes that span multiple themes, highlighting the motivations, behaviors, and outcomes. These challenges are interconnected and require alterations that address visitors' motivations to alleviate problems, create behavioral changes in the visitors, and achieve positive outcomes for the national park. The structure of this sub-chapter follows the interconnected sub-themes that have not yet been addressed.

5.3.1 The White Horse Hill Campground Experience

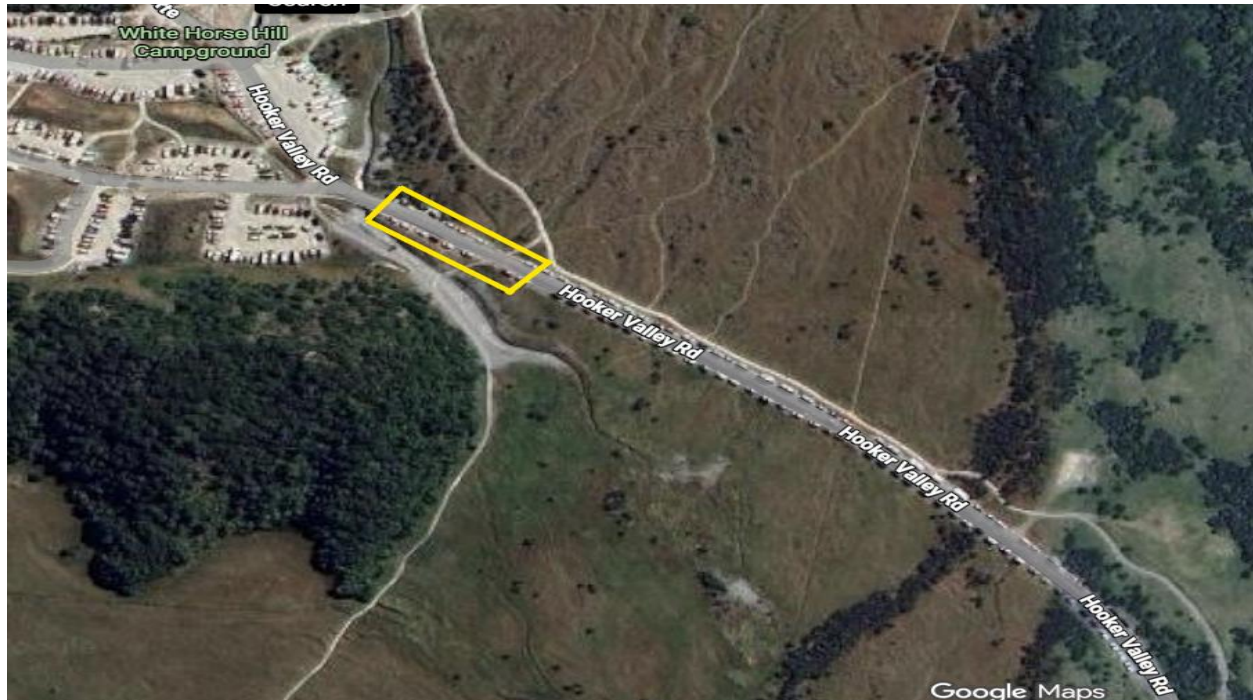
The campground's quality had a mixture of reviews, with some stating how nice the area and facilities were and others describing a lack of cleanliness and an odor. Observation made me realize the facilities can become dirty quickly, leading some experiences to be highly positive and some negative depending on when the area was last cleaned. This pattern was exacerbated as reviewers are more likely to leave a review if they encountered a more extreme experience (Schoenmueller et al., 2020). For this reason, the negative reviews are likely inevitable, considering the high visitation level at the park. The bins in the campground were emptied with relative frequency, and none were observed to be overflowing, which is one of the largest contributors to visitor littering (Lev et al., 2026). Additionally, park management has already implemented signage with appropriate language suggesting visitors help to protect the park by not littering, thereby creating a deterrent (Taff et al., 2022).

Parking becomes difficult to find during the busiest hours of the day. Based on the number of visitors complaining about their inability to find parking and the fact that curbside parking is sometimes available on only half the road, with the other half restricted by a railing, it is likely that curbside parking is intentionally used as an overflow parking area (see Figure 14). I can only assume that the curbside parking is free because when the new paid parking system was established, it was only enforceable inside the parking lot, leaving the curbside parking in a grey area because it would be deemed necessary for high visitation. Curbside parking can damage the environment through vegetation trampling, erosion, or the creation of “social trails” (Marion et al., 2016).

Additionally, curbside parking creates a potential hazard, as more visitors walking on the main road, as shown in Figure 19, increases the risk of traffic accidents involving pedestrians (Box, 2004). One limiting factor for this hazard was the moderately smooth hiking trail along the curbside parking on Hooker Valley Road, all the way to Highway 80. This connects to The Hooker Valley Trail and serves as a wheelchair-accessible route to the car park, although the trail does veer off the road near the parking lot.

Figure 19

Google Maps Satellite Image of Curbside Parking Hazard Zone



Note. This satellite image depicts an aerial view of The Hooker Valley Road, indicating the potential hazard zone in yellow, as well as potential hazards from crossing the road to reach the trail, which are obscured by parked vehicles. This image was sourced and edited from Google Maps on June 4th, 2026.

5.3.2 Disability Accessibility

Much of the infrastructure in public spaces is designed for people with a wide range of abilities, leaving consideration for people with disabilities as a challenge to be overcome (Stafford et al., 2022). This is shown in many ways at AMCNP, such as the previously mentioned trail next to the curbside parking. The trail itself, even though unpaved, should still be usable by a wheelchair, but there is no connection to the road, making the meter-

and-a-half distance to the trail exceedingly difficult for wheelchair users. This could easily be resolved with enough disability parking locations within the parking lot. None were observed within the park lot. The disability parking spots, in addition to leaving spaces for visitors who need them the most (Lu et al., 2014), increase participation (Darcy & Burke, 2018) and quality of the experience for people with disabilities (Flemmer & McIntosh, 2025).

In many instances, disability seems to be an afterthought in the planning of the park. This is in alignment with the tourism industry across New Zealand which lacks experiences that offer equity of access (Cockburn-Wootten & McIntosh, 2020). Other than the trails to the parking lot, the only trails accessible in a wheelchair are the first approximately 800 meters of the Hooker Valley Track and a small fraction of the route to Kea Point. The only proper viewpoint they can access is the Lake Mueller Lookout, assuming they can get up the hill to it, which according to Lepoglavec et al. (2023), is nearly impossible to do while traveling a gravel path with an incline above nine degrees while wheelchair-bound. The DOC (2025f) claims this area is “suitable” for wheelchairs, while areas beyond it on the trail are “difficult” for wheelchair use, which is a significant understatement.

The national park facilities would be more accessible with minimal stairs and larger restroom stalls when space is needed. According to Chen (2013), the facilities at the national park ought to include accessible restroom doors, grab bars, curb cuts, accessible trail-connecting facilities, and minimal barriers between the campground and utilities to be fully accessible. Other than curb cuts, which are unnecessary at the park due to the lack of road curbs, the only missing element is grab bars for visitors with mobility disabilities.

Aside from physical infrastructure, communication is one of the most important factors in encouraging people with disabilities to visit the park (Whiting et al., 2025). While information is available at the facilities and online through DOC (2025g), independent sources, such as blogs, have provided the most detailed information about accessibility concerns at the national park (Aur lie, 2017; Graham, 2024).

5.3.3 Decreasing Quality of Experience

Relaxation is one of the main cultural services that draws visitors to the national park. This sub-theme is responsible for some of the main positive benefits of visits to nature, such as emotional well-being and reduced mental fatigue (Sancho-Pivoto et al., 2025; Kuo & Sullivan, 2003). The reviews suggest the national park's potential for relaxation is extremely high, although visitors note that due to crowding they are finding it more difficult to relax.

The quality of visitor experiences at the park is partially determined by all five themes. The quality of infrastructure in parks, such as washrooms, campgrounds, and parking areas, directly affects the relaxing nature of the experience (Geng et al., 2021). Accessibility becomes a double-edged sword because the more people who can access the park, the more people who visit, increasing the crowding problem, which ultimately decreases the tranquility, relaxation, and quality of experience in natural environments (Manning et al., 2026; Sever & Verbi , 2019; Blut & Iyer, 2019). Combining all these motivating factors increases the likelihood of rule breaking, such as off-trail hiking, due to the park's issues with carrying capacity (Park et al., 2022; Manning, 2013).

5.3.4 Touristification of AMCNP

AMCNP has seen increasing use in recent years, making it the second-most-visited national park in New Zealand (Visitor Insights reports, 2025). The overtourism is reflected in reviewers' reports that many visitors are clustered around specific areas, such as the main bridges. This is likely due to several reasons, including growth and higher standards for nature tourism after the COVID-19 pandemic (Geng et al., 2025; Díaz-Pérez et al., 2024), concentration of visitors in specific times and locations within the park (Rogowski et al., 2024), and social media popularization (Wichman, 2024).

The literature on this topic suggests that the clearest way to alleviate this problem is to address the times and locations with the most visitors (Rogowski et al., 2024). This could be done by limiting how long visitors can spend at specific locations or by making other times and locations more appealing to them. Other suggestions include expanding nearby tourist hotspots, which would spread visitor density around the park as crowding perception is more often defined by specific locations than by average visitor density (Kohlhardt et al., 2017). This pattern is present in the case of AMCNP due to the previously mentioned high density areas in the park creating these hot spots. This is likely exacerbated by the partial closure of the Hooker Valley Trail, blocking access to the second and third swing bridges.

5.3.5 Rule Breaking

Off-trail hiking, although only indirectly referenced in the thematic analysis and with no observations recorded, has increased in frequency and caused disruptions during the

construction of the second swing bridge (DOC, 2025e). The literature suggests that a primary reason for off-trail hiking is high levels of crowding (Sim et al., 2018). This seems especially applicable in this situation. The lack of visitors past the second bridge creates a unique photography and social media incentive for visitors to capture a photo of the bridge without anyone standing on it – tourists will often try to replicate photographs they see online (Payntar et al., 2021). For this reason, the social media fascination with the swing bridges increases visitation to the park, particularly in these areas, while also creating a social incentive to see and photograph them when the chance arises. Once the Hooker Valley Trail reopens, the off-trail hiking should decrease as the locations the visitors want to see will be available again. This is still important because any future trail closure for construction or maintenance creates the same problem.

Fines are the only enforcement for paid parking at the national park. The cost should remain consistent but at a relatively high level to minimize rule-breaking, as a smaller fine would mean weighing visitors' costs of receiving a fine against the parking cost (Cullinane & Polak, 1992). Consistent enforcement monitoring of the parking lot should be made by park staff. None were observed; however, reviews have spotted regular sightings of DOC workers at the parking lot, especially in the mornings. One suggestion would be to increase the clarity of the parking rules, as the zones in the parking lot and surrounding area designating camping, parking, and non-enforced parking are not intuitive, and the curbside parking is left without signage. If some zones are effectively free, visitors may become confused, leading to fewer people paying for parking, as they will innately prioritize curbside parking in restricted areas (Albalade & Gragera, 2022).

5.4 Chapter Conclusion

This chapter discussed the implications of the findings and explored their relationship with prior literature. The themes and sub-themes do not directly map onto the issues or recommendations for the park, with many of the sub-themes being self-contained, while others require a deeper understanding of the underlying causes and motivations of visitors. By understanding the themes and sub-themes in relation to the academic literature, this chapter provides a basis for the recommendations in the following chapter. In addition, this chapter clarified visitor perspectives on the national park's infrastructure and accessibility, furthering this research project's aims and objectives.

Chapter Six: Conclusion

6.1 Introduction

This research project adds to the literature by using visitor experiences to gain deeper insights into the infrastructure and accessibility of AMCNP. This research project investigates online reviews of AMCNP to improve policies, infrastructure, and accessibility practices. This was conducted through thematic analysis of online data combined with onsite observation to clarify, verify, and elaborate on the data. This chapter addresses the aims and objectives of this study, provides suggestions for the national park, discusses limitations of the research project, and provides a reflection on the research project. A reflection is included in the chapter to help academics understand my perspective on the national park and create additional discussions regarding the challenges these parks are facing.

6.2 Answering Research Project's Research Questions

The primary purpose of this study is to understand the experience of visitors at AMCNP, to improve its infrastructure, accessibility, and better manage visitation at the park. Based on the reviews collected, combined with observations of the park, the following insights were made:

- The infrastructure consisting of the parking lot, trail system, and campground is insufficient for the volume of tourism the national park receives.

- The national park is accessible to visitors of all ages and fitness levels, although accessibility for people with mobility disabilities is mostly limited to the campground and parking lot with some exceptions.
- Visitors greatly enjoy the cultural resources of the park, using it for photography and social media, while visitors who wish to relax find difficulties due to large crowds.
- Crowding has become an increasing problem, particularly around key hotspot areas for tourists such as Kea Point and the swing bridges. Construction of the second swing bridge limits hotspot areas and creating larger crowds in fewer areas.
- Confusion due to signage location and lack of translations, combined with frustration from crowding, creates motivation for rule breaking.

Through analysis of online reviews and observation, the research project found answers to the following research questions:

RQ1: What are the visitor perspectives of the infrastructure at AMCNP?

The visitor perception of infrastructure broadly falls under four sub-themes: (1) campground; (2) parking; (3) maintenance; and (4) cost. The visitor reviews of the White Horse Hill Campground consisted of messages noting how beautiful the campground was, with few comments complaining about the restroom smell, and other comments highlighting the high cost during winter when campground facilities were closed. The claim of the smell could not be corroborated, but altogether the experiences of the campground were highly positive with only minor frustrations partially related to the next sub-theme.

Parking-related reviews consisted of visitor speculation about what park rules were. This is because parking fees are not enforced past the boundaries of the parking lot. Some visitors use this to avoid fees for parking altogether thereby creating frustration from perceived unfairness. Additionally, the newly implemented paid parking system was praised for its usability. Furthermore, reviews noted that because of the volume of tourists, finding a parking spot was difficult and therefore contributed to crowding in the national park.

Maintenance was exclusively mentioned positively in the reviews, with their experiences being verified through observation. Rubbish bins were cleared consistently, with trash rarely overflowing. Very minor amounts of litter were found on the park grounds, which seemed to be cleaned quickly after. Overall, visitors consistently mentioned how beautiful the national park was and praised its environmental conditions.

Visitors were upset with the high price of the campground, especially as there is a nearby campground with similar facilities that is cheaper. Other visitors were upset that some visitors did not pay for parking by using the curbside parking, which is not explained anywhere with most visitors finding out about the “free curbside parking” after they had already paid.

RQ2: Do visitors perceive any accessibility challenges while visiting AMCNP?

While most visitors refrained from speaking broadly about accessibility, many mentioned their own challenges which consisted of being wheelchair-bound, their fitness level, and traveling with a family of varying ages. Some visitors mentioned how the only trail useable with a wheelchair is the small section of the Hooker Valley Trail. Even though the

campground and parking lot are fully wheelchair accessible, the curbside parking creates hazards as wheelchair users must use the road to reach the parking lot from their vehicle. Additionally, there is no disability parking.

Fitness level was mentioned in relation to the trails used by a wide range of visitors with diverse demographics. The two most accessible trails were the Hooker Valley Trail, which was partially closed and the route to Kea Point. The other trails, such as the route to Mueller Hut, were mentioned as possible with lower physical endurance, but observation revealed they were rarely used by visitors who lacked athleticism. Family visitor groups rarely deviated from the Hooker Valley Trail and the route to Kea Point, although some families with small children were seen hiking to Mueller Hut.

RQ3: How can DOC better manage visitation at AMCNP?

This question has multiple answers, as many factors are involved in national park tourism management. In addition to infrastructure and accessibility challenges previously mentioned, other issues such as crowding and rule breaking are continual problems facing the park, which are often motivated by the cultural services visitors obtain through use of the park. Some of these answers are much easier to implement, whereas others are more complex, require funding, or require the creation of new infrastructure. To answer this question fully, the answers are split into short-term and long-term suggestions.

6.2.1 Short-Term Suggestions

- Notify visitors about trail closures before they pay for parking.

Regardless of whether visitors intended to pay for parking, this fully informs them about their experience before paying for a service. This can be done by creating a sign in the parking lot or at the park entrance that informs visitors of any trail disturbances before they pay.

- Clarify to visitors how the curbside parking works at the entrance to the park.

This helps alleviate confusion about the rules of paid parking and decreases the number of visitors who paid the parking fee, feeling that others are getting into the park without paying the fee. If this leads to visitors prioritizing the curbside parking and avoiding the fee, either enforce paid parking on the curbside parking area, or prevent people from parking there and expand the parking infrastructure.

- Implement seasonal pricing for parking and camping.

Seasonal pricing for both the campgrounds and parking encourages more domestic visitation during the off-season when the park sees its lowest visitation. The results limit domestic visitation as international tourists pay so much for the trip to New Zealand that the additional costs for parking or camping would be negligible for their decision.

Additionally, the closed facility due to the cold weather is understandable to visitors, but if they pay the same amount for less functional facilities visitors may feel as though they are being ripped off, especially with cheaper alternatives nearby.

- Create designated disability parking spots.

To increase the park accessibility, the creation of disability parking spots should create a large difference for disabled visitors. It could allow them quicker access to national park facilities, such as restrooms, while reducing the time required to move across driving areas. Additionally, it could create an easy solution to the hazards that curbside parking creates for disabled visitors.

- Create translations for important signage.

Reviews have shown that language barriers are common occurrences. Creating digital translations through a QR code attached to the signs could create a solution that informs foreign visitors without a large amount of effort, to decrease rule breaking. Although not likely a major motivator of rule breaking, this simple change could decrease unwanted behavior.

6.2.2 Long-Term Suggestions

- Expand the Hooker Valley Trail.

This is the most visited trail system in the national park, based on reviews and observations. Expanding the trail system here would decrease crowding, especially if it were a loop, or partial loop; this removes the need to follow the same trail back. This also creates more opportunities for photography locations. Additionally, more of these locations should decrease the perception of crowding at the national park (Kohlhardt et al., 2017).

- Expand the parking lot.

The parking lot is not large enough relative to the volume of tourism visitation the national park receives. The excessive number of vehicles creates issues such as overflow curbside parking. This should be expanded to accommodate the visitors at the most popular times and beyond, as the number of visitors will likely continue to increase each year (DOC, 2025a)

- Create a weight indicator for the bridges.

Creating an indicator of how many people are on the swing bridges at a time lets visitors on either side know when they should cross. Currently, visitors estimate bridge capacity, and given how they are lined up, counting all the visitors who cross becomes challenging, leading to visitors surpassing the 20-person limit on the bridge (Dehaene, 2011). To stop this, a mechanical indicator on the bridge would depict the tension the bridge is under and shows an approximate indicator for the number of people on the bridge. This should reduce the frequency and the number of people crossing the bridge at once.

- Create more locations to view bridges on the Hooker Valley Trail.

The swing bridges act as one of the main tourist locations in the park, which creates large crowds around them and the areas where photos of the bridges are taken. Creating more of these viewing locations spreads out visitors, which decreases perceptions of crowding and would increase visitors' satisfaction with their experience (Kohlhardt et al., 2017).

6.3 Reflection

I decided on this research topic because of my years of experience in visiting and working at recreational parks. This perspective allows me to gain further insights into the research while expanding my knowledge of the topic. My journey through this research allowed me to see this national park as more than just a recreational space – it is a tourist hub with visitors relaxing in the beauty of nature while using the experience to bolster their online social presence. This topic has allowed me to draw parallels between my prior work experience and the academic literature relating to infrastructure and accessibility at national parks. Analysis of visitor reviews allowed me to gain further insights into perspective of casual visitors while my work experience allowed me to notice infrastructure which ought to be improved.

Even though these visitors will likely only remain in the park for a few days at most, learning from their experiences allows the park to improve. It allows the national park to hear from one of its key stakeholders. Understanding the needs and desires of the visitors allows me to better serve them in any future occupation related to the research project. Through this understanding I and many others can bring people closer to enjoying the cultural services that nature has to offer.

6.4 Limitations

Although the findings are informative, this research project does not come without limitations. The first limitation is that all the non-observational data was collected online, therefore creating a selection bias towards those who post online reviews being more likely

to have had more extreme experiences than a typical visitor (Schoenmueller et al., 2020). Additionally, all the review data is self-reported, which is prone to biases and individual experiences which may not be replicable. Observation data were used to verify relevant information but, given that the observation was not collected during the busiest season of the national park, some of the crowding reviews could not be verified.

Furthermore, visitors to the park were not asked for their opinion on what should change. Suggestions were extrapolated from the issues compiled in the cumulative data set. If visitors had highly detailed suggestions for improvements, it is likely they wouldn't be shared with the reviews, as they are primarily a way to send information between visitors (Yoo & Gretzel, 2008). Additionally, clarification cannot be made as there is no way to reach out to reviewers through Google reviews.

6.5 Conclusion

As more people shift their recreational activities to wilderness areas due to the COVID-19 pandemic (Geng et al., 2025), it becomes imperative to conserve these areas. These spaces help develop mindfulness and cultivate our wellbeing (Olson et al., 2020; Smith & Turner, 2023) in addition to the ecological services they provide. For these reasons, protecting these areas while making them available for the public to enjoy and benefit from is vital. In doing so, it is necessary to provide infrastructure so that these areas do not deteriorate over time, while planning it in an accessible way that considers people with varying ability levels.

Additionally, as climate change continues it becomes increasingly important to re-examine infrastructure and how national parks build trails. A large storm was responsible for the second swing bridge needing reconstruction (DOC, 2025b). This led to the partial closure of the Hooker Valley Trail and likely increases in crowding during its repair. As storms are likely to worsen and become more frequent, infrastructure that can better withstand the natural environment or is quicker to repair becomes more important. Future research on infrastructure, accessibility, and park management is necessary, as over time the population and environmental conditions of these areas change, creating sustainability difficulties. Designing parks to accommodate the needs of the visitors who travel to them have the potential to create positive community, environmental and sustainability outcomes (Ghoddousi et al., 2018; Hunt et al., 2014; Lu & Pan, 2025).

These findings suggest many improvements could be made to AMCNP. With approaching sustainability challenges due to increased visitation and climate change, listening to all stakeholders of the national parks becomes essential. These voices help protect the environment, contribute to the local economy, and ensure quality experiences in these protected areas.

References

- Adach, S., Wojtkowska, M., & Religa, P. (2022). Consequences of the accessibility of the mountain national parks in Poland. *Environmental Science and Pollution Research*, 30(10), 27483–27500. <https://doi.org/10.1007/s11356-022-24197-w>
- Aguilar-Carrasco, M. J., Gielen, E., Vallés-Planells, M., Galiana, F., & Riutort-Mayol, G. (2023). Assessment of barriers for people with disability to enjoy national parks. *Frontiers in Psychology*, 13. <https://doi.org/10.3389/fpsyg.2022.1058647>
- Aguilar-Carrasco, M. J., Gielen, E., Vallés-Planells, M., Galiana, F., Almenar-Muñoz, M., & Konijnendijk, C. (2022). Promoting inclusive outdoor recreation in national park governance: A comparative perspective from Canada and Spain. *International Journal of Environmental Research and Public Health*, 19(5), 2566. <https://doi.org/10.3390/ijerph19052566>
- Aguilar-Carrasco, M., Gielen, E., Vallés-Planells, M., & Galiana, F. (2024). Can website information be a constraint for people with physical disabilities? Assessing an index of national parks' website content quality and efficiency. *European Journal of Tourism Research*, 38, 3803–3803. <https://doi.org/10.54055/ejtr.v38i.3298>
- Ahmed, S. K., Mohammed, R. A., Nashwan, A. J., Ibrahim, R. H., Abdalla, A. Q., Ameen, B. M. M., & Khidhir, R. M. (2025). Using thematic analysis in qualitative research. *Journal of Medicine, Surgery, and Public Health*, 6(6), 100198. <https://doi.org/10.1016/j.glmedi.2025.100198>

- Albalade, D., & Gragera, A. (2022). Misinformation and misperception in the market for parking. *Travel Behaviour and Society*, 28, 227–236.
<https://doi.org/10.1016/j.tbs.2022.03.005>
- Alemu, M. M. (2015). Environmental role of national parks. *Journal of Sustainable Development*, 9(1), 1. <https://doi.org/10.5539/jsd.v9n1p1>
- Allen, S. W., Schneider, D. P., & Owens, I. (2009). First approaches towards modelling glacial hazards in the Mount Cook region of New Zealand's Southern Alps. *Natural Hazards and Earth System Sciences*, 9(2), 481–499. <https://doi.org/10.5194/nhess-9-481-2009>
- Allen, S., Owens, I., & Sirguey, P. (2008). Satellite remote sensing procedures for glacial terrain analyses and hazard assessment in the Aoraki Mount Cook region, New Zealand. *New Zealand Journal of Geology and Geophysics*, 51(1), 73–87.
<https://doi.org/10.1080/00288300809509851>
- Alvesson, M., Hardy, C., & Harley, B. (2008). Reflecting on reflexivity: Reflexive textual practices in organization and management theory. *Journal of Management Studies*, 45(3), 480–501. <https://doi.org/10.1111/j.1467-6486.2007.00765.x>
- Aurélie. (2017, January 15). *Mount Cook: Amazement and wheelchair's strolls I Wheel Travel*. <https://www.iwheeltravel.com/en/travel-new-zealand-handicap-mount-cook-wheelchair/>

- Backhaus, C., Heussler, T., & Croce, V. (2022). Planning horizon in international travel decision-making: The role of individual and cultural determinants. *Journal of Travel Research*, 62(2), 004728752110661. <https://doi.org/10.1177/00472875211066112>
- Baker, C., & Hover, M. (2024). Leveraging historical hospitality in the national parks: Fred Harvey, Mary Colter, and the heritage of the American Southwest. *Journal of Heritage Tourism*, 19(6), 816–838. <https://doi-org.ezproxy.aut.ac.nz/10.1080/1743873X.2024.2379538>
- Bartl, M., Kannan, V. K., & Stockinger, H. (2016). A review and analysis of literature on netnography research. *International Journal of Technology Marketing*, 11(2), 165. <https://doi.org/10.1504/ijtmkt.2016.075687>
- Beal, D. J. (2024). A travel cost analysis of the value of Carnarvon Gorge National Park for recreational Use. *Review of Marketing and Agricultural Economics*, 63(2), 292–303. <https://doi.org/10.22004/ag.econ.12337>
- Bell, S. J. (2019). Co-becoming with angophora: performing more-than-human belongings in Ku-ring-gai Chase National Park. *Social & Cultural Geography*, 20(5), 605–629. <https://doi-org.ezproxy.aut.ac.nz/10.1080/14649365.2017.1375551>
- Bhuiyan, M. A. R., Mia, A., Sarker, A., & Khan, A. (2021). Effect of transportation infrastructure on forest plant diversity and soil properties in Lawachara National Park, Bangladesh. *Acta Ecologica Sinica*, 42(1), 110-120. <https://doi.org/10.1016/j.chnaes.2021.08.015>

- Bianchi, P., Cappelletti, G. M., Mafrolla, E., Sica, E., & Sisto, R. (2020). Accessible tourism in natural park areas: A social network analysis to discard barriers and provide information for people with disabilities. *Sustainability*, 12(23), 9915.
<https://doi.org/10.3390/su12239915>
- Blut, M., & Iyer, G. R. (2019). Consequences of perceived crowding: A meta-analytical perspective. *Journal of Retailing*, 96(3), 362-382.
<https://doi.org/10.1016/j.jretai.2019.11.007>
- Boley, B. B., & Green, G. T. (2016). Ecotourism and natural resource conservation: The 'potential' for a sustainable symbiotic relationship. *Journal of Ecotourism*, 15 (1), 36 – 50. <https://doi.org/10.1080/14724049.2015.1094080>
- Booth, K. L., Cullen, R., (2001) Managing recreation and tourism in New Zealand mountains. *Mountain Research and Development*, 21(4), 331-334,
[https://doi.org/10.1659/0276-4741\(2001\)021\[0331:MRATIN\]2.0.CO;2](https://doi.org/10.1659/0276-4741(2001)021[0331:MRATIN]2.0.CO;2)
- Box, P. C. (2004). Curb-parking problems: Overview. *Journal of Transportation Engineering*, 130(1), 1–5. [https://doi.org/10.1061/\(asce\)0733-947x\(2004\)130:1\(1\)](https://doi.org/10.1061/(asce)0733-947x(2004)130:1(1))
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101. <https://doi.org/10.1191/1478088706qp063oa>
- Bravo, M., & Silverman, E. (2024). National parks in prospect. *Art Journal*, 83(4), 7–15.
<https://doi-org.ezproxy.aut.ac.nz/10.1080/00043249.2024.2408999>

Buckley, R. (2020). Nature tourism and mental health: parks, happiness, and causation.

Journal of Sustainable Tourism, 28(9), 1409–1424.

<https://doi.org/10.1080/09669582.2020.1742725>

Buecker, S., Mund, M., Chwastek, S., Sostmann, M., & Luhmann, M. (2021). Is loneliness in emerging adults increasing over time? A preregistered cross-temporal meta-

analysis and systematic review. *Psychological Bulletin*, 147(8), 787–805.

<https://doi.org/10.1037/bul0000332>

Bywater, T. (2024, February 18). *Toilet blockage closes NZ's scenic Mueller Hut walk for foreseeable future. The New Zealand Herald.*

<https://www.nzherald.co.nz/travel/toilet-blockage-closes-nzs-scenic-mueller-hut-walk-for-foreseeable/U447OSM55ZDFNFEDCG62SHS6GE/>

Castleberry, A., & Nolen, A. (2018). Thematic analysis of qualitative research data: Is it as easy as it sounds? *Currents in Pharmacy Teaching and Learning*, 10(6), 807–815.

<https://doi.org/10.1016/j.cptl.2018.03.019>

Chan, K. M. A., Guerry, A. D., Balvanera, P., Klain, S. C., Satterfield, T., Basurto, X., Bostrom, A., Palmer, A. R., Gould, R. K., Halpern, B. S., Hannahs, N., Levine, J., Norton, B., Ruckelshaus, M., Russell, R., Tam, J., & Woodside, U. (2012). Where are cultural and social in ecosystem services? A framework for constructive engagement.

BioScience, 62(8), 744–756. <https://doi.org/10.1525/bio.2012.62.8.7>

Chauhan, L., Bunkar, R. C., Verma, A., & Mounika, B. (2024, November 20). *Observational Research: A qualitative research method. Research Gate.*

https://www.researchgate.net/publication/386506046_OBSERVATIONAL_RESEARCH_H_A_QUALITATIVE_RESEARCH_METHOD

- Chen, H. S., Chen, C. Y., Chang, C. T., & Hsieh, T. (2014). The construction and application of a carrying capacity evaluation model in a national park. *Stochastic Environmental Research and Risk Assessment*, 28(6), 1333–1341. <https://doi.org/10.1007/s00477-013-0844-5>
- Chen, R. J. (2013). Beyond management and sustainability: Visitor experiences of physical accessibility in the Great Smoky Mountains National Park, USA. *Journal of Management and Sustainability*, 3(2). <https://doi.org/10.5539/jms.v3n2p145>
- Chikuta, O., Du Plessis, E., & Saayman, M. (2017). Nature-based travel motivations for people with disabilities. *African Journal of Hospitality Tourism and Leisure*, 6(1). https://www.researchgate.net/publication/315686250_Nature-based_travel_motivations_for_people_with_disabilities
- Chikuta, O., Du Plessis, E., & Saayman, M. (2018). Accessibility expectations of tourists with disabilities in national parks. *Tourism Planning & Development*, 16(1), 75–92. <https://doi.org/10.1080/21568316.2018.1447509>
- Chikuta, O., du Plessis, E., & Saayman, M. (2019). Accessibility expectations of tourists with disabilities in national parks. *Tourism Planning & Development*, 16(1), 75–92. <https://doi.org/10.1080/21568316.2018.1447509>

- Chitaunga, P. S., Boley, B. B., & King, E. (2025). Support for large-scale tourism infrastructure projects: porters' reactions to the proposed cable car development on Mount Kilimanjaro National Park in Tanzania. *Journal of Sustainable Tourism*, 1–24. <https://doi-org.ezproxy.aut.ac.nz/10.1080/09669582.2025.2588376>
- Choné, A., Hajek, I., & Hamman, P. (2017). *Rethinking Nature*. Routledge. <https://doi.org/10.4324/9781315444765>
- Christou, P. A. (2022). How to use thematic analysis in qualitative research. *Journal of Qualitative Research in Tourism*, 3(2), 79–95. <https://doi.org/10.4337/jqrt.2023.0006>
- Clarke, V., & Braun, V. (2017). Thematic analysis. *The Journal of Positive Psychology*, 12(3), 297–298. <https://doi.org/10.1080/17439760.2016.1262613>
- Cockburn-Wooten, C., & McIntosh, A. (2020). Improving the Accessibility of the Tourism Industry in New Zealand. *Sustainability*, 12(24), 10478. <https://doi.org/10.3390/su122410478>
- Cody, E., McColl, S., Draebing, D., & Cook, S. (2018). Structural control and development of the ice buttressed Mueller Rockslide, New Zealand. *EGU General Assembly Conference Abstracts*, 10748. <https://ui.adsabs.harvard.edu/abs/2018EGUGA..2010748C/abstract>
- Coombs, H. V. (2022). *Case study research defined*. *Utah Journal of Communication*. <https://ujoc.org/case-study-research-defined/>

Cornell, S., Peden, A. E., & Brander, R. W. (2025). The safety of social media instigated visitation to national parks in New South Wales, Australia: Insights from a population representative sample. *Health Promotion Journal of Australia*, 36(2).
<https://doi.org/10.1002/hpja.7000>

Cornell, S., Peden, A. E., & Brander, R. W. (2025). The safety of social media instigated visitation to national parks in New South Wales, Australia: Insights from a population representative sample. *Health Promotion Journal of Australia: Official Journal of Australian Association of Health Promotion Professionals*, 36(2), 1-9.
<https://doi.org/10.1002/hpja.70009>

Crowe, S., Cresswell, K., Robertson, A., Hubby, G., Avery, A., & Sheikh, A. (2011). The case study approach. *BMC Medical Research Methodology*, 11(1), 1–9.
<https://doi.org/10.1186/1471-2288-11-100>

Cua, C. F., & Garrett, T. C. (2009). Understanding ontology and epistemology in information systems research. *Information Systems Research Methods, Epistemology, and Applications*, 35–56. <https://doi.org/10.4018/978-1-60566-040-0.ch002>

Cullinane, K., & Polak, J. (1992). Illegal parking and the enforcement of parking regulations: causes, effects and interactions. *Transport Reviews*, 12(1), 49–75.
<https://doi.org/10.1080/01441649208716803>

Cuthbertson, L. M., Robb, Y. A., & Blair, S. (2020). Theory and application of research principles and philosophical underpinning for a study utilising interpretative

phenomenological analysis. *Radiography*, 26(2), e94–e102.

<https://doi.org/10.1016/j.radi.2019.11.092>

Cuthbertson, L. M., Robb, Y. A., & Blair, S. (2020). Theory and application of research principles and philosophical underpinning for a study utilising interpretative phenomenological analysis. *Radiography*, 26(2), 94–102.

<https://doi.org/10.1016/j.radi.2019.11.092>

Danaher, P. J., & Arweiler, N. (1996). Customer Satisfaction in the Tourist Industry. *Journal of Travel Research*, 35(1), 89–93. <https://doi.org/10.1177/004728759603500113>

Darcy, S., & Burke, P. F. (2018). On the road again: The barriers and benefits of automobility for people with disability. *Transportation Research Part A: Policy and Practice*, 107, 229–245. <https://doi.org/10.1016/j.tra.2017.11.002>

Dehaene, S. (2011). *The number sense: How the mind creates mathematics*. Oxford University Press.

Department of Conservation. (2012, June 12). *Approved Amendment to Aoraki/Mount Cook National Park Management Plan 2004*. Doc.govt.nz.

<https://www.doc.govt.nz/globalassets/documents/about-doc/role/policies-and-plans/aoraki-mount-cook-national-park/amendment-aoraki-mount-cook-national-park-management-plan-2004-.pdf>

Department of Conservation. (2024a). *Haere mai*. <https://www.doc.govt.nz/>

Department of Conservation. (2024b). *Mueller Hut Route reopens to day hikers*.

<https://www.doc.govt.nz/news/media-releases/2024-media-releases/mueller-hut-route-reopens-to-day-hikers/>

Department of Conservation. (2025a). Visitor insights reports. *Govt.nz*.

<https://www.doc.govt.nz/about-us/our-role/managing-conservation/recreation-management/visitor-research/visitor-insights-reports/>

Department of Conservation. (2025b). Bridge on popular Hooker Valley Track at Aoraki/Mount Cook closed after heavy rainfall.

<https://www.doc.govt.nz/news/media-releases/2025-media-releases/bridge-on-popular-hooker-valley-track-at-aorakimount-cook-closed-after-heavy-rainfall/>

Department of Conservation. (2025c). *Aoraki/Mt Cook car park charges confirmed*.

<https://www.doc.govt.nz/news/media-releases/2025-media-releases/aoraki-mt-cook-car-park-charges-confirmed/>

Department of Conservation. (2025d). *DOC reveals first pictures of massive new*

Aoraki/Mount Cook swing bridge. <https://www.doc.govt.nz/news/media-releases/2025-media-releases/doc-reveals-first-pictures-of-massive-new-aorakimount-cook-swing-bridge/>

Department of Conservation. (2025e). *“Stay on track” at Aoraki/Mount Cook*.

<https://www.doc.govt.nz/news/media-releases/2025-media-releases/stay-on-track-at-aorakimount-cook/>

Department of Conservation. (2025f). *Hooker Valley Track*. <https://www.doc.govt.nz/parks-and-recreation/places-to-go/canterbury/places/aoraki-mount-cook-national-park/things-to-do/tracks/hooker-valley-track/>

Department of Conservation. (2025g). *Welcome To Zscaler Directory Authentication*. <https://www.doc.govt.nz/parks-and-recreation/places-to-go/canterbury/places/aoraki-mount-cook-national-park/>

Department of Conservation. (2025h). *DOC pricing proposal for Aoraki car park*. <https://www.doc.govt.nz/news/media-releases/2025-media-releases/doc-pricing-proposal-for-aoraki-car-park/>

Department of Conservation. (n.d.). *History of Aoraki/Mount Cook*. <https://www.doc.govt.nz/parks-and-recreation/places-to-go/canterbury/places/aoraki-mount-cook-national-park/historic-aoraki-mount-cook/>

Díaz-Pérez, F. M., García-González, C. G., Fyall, A., Fu, X., Deel, G., & Fernandez-Hdez, C. (2024). The altered perceptions of visitors to national parks: A comparison between a pre- and post-covid-19 periods. *Social Sciences & Humanities Open*, 11, 101219. <https://doi.org/10.1016/j.ssaho.2024.101219>

Donici, D. S., & Dumitras, D. E. (2024). Nature-Based Tourism in National and Natural Parks in Europe: A Systematic Review. *Forests*, 15(4), 588. <https://doi.org/10.3390/f15040588>

- Dragovich D., & Amiraslani F. (2023) Conservation and co-management of rock art in national parks: An Australian case study. *Heritage*, 6(10), 6901-6916.
<https://doi.org/10.3390/heritage6100360>
- Evans, C. (2018). *Risky photography in national parks: An examination of the role of online identity management in wildlife risk perceptions*. Colorado State University.
<https://www.proquest.com/openview/c3e8d5df871b543c31ce23c47882b2e9/1?pq-origsite=gscholar&cbl=18750>
- Farías-Torbidoni, E. I., Monserrat-Revilla, S., & Soler-Prat, S. (2024). Comparing the gendered nature of visits, recreation and physical activities in two Catalan (Spain) protected natural areas: natural and peri-urban parks. *Journal of Sport & Tourism*, 28(4), 173–196. <https://doi.org/10.1080/14775085.2024.2448938>
- Fehnker, L., Pearson, D., & Howland, P. J. (2021). Understanding conceptions of “nature” for environmental sustainability: A case study in Tāmaki Makaurau Auckland, Aotearoa New Zealand. *Earth*, 2(3), 357–373. <https://doi.org/10.3390/earth2030021>
- Ferretti-Gallon, K., Griggs, E., Shrestha, A., & Wang, G. (2021). National parks best practices: Lessons from a century’s worth of national parks management. *International Journal of Geoheritage and Parks*, 9(3), 335–346.
<https://doi.org/10.1016/j.ijgeop.2021.05.004>
- Flemmer, C., & McIntosh, A. (2025). Perceptions of people with disabilities on the accessibility of New Zealand’s built environment. *Disabilities*, 5(3), 75–75.
<https://doi.org/10.3390/disabilities5030075>

- Gao-Di, X., XIAO, Y., & Chun-Xia, L. (2006). Study on ecosystem services: Progress, limitation and basic paradigm. *Chinese Journal of Plant Ecology*, 30(2), 191–199. <https://doi.org/10.17521/cjpe.2006.0028>
- Gazley, B., Cheng, Y., & Lafontant, C. (2018). Charitable support for U.S. national and state parks through the lens of coproduction and government failure theories. *Nonprofit Policy Forum*, 9(4). <https://doi.org/10.1515/npf-2018-0022>
- Geng, D. C., Chen, M., Seely, H., Harshaw, H. W., Gaston, C., Wu, W., & Wang, G. (2025). Adapting to change: Visitor patterns in national parks across the pandemic timeline. *Trees, Forests and People*, 20, 100874. <https://doi.org/10.1016/j.tfp.2025.100874>
- Geng, D. C., Chen, M., Seely, H., Harshaw, H. W., Gaston, C., Wu, W., & Wang, G. (2025). Adapting to change: Visitor patterns in national parks across the pandemic timeline. *Trees, Forests and People*, 100874. <https://doi.org/10.1016/j.tfp.2025.100874>
- Geng, D. C., Innes, J. L., Wu, W., Wang, W., & Wang, G. (2021). Seasonal variation in visitor satisfaction and Its management implications in Banff National Park. *Sustainability*, 13(4), 1681. <https://doi.org/10.3390/su13041681>
- Ghoddousi, S., Pintassilgo, P., Mendes, J., Ghoddousi, A., & Sequeira, B. (2018). Tourism and nature conservation: A case study in Golestan National Park, Iran. *Tourism Management Perspectives*, 26, 20–27. <https://doi.org/10.1016/j.tmp.2017.12.006>

- Gichuru, M. (2017). The interpretive research paradigm: A critical review of its research methodologies. *International Journal of Innovative Research and Advanced Studies* 4(2), 1–5. https://www.ijiras.com/2017/Vol_4-Issue_2/paper_1.pdf
- Gobo, G. (2023). Mixed methods and their pragmatic approach: Is there a risk of being entangled in a positivist epistemology and methodology? Limits, pitfalls and consequences of a bricolage methodology. *Forum: Qualitative Social Research*, 24(1). <https://doi.org/10.17169/fqs-24.1.4005>
- Goh, E. (2023). Managing off-trail walking behaviour in national parks. *Anatolia*, 34(1), 104–107. <https://doi-org.ezproxy.aut.ac.nz/10.1080/13032917.2023.2129747>
- Graham, K. (2024, August 4). A day in the Aoraki Mount Cook National Park as a wheelchair user. *Grab Your Wheels, Let's Travel*. <https://grabyourwheels.nz/2024/08/04/a-day-in-the-aoraki-mount-cook-national-park-as-a-wheelchair-user/>
- Greaney, A. M., Sheehy, A., Heffernan, C., Murphy, J., Mhaolrúnaigh, S. N., Heffernan, E., & Brown, G. (2012). Research ethics application: A guide for the novice researcher. *British Journal of Nursing*, 21(1), 38–43. <https://doi.org/10.12968/bjon.2012.21.1.38>
- Hancock, M. (2018). Thinking qualitatively methods of mind: A review. *The Qualitative Report*. <https://doi.org/10.46743/2160-3715/2018.3715>
- Hansen, E., Ernst, J., & Washburn, J. (2017). Interpretive accommodations for national park service visitors who are d/deaf or hard of hearing. *Journal of Interpretation Research*, 22(1), 5–32. <https://doi.org/10.1177/109258721702200102>

Hassell, S., Moore, S. A., & Macbeth, J. (2015). Exploring the motivations, experiences and meanings of camping in national parks. *Leisure Sciences*, 37(3), 269–287.

<https://doi.org/10.1080/01490400.2014.995325>

Haukeland, J. V. (2011). Tourism stakeholders' perceptions of national park management in Norway. *Journal of Sustainable Tourism*, 19(2), 133–153.

<https://doi.org/10.1080/09669582.2010.51738>

Henderson, A., & Fry, C. R. (2011). Better parks through law and policy: A legal analysis of authorities governing public parks and open spaces. *Journal of Physical Activity and Health*, 8(s1), S109–S115. <https://doi.org/10.1123/jpah.8.s1.s109>

Hibbert, P., Sillince, J., Diefenbach, T., & Cunliffe, A. L. (2014). Relationally reflexive practice. *Organizational Research Methods*, 17(3), 278–298.

<https://doi.org/10.1177/1094428114524829>

Higham, J., & Espiner, S. (2019). The environmental impacts of tourism in Aotearoa New Zealand: A spatio-temporal analysis. *Lincoln University*.

<https://pce.parliament.nz/media/5fqdqzno/the-environmental-impacts-of-tourism-in-aotearoa-new-zealand-a-spatio-temporal-analysis.pdf>

Hulme, P. E. (2020). Plant invasions in New Zealand: global lessons in prevention, eradication and control. *Biological Invasions*, 22, 1539–1562.

<https://doi.org/10.1007/s10530-020-02224-6>

Hunt, C. A., Durham, W. H., Driscoll, L., & Honey, M. (2014). Can ecotourism deliver real economic, social, and environmental benefits? A study of the Osa Peninsula, Costa Rica. *Journal of Sustainable Tourism*, 23(3), 339–357.

<https://doi.org/10.1080/09669582.2014.965176>

Jonsson, J., & Roos, A. (2025). Using netnography to explore the entrepreneurship process. *The International Journal of Entrepreneurship and Innovation*.

<https://doi.org/10.1177/14657503251341791>

Kappelle, R. J. (2001). *Lincoln University*.

<https://researcharchive.lincoln.ac.nz/entities/publication/3893d8f9-a3a7-4674-820b-961ddc0594dd>

Kohlhardt, R., Honey-Rosés, J., Lozada, S. F., Haider, W., & Stevens, M. (2017). Is this trail too crowded? A choice experiment to evaluate tradeoffs and preferences of park visitors in Garibaldi Park, British Columbia. *Journal of Environmental Planning and Management*, 61(1), 1–24. <https://doi.org/10.1080/09640568.2017.1284047>

Kuo, F. E., & Sullivan, W. C. (2001). Aggression and violence in the inner city: Effects of environment via mental fatigue. *Environment and Behavior*, 33(4), 543-571.

<https://doi.org/10.1177/00139160121973124>

Lake, H., Photo, & Welle, H. (n.d.). Walking and cycling tracks in Aoraki/Mount Cook National Park [PDF]. *Department of Conservation*.

<https://www.doc.govt.nz/globalassets/documents/parks-and-recreation/tracks-and-walks/canterbury/walking-and-cycling-tracks-in-aoraki-mt-cook.pdf>

Lang, G. (n.d.). *Aoraki Mt Cook*. Climbnz.org.nz. <https://climbnz.org.nz/nz/si/aoraki-tai-poutini/kirikirikatata-mt-cook-range/aoraki-mt-cook>

Langhammer, P. F., Bull, J. W., Bicknell, J. E., Oakley, J. L., Brown, M. H., Bruford, M. W., Butchart, S. H. M., Carr, J. A., Church, D., Cooney, R., Cutajar, S., Foden, W., Foster, M. N., Gascon, C., Geldmann, J., Genovesi, P., Hoffmann, M., Howard-McCombe, J., Lewis, T., ... Brooks, T. M. (2024). The positive impact of conservation action. *Science*, 384(6694), 453–458. <https://doi.org/10.1126/science.adj6598>

Lashley, M. C. (2024). *Observational research, advantages and disadvantages*. Sagepub.com. <https://doi.org/10.4135/9781483381411.n384>

Lepoglavec, K., Papeš, O., Lovrić, V., Raspudić, A., & Nevečerel, H. (2023). Accessibility of urban forests and parks for people with disabilities in wheelchairs, considering the surface and longitudinal slope of the trails. *Sustainability*, 15(10), 7741. <https://doi.org/10.3390/su15107741>

Lev, N., Negev, M., & Ayalon, O. (2026). The complex web of littering behaviour in natural open spaces: A multivariate exploration. *Waste Management & Research: The Journal for a Sustainable Circular Economy*. <https://doi.org/10.1177/0734242x261441101>

Li, H., Wang, C. (Renee), Meng, F., & Zhang, Z. (2019). Making restaurant reviews useful and/or enjoyable? The impacts of temporal, explanatory, and sensory cues. *International Journal of Hospitality Management*, 83, 257–265. <https://doi.org/10.1016/j.ijhm.2018.11.002>

- Li, H., Xie, K. L., & Zhang, Z. (2020). The effects of consumer experience and disconfirmation on the timing of online review: Field evidence from the restaurant business. *International Journal of Hospitality Management*, 84, 102344. <https://doi.org/10.1016/j.ijhm.2019.102344>
- Li, Y., Hou, L., & Liu, P. (2024). The impact of downgrading protected areas (PAD) on biodiversity. *Ecological Economics*, 228, 108441–108441. <https://doi.org/10.1016/j.ecolecon.2024.108441>
- Lim, W. M. (2024). What is qualitative research? An overview and guidelines. *Sage Journals*, 33(2), 199–229. <https://doi.org/10.1177/14413582241264619>
- Lu, W., & Pan, C. (2025). Toward prosperity: How national parks can contribute to sustainable local economic development. *Journal of Quality Assurance in Hospitality & Tourism*, 1–19. <https://doi-org.ezproxy.aut.ac.nz/10.1080/1528008X.2025.2560393>
- Lu, W., Vandebona, U., & Kiyota, M. (2014). Analysis of experience with formalizing handicapped parking system. *Transportation Research Part F: Traffic Psychology and Behaviour*, 26, 62–71. <https://doi.org/10.1016/j.trf.2014.06.011>
- Manning, R. (2001). Visitor experience and resource protection: A framework for managing the carrying capacity of national parks. *Journal of Park & Recreation Administration*, 19(1), 93–108.

- Manning, R. (2002). Monitoring and management of visitor flows in how much is too much? Carrying capacity of national parks and protected areas. *Journal of Environmental Protection*, 6(9). 306–313. <https://npshistory.com/publications/social-science/how-much.pdf>
- Manning, R. E. (2013). Parks and carrying capacity: Commons without tragedy. *Island Press*.
- Manning, R., Valliere, W., Minter, B., Wang, B., & Jacobi, C. (2026). Crowding in parks and outdoor recreation: A theoretical, empirical, and managerial analysis. *Journal of Park and Recreation Administration*, 18(4).
<https://js.sagamorepub.com/index.php/jpra/article/view/1593?utm>
- Marion, J. L., Leung, Y. F., Eagleston, H., & Burroughs, K. (2016). A review and synthesis of recreation ecology research findings on visitor impacts to wilderness and protected natural areas. *Journal of Forestry*, 114(3), 352–362. <https://doi.org/10.5849/jof.15-498>
- Maslennikova, E. G., & Vladimirovna, E. (2020). Tourism potential of national parks: Opportunities for promotion through photo tourism. *Revista Turismo Estudos E Práticas*, 3, 1–11. <https://geplat.com/rtep/index.php/tourism/article/view/509>
- Mccarthy, S., & Rünaka, M. (2004). *Aoraki/Mount Cook National Park management plan*.
<https://www.doc.govt.nz/globalassets/documents/about-doc/role/policies-and-plans/aoraki-mount-cook-national-park/aoraki-mount-cook-national-park-management-plan.pdf>

McCleave, J., Booth, K., & Espiner, S. (2004). Love thy neighbour? The relationship between Kahurangi National Park and the border communities of Karamea and Golden Bay, New Zealand. *Annals of Leisure Research*, 7(3-4), 202–221.

<https://doi.org/10.1080/11745398.2004.10600952>

McCleave, J., Espiner, S., & Booth, K. (2006). The New Zealand people–Park relationship: An exploratory model. *Society & Natural Resources*, 19(6), 547–561.

<https://doi.org/10.1080/08941920600664001>

McIntyre, N., Jenkins, J., & Booth, K. (2001). Global influences on access: The changing face of access to public conservation lands in New Zealand. *Journal of Sustainable Tourism*, 9(5), 434–450. <https://doi.org/10.1080/09669580108667413>

Ministry of Business, Innovation, and Employment. (2016). *Projects funded by the IVL* | Ministry of Business, Innovation & Employment.

<https://www.mbie.govt.nz/immigration-and-tourism/tourism/tourism-funding/international-visitor-conservation-and-tourism-levy/projects-funded-by-the-ivl>

Ministry of Business, Innovation, and Employment. (2025). *IVL annual performance reports* | Ministry of Business, Innovation & Employment.

<https://www.mbie.govt.nz/immigration-and-tourism/tourism/tourism-funding/international-visitor-conservation-and-tourism-levy/ivl-annual-performance-reports>

- Mkansi, M., & Acheampong, E. A. (2012). Research philosophy debates and classifications: students' dilemma. *Electronic Journal of Business Research Methods*, 10(2), 132-140. <https://academic-publishing.org/index.php/ejbrm/article/view/1295>
- Mogashoa, T. (2014). Applicability of constructivist theory in qualitative educational research. *ResearchGate*.
https://www.researchgate.net/publication/265953001_Applicability_of_Constructivist_Theory_in_Qualitative_Educational_Research
- Muekthong, T. (2021). Study of signage design and information content for The Namtok Sai Khao National Park. *Earth and Environmental Science*, 881(1), 012006–012006.
<https://doi.org/10.1088/1755-1315/881/1/012006>
- Murray, L. A., Magurno A. B., Glover, B. L., & Wogalter, M. S. (1998). Prohibitive pictorials: Evaluations of different circle-slash negation symbols. *International Journal of Industrial Ergonomics*, 22(6), 473–482. [https://doi.org/10.1016/s0169-8141\(97\)00029-2](https://doi.org/10.1016/s0169-8141(97)00029-2)
- Mylius, B. (2018). Three types of anthropocentrism. *Environmental Philosophy*, 15(2), 159–194. <https://doi.org/10.5840/envirophil20184564>
- Nading, M. A., Lahmar, J. J., Frew, J. W., Ghionis, N., Hanley, M. J., Welch, A. K., & Murrell, D. F. (2009). A ski and adventure camp for young patients with severe forms of epidermolysis bullosa. *Journal of the American Academy of Dermatology*, 61(3), 508–511. <https://doi.org/10.1016/j.jaad.2008.12.004>

Naeem, M., Ozuem, W., Howell, K., & Ranfagni, S. (2023). A step-by-step process of thematic analysis to develop a conceptual model in qualitative research.

International Journal of Qualitative Methods, 22(1), 1–18.

<https://doi.org/10.1177/16094069231205789>

Naeem, M., Ozuem, W., Howell, K., & Ranfagni, S. (2024). Demystification and actualisation of data saturation in qualitative research through thematic analysis.

International Journal of Qualitative Methods, 23(23).

<https://doi.org/10.1177/16094069241229777>

Nathan, S. (2009). *National and conservation parks. Te Ara: The Encyclopedia of New*

Zealand. <https://teara.govt.nz/en/table/13914/national-and-conservation-parks>

Nkomo, D., Dube, B., & Thokweng, M. A. (2024). Pragmatism: an essential philosophy for mixed methods research in education. *International Journal of Research and*

Innovation in Social Science, 8(1). <https://doi.org/10.47772/ijriss.2024.803073>

Olson, E. R. T., Hansen, M. M., & Vermeesch, A. (2020). Mindfulness and shinrin-yoku:

Potential for physiological and psychological interventions during uncertain times.

International Journal of Environmental Research and Public Health, 17(24), 9340.

<https://doi.org/10.3390/ijerph17249340>

Oppegaard, B., Conway, T., & Conway, M. (2015). *Envisioning mobile apps for audio description*. *Association for Computing Machinery*, 1-8.

<https://doi.org/10.1145/2775441.2775463>

- Ostergren, D., Solop, F. I., & Hagen, K. K. (2005). *National park service fees: Value for the money or a barrier to visitation*. 23(1), 18–36.
https://www.researchgate.net/publication/228666340_National_Park_Service_fees_Value_for_the_money_or_a_barrier_to_visitation
- Pan, S., & Ryan, C. (2007). Mountain Areas and Visitor Usage–Motivations and Determinants of Satisfaction: The Case of Pirongia Forest Park, New Zealand. *Journal of Sustainable Tourism*, 15(3), 288–308. <https://doi.org/10.2167/jost662.0>
- Pan, S., & Ryan, C. (2007). Mountain areas and visitor usage–Motivations and determinants of satisfaction: The case of Pirongia Forest Park, New Zealand. *Journal of Sustainable Tourism*, 15(3), 288–308. <https://doi.org/10.2167/jost662.0>
- Paoli, A., D., & D’Auria, V. (2025). The digitalization of ethnography: A scoping review of methods in netnography. *Journal of Contemporary Ethnography*.
<https://doi.org/10.1177/08912416251342795>
- Park, L. O., Marion, J. L., & Wimpey, J. F. (2022). Efficacy of combining education and site management in reducing off-trail travel in a fragile biotic community, Acadia National Park. *Journal of Interpretation Research*, 28(1), 25-49.
<https://doi.org/10.1177/10925872221133774>
- Park, L. O., Marion, J. L., Manning, R. E., Lawson, S. R., & Jacobi, C. (2024). Managing visitor impacts in parks: A multi-method study of the effectiveness of alternative management practices. *Journal of Park and Recreation Administration*, 26(1), 97–121. <https://pubs.usgs.gov/publication/5224932>

- Payntar, N. D., Hsiao, W. L., Covey, R. A., & Grauman, K. (2021). Learning patterns of tourist movement and photography from geotagged photos at archaeological heritage sites in Cuzco, Peru. *Tourism Management*, 82, 104165.
<https://doi.org/10.1016/j.tourman.2020.104165>
- Pierce, G., & Shoup, D. (2013). Getting the Prices Right. *Journal of the American Planning Association*, 79(1), 67–81. <https://doi.org/10.1080/01944363.2013.787307>
- Piskin, B. A., & Akdeniz, N. S. (2023). How can people with disabilities use the outdoors? An assessment within the framework of disability standards. *Social Indicators Research*, 167(1-3), 153–174. <https://doi.org/10.1007/s11205-023-03102-z>
- Pretorius, L. (2024). Demystifying research paradigms: Navigating ontology, epistemology, and axiology in research. *The Qualitative Report*, 29(10), 2698-2715.
<https://doi.org/10.46743/2160-3715/2024.7632>
- Pulido-Fernández, J. I., Carrillo-Hidalgo, I., López-Sánchez, Y., & Casado-Montilla, J. (2024). Assessing social carrying capacity of tourists in protected natural areas. *Current Issues in Tourism*, 1–17. <https://doi.org/10.1080/13683500.2024.2320865>
- Purdie, H., Hutton, J. H., Stewart, E., & Espiner, S. (2020). Implications of a changing alpine environment for geotourism: A case study from Aoraki/Mount Cook, New Zealand. *Journal of Outdoor Recreation and Tourism*, 29, 100235.
<https://doi.org/10.1016/j.jort.2019.100235>

Quigg, R., & Russell, E. (2025). Indigenous rights and managed public land: A critical treaty analysis of parks and reserves in New Zealand. *Local Environment*, 1–18.

<https://doi.org/10.1080/13549839.2025.2543308>

Rassokha, I. M. (2021). Relativism as an ontological system. *Axiomathes*, 32(1).

<https://doi.org/10.1007/s10516-021-09589-w>

Recreation Construction. (2021). *Aoraki/Mount Cook*.

<https://www.recreationconstruction.co.nz/aorakimtcook>

Reindrawati, D. Y., Rhama, B., & Hisan, U. F. C. (2022). Threats to sustainable tourism in national parks: case studies from Indonesia and South Africa. *African Journal of Hospitality, Tourism and Leisure*. 11(3), 919-937

<https://doi.org/10.46222/ajhtl.19770720.266>

Rice, W. L., Taff, B. D., Morris, S. A., Pan, B., Parkinson, C., & Newman, P. (2024).

Explorations of preferred and maximum booking windows among U.S. national park campers: Implications for improved fairness. *Tourism and Hospitality Research*, 25(3). <https://doi.org/10.1177/14673584241237442>

Rogowski, M., Zawilińska, B., & Hibner, J. (2024). Managing tourism pressure: Exploring tourist traffic patterns and seasonality in mountain national parks to alleviate overtourism effects. *Journal of Environmental Management*, 373, 123430.

<https://doi.org/10.1016/j.jenvman.2024.123430>

Russell, J. C., Innes, J. G., Brown, P. H., & Byrom, A. E. (2015). Predator-free New Zealand: Conservation Country. *BioScience*, 65(5), 520–525.

<https://doi.org/10.1093/biosci/biv012>

Rylance, A. (2016). Estimating tourism's contribution to conservation area financing in Mozambique. *Tourism and Hospitality Research*, 17(1), 24-33. <https://doi->

[org.ezproxy.aut.ac.nz/10.1177/1467358415613119](https://doi-org.ezproxy.aut.ac.nz/10.1177/1467358415613119)

Sancho-Pivoto, A., Raimundo, S., & Santos, G. E. O. (2025). Contributions of visitation in parks to health and wellness: A comparative study between natural and urban parks in Brazil. *Tourism Planning & Development*, 22(2), 139–158. <https://doi->

[org.ezproxy.aut.ac.nz/10.1080/21568316.2024.2315945](https://doi-org.ezproxy.aut.ac.nz/10.1080/21568316.2024.2315945)

Sarhan, M., Pernecky, T., Orams, M., & Lück, M. (2025). Exploring collaborative governance and community participation in tourism and conservation—insights from Waiheke Island, New Zealand. *Frontiers in Sustainable Tourism*, 4, 1-20.

<https://doi.org/10.3389/frsut.2025.1567048>

Saunders, R., Weiler, B., Scherrer, P., & Zeppel, H. (2018). Best practice principles for communicating safety messages in national parks. *Journal of Outdoor Recreation*

and Tourism, 25, 132–142. <https://doi.org/10.1016/j.jort.2018.01.006>

Saunders, R., Weiler, B., Scherrer, P., & Zeppel, H. (2019). Best practice principles for communicating safety messages in national parks. *Journal of Outdoor Recreation*

and Tourism, 25, 132–142. <https://doi.org/10.1016/j.jort.2018.01.006>

- Schamel, J., & Job, H. (2017). National parks and demographic change – Modelling the effects of ageing hikers on mountain landscape intra-area accessibility. *Landscape and Urban Planning*, 163, 32–43. <https://doi.org/10.1016/j.landurbplan.2017.03.001>
- Schill, E. C. (2018). *The price of public land: An analysis of visitor responsiveness to national park entrance fees*. *BYU ScholarsArchive*.
https://scholarsarchive.byu.edu/studentpub_uht/72/?utm
- Schoenmueller, V., Netzer, O., & Stahl, F. (2020). The polarity of online reviews: Prevalence, drivers and implications. *Journal of Marketing Research*, 57(5), 853–877.
<https://doi.org/10.1177/0022243720941832>
- Schwartz, Z., Stewart, W., & Backlund, E. A. (2012). Visitation at capacity-constrained tourism destinations: Exploring revenue management at a national park. *Tourism Management*, 33(3), 500–508. <https://doi.org/10.1016/j.tourman.2011.05.008>
- Selvaag, S. K., & Evju, M. (2025). Assessing the effectiveness of signs to change littering behavior in a Norwegian national park. *Journal of Outdoor Recreation and Tourism*, 51. <https://doi.org/10.1016/j.jort.2025.100930>
- Selvaag, S. K., Keller, R., Aas, Ø., Gundersen, V., & Singsaas, F. T. (2022). On-site communication measures as a tool in outdoor recreation management: A systematic map protocol. *Environmental Evidence*, 11(1).
<https://doi.org/10.1186/s13750-022-00261-3>

- Sever, I., & Verbič, M. (2019). Assessing recreational values of a peri-urban nature park by synthesizing perceptions and preferences of trail users. *Journal of Environmental Psychology*, 63, 101–108. <https://doi.org/10.1016/j.jenvp.2019.04.010>
- Sheppard, D. Y., Miller, A. D., Sirguey, P., & Cox, S. C. (2026). Landscape changes in the Kitchener avalanche path, Aoraki/Mount Cook National Park after the record-breaking July 2022 storm. *New Zealand Journal of Geology and Geophysics*, 69(1). <https://doi.org/10.1002/jgo2.70041>
- Sikora, J. (2024). Financial aspects of national parks in Poland. *European Research Studies Journal*, XXVII(4), 325–345. <https://ideas.repec.org/a/ers/journal/vxxviy2024i4p325-345.html?utm>
- Sim, K. W., Koo, C. D., Koo, T. T. R., & Lee, H. S. (2018). An analysis on perceived crowding level reported by domestic visitors of South Korean National Parks: a multilevel ordered logit approach. *Asia Pacific Journal of Tourism Research*, 23(3), 281–296. <https://doi-org.ezproxy.aut.ac.nz/10.1080/10941665.2017.1422527>
- Simberloff, D. (2019). New Zealand as a leader in conservation practice and invasion management. *Journal of the Royal Society of New Zealand*, 49(3), 259–280. <https://doi.org/10.1080/03036758.2019.1652193>
- Slabbert, L., & Du Preez, E. A. (2021). Where did all the visitor research go? A systematic review of application areas in national parks. *Journal of Hospitality and Tourism Management*, 49, 12–24. <https://doi.org/10.1016/j.jhtm.2021.08.015>

- Smith, E. A. (2023). North Carolina state park gateway community stakeholders' perceptions of proposed management actions for revenue generation and use dispersion. *ProQuest Dissertations & Theses Global*.
<https://ezproxy.aut.ac.nz/login?url=https://www.proquest.com/dissertations-theses/north-carolina-state-park-gateway-community/docview/2838438897/se-2>
- Smith, F., & Turner, D. W. (2023). What are the psychological and cognitive wellbeing benefits as reported by people experiencing green space? A meta-ethnography. *Wellbeing, Space and Society*, 5, 100158.
<https://doi.org/10.1016/j.wss.2023.100158>
- Sprague, D. (2023, August 7). *The history of online reviews and how they have evolved*. Results.shopperapproved.com. <https://results.shopperapproved.com/blog/the-history-and-evolution-of-online-reviews>
- Sprinkle, J. H. (2017). Maintenance of the National Park Service's history infrastructure. *The George Wright Forum*, 34(3), 254–260. <https://doi.org/10.2307/26452968>
- Srinivasa, Y. (2025, December 16). *Extreme weather, unruly visitors put NZ's longest swing bridge slightly behind schedule*. The Press. <https://www.thepress.co.nz/nz-news/360917462/extreme-weather-unruly-visitors-put-nzs-longest-swing-bridge-slightly-behind-schedule>
- Stafford, L., Vanik, L., & Bates, L. K. (2022). Disability Justice and Urban Planning. *Planning Theory & Practice*, 23(1), 101–142. <https://doi.org/10.1080/14649357.2022.2035545>

- Stafford, L., Vanik, L., & Bates, L. K. (2022). Disability justice and urban planning. *Planning Theory & Practice*, 23(1), 101–142. <https://doi-org.ezproxy.aut.ac.nz/10.1080/14649357.2022.2035545>
- Stevens, M., Paul, K. L., Lunstrum, E., Edmo, T., & Maxwell, B. (2025). Rethinking indigenous hunting in national parks. *Annals of the American Association of Geographers*, 115(10), 2469–2482. <https://doi.org/10.1080/24694452.2024.2440412>
- Sun, N., Rau, P. P. L., & Ma, L. (2014). Understanding lurkers in online communities: A literature review. *Computers in Human Behavior*, 38, 110–117. <https://doi.org/10.1016/j.chb.2014.05.022>
- Sutton, P. C., Duncan, S. L., & Anderson, S. J. (2019). Valuing our national parks: An ecological economics perspective. *Land*, 8(4), 54. <https://doi.org/10.3390/land8040054>
- Swarbrick, N. (2009). *National parks map*. *Te Ara: The Encyclopedia of New Zealand*. <https://teara.govt.nz/en/map/14418/national-parks-map>
- Swarbrick, N. (2015). *National parks: Page 2 – Towards better management, 1900–1950s*. *Te Ara: The Encyclopedia of New Zealand*. <https://teara.govt.nz/en/national-parks/page-2>
- Szczesny, D. M., Williams, P. S., Darville, R., & McBroom, M. (2022). Role of historic visitor service structures in the interpretation of natural and scenic national parks: Grand

Canyon, Yellowstone, Yosemite. *Journal of Interpretation Research*, 27(1), 25–43.

<https://doi.org/10.1177/10925872221087197>

Taff, B. D., Benfield, J., Miller, Z. D., D’Antonio, A., & Schwartz, F. (2019). The role of tourism impacts on cultural ecosystem services. *Environments*, 6(4), 43.

<https://doi.org/10.3390/environments6040043>

Taff, B. D., Miller, Z., Lawhon, B., Freeman, S., & Newman, P. (2022). Effective communication and campground recycling: Lessons learned from Yosemite, Grand Teton, and Denali National Parks. *Land*, 11(10), 1872.

<https://doi.org/10.3390/land11101872>

Takahashi, M., Fujimoto, M., & Yamasaki, N. (2002). The active lurker. *ACM SIGGROUP Bulletin*, 23(3), 29–33. <https://doi.org/10.1145/990017.990023>

Takenaka, B. P., Seerha, H., Frumkin, H., & Tandon, P. S. (2025). Health funding for parks and greenspace: An innovative community investment strategy. *INQUIRY: The Journal of Health Care Organization, Provision, and Financing*, 62.

<https://doi.org/10.1177/00469580251404376>

Tang, E. Y. F. (2015). A scheme for “the window of Taiwan National Park.” *The International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences*, XL-5/W7, 425–429. <https://doi.org/10.5194/isprsarchives-xl-5-w7-425-2015>

- Thirumarpan, K., & Robinson, E. J. Z. (2025). Park pricing in theory and practice and implications for ecosystem and human health. *Eco-Environment & Health*, 4(2), 100151. <https://doi.org/10.1016/j.eehl.2025.100151>
- Tourism New Zealand. (2025). *Tourism data*.
<https://www.tourismnewzealand.com/insights/tourism-data/>
- Tu, X., Huang, G., Wu, J., & Guo, X. (2020). How do travel distance and park size influence urban park visits? *Urban Forestry & Urban Greening*, 52, 126689.
<https://doi.org/10.1016/j.ufug.2020.126689>
- Tverijonaite, E., Ólafsdóttir, R., & Thorsteinsson, T. (2018). Accessibility of protected areas and visitor behaviour: A case study from Iceland. *Journal of Outdoor Recreation and Tourism*, 24, 1–10. <https://doi.org/10.1016/j.jort.2018.09.001>
- Upchurch, J. (2006). Service times and capacity at national park entrance stations. *Transportation Research Record Journal of the Transportation Research Board*, 1981(1), 160–170. <https://doi.org/10.1177/036119810619810012>
- Walpole, M. J., Goodwin, H. J., & Ward, K. G. R. (2001). Pricing policy for tourism in protected areas: Lessons from Komodo National Park, Indonesia. *Conservation Biology*, 15(1), 218–227. <https://doi.org/10.1111/j.1523-1739.2001.99231.x>
- Walters, T. (2016). Using Thematic Analysis in Tourism Research. *Tourism Analysis*, 21(1), 107–116.

Ward, J., Hughey, K., & Ulrich, S. (2002). A Framework for Managing the Biophysical Effects of Tourism on the Natural Environment in New Zealand. *Journal of Sustainable Tourism*, 10(3), 239–259. <https://doi.org/10.1080/09669580208667165>

Weber, J., & Sultana, S. (2013). Why do so few minority people visit national parks? Visitation and the accessibility of “America’s best idea.” *Annals of the Association of American Geographers*, 103(3), 437–464.
<https://doi.org/10.1080/00045608.2012.689240>

Weiler, M., Whiting, A., Sajid, W., Dewan, N., & Dutta, T. (2025). Accessibility of national parks and other natural protected areas for people with disabilities: a scoping review of the academic literature. *World Leisure Journal*, 67(4), 638–665. <https://doi-org.ezproxy.aut.ac.nz/10.1080/16078055.2024.2413069>

Whalen, E. A. (2018). Understanding a shifting methodology: A content analysis of the use of netnography in hospitality and tourism research. *International Journal of Contemporary Hospitality Management*, 30(11), 3423–3441.
<https://doi.org/10.1108/ijchm-08-2017-0536>

Whiting, A., Sharma, Y., Dudney, H., Sajid, W., & Dutta, T. (2025). A survey on understanding factors that influence accessibility in national and provincial parks for adults with disabilities and caregivers. *Wellbeing, Space and Society*, 100292.
<https://doi.org/10.1016/j.wss.2025.100292>

Wichman, C. J. (2024). Social media influences National Park visitation. *Proceedings of the National Academy of Sciences of the United States of America*, 121(15).

<https://doi.org/10.1073/pnas.2310417121>

Winthrop, R. H. (2014). The strange case of cultural services: Limits of the ecosystem services paradigm. *Ecological Economics*, 108, 208–214.

<https://doi.org/10.1016/j.ecolecon.2014.10.005>

Wutich, A., Beresford, M., & Bernard, H. R. (2024). Sample sizes for 10 types of qualitative data analysis: An integrative review, empirical guidance, and next steps.

International Journal of Qualitative Methods, 23(1), 1–14.

<https://doi.org/10.1177/16094069241296206>

Yamagishi, K., & Sañosa, A. R. (2025). Does tourism fatigue impact support for natural protected areas' sustainability? *Current Issues in Tourism*, 28(22), 3583–3600.

<https://doi-org.ezproxy.aut.ac.nz/10.1080/13683500.2024.2402038>

Yaqub, M. (2025, December 13). 45+ Google business profile statistics: A must know in 2025. Red Local Agency. [https://redlocalagency.com/google-business-profile-](https://redlocalagency.com/google-business-profile-statistics/)

[statistics/](https://redlocalagency.com/google-business-profile-statistics/)

Yoo, K. H., & Gretzel, U. (2008). What motivates consumers to write online travel reviews? *Information Technology & Tourism*, 10(4), 283–295.

<https://doi.org/10.3727/109830508788403114>

- Yoon, H., & Zou, S. (2025). An empirical investigation of the effects of entrance fees on national park visitors. *Tourism Recreation Research*, 50(1), 150–160. <https://doi-org.ezproxy.aut.ac.nz/10.1080/02508281.2023.2237798>
- Yu, H., Xie, W., Yang, L., Du, A., Almeida, C. M. V. B., & Wang, Y. (2020). From payments for ecosystem services to eco-compensation: Conceptual change or paradigm shift? *Science of the Total Environment*, 700, 134627. <https://doi.org/10.1016/j.scitotenv.2019.134627>
- Zhang, G., Higham, J. E. S., & Albrecht, J. N. (2021). Ecological restoration in Aotearoa New Zealand: Contrasting tourist conservation narratives. *Tourism Management Perspectives*, 37, 100761. <https://doi.org/10.1016/j.tmp.2020.100761>
- Zhao, Y., Tang, S., Zhang, H., & Lyu, L. (2025). AI vs. human: A large-scale analysis of AI-generated fake reviews, human-generated fake reviews and authentic reviews. *Journal of Retailing and Consumer Services*, 87, 104400. <https://doi.org/10.1016/j.jretconser.2025.104400>
- Zube, E., Crystal, J., & Palmer, J. (1978). National parks visitor centers. *Environmental Design Evaluation*, 116–128. https://doi.org/10.1007/978-1-4757-5154-3_10