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Considerations in the Development and Implementation of a Visitor Strategy

A Case Study of Different Perceptions on Visitor Management in Skarvan and Roltdalen National Park and Sylan Landscape Protection Area

Master's thesis in Natural Resources Management - Specialization in Geography

Supervisor: Jørund Aasetre

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Abstract

The connection between use and nature conservation is central in visitor management in protected areas. Even though the Norwegian nature is attractive among both domestic and international tourists, the management has to little extent promoted the protected areas in particular. With the new brand and visitor strategies, however, the Norwegian Environment Agency is now aiming for more visitors in national parks and other large protected areas while at the same time ensuring the protection of conservation values. This study examines how different local stakeholders and the management authorities perceive visitor management in Skarvan and Roltdalen national park and Sylan landscape protection area in Trøndelag, Norway. It particularly looks at the different, and potentially conflicting, objectives of visitor management and which considerations should be emphasized in the development of a visitor strategy. The study has a qualitative approach and the findings are mainly based on interviews with eight local and regional informants as well as a document analysis of the new local visitor strategy (The National Park Board for Skarvan and Roltdalen and Sylan, 2020). The data is also compared to the findings from the user study for this area, which was conducted by Selvaag et al. (2017). The study explores how visitation and tourism are perceived similarly and differently and which interests are seen as most important in visitor management. In the discussion, these perspectives are linked to theory on adaptive management approaches and the concepts of Recreation Opportunity Spectrum (ROS) and Limits of Acceptable Change (LAC). The approaches expressed by national and local management and the informants are also connected to prevailing discourses on nature conservation.

The study finds that while the national goal of visitor management is to balance facilitation for visitor experiences, opportunities for strengthening local economies, and nature protection, the conservation values are highly prioritized in local management. Furthermore, the local stakeholders are skeptical of an increase in the number of visitors. Several informants perceive the aim of facilitating more people in protected areas as contradictory and the national visitor management as a paradox. The new visitor strategy in the study area is emphasizing measures with channeling effects, especially the distribution of more and better information about the protected nature. This is also called for by many informants. The study concludes that the perceptions of the local informants and the national park board generally correlate. They are skeptical of the win-win approach which is often expressed in visitor management. Further, they focus mostly on limiting the negative impacts of visitation. This may be beneficial in cooperation between the management authorities and the local tourism industry. However, it is possible that it makes the visitor management more static and that potential positive effects of tourism are missed out on.

Sammendrag

Sammenhengen mellom bruk og naturvern er helt sentral i besøksforvaltning i verneområder. Selv om den norske naturen er attraktiv blant både innenlandske og utenlandske turister, har forvaltningen i liten grad fokusert på å promotere verneområdene. Med de nye merkevare- og besøksstrategiene tar derimot Miljødirektoratet sikte mot å legge til rette for flere besøkende i nasjonalparker og andre større verneområder, samtidig som verneverdiene beskyttes. Denne studien undersøker hvordan forskjellige lokale aktører og den lokale forvaltningsmyndigheten oppfatter besøksforvaltningen i Skarvan og Roltdalen nationalpark og Sylan landskapsvernområde i Trøndelag. Den ser spesielt på de ulike, og potensielt motstridende, målene i besøksforvaltningen og hvilke hensyn som bør prioriteres i utviklingen av en besøksstrategi. Studien har en kvalitativ tilnærming og funnene er hovedsakelig basert på intervjuer med åtte lokale og regionale informanter, i tillegg til en dokumentanalyse av the nye lokale besøksstrategien for disse områdene (The National Park Board for Skarvan and Roltdalen and Sylan, 2020). Dataene blir også sammenlignet med resultatene fra brukerundersøkelsen for dette området, som ble gjennomført av Selvaag et al. (2017). Studien utforsker hvordan besøk og turisme blir oppfattet likt og ulikt og hvilke interesser som blir sett på som viktigst i besøksforvaltningen. I diskusjonen blir disse perspektivene knyttet til teori om adaptive forvaltningstilnæringer og konseptene med Recreation Opportunity Spectrum (ROS) og Limits of Acceptable Change (LAC). Tilnærminene som uttrykkes av nasjonal og lokal forvaltning og av informantene blir også sett i sammenheng med rådende diskurser om naturvern.

Studien finner at mens det nasjonale målet for besøksforvaltning er å balansere tilrettelegging for besøksopplevelser, muligheter for lokal verdiskaping og naturvern, blir verneverdiene klart mest prioritert i den lokale forvaltningen. Videre er lokale aktører skeptiske til en økning i antallet besøkende. Flere informanter oppfatter målet om å legge til rette for flere besøkende i verneområder som motstridende og den nasjonale besøksforvaltningen som et paradoks. Den nye besøksstrategien i studieområdet fokuserer på kanaliseringstiltak, spesielt distribusjon av mer og bedre informasjon om den vernede naturen. Dette etterlyses også av mange informanter. Studien konkluderer med at synspunktene til de lokale informantene og nasjonalparkstyret generelt sett samsvarer med hverandre. De er skeptiske til vinn-vinn-tilnærmingen som ofte uttrykkes innen besøksforvaltningsfeltet. Videre fokuserer de for det meste på å begrense de negative virkningene av besøk or turisme. Dette kan være fordelaktig for et samarbeid mellom vernemyndighetene og den lokale turisnæringen. Det er likevel mulig at dette gjør besøksforvaltningen mer statisk og at man går glipp av de potensielle positive effektene av turisme.

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List of Abbreviations

CBD	Convention on Biological Diversity
DNT	The Norwegian Trekking Association
IUCN	The International Union for Conservation of Nature
LAC	Limits of Acceptable Change
NINA	The Norwegian Institute for Nature Research
NSD	Norwegian Center for Research Data
NTT	Nord-Trøndelag Tourist Association
ROS	Recreation Opportunity Spectrum
TT	Trondhjems Tourist Association

1 Introduction

1.1 Background and topic

In protected area management, the relationship between use and conservation has the last decades become increasingly emphasized and discussed. At the same time, the international tourism industry has experienced steady growth and pristine natural areas have become highly popular tourist destinations (Leung, Spenceley, Hvenegaard, & Buckley, 2018; UNWTO, 2019). Protected areas are often seen as especially interesting because of their large and "untouched" nature. Each area is, in some way or another, unique and their visitors seek a variety of experiences. However, the expansion of tourism also comes with major responsibility for the management authorities to sustainably handling all the visitors (Eagles, McCool, & Haynes, 2002). All human intervention and use influence the natural conditions and conservation practices. While intensive tourism may lead to wear and tear of the landscape, on the one hand, it can increase the common understanding of the importance of conservation on the other. The impacts of use can thus be either positive or negative and often both. Furthermore, both the tourists and the nature they visit can profit from each other. Yet, this relationship between use and protection is complex and by many also perceived as contradictory. A variety of considerations and stakeholders makes the balance of interests in nature protection a complicated task (Eagles et al., 2002). Internationally, visitor management has, thus, become an important part of protected area management. The most common approach to facilitate tourism while at the same time protecting valuable nature the recent years is adaptive management. It emphasizes the importance of participation, a broad knowledge base, specific management objectives, and continuous monitoring and adjustments of these objectives (Leung et al., 2018).

This development of visitor management has also been seen in Norway. Although the Norwegian nature has long been one of the main reasons for tourists to visit the country, there has not been a particular focus on promoting the protected areas. However, concurrently with a national goal of involving more people in outdoor recreation, it has been decided that the brand of Norwegian protected areas should be strengthened and that all national parks should develop individual visitor strategies by the end of 2020 (Ministry of Climate and Environment, 2016; Norwegian Environment Agency, 2015). The goal of the brand strategy is for more people to visit the larger protected areas, both to improve public health, to strengthen local economies, and to increase the support of nature protection. The visitor strategies are meant to be a tool for local management authorities to achieve this goal. Central in these visitor strategies is the adaptive management approach. The local managers have thus been given the task to make individual and detailed strategies in order to balance the interests of visitors, local stakeholders, and conservation values.

1.2 The purpose and aims of the study

This master's thesis is a qualitative study of visitor management in Skarvan and Roltdalen national park and Sylan landscape protection area in Trøndelag, Norway. The study aims to better understand the considerations that are included and emphasized in local visitor management. Furthermore, it investigates how the visitor strategy balances the three purposes of more visitors, a stronger local economy, and the protection of valuable and vulnerable nature. Through interviews with a selection of stakeholders connected to the study area, I particularly examine how they perceive the local visitor management and the process of developing a new visitor strategy. This will be connected to the analysis of the new visitor strategy (The National Park Board for Skarvan and Roltdalen and Sylan, 2020) and a user study conducted in the area by Selvaag et al. (2017). The process of data collection is based on the following research questions:

1. How do central stakeholders perceive the use and facilitation of Skarvan and Roltdalen and Sylan?
2. Which interests are given the most consideration in the development of a new visitor strategy?
3. How should these protected areas be developed in the future?

The first question refers mainly to the existing use by visitors to the area and the facilitation connected to this visitation. Like most Norwegian national parks, the use of Skarvan and Roltdalen and Sylan is dominated by traditional outdoor recreation such as hiking and cross-country skiing. This study will therefore to a high degree focus on these activities. Similarly, the facilitation in protected areas is often connected to such use but also includes other management initiatives such as viewpoints. The second question regards whose interests and which factors are given most attention in the new visitor strategy. Are decisions first and foremost made to satisfy the visitors, the local community, or to strengthen the protection of vulnerable nature? By analyzing the experiences of informants, the perceptions of visitors, and the plans in the visitor strategy, the study examines how these interests are taken into consideration and balanced in visitor management. This balance is also connected to how people wish for Skarvan and Roltdalen and Sylan to be in the future. The third question is, therefore, considering the hopes and preferences for the future situation in these protected areas. Furthermore, the study connects the findings in the study area to a broader perspective within visitor management and considerations in nature protection.

1.3 Thesis outline

The thesis includes seven chapters. I have in the first one described the main topic and purpose of the study. Chapter 2 explains the background of nature protection, with particular emphasis on the Norwegian conservation management system. Further, it describes the study area and the use of Skarvan and Roltdalen and Sylan. Chapter 3 presents central considerations in and theory on visitor management. This includes the concepts of Recreation Opportunity Spectrum (ROS), Limits of Acceptable Change (LAC), adaptive management, and discourses on nature conservation. Further, chapter 4 explains the qualitative methodology of the study and the methods used for data collection. It also discusses ethical considerations in this research and the validity of the study. Chapter 5 presents the results from the interviews together with findings from the visitor strategy. It includes the informants' perceptions of use, facilitation and management, and the connections between these. Additionally, it presents the informants' views on potential local value creation in connection to the protected areas

and the implementation of the visitor strategy. The chapter is divided into five parts which address each of these topics. In chapter 6, I discuss these results and connect them to theoretical concepts and the analysis of the visitor strategy and the user study. The chapter aims to give a better understanding of how and why different interests are prioritized in visitor management. Finally, chapter 7 concludes the discussion and includes some reflections around the study and the need for further research.

2 Background

2.1 Historical background of nature protection

The protected area concept has a long history in Europe. If we include the recognition of areas that had spiritual or religious meaning to humans, the concept has existed for thousands of years (EEA, 2012). Conservation of areas because of their natural resources, however, came with William the Conqueror who, in the 11th century, officially claimed a part of what is now New Forest in England to be kept for hunting purposes. This type of conservation was aiming at preserving individual resources such as game or for example timber, and most of the protected areas at the time were established on this basis (EEA, 2012). The idea of preserving larger territories, however, got widespread several centuries later when the European Romanticism emphasized the natural beauty of wild nature itself. During the 19th century, civil society's interest in protecting these natural areas increased. At the same time, the idea of national parks emerged in North America, and the world's first-ever national park, Yellowstone, was established in 1872 (EEA, 2012). The conservation approach at the time was exclusively concerned about protecting nature, which included the protection of areas against humans and their practices. Tourism was the only legal type of use. This type of management was later common in other parts of the world as well (Benjaminsen & Svarstad, 2017). The idea of organizing conservation into national parks got spread to Europe in the early 1900s, and later to Norway (Berntsen, 1977; EEA, 2012). Yet, the strict prohibition of use as seen in Yellowstone was never really implemented in Norway (Benjaminsen & Svarstad, 2017).

Norway also saw the first initiatives concerning nature protection in the late 19th century. The preservation of the beech forest in Larvik and the peninsula Bygdøy outside Oslo are considered to be some of the first ones (Berntsen, 1977; Jansen, 1989; Olerud, 2018). At this time, the public conservation initiatives in Norway followed the same principle as the early European ones. They were individual and focused on preserving smaller areas for recreation and use, rather than larger territories preserved because of the intrinsic value of nature (Jansen, 1989). Both in Norway and Europe, the first protected areas were often initiated privately or by civil society organizations (EEA, 2012). Nature protection did not become a matter for the state until the 20th century when, in 1910, Norway got its first legislation on conserving nature (Jansen, 1989; Norwegian Environment Agency, n.d.-a). This new governmental organization of nature conservation continued to focus on the protection of isolated and individual natural resources or because of an area's scientific or historical value (Berntsen, 1977). Yet, many were inspired by the establishments of national parks in other countries. Sweden was, for example, the first country in Europe to establish national parks, the first ones being established in 1909 (EEA, 2012). The Norwegian Society for the Conservation of Nature (Naturvernforbundet), founded in 1914, had a strong position in the development of the concept of nature protection in the country. With its local member associations, it aimed at increasing the interest in conservation of nature among the Norwegian population and most of the initiatives for preservation originated from this society (Berntsen, 1977). Already at the beginning of the 20th century, the conflicts in nature conservation were to a large extent based on the conflicting interests in the industrial development of waterfalls and watercourses on the one hand, and protection of these resources on the

other. This debate has since then been central in conservation issues. The protection of individual natural resources and features continued to be the general perspective of conservation until the second world war, even though many argued for a need for the protection of greater and more coherent natural areas, such as national parks (Berntsen, 1977).

In 1954, however, the 1910 legislation was replaced by a new law on nature conservation, which to a higher degree was aiming towards more comprehensive territorial nature protection and opened up for the establishment of national parks, the first of which was Rondane national park in 1962 (Jansen, 1989; Norwegian Environment Agency, n.d.-a). This establishment came 60 years after the first suggestion of a Norwegian national park in 1902 and 90 years after Yellowstone. Yet, the majority of protected areas in the world have been established after the Rondane national park (EEA, 2012). In addition to the establishment of national parks, the new law also allowed for the conservation of an area because of its esthetical features (Berntsen, 1977). The new legislation can be seen as a turning point in Norwegian nature protection, and the interest in conservation had indeed started to increase within the Norwegian population (Berntsen, 1977; Jansen, 1989). Despite the importance of the 1954 law on nature conservation, it was criticized because of its limitations and was replaced 16 years later by the Nature Conservation Act of 1970 (Berntsen, 1977). This was an important breakthrough for Norwegian nature protection, particularly within the public management of protected areas and is regarded as the country's first modern conservation act. The Nature Conservation Act of 1970 also opened up for establishing landscape protection areas where conservation in the form of national parks or nature reserves was not applicable (Berntsen, 1977). In 1972, the Norwegian Ministry of the Environment (now called the Ministry of Climate and Environment) was established and, thus, the central management of nature conservation was strengthened (Jansen, 1989). Internationally, the protected areas had for a long time been perceived as individual areas independent from the surrounding nature. In the 1970s, however, there was a change of perspective towards a more ecological approach where the importance of safeguarding biological diversity was emphasized (EEA, 2012). For example, the ecological importance of wetlands was emphasized during the conference regarding this matter in Ramsar, Iran, in 1971. This resulted in the Ramsar Convention on Wetlands which was signed by Norway in 1974 (Berntsen, 1977). At the same time, both the number and size of European protected areas increased rapidly (EEA, 2012).

The development of Norwegian and international nature protection has, thus, been characterized by a change in the perception of conservation from the preservation of specific natural resources to a more holistic and ecological approach (Berntsen, 1977; EEA, 2012). At the same time, the interest in nature protection has strongly increased in the society and become a significantly larger area of responsibility. In the years following the implementation of the Nature Conservation Act, several new national parks were suggested and established, both on the Norwegian mainland and at Svalbard (Berntsen, 1994). In total, 21 new Norwegian national parks were established in the period 1962-1990 (Kaltenborn, Riese, & Hundeide, 1991). In this period, the need for protection of larger coherent natural areas was to a higher degree emphasized and the size of the national parks increased. Further development of the Norwegian national parks was suggested during the 1980s and a new plan for national parks and other large protected areas was presented for the Norwegian Parliament in 1992 (Berntsen, 1994; Ministry of the Environment, 1992). The new plan aimed at continuing the work with conservation under the Nature Conservation Act in a total of 46 areas and an expansion of 9 existing

national parks (Ministry of the Environment, 1992). This work is now mainly completed and, as a consequence, the amount of protected nature went from 6% in 1992 to almost 15% in 2010 (Benjaminsen & Svarstad, 2017; Svarstad, Skuland, Guldvik, & Figari, 2009). Today, this number is 17,4% and the total number of protected areas has exceeded 3000 (Norwegian Environment Agency, 2019a). There are 47 national parks in Norway, 40 of which are located on mainland and 7 at Svalbard (Norwegian Environment Agency, n.d.-d).

2.2 Management and regulations today

Most protected areas present in Norway today were established under the Nature Conservation Act of 1970 (Norwegian Environment Agency, n.d.-a). In 2009 the act got replaced by a new and even more modernized law, the Nature Diversity Act. Today, this act is the basis for all Norwegian nature management, the establishment, planning, and management of protected areas included (Norwegian Environment Agency, 2019c, n.d.-b). While continuing regulations about conservation of natural areas, the new act of 2009 additionally considers how sustainable use and protection of these areas may work together as a tool to achieve management goals. Thus, the Nature Diversity Act (2009) is modernized to conform to contemporary principles in the field and follows international conventions such as the 1992 Convention on Biological Diversity (CBD) (Backer, 2009). It is also regarded as “the most comprehensive and important piece of legislation on Norwegian nature and its management ever adopted” (Norwegian Environment Agency, n.d.-a). An important part of the Nature Diversity Act is the precautionary principle. This principle emphasizes the need to act to prevent the devastation of natural diversity and states that in a situation where the natural diversity is critically threatened, “lack of knowledge shall not be used as a reason for postponing or not introducing management measures” (Naturmangfoldloven, 2009, § 9). In addition to the Nature Diversity Act, all protected areas have their regulations decided by the government. Many areas, especially larger protected areas, also have individual management plans developed by the local management board.

The later years’ increased emphasis on the relationship between conservation and use has happened coincidentally with a shift from focusing exclusively on protection to focusing more and more on the people living in or close to protected areas. This shift has also been evident in Norway. The management of larger protected areas has since 1983 been the responsibility of the county governors (Benjaminsen & Svarstad, 2017). In 2009, however, a new “local management” model was implemented in the wake of a pilot project in three national parks and one landscape protection area (Lundberg, Hongslo, Hovik, & Bay-Larsen, 2013). The new model opened for delegating the practical management of larger protected areas to a local management board. This board must consist of representatives from each of the municipalities and counties affected by the protection, as well as one or more representative(s) from the Sami parliament if Sami people are affected. Additionally, these boards have a related advisory committee with local stakeholders and a protected area manager employed by the county governor (Benjaminsen & Svarstad, 2017). This was initially presented as a local management approach. Yet, it is argued that the model is rather a form of co-management, as the final decisions are still taken centrally but with better communication between the different management levels (Benjaminsen & Svarstad, 2017; Lundberg et al., 2013). The national responsibility for protected areas in Norway belongs to the Ministry of

Climate and Environment and the Environment Agency (Norwegian Environment Agency, n.d.-b).

The International Union for Conservation of Nature (IUCN) has made global standards regarding nature conservation. They define a protected area as:

A clearly defined geographical space, recognized, dedicated and managed, through legal or other effective means, to achieve the long-term conservation of nature with associated ecosystem services and cultural values. (Dudley, 2008, p. 4)

Additionally, they classify the different forms of protected areas into six categories according to the management objectives: (1) Strict protection (strict nature reserve or wilderness area), (2) National park, (3) Natural monument or feature, (4) Habitat/species management area, (5) Protected landscape/seascape, and (6) Protected area with sustainable use of natural resources (IUCN, n.d.). Even though these categories are widely recognized as a standard, they are not legally binding (NOU 2004: 28, 2004). Moreover, they are made from an international perspective. The Norwegian protected area categories are therefore not completely corresponding to them but rather adjusted to the Norwegian context. The categories stated in the Nature Diversity Act (2009) are national parks, landscape protection areas, nature reserves, habitat management areas, and marine protected areas. All new areas and revisions of old conservation regulations are adopted according to these categories. The national parks are characterized by large natural areas which include unique or representative ecosystems, or pristine landscapes (Naturmangfoldloven, 2009). These areas are important to maintain biological diversity and the interactions within nature. Landscape protection areas can be either natural or cultural landscapes valuable for ecological, cultural, or experiential reasons. Identity-building areas can also be protected under this category. Often, landscape protection areas are established to better protect cultural landscapes that are still in use, for example areas with traditional mountain farming (Norwegian Environment Agency, n.d.-e). Nature reserves is the strictest category of nature protection and human traffic, including traditional hiking, may be completely prohibited in these areas. These areas have natural or geological features that are of particular importance to biological diversity or natural science or have representative habitats or geological deposits. Habitat management areas are areas that fulfill ecological functions for one or more particular species and thus are of special importance. Finally, marine protected areas can be established on the same premises as nature reserves, protected areas, or habitat management areas. The management objectives and regulations may apply to particular parts of the marine area, such as the seabed, the water column or the surface, or a combination of these (Naturmangfoldloven, 2009).

The concept of outdoor recreation has had a strong position among the Norwegian population since the beginning of the 19th century (Berntsen, 1994). Traditional outdoor recreation, such as harvesting, hiking, and cross-country skiing, is still popular and such activities are generally allowed on all uncultivated land due to the Outdoor Recreation Act (1957) and its Public Right of Access. This contributes to the promotion and insurance of the possibility of outdoor recreation to all people. The Public Right of Access stands strong in the country and outdoor recreation is seen as important for both common Norwegians and the government as a measure to stimulate public health and wellbeing. The requirement of the opportunity for simple outdoor recreation in protected areas is also stated in the Nature Diversity Act (2009, § 33). Some areas may, however, have individual rules for particular activities or organized activities (Norwegian Environment

Agency, n.d.-b). In national parks prohibition or restriction of traditional hiking can only be implemented if it is necessary for the protection of flora, fauna, cultural heritage, or geological deposits (Naturmangfoldloven, 2009, § 35).

2.3 The new brand and visitor strategies for Norwegian protected areas

Together with the increased focus on the use of protected areas and local participation, there has been an international increase of tourists traveling to and within protected areas. This growth has created a need for better visitor management and more emphasis on tourism (Leung et al., 2018). Tourism may not be the first solution to enter our minds when trying to think of ways to achieve sustainable management of protected areas. Yet, as will be explained in section 3.1.2, there are several reasons why tourism and outdoor recreation can be beneficial, both for the quality of protected area conservation, for the economy of local communities surrounding protected areas, and for the health and well-being of the visitors. With particular emphasis on the public health benefits associated with outdoor recreation, the Norwegian government presented in Meld. St. 18 (2016) their wish for a higher number of the population to participate in outdoor recreation. Here, the government also addresses the need for better inclusion of modern outdoor activities in the laws and regulations regarding outdoor recreation and the use of natural areas. They focus on improving the facilitation and information for users instead of implementing stronger restrictions to handle conflicts between different user groups. The balance between use and conservation in Norwegian protected areas has been a continuous debate since the beginning of the development of national parks (Aas et al., 2003). Even though recreational activities have been part of these areas since the beginning, practical management has, to a large extent, prioritized protection over use. In the last two decades, however, there has been a general development in protected area management towards a stronger combination of use and conservation in the national parks (Andersen, 2016). This eventually resulted in the development of a new brand strategy that was launched in 2015 to make the visual brand of Norwegian protected areas stronger and more coherent (Hagen et al., 2019). The final aim of the strategy is to invite and encourage more people to visit the protected areas and, thereby, increase the knowledge about natural areas and improve the conservation of them (Norwegian Environment Agency, n.d.-c). The brand strategy is now being gradually introduced in all protected areas.

In the context of the new brand strategy, it has been decided that all management authorities of national parks and other large protected areas must develop and implement individual visitor strategies. This is an important part of the task that was given from the government to the Norwegian Environment Agency in 2014, regarding better facilitation of the use in the national parks (Norwegian Environment Agency, 2019b). The strengthening of the visitor management and the work on visitor strategies are based on the idea of facilitating increased visitor traffic in locations which can tolerate a high number of visitors. This will both increase the value of these areas as well as limit the user impacts in other, more sensitive locations (Norwegian Environment Agency, 2019b). Each visitor strategy will, thus, be an important tool for the local management boards to improve the visitor management of their protected areas. The visitor strategies must, therefore, consider facilitation and channeling measures, such as marked trails, information, wooden boards over wet areas, viewpoints, and entry points. Additionally,

the visitor strategies and the following management must be carried out based on the purpose of conservation. At the same time, the visitor strategies should take into account the opportunities to strengthen the local economy linked to their protected areas and encourage stronger cooperation between the management authorities and local stakeholders (Norwegian Environment Agency, 2015).

2.4 Study area

Skarvan and Roltdalen national park (see Figure 1) is a Norwegian protected area in the municipalities of Stjørdal, Meråker, Selbu, and Tydal in Trøndelag county. It is situated east of Trondheim between Neadalføret and Stjørdalsføret, has an extent of 442 km², and was established in 2004 (Norwegian Environment Agency, n.d.-f; Selvaag et al., 2017). The national park aims to protect a mountain and forest area which is, to a notable extent, pristine (Forskrift om Skarvan og Roltdalen nasjonalpark, 2004). Almost half of the total area is more than 5 kilometers from technical interventions and is thus defined as wilderness in Norway (County Governor of Nord-Trøndelag, 2008). The type of mountain and forest area covered in Skarvan and Roltdalen is typical for the region. Additionally, the protection aims to ensure valuable biodiversity and cultural heritage. Roltdalen is also the largest roadless wooded valley in the region of Trøndelag (Selvaag et al., 2017). Southeast of Skarvan and Roltdalen, by the Swedish-Norwegian border, is Sylan landscape protection area (see Figure 2). Sylan is located in Tydal municipality. This is an area of 167 km² and was established in 2008. The purpose of the protection is to conserve a relatively pristine and distinctive mountain area with a high degree of biodiversity (Forskrift om Sylan landskapsvernområde, 2008). As part of the landscape protection area is Sylmassivet, a mountain area popular for hikers. Around it is lower marshlands and forest areas. Both the national park and the landscape protection areas were part of the national plan for larger protected areas that were presented in St. Meld. 62 (Ministry of the Environment, 1992). Skarvan and Roltdalen and Sylan are surrounded by three nature reserves: Stråsjøen-Prestøyan, Sankkjølen, and Rangelaldalen. These are all valuable wetlands and marshlands and many wetland bird species have their habitats here (Forskrift om naturreservat, Meråker, 1988; Forskrift om naturreservat, Selbu, 1983; Forskrift om Sankkjølen naturreservat, 2008). Furthermore, Sankkjølen has a high degree of botanical biodiversity and contains quaternary geological deposits. This area is also of scientific importance as a reference area because of the absence of major technical interference. Additionally, Sankkjølen is valuable for Sami culture, and the area is used for reindeer herding (Forskrift om Sankkjølen naturreservat, 2008).

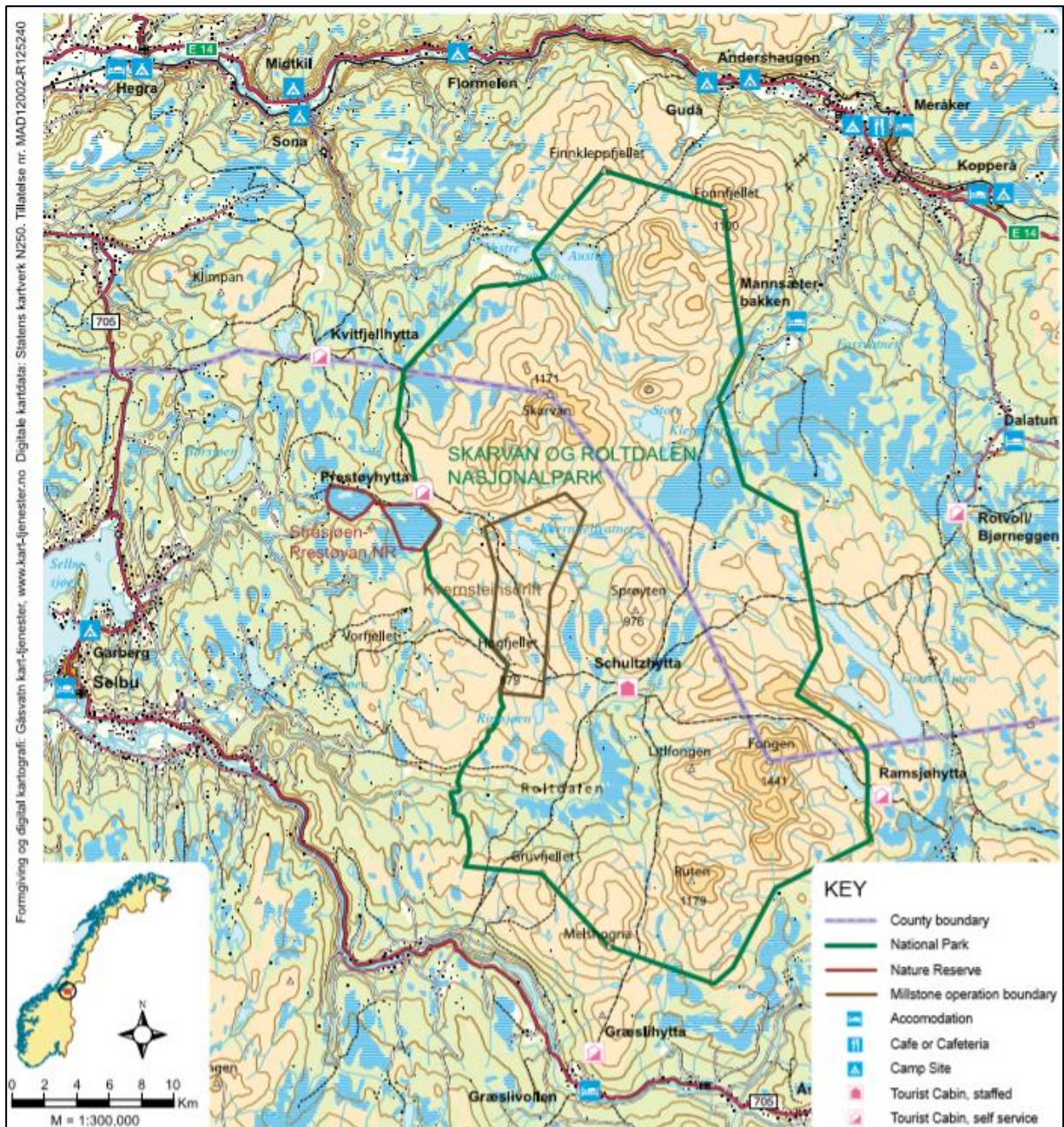


Figure 1: Map of Skarvan and Roltdalen national park in Trøndelag, Norway. Retrieved from Norwegian Environment Agency (n.d.-f).

Both Skarvan and Roltdalen national park and Sylan landscape protection area are well used for outdoor recreation (Selvaag et al., 2017). According to the conservation regulations for both Sylan and Skarvan and Roltdalen, “traditional and simple outdoor recreation with a low degree of technical facilitation” should be allowed and made possible for common people (Forskrift om Skarvan og Roltdalen nasjonalpark, 2004, § 2; Forskrift om Sylan landskapsvernområde, 2008, § 2). Today, these areas have a relatively high degree of facilitation, particularly in certain areas. This facilitation includes marked summer and winter trails, private and tourist cabins, and bridges and plank structures over wet and marshy areas. The two popular multiday hiking routes called “Firkanten” (“The Square”) and “Norge på tvers” (“Across Norway”) go through Skarvan

and Roltdalen and Sylan. Both are organized by The Norwegian Trekking Association (DNT) and attract many multi-day users. The local DNT member associations, Trondhjem's Tourist Association (TT) and Nord-Trøndelag Tourist Association (NTT), have several serviced and self-serviced cabins in and close to the protected areas. The most visited of these are the two serviced cabins Nedalshytta and Storerikvollen in Sylan (Trondhjems Tourist Association, 2019). Outdoor recreation in these areas is usually of the traditional and simple sort and often includes hiking, skiing, hunting, harvesting, and/or fishing (Selvaag et al., 2017). Traditional mountain farming and reindeer herding are also allowed in these protected areas and are included in the conservation regulations (Forskrift om Skarvan og Roltdalen nasjonalpark, 2004; Forskrift om Sylan landskapsvernområde, 2008).

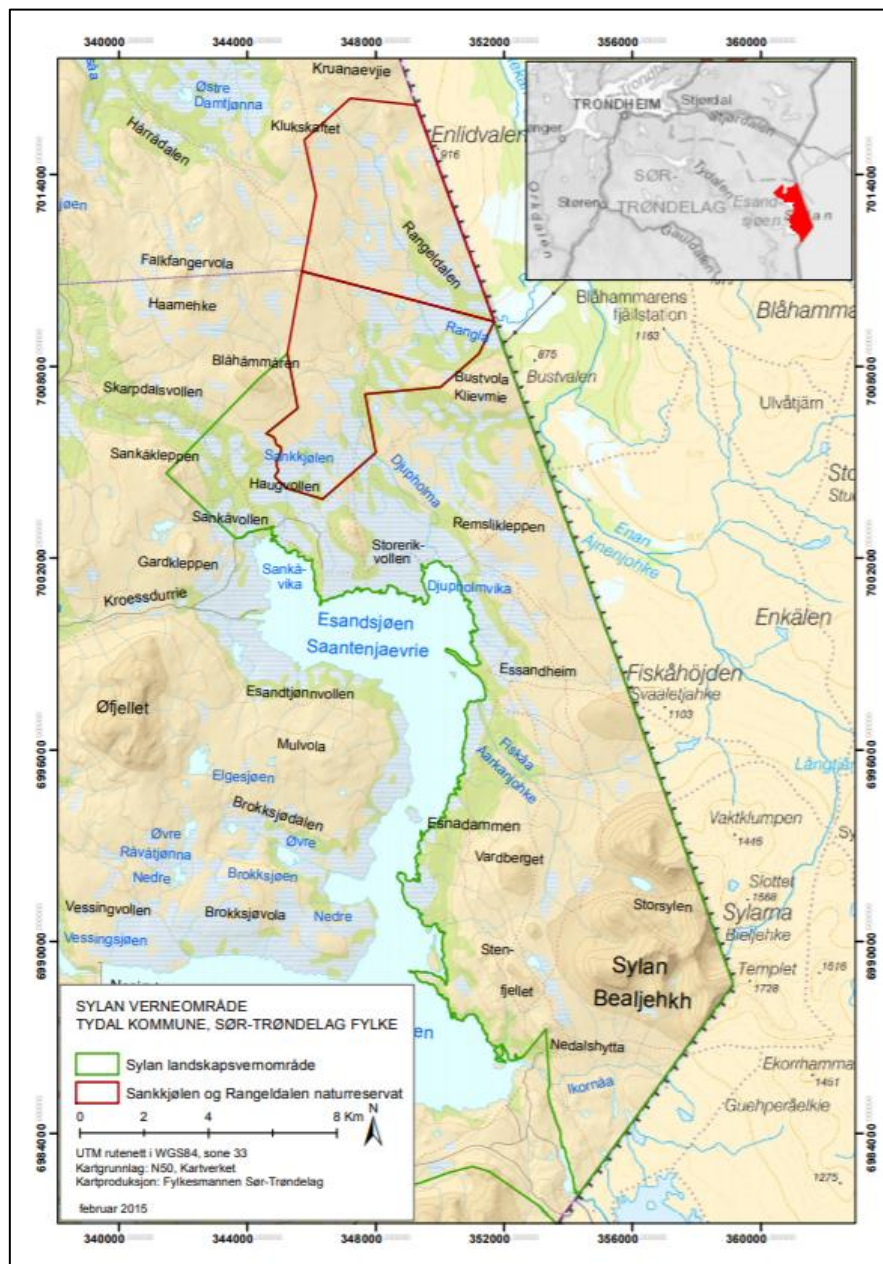


Figure 2: Map of Sylan landscape protection area in Trøndelag, Norway. The protection area is located by the Norwegian-Swedish border. Retrieved from the National Park Board for Skarvan and Roltdalen and Sylan (n.d.).

2.5 User study

In conjunction with the development of new visitor strategies, there have been conducted user studies to better understand the visitors' needs. The user survey for Skarvan and Roltdalen national park and Sylan landscape protection area was done by Selvaag et al. (2017) for the Norwegian Institute for Nature Research (NINA) during the summer of 2016. The study is based on a questionnaire placed in self-registration boxes along the most important paths in the areas, as well as a web-based survey and several traffic-counters. The number of respondents used in the survey is 2514 for the questionnaire and 432 for the web-based survey (Selvaag et al., 2017). The study shows several relevant characteristics of the visitors, how they use these protected areas, and their facilitation preferences.

Selvaag et al. (2017) define four different types of outdoor recreation:

1. Traditional harvesting ("tradisjonelt høstingsfriluftsliv")
2. Hiking/skiing ("turfriluftsliv")
3. Modern outdoor recreation ("moderne friluftsliv")
4. Motorized outdoor activities ("motoriserte utendørsaktiviteter")

Traditional harvesting here includes the provision of food through harvesting of berries and mushrooms, fishing, and hunting. Modern outdoor recreation is defined as "activities that require special skills or equipment" (Selvaag et al., 2017, p. 27). Climbing, mountain biking, and snowkiting are some of the mentioned examples of modern activities, while boating and snowmobile driving are given as examples of motorized outdoor activities. Selvaag et al. (2017) also describe "traditional outdoor recreation" in general to include traditional harvesting and hiking/skiing. Further, they appear to understand facilitation as "simple" if it is limited to the marking of trails, planks or bridges over wet areas and streams, information boards and signs.

One of the main aims of the user study was to examine why people visit Skarvan and Roltdalen national park and Sylan landscape protection area. The survey shows that most of the visitors were Norwegians and living outside of the local municipalities (Tydal, Stjørdal, Meråker, Selbu, and Røros). However, Selvaag et al. (2017) argue that the amount of local visitors (25,1%) is "quite high" compared with the results from other protected areas. Of the foreign visitors, Swedes were most represented. Most respondents had experience in multi-day hiking or skiing trips, and the study shows that 72% had been on such trips 6 or more times. Most of the visitors (70%) had during the last year had an overnight stay within or around the protected areas and the most commonly used type of accommodation was tourist cabins. More than half of the total amount of visitors had been visiting these areas before. According to the survey, the far most interesting activity among the visitors was traditional outdoor recreation; 97% of the respondents to the web-based survey answered that they were interested or very interested in this. 68% was interested or very interested in harvesting, while 19% was interested or very interested in modern outdoor activities. 10% of the respondents answered that they were interested or very interested in motorized outdoor activities. In the self-registration survey, most respondents answered that the main purpose of their current trip was hiking (84%). In the web-based survey, the respondents were asked what kinds of activities they had exercised in the areas the last year. For summer activities, hiking was still most frequently answered. Different types of skiing were the

most popular activities during winter while photographing was the most popular season independent activity (Selvaag et al., 2017).

In total, the respondents rated "nature experience" as the most important motivation for visiting Skarvan and Roltdalen and Sylan, followed by "to experience wilderness". Selvaag et al. (2017) argue that this conforms to user surveys conducted in other large protected areas, where the same motivation alternatives have been used. Further, as seen in Figure 3, experiences connected to traditional outdoor recreation are generally given a high rating. From the figure, it also appears that the network of trails and tourist cabins are somewhat important motivations to visit. In the self-registration survey, 75,5% of the respondents answered that they "for the most part walks along marked/clear trails/roads". In the web-based survey, 55% of the respondents gave the same answer. In both surveys, 4% of the respondents answered that they "for the most part walks outside marked/clear trails/roads". Selvaag et al. (2017) argue that the difference between these results might be because the self-registration survey was based on the current trip and the self-registration boxes were placed along marked trails, while the answers in the web-based survey were based on the last year in total.

According to the traffic counters from the summer season 2016, the area around Nedalshytta has the highest intensity of traffic. Selvaag et al. (2017) stress that the traffic counters do not show the number of visitors, but the number of times anyone has passed by the counters. This means that the visitors might have passed the same counter several times. According to the web-based survey, the most used entry point was also Nedalshytta.



Figure 3: The average score given to the different motives according to their importance in the respondents' choice of visiting Skarvan and Roltdalen national park and Sylan landscape protection area, on a scale from 1 (not at all important) to 7 (very important). N = 425–427. Adapted from Selvaag et al. (2017). My translation.

In the user survey, Selvaag et al. (2017) describe the network of trails as “relatively large and well-used” (p. 10). From their survey, it is clear that most of the visitors are “well satisfied” with the current facilitation for outdoor recreation (see Figure 4). The respondents could suggest improvements. From the complete list of suggestions, it appears that most of these regard the marking of trails and planks and bridges over wet areas. Several respondents also mention the need for more information, especially regarding opportunities for outdoor recreation.

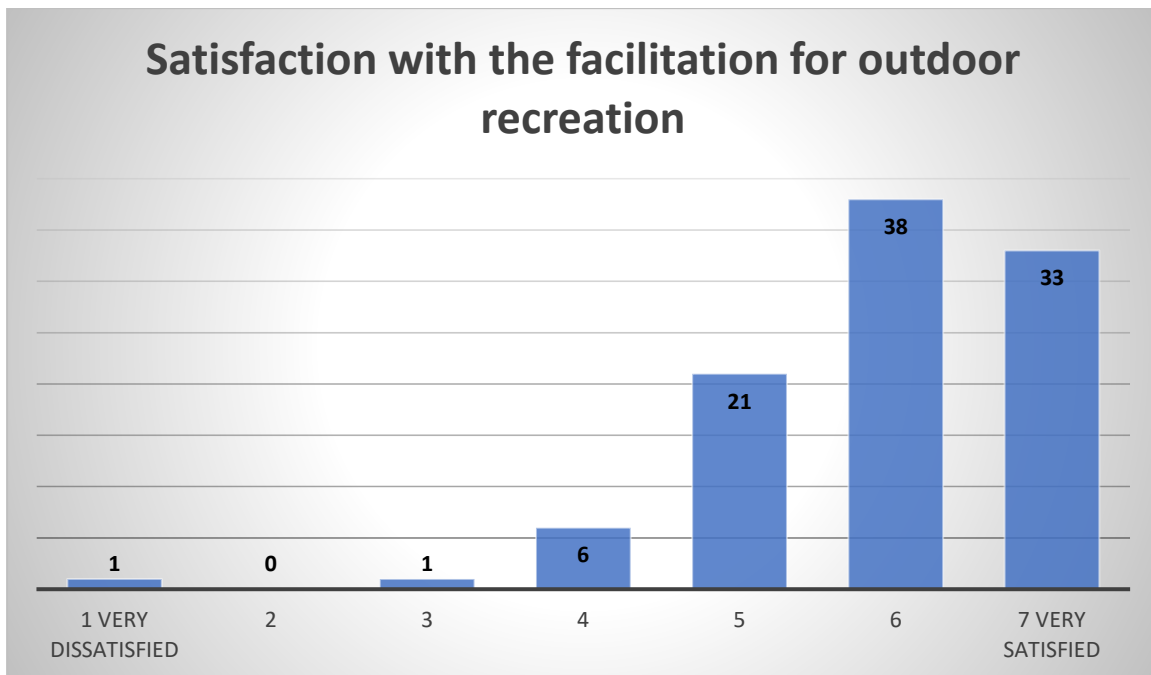


Figure 4: The level of satisfaction with the current facilitation for outdoor recreation in Skarvan and Roltdalen national park and Sylan landscape protection area among the users, shown in percent (%) on a scale from 1 (very dissatisfied) to 7 (very satisfied). N = 400. Adapted from Selvaag et al. (2017). My translation.

The respondents were also asked about information in particular. According to Selvaag et al. (2017), the respondents found it “relatively easy” to find information about this area, and around half of them had found information about the area before visiting. The most used information source was the Internet in general, followed by acquaintances/friends/family and tourist information. Information regarding outdoor recreation, such as suggestions on routes, maps, and attractions, was most interesting to the visitors. Information about “the landscape”, “biology/botany/ecology” and “cultural history”, which were requested by 32-43% of the respondents, respectively. Most respondents preferred to obtain information before entering the protected areas, mainly at home or in parking areas/entry points (Selvaag et al., 2017).

As part of the user study, Selvaag et al. (2017) also formed eight dimensions for the respondents to rate according to how they wanted their “ideal area” for a longer trip in forest or mountain terrain during the summer” to be. The answer to this is thus not limited to visits in Skarvan and Roltdalen and Sylan, but in nature in general. The eight dimensions and their scores can be seen in Figure 5. Selvaag et al. (2017) argue that most of the respondents are generally very positive to facilitation but stress that they are “not very happy to meet many people”. Based on the same dimensions, the survey also shows that the visitors are, for the most part, low purists (78,8%). Selvaag et al. (2017) show that this number is high compared with other large protected areas in Norway.

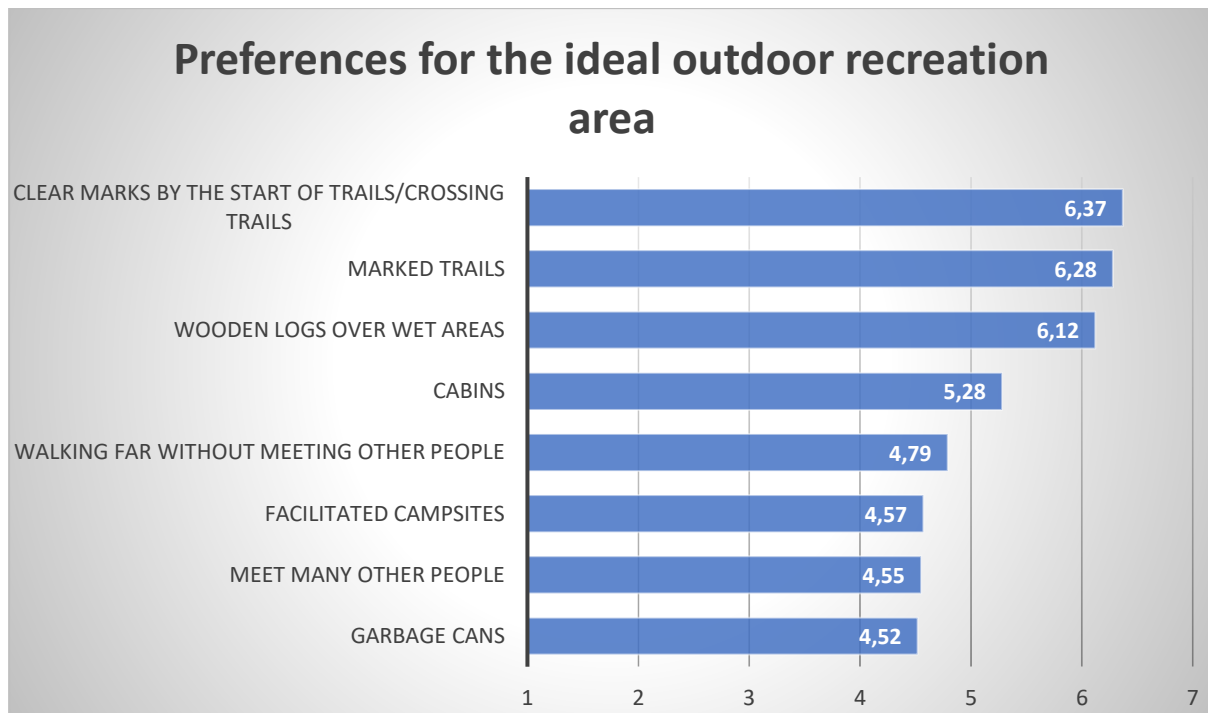


Figure 5: Average score for the different preferences among users for their ideal area to exercise multi-day outdoor recreation, on a scale from 1 (very negative) to 7 (very positive). 4 is neutral. N = 1927–1941. Adapted from Selvaag et al. (2017). My translation.

The respondents were also asked specifically about their attitudes towards different types of physical facilitation. Selvaag et al. (2017) argue that the visitors are generally positive to the 12 initiatives presented in the study. The two types of facilitation to which the visitors were most positive were “timber/plank/stone walkways put out in wet areas on the trails” and “planks/bridges over rivers/streams which are difficult to cross”. The visitors were also positive about the change of some trails to better protect vulnerable nature. The respondents were least positive, yet not very negative, to “the removal of particular trails to obtain larger continuous areas without facilitation”. Furthermore, they were asked about their attitudes towards the development of different types of services in or around the protected areas. The respondents were somewhat negative to most of these suggestions (Selvaag et al., 2017). They were relatively positive, however, to public transportation services taking visitors to the entry points. Furthermore, they were slightly positive to more offers regarding the serving and selling of local food and the facilitation of simple campsites within the protected areas. Very few (5%) of the respondents in the self-registration survey were part of an organized tour when filling out the form, which can be connected to their attitude towards guided tours. Selvaag et al. (2017) mention, however, that the result might be influenced by the fact that larger groups are “less inclined to stop by the self-registration boxes” (p. 55).

Most of the respondents knew that Skarvan and Roltdalen and Sylan were protected, and they were generally very positive to this (Selvaag et al., 2017). Moreover, the user study shows that the conservation status was of little relevance for the respondents when choosing to visit these particular areas. The respondents were asked: “The fact that Skarvan and Roltdalen national park/Sylan is protected, did that influence your choice of coming here?”. On a scale from 1 to 7, where 1 is “not at all” and 7 is “to a very large extent”, the mean score was 3,0. 33% answered “not at all”. Selvaag et al. (2017) mention that the score is higher for foreigners than Norwegians. Yet, they conclude that

“[t]he protection in itself is, thus, to a small degree decisive, but nature qualities in the area are important for the choice of visit” (Selvaag et al., 2017, p. 55).

The survey shows that most of the respondents (86%) in the web-based survey had not had any disturbing or negative experiences during their visits in the last year (Selvaag et al., 2017). They who had had negative experiences mainly reported issues with wear and tear, noise from motorized traffic, littering, and crowdedness. Additionally, the respondents who had visited Skarvan and Roltdalen and/or Sylan before were asked if they had experienced any changes in the conditions of noise, littering, wear and tear, and the number of users. Most respondents perceive the amount of noise and littering to be the same as before, while some (23%) experienced more wear and tear of the area. 43% of the respondents have experienced an increase in the number of visitors. There are generally very few who experience a decrease in any of these conditions (2-5%) (Selvaag et al., 2017).

3 Theory

3.1 The concept of visitor management

3.1.1 Definitions

While the world's tourism industry is steadily growing, natural and protected areas have become increasingly important as tourist destinations (Leung et al., 2018; UNWTO, 2019). The increased interest in protected areas has led to visitor management receiving more attention and becoming highly relevant in all conservation management. Leung et al. (2018) define visitor management as "[t]he process of tracking visitor usage in a protected area" (p. 101). The term is often used, however, in connection with the regulation of visitor use to balance visitor impacts and the protection of valuable nature (for example in Candrea & Ispas, 2009; Mason, 2005; Spenceley, 2015). Such regulation can, for example, be to prevent visitation in certain areas and allow access to other areas. Furthermore, visitor management can include education of visitors and raising awareness about environmental and social issues regarding protected nature. Regulation and education approaches may be used individually or combined (Mason, 2005).

Spenceley et al. (2015) argue that there are various types of visitors to protected areas and that these visitors in turn use the areas differently. In their use of the term "visitor", they include both official visitors, such as managers, community service officials, indigenous peoples and local community members, and other visitors using the area for scientific, recreational, commercial, and cultural purposes. Leung et al. (2018) distinguish between a "visitor" and a "tourist". They define a visitor as a person visiting the protected area "for purposes mandated for the area", such as recreation (p. 101). A visitor does not work there or live there permanently. A tourist is defined as a visitor "whose trip to a protected area includes an overnight stay" (p. 100). In Norwegian management, however, the term "visitor" ("besøkende") is used regardless of whether the visitor is staying overnight or not. It is also often used as a collective term for all types of users who do not work in the protected areas (for example in Gundersen et al., 2011; Selvaag et al., 2017; The Norwegian Environment Agency, 2015). Likewise, the terms "visitor" and "user" will, in this thesis, mainly refer to all people who are not paid to spend time in the protected areas.

3.1.2 Impacts of tourism and human activity

In visitor management, acknowledging and understanding the various impacts of visitor use is essential to balance it with the conservation objectives. The conventional approach to visitor management has been concerned about limiting the negative consequences of unrestricted tourism (Candrea & Ispas, 2009; Mason, 2005). Yet, in other situations, management practices have focused more on facilitating visitor experiences and environmental education. This approach, where the positive impacts of tourism in protected areas are to a greater extent acknowledged, has become more common in visitor management in the later years. Even though human activities in protected areas may, in some cases, be problematic, they are often desirable (Gundersen, Andersen, Kaltenborn, Vistad, & Wold, 2011). There are many reasons why the use of protected areas may indeed be beneficial to conservation. In *Tourism and visitor management in*

protected areas, which is part of the IUCN *Best Practice Protected Area Guidelines Series*, Leung et al. (2018) address, first and foremost, the important and various opportunities that tourism represents in protected areas. They emphasize that appropriate management is crucial in order to utilize this potential in nature-based tourism and present guidelines for sustainable management of tourism and visitation. Yet, Leung et al. (2018) argue that, depending on the quality of visitor management, tourism can have either positive or negative consequences for the objectives of conservation. On the one hand, through their experiences in protected areas, visitors can develop a stronger connection to and support of the protected nature and better understand the reasons behind the conservation. As nature-based tourism is dependent on the beautiful nature of which visitors wish to experience, it is in the tourism industry's interest to care for it. Tourism may, therefore, eventually contribute to more and better protection of valuable nature. On the other hand, insufficient visitor management can result in tourism negatively influencing conservation values (Leung et al., 2018). Apart from the possible environmental effects, tourism may have positive and negative economic and social impacts. Leung et al. (2018) argue that the environmental, economic, and social benefits and disadvantages from tourism overlap. Protected area tourism may, for example, contribute to the strengthening and diversifying of the local economy, as well as the improvement of facilities and infrastructure in local communities. This might in turn help to increase the local support of the conservation. Additionally, facilitating tourism in such areas may be beneficial to improve public physical and mental health, and to increase knowledge about natural resources. However, tourism may be disadvantageous if it is poorly managed. Overcrowding and littering are examples which may be harmful to the natural environment but also create negative visitor experiences (Leung et al., 2018; Spenceley et al., 2015). An important part of visitor management is to consider what impacts are tolerable in that specific area and which are not (Spenceley et al., 2015). Yet, there are a variety of considerations which should be balanced to achieve successful visitor management.

3.1.3 Considerations in visitor management

One of the issues to take into account in visitor management is the underlying complexity of protected area management, especially regarding the "multiple, sometimes conflicting, objectives" of nature conservation (Leung et al., 2018, p. 2). These objectives often include to facilitate positive visitor experiences, to involve local stakeholders and communities and ensure their benefits from the protected areas, and to secure the protection of the conservation values and associated ecosystem services. To ensure the sustainability of tourism in protected areas, Leung et al. (2018) emphasize the importance of balancing all these objectives and, additionally, securing the rights of indigenous and other local peoples and communities. Furthermore, planning for sustainable tourism can be challenging as the managers need to consider difficult questions regarding, for example, who and which activities should be facilitated, where the facilitation should be and how much infrastructure is appropriate, what type of information visitors should be given, what the consequences of such facilitation and information will be, and how these issues can be solved through policy-making, planning, and management (Leung et al., 2018; Spenceley et al., 2015). The questions which should be asked and the answer to them strongly depend on the local context. It is, therefore, important to adapt visitor management practices to the particular situation in each protected area (Gundersen et al., 2011; Leung et al., 2018). To achieve this, it is essential in the process of developing visitor management plans to gain sufficient knowledge about the environmental state of the area, the characteristics and motivations of visitors, and the needs of local communities and the tourism sector, as well as the

relationship between these (Gundersen et al., 2011; Leung et al., 2018; Spenceley et al., 2015).

Protected areas often contain nature which is especially sensitive to human intervention (Norwegian Environment Agency, 2015). Yet, in this context, some areas are usually more vulnerable than others. Furthermore, certain conservation values may be sensitive to particular activities or in specific times of the year. Contrastingly, other natural features might themselves be results of human activity. A common example of this in Norway is the many landscapes created and maintained by the husbandry and grazing of sheep, cattle, or domesticated reindeer. In such landscapes, continued use is essential to conserve the landscape (Norwegian Environment Agency, 2015). In Norwegian protected areas, vulnerability assessments are used to gather information about how sensitive different areas are to human activity. Such evaluations are an important part of the knowledge base in visitor management. As the vulnerability of nature may vary not only from one protected area to another but also internally, the Norwegian Environment Agency (2015), stresses the possible need for "differentiated management". In this context, differentiated management is management practices that differ within a protected area according to the conservation values and visitor interests in each location or at different times of the year. The Norwegian Environment Agency (2015) emphasizes that such management "should primarily maintain or support the goals of protection, not the user interests" (p. 15).

An important aim for visitor management in protected areas is to contribute to environmental, economic, and social value (the "triple bottom line") (Leung et al., 2018). Visitor management in Norway also emphasizes the importance of the "triple bottom line". According to the Norwegian Environment Agency (2015), both the maintenance of conservation values, the facilitation of experience values, and to help the tourism industry to utilize the potential in protected areas are important parts of the conservation management. They specify that an important principle in visitor management is that, in case of a conflict between the tree target values, the protection of conservation values should always be prioritized. While the tourism industry, internationally, is focusing increasingly on protected area tourism, and particularly on national park tourism, Norway has not yet specifically advertised its national parks. It is argued, however, that nature has always been one of the most important motivations for international tourists to visit the country (Norwegian Environment Agency, 2015). Additionally, outdoor recreation is an essential part of the Norwegian culture, making protected natural areas attractive also to domestic visitors. As presented in section 2.3, the Norwegian government has now decided to strengthen the brand of Norwegian protected areas and improve visitor management to better utilize the tourism potential of these areas.

3.2 Approaches, principles, and models in visitor management

3.2.1 Visitor management approaches

To handle an increased number of visitors and balance their impact with the objectives of nature protection, the development and implementation of visitor management plans have become an important tool for management authorities (Candrea & Ispas, 2009; Mason, 2005). Four approaches, or strategies, to reduce or limit the negative impacts of visitor use have been developed and are widely referred to (for example in Candrea & Ispas, 2009; Gundersen et al., 2011; Leung et al., 2018; Spenceley et al., 2015). Here, the concept of supply and demand is central and the approaches are strongly connected to the ROS model, which will be explained in section 3.2.2. The strategies include:

1. Managing the supply of visitor opportunities in time or space. Take advantage of all available periods and areas to facilitate more visitation and avoid over-use.
2. Managing the demand for visitation. Reduce the demand for problematic use by limiting the number of users, regulate certain types of activities or similar restrictions.
3. Increase the capability of resources to handle use, often called hardening. Wooden planks laid out over wet parts of the trails are one example of hardening initiatives.
4. Managing user impacts, most commonly to reduce negative effects by dispersing or concentrating use or alter the type of use.

Mason (2005) states that the hardening approach, together with the general focus on negative impacts, was central in most of the visitor management strategies during the 1980s and 1990s as a result of the rapidly growing tourism industry. He suggests instead a "soft" approach to visitor management, focusing on visitor experiences and educational processes. The means to more sustainable visitor management are, in the soft approach, more directed towards information initiatives and positive promotion of alternative visitation times or destinations (Mason, 2005). Thus, altering user patterns by spreading the use may be part of the soft approach if it focuses on promoting alternatives, rather than prohibiting use in particular periods or areas. Encouraging visitors to take part in appropriate activities or behave in a certain way, by providing relevant information, is another example. Which approach is most effective is debatable and there has been done little research on this topic (Leung et al., 2018).

3.2.2 Recreation Opportunity Spectrum (ROS) and Limits of Acceptable Change (LAC)

For several decades, the Recreation Opportunity Spectrum (ROS) has been used as a framework for studying opportunities for outdoor recreation in natural areas and the management of these (Clark & Stankey, 1979; Gundersen et al., 2011; Leung et al., 2018). As the use of the study area in this thesis is mainly based on recreational activities, the ROS framework is highly relevant. The ROS concept is founded on the idea that recreationists seek different opportunities in nature, and that these opportunities encourage visitors to perform certain activities and thus get the experiences they want (Gundersen, Tangeland, & Kaltenborn, 2015). ROS is mainly based on theories about motivations behind human recreational behavior and is, therefore, psychologically oriented (Gundersen et al., 2011). To understand the link between opportunities and recreation, Clark & Stankey (1979) focus on the different settings in which recreation takes place. They define a recreation opportunity setting as "the combination of physical, biological, social, and managerial conditions that give value to a place" (Clark & Stankey, 1979, p. 1). The opportunity is here composed of various qualities and conditions in a place, provided by nature or managers, which open up for different types of recreation and use. Qualities provided by nature may, for example, be vegetation or topography, while conditions provided by managers could be paths, bridges, or regulations (Clark & Stankey, 1979). If an area provides high mountains and little vegetation, it would be a good choice for people wanting to do Randonnée. However, people seeking new adventures by simply carrying a hammock to sleep in would find the same area next to useless because of the lack of trees to place the hammock in. Similarly, an area with a high degree of facilitation such as paths and tourist cabins would typically attract more less-skilled hikers who prefer a lower degree of planning and minimal weight to carry. In contrast, hunters and fishers would often favor less facilitation. Thus, the ways in which

managers facilitate protected areas, in addition to natural conditions, will affect the opportunities for recreation. If a diverse set of opportunities are provided, this can contribute to the ensure a high quality of outdoor recreation (Clark & Stankey, 1979). Furthermore, the set of opportunities influences which groups of people come to this particular place and which experiences they obtain while staying there. However, the relationship between visitors and facilitation also works the other way around. As a basis for the new visitor management strategies, there have been conducted user studies in most of the larger Norwegian protected areas (Vorkinn, Boe, & Larsen, 2018). The information gathered in such studies says something about the visitors' preferences, and thus informs the managers about what types of recreation opportunity settings the visitors seek in this area.

When using ROS as a tool for creating opportunities in nature it can be seen as a type of market segmentation and be connected to the principle of supply and demand (Gundersen et al., 2011). Thus, in addition to having a psychological fundament, the model is influenced by economic thinking. Nature in itself has a variety of opportunities for recreation. Yet, with different forms of facilitation, these opportunities may be increased or decreased. It is, therefore, possible to facilitate desired activities while reducing opportunities for other, unwanted activities. The ROS model is also based on a zoning approach where different management initiatives and physical and social conditions help defining various recreational areas, also within one protected area. The physical, social, and managerial conditions can be defined as the three components or dimensions in the spectrum (Gundersen et al., 2011; Leung et al., 2018). The users are also grouped according to their motivations and preferences. In this way, the condition in some areas will be suitable for particular visitors, while other areas will fit other visitor groups. The use of the ROS model involves, therefore, the provision of a range of opportunities for various recreational activities in different zones of the protected area. The opportunities provided in each zone should be based both on the visitors' preferences and on what is appropriate in regards to that area's management objectives (Gundersen et al., 2011; Leung et al., 2018).

The original Recreation Opportunity Spectrum, consisting of indicators connected to its three dimensions, ranges between the two extremes of well-developed (modern/urban) areas and completely undeveloped (primitive/wild) areas (Clark & Stankey, 1979). Moreover, the spectrum can be divided into different recreation classes (see Figure 6), including the extremes and nuances between them, to describe user groups based on the visitors' preferences (Gundersen et al., 2011). The spectrum, thus, stretches from areas characterized by high levels of facilitation, high density of visitors, and impacts from use to large areas with a sense of wilderness, little to no visible facilitation, and a high level of solitude. By applying the spectrum and categorize the users according to their preferences, the ROS model can help define the use and motivations of visitors in a protected area and present a basis for the management and facilitation of this area or particular parts within it.

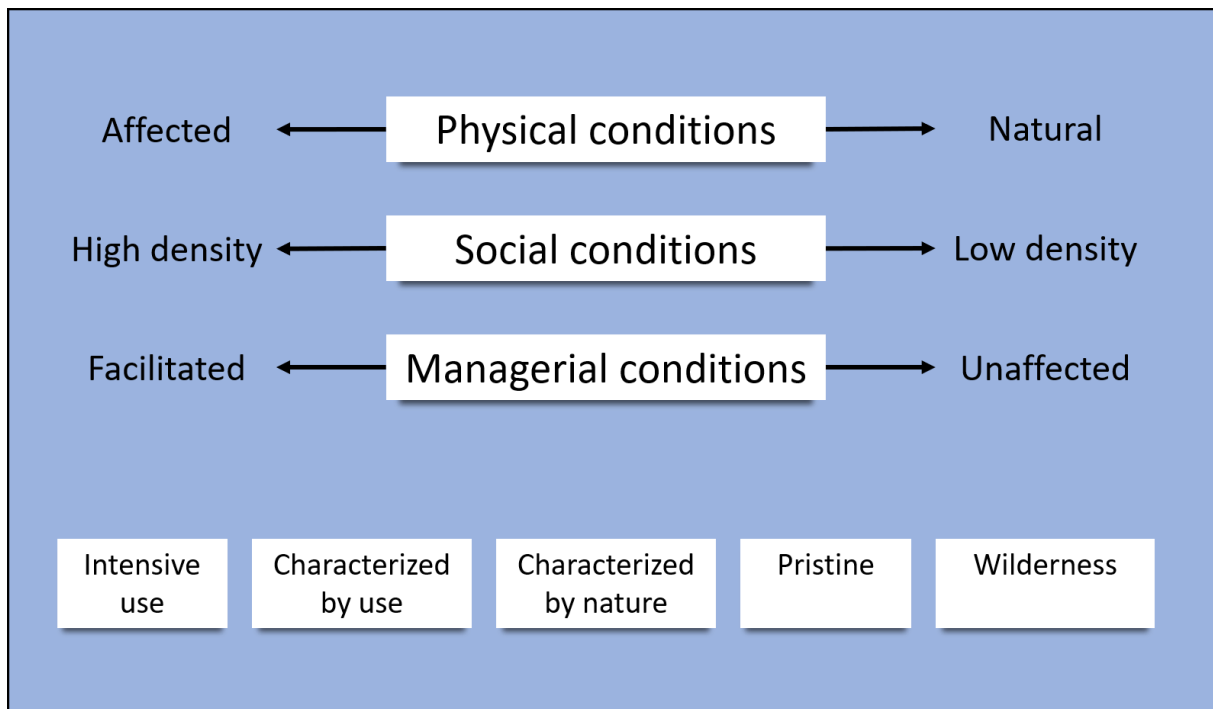


Figure 6: A draft of the original three dimensions of the ROS concept: physical, social, and managerial conditions. The spectrum may be further divided into different recreation classes, as exemplified in the bottom of the figure. The level of human impact is highest to the left side of the model and lowest to the right side. Adopted from Emmelin (1997) as applied in Gundersen et al. (2011).

Closely related to the ROS concept is the Wilderness Purism Scale. This Likert-type scale is widely used in studies on visitor preferences regarding facilitation and conditions in natural areas (Vistad & Vorkinn, 2012). The Purism Scale can also be used to identify recreationists' attitudes towards specific management facilities and services (Hendee, Catton, Marlow, & Brockman, 1968). As seen in Figure 6, some recreational users prefer high-developed areas with extensive facilitation. They do not mind meeting other people in natural areas. In the concept of purism, these users are called "low purists". On the other end of the scale, we find those who seek and prefer wilderness areas free of facilitation and other people, the "strong purists" (Vistad & Vorkinn, 2012). In Norway, the level of purism among recreationists has been examined in several studies, including user studies in protected areas (for example Oslo Economics, 2018; Selvaag et al., 2017; Selvaag & Wold, 2019; Vistad, Gundersen, & Wold, 2014). These user studies applied the simplified Purism Scale as described by Vistad & Vorkinn (2012), where the respondents ranged eight different statements about social and facilitation conditions on a scale from 1 ("Strongly detract from") to 7 ("Strongly add to"), 4 being "Neutral".

After recognizing the visitor motivations and identifying the opportunities for outdoor recreation, Clark & Stankey (1979) suggest three concepts which can help to determine a suitable management strategy: "(1) the relative availability of different opportunities, (2) their reproducibility, and (3) their spatial distribution" (p. 21). The first of these concepts considers how the different opportunities are available compared to other opportunities and, thus, the level of which they are supplied in that area. Clark & Stankey (1979) give an example where one type of opportunity is much more abundant than others and argue that in this case, the managers should provide a more diverse set of opportunities

by facilitating some areas differently. The second concept is that of reproducibility, that is to what extent it is possible to create different types of opportunities through technology or other non-natural resources. For example, opportunities belonging to the more modern or developed end of the scale (to the left side in Figure 6) can more easily be reproduced than those belonging to primitive end (to the right in Figure 6) (Clark & Stankey, 1979). Here, Clark & Stankey also argue that one should consider the reversibility of management decisions and facilitation, especially regarding a change of an area's conditions from primitive to more developed as it may be difficult to reverse. The third concept which should be considered in management strategies is the opportunities' spatial distribution. Clark & Stankey (1979) argue that opportunities for significantly different activities should not be facilitated in the same place, as they may lead to conflicts between the users and may affect the quality of each other. In Norway, many areas, especially natural areas adjacent to larger cities, provide the population with many different opportunities in a relatively small geographical space. This has led to conflicts between user groups with different interests, for example between mountain bikers and hikers, or between the opportunities to exercise the activities of snowmobiling and traditional outdoor recreation (Flemsæter, Setten, & Brown, 2015).

Even though the ROS model has been widely used, Gundersen et al. (2011) address several critical arguments connected to it. They especially emphasize the different perspectives which are not captured in the model. One of these is the potential change and development processes in the society in general, or in the particular landscape, which may influence the use and management of protected areas. Gundersen et al. (2011) label the model as "static" and argue that it does not conform to the dynamic aspects of the landscape and society. They also state that the model lacks an approach or theory of action as it can be used to understand the current state of the area without addressing how it should be in the future. The local knowledge, history, traditions and use, as well as the participation of locals and users are also missing aspects in the ROS concept (Gundersen et al., 2011). The lack of a participation component is, according to Gundersen et al. (2011), problematic in regards to the Norwegian context because it needs to function with the country's local management and participation system.

Based on the concept of ROS, there have been developed several other similar models. One of these is the well-developed framework called Limits of Acceptable Change (LAC). LAC is based on the concept of carrying capacity. In the context of tourism, carrying capacity considers the maximum number of people visiting an area simultaneously without seriously reducing or devastating either the environment or the visitor experiences (Leung et al., 2018). As all use causes some amounts of change, carrying capacity in recreation, or tourism, is focusing on the question of how much change is *acceptable* (Stankey, 1973). When using an LAC approach in protected area management, the management authorities define the acceptable and desired conditions for that area and recognizes which measures are appropriate to achieve or maintain these conditions (Stankey, Cole, Lucas, Petersen, & Frissell, 1985). Furthermore, LAC is an adaptive and objective-based process, including monitoring and evaluation of the effectiveness of the implemented strategies (Stankey et al., 1985). It is therefore more comprehensive than the ROS framework and includes a more specific theory of action (Gundersen et al., 2011). As it may be difficult to specifically define how much use is sustainable, the acceptable limits of change can be determined based on the preferences of users. This connects the LAC model with ROS and the Purism Scale. It is focusing mostly, however, on the pristine end of the scale (Gundersen et al., 2011).

The LAC process consists of nine steps (Figure 7) aiming to develop specific and measurable indicators for the acceptable and desirable conditions as well as necessary management measures (Stankey et al., 1985). These steps lead managers from the identification of issues, via definition and development of indicators and needed measures, to the implementation and monitoring of management actions. The main goal is to maintain or achieve a situation where the environmental and social changes are within the acceptable limit.

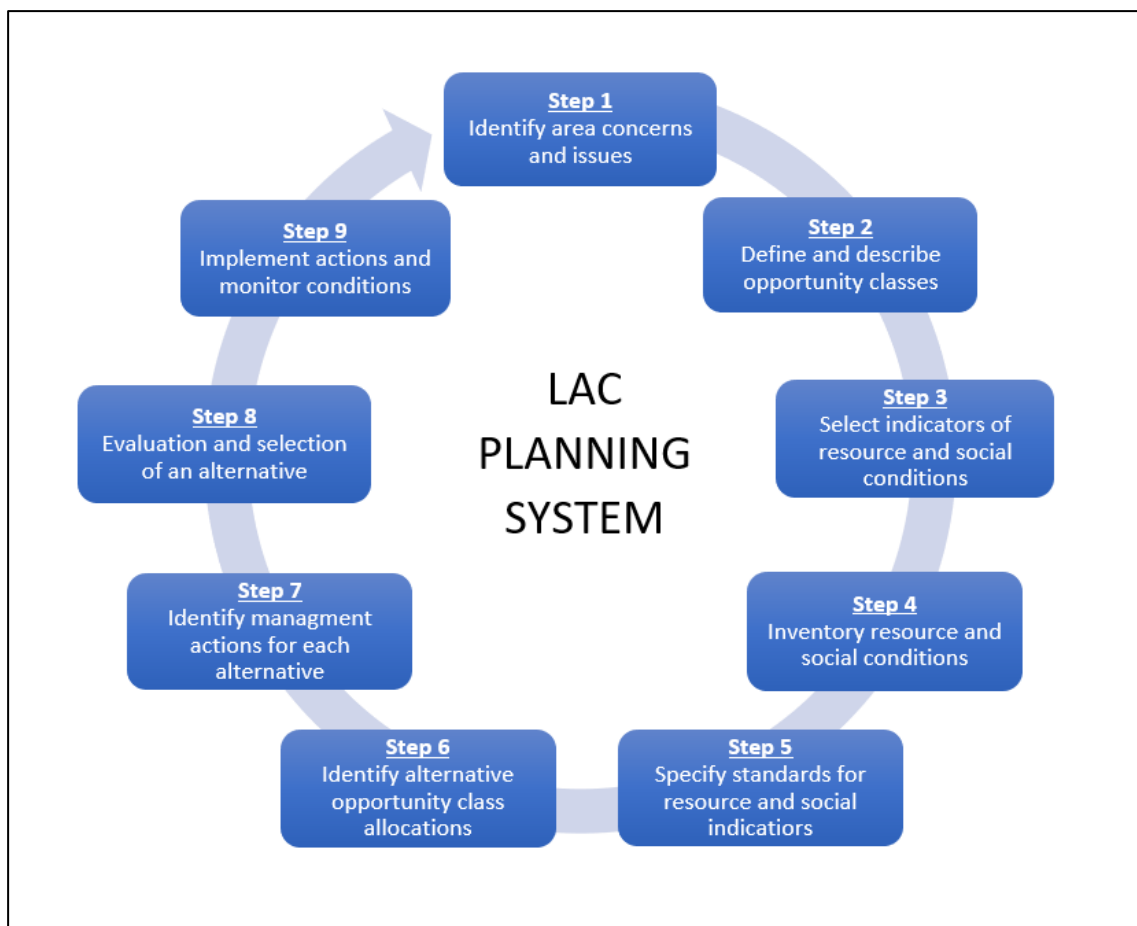


Figure 7: The Limits of Acceptable Change (LAC) planning system, including the nine steps of the process. Adapted from Stankey et al. (1985).

Because of the comprehensiveness of the LAC model, it can be perceived as a management tool rather than a framework (Emmelin, Fredman, & Sandell, 2005). Where the ROS model is useful to gain an overview of the potential for creating recreational opportunities, the LAC model is more effective in defining and solving specific local challenges. Furthermore, it is focusing more on the participation of different stakeholders and includes the dynamic processes of landscapes and societies (Gundersen et al., 2011). However, Gundersen et al. (2011) argue that the implementation of an LAC process is both time-consuming and costly and that the model needs to be adapted and simplified to be feasible.

3.2.3 Adaptive management

In *Målstyrt forvaltning – Metoder for håndtering av ferdsel i verneområder* (Management by Objectives – Methods for Handling Recreation of Protected Areas), Gundersen et al. (2011) examines the processes of adaptive management, or what they call “Management by objectives”, in the context of Norwegian protected areas. As management generally is based on objectives, they specify that this kind of management is a dynamic and flexible process with precise goals regarding acceptable levels of user impacts and continued monitoring, evaluation, and adjustments of the relationship between conservation and use. In the later years, such objective-based management has begun to replace rule-based management and become more and more central in the context of protected areas (Gundersen et al., 2011, p. 67). This process of Management by objectives should be based, as much as possible, on facts and knowledge to define and achieve the management aims. Gundersen et al. (2011) mention five topics of knowledge essential in objective-based management: the state of nature, the use of the areas, monitoring of use and its environmental and social impacts, determining acceptable use and the level of impact, and models and methods for interactions and priorities (pp. 28-29). In the report, they especially emphasize the importance of knowledge and understanding of visitor use and motivation and look at several associated models for management. They particularly focus on ROS and the related LAC model. In addition to the required knowledge foundation, the processes leading to framework decisions are open and often based on negotiation with contributions from affected or involved stakeholders (Gundersen et al., 2011, p. 67). Furthermore, Gundersen et al. (2011) emphasize the importance of balancing the control and regulation of user impact so that it contributes to the protection of valuable nature without negatively influencing the visitor experience. Initiatives and regulations beyond those which are necessary to achieve the established goals should not be implemented (Gundersen et al., 2011, p. 68).

Similar to Gundersen et al. (2011), Leung et al. (2018) emphasize the importance of flexible management processes where knowledge, continuous monitoring, and cooperation are central components. They present ten principles which, according to them, will contribute to sustainable tourism and visitor management in protected areas (p. 29–30):

1. *Appropriate management depends on objectives and protected area values*
2. *Proactive planning for tourism and visitor management enhances effectiveness*
3. *Changing visitor use conditions are inevitable and may be desirable*
4. *Impacts on resource and social conditions are inevitable consequences of human use*
5. *Management is directed at influencing human behaviour and minimizing tourism-induced change*
6. *Impacts can be influenced by many factors so limiting the amount of use is but one of many management options*
7. *Monitoring is essential to professional management*
8. *The decision-making process should separate technical descriptions from value judgements*
9. *Affected groups should be engaged since consensus and partnership is needed for implementation*
10. *Communication is key to increased knowledge of and support for sustainability*

Considered collectively, the first six principles represent the importance of balancing conservation objectives and possible negative impacts of human use. This can, according

to Leung et al. (2018), be achieved with the help of various visitor management frameworks. It is important to map out the potential tourism activities and associated impacts, as well as connecting these to the protected area objectives. Further, the demand for and supply of different visitor activities should be regulated or modified, both to improve the protection of conservation values, for example by using the four strategies mentioned above, and to enhance the visitor experiences. The latter aim could be achieved by using a framework such as ROS. Leung et al. (2018) state that the change in natural resources as a result of human activities is "inevitable" and that managers need to focus on minimizing the negative impacts and maximizing the positive ones. Furthermore, there are many reasons for the impacts of visitors. Different visitor management tools should, therefore, be combined and complement each other (Leung et al., 2018).

Adaptive management is central in the last four principles, focusing on monitoring, communication, and evaluation in the planning and implementation of visitor management strategies. According to Leung et al. (2018), continuous monitoring of the conditions in the protected area is important in order to assess the effectiveness of implemented strategies and initiatives. Further, managers should use the information from monitoring as a basis for what type of adjustments are needed. Additionally, it is essential in sustainable visitor management to include and cooperate with local stakeholders and other affected groups, as well as to communicate clearly with the target audience. These factors may contribute to increasing public support for the conservation and management of protected areas (Leung et al., 2018). Furthermore, different stakeholders, managers, visitors, and industries may consider the impacts of tourism variously. What is perceived as positive to some might be seen as negative to others, dependent on their point of view. To see the impacts of management and use from different perspectives is generally essential in visitor management as the main challenge is to balance the interests of both visitors, local communities, and natural values. It is also important to understand and take into consideration that the decisions in visitor management are influenced by underlying value judgments (Leung et al., 2018).

Based on the ROS and LAC frameworks, Gundersen et al. (2011) suggest a two-scale approach to adaptive visitor management in the Norwegian context. The approach is addressing the need for a holistic view on the one hand and a more specific focus on particular areas on the other. Furthermore, they suggest two models to handle the planning and management at these two scales. The first one is based on the two extremes in the ROS model and is a comprehensive mapping of the most pristine and the most developed areas. This model looks at the protected area as a whole, including the border zones. Often, the most trafficked areas are the entry points and the infrastructure here is important measures for the channeling of visitors (Gundersen et al., 2011). The holistic model is emphasizing the concept of zoning based on the differences in the levels of impact and facilitation. It also includes the identification of connections between the protected area and the adjacent areas and to set specific goals for these for future management. The other model is a simplified version of the LAC framework (Gundersen et al., 2011). It emphasizes more specific planning and management of focus areas, often geographically bounded, within or close to the protected area. The process consists of (1) a descriptive phase, including an identification of the current situation and goals and indicators for this area in the future, (2) a planning phase where acceptable indicator levels and mitigation measures are specified, and (3) an implementation phase, including monitoring of the implemented measures and their effectiveness. Gundersen et al.

(2011) emphasize the need for cooperation between management authorities and local stakeholders in all three phases.

3.2.4 Conservation discourses

The relationship between use and conservation of protected areas has been perceived in various ways and these perceptions are central in discourses about nature protection. A discourse, in this context, refers to a shared perception of a topic or structure which is created by humans and promoted and maintained through written or oral statements (Benjaminsen & Svarstad, 2017). Even though discourses are social constructions, they are influencing decision-making and, in nature protection, contributing to the physical facilitation of protected areas. Benjaminsen & Svarstad (2017) present three main discourses about nature protection which addresses different perspectives on the balance of use and protection: a fortress conservation discourse, a win-win discourse, and a radical discourse.

Fortress conservation is referring to conservation management where the protected areas are heavily guarded and use is mainly prohibited (Benjaminsen & Svarstad, 2017). The origin of this type of nature protection is the establishment of Yellowstone national park in the USA. Later, the same approach has been used in other protected areas, especially in the then colonized countries in Africa and Asia. However, it never took root in Norwegian conservation management. Benjaminsen & Svarstad (2017) argue that the fortress conservation discourse is emphasizing the perception of wilderness as something opposite of civilization and use. Here, the wild, natural areas should be protected from human interference. This discourse was, however, challenged as a new focus on local participation in decision-making processes and the use of protected areas grew forth in the late 1900s. The new approach emphasizes that local and indigenous people should both be a part of and profit from the protection (Benjaminsen & Svarstad, 2017). This thought is central in the win-win discourse about nature conservation. The main aim is still to protect nature and biological diversity, but local participation is used as a means to achieve this. The thought is that by facilitating for tourism and including the local population, the locals will be compensated for potential loss of income and to a higher degree support the protection. As this conservation discourse attempts to both satisfy the locals and sufficiently protect natural areas, it is by many seen as a win-win solution. Even though the win-win discourse is widespread today, it has also the later years been criticized and challenged by a radical discourse on conservation (Benjaminsen & Svarstad, 2017). The radical discourse is mainly maintained by people living close to protected areas and is emphasizing the interests of the locals. Arguments about the lack of actual participation and the compensations being insufficient are central in its critique of the win-win discourse. Furthermore, it is argued that, in situations where the protection of nature and the maintenance of local interests are in conflict, nature is always prioritized. In the radical discourse, the local and traditional use of natural resources is perceived as sustainable (Benjaminsen & Svarstad, 2017). In addition to this critique, the win-win discourse has also been challenged by a renewal of the fortress conservation discourse. According to Benjaminsen & Svarstad (2017), this resurgence is caused by several conservationists and biologists calling for stricter and more centralized control of the protected areas. Here, the protection of nature should be based on natural science research and it is argued that too much involvement of local stakeholders undermines the effects of the protection.

4 Methods

4.1 Introduction

This thesis is a qualitative study of the individual perceptions of selected managers and stakeholders connected to visitor management in Skarvan and Roltdalen national park and Sylan landscape protection area in Trøndelag, Norway. The choice of methodology is based on the research objective, as the aim of the study is to obtain a better understanding of the views among relevant stakeholders and the reasons behind their perceptions. As Winchester & Rofe (2016) explains, qualitative methods are mainly used in studies aiming to decode "individual experiences, social structures, and human environments" (p. 3). To achieve the objectives of this study, it is necessary to go in-depth in the informants' understanding of the use and protection of the study area. This would be difficult to accomplish using quantitative methods. Another reason for using a qualitative approach is that the potential number of informants was relatively low. Persons working in the local management and local stakeholders are quite limited. This study is mainly based on semi-structured interviews with relevant actors. Additionally, the thesis is connecting my findings with the new visitor strategy for Skarvan and Roltdalen and Sylan as well as with the earlier conducted user study in this area. To understand this connection, a thorough qualitative textual analysis was needed. The study area and the development of visitor strategies can be seen as cases because a case study may, according to Baxter (2016), include a specific place, process, or event. Case studies are often used to confirm or disprove existing theories and concepts, or to develop new ones. In this study, I attempt to explain the perceptions of different informants in relation to theoretical management approaches and discourses. This connects the case to more general theories. Furthermore, case studies go in-depth in specific situations and examine why existing theory is applicable or not (Baxter, 2016). Case studies are also characterized by comprising much information about few entities (places, processes, or events) (Thagaard, 2013).

4.2 Fieldwork

This section describes the methods used to gather data in the field. The fieldwork first and foremost includes eight semi-structured interviews conducted during the fall and winter of 2019/2020. All interviews were done individually, and the interviews lasted between 60 and 90 minutes. All informants agreed for the interviews to be audio recorded. The list of the participating informants consisted of two persons working in management, one locally and one nationally, four local stakeholders working with traditional practices (mountain farming and reindeer herding) and tourism, and two regional stakeholders, one working with tourism and one within an environmental organization. Furthermore, the fieldwork includes some observations and informal conversations with visitors, which were used mostly as a basis for understanding the study area.

4.2.1 The choice of study area

There are several reasons why I found Skarvan and Roltdalen and Sylan interesting for studying visitor management. First, these areas are already relatively much used as recreational areas. This fact created an assumption that local stakeholders and management officials have stronger perceptions of the use of these areas. This could increase the access to informants as more people would be interested in talking about it. Second, the area has to a low degree been object of earlier studies on visitor management, which may either lead to new findings or strengthen existing theories. Third, the location of these protected areas is interesting because of their proximity to the relatively high-populated Trondheim region and the much more used Swedish part of Sylan. Growth in the number of users has already been seen in the area and these geographical factors can contribute to a further increase. Furthermore, the proximity to Trondheim made it more accessible for me to study and less resource demanding.

Crang & Cook (2007) argue that many researchers base their studies on social networks or places they already have connections to. The existing link to the case may provide an inner motivation to further examine it. It could also ease access to the place or relevant informants. Before I studied Skarvan and Roltdalen and Sylan I had spent only a short time there as a recreationist, yet enough time to be interested in studying the area. While this existing connection contributed to basic knowledge about and experience with the study area, the field was new to me as a researcher.

The study area includes several individual protected areas. Despite that the borders of Skarvan and Roltdalen, Sylan, and the three nature reserves are not completely connected, they are bound together by several hiking paths and tracks. All five protected areas are part of Saanti Sijte/Essand reindeer grazing district and have similar natural features and conservation values. They are also managed by the same local national park board and are all included in the same visitor strategy. It is, therefore, reasonable to look at these areas combined (The National Park Board for Skarvan and Roltdalen and Sylan, 2020). For simplicity, I will in this thesis mainly refer to the study area as Skarvan and Roltdalen and Sylan. The national park and the landscape protection area were also given the most attention in the interviews.

4.2.2 Informant selection

As mentioned by Dunn (2016), it is common to choose informants based on preparatory work. In this thesis, the list of informants was developed according to which informants would be relevant for visitor management in Skarvan and Roltdalen and Sylan. The relevant informants were, thus, chosen through purposive sampling. This is a sampling method where participants are selected because of their characteristics, such as where they work, where they live, or their interests (Hay, 2016). To this study, I contacted people working within or around the study area with either management, tourism, or other practices. To have a broader selection of informants, I also defined some categories that I wanted one or more representative(s) from. These were management authorities, stakeholders working with tourism, local landowners, and/or locals working in traditional practices, and stakeholders with environmental interests. This type of informant selection is called quota sampling (Thagaard, 2013). When finding informants, I mapped out persons within these categories. The selected informants were primarily contacted by email. Here I explained the topic of my thesis, why I considered them relevant as interviewees, how the interview would happen, and how the data would be stored and used (see Appendices 1 and 2 for translated copies). They also received the letter of

consent (see Appendix 3 for a translated copy). First, I contacted those who appeared most relevant for the study. The people who answered did for the most part agree to participate. Others suggested alternative informants instead. There were, however, quite many who did not respond either to emails or subsequent telephone calls. The sampling is also to a certain degree opportunistic, as I was flexible to follow up on frequently mentioned topics (Hay, 2016). For example, the challenges connected to reindeer herding were addressed by several informants during the first interviews. Therefore, it became clear that a representative from this specific traditional practice should be included in the list of informants. Furthermore, some of the final informants were selected through snowball sampling, meaning that I contacted specific persons suggested by people I had already contacted or interviewed (Hay, 2016).

The total number of informants interviewed in this study is eight. Since the selection is not meant to be representative, the number of informants is often less important in qualitative studies (Stratford & Bradshaw, 2016). What is more important is that the selection of informants suits the research objective and gives enough information and insight to the case (Thagaard, 2013). I consider the informants to this study to be relevant and that they covered the central part of the research objective. However, an even broader informant selection could have been beneficial. For example, it became apparent through some of the interviews that a representative from one or more of the local municipalities could have been useful to look into local value creation in the area. It proved to be difficult, however, to get in contact with relevant people. I also considered including more people within each category but seeing that the perceptions among, for example, the different local stakeholders were quite similar, the categories reached what Thagaard (2013) calls the saturation point. This is when interviewing more people within a category does not provide further information or understanding of the case that is being studied. Several of the informants in my selection also had overlapping roles. They could, therefore, be representative of more than one category. This mostly became apparent during the interviews and was also addressed by the informants themselves. Moreover, the informant selection must be decided according to the available resources (Stratford & Bradshaw, 2016). The work before, during, and after each interview is time-consuming and the number of informants was therefore considered according to this. Crang & Cook (2007) stress the importance of establishing contact early in the research process and in hindsight, this could have been done earlier in the work with this thesis.

4.2.3 Interviews

The study is mostly based on interviews with the selected informants. Dunn (2016) lists several strengths with the interview as a qualitative method. First, it can bring forward information that is difficult to obtain through other methods, such as observation. Second, an interview allows for a stronger investigation of personal perceptions and motivations. Third, it contributes to the collection of diverse opinions but also corresponding or complementary meanings and experiences that support each other. Finally, the interview can be important in a setting where "a method is required that shows respect and empowers the people who provide the data" (Dunn, 2016, p. 150). In an interview, the participant is in focus and it is his or her story that is respected and taken into consideration. All these factors were important in my choice of methods. It was the personal experiences, opinions, and points of view I was interested in, as well as the differences and similarities between them. The interviews proved to be essential in order to investigate these perspectives.

There are different forms of interviews which are often categorized into three different approaches: structured interviews, semi-structured interviews, and unstructured interviews (Dunn, 2016). The first of these, the structured interview, follows an already formed list template with specific questions in a defined order. Here, it is normal to use the same template, or interview guide, in more or less the same way in each of the interviews. Contrastingly, an unstructured interview is fluid and flexible. The informant steers the interview and talks about what he or she perceives as relevant for the story. Such interviews are often connected to life histories (Dunn, 2016). The semi-structured interview is a sort of compromise between these two. This is an interview where the interviewer has formed specific questions and has to a certain degree ordered them in an interview guide. Such interviews are, however, much more flexible than the structured ones and the interviewer often adapt the questions to the information addressed during the interview (Dunn, 2016). This was the approach in the interviews for this study. Two different interview guides, one for the people working in management (Appendix 4) and one for the local and regional stakeholders (Appendix 5), were developed in advance. They consisted of specific questions in a preliminary order. During the interviews, however, I let the informants speak relatively freely out from the beginning questions and only making sure that all topics and questions were answered. This was beneficial as the interviewees several times addressed issues that the interview guide did not specifically touch upon but that nevertheless were interesting and relevant for the study. It was also easier to understand which issues were of most importance for the informants and, thus, their interests and perspectives.

In qualitative methods, the interview has traditionally been seen as a form of personal face-to-face communication between the interviewer and the informants. Here, the interviewer wishes to collect information from the informant. With the later years' development in communication platforms, the contact between the two no longer needs to be as personal as before (Dunn, 2016). Using such means of communication can be both positive and negative in an interview setting. Such computer-mediated communication can be both timesaving and economically beneficial as it can help limit the amount of traveling. This can also mean that the researcher can talk to people he or she would not otherwise have the possibility to interview (Dunn, 2016). Furthermore, for some informants, it can be easier to express themselves textually, for example through email. A challenge with this type of communication, however, is that it is difficult for the interviewer to take into account what Dunn (2016) calls paralinguistic clues. The informant may, for example, be uncomfortable when he or she talks about a particular topic, something that could affect the story which is told. This disadvantage is more apparent in email communication than in video calls. Uneven internet access, technology skills, and ethical questions can also be challenging in digital interviews. The interviews in this study were mostly done face-to-face. I considered this to be most beneficial as personal contact can contribute to more predictability and comfort. Yet, to be able to interview two of the informants, it was most convenient to use video calls. The record of one of these interviews was not ideal and required more time to transcribe than the others. Yet, I consider the outcome of these interviews to be satisfactory. To be able to see each other contributed to maintaining a personal interview situation.

Even though this thesis is presented in English, all interviews were done in Norwegian. As all informants and I speak Norwegian fluently, this both limited potential misunderstandings and contributed to a more comfortable interview setting. It is likely that several of the informants otherwise would either be uncomfortable speaking English, which would reduce the quality of the results, or indeed disagree with being interviewed.

Moreover, the transcription of the interviews and the analysis of the results would be much more challenging. Jordan (2002) emphasizes the challenges of translation in research. She addresses three different stages of translation: (1) translations in the field between researcher and informants, (2) translations made by the researcher to communicate the results to an audience, and (3) the translation made by the audience when interpreting the study they are presented. Even though she talks about the translation of cultural language, the importance of these stages can be applied also in this context. The first stage of translation is, in this context, about the interviewer and the informants understanding each other. In this study, I decided to limit confusion by using a language both the informants and I are accustomed to communicating in. Yet, some dialectical differences or similar may have caused smaller misunderstandings. My perception is, however, that these have not affected the main outcome. The second stage is, in my study, represented by me translating the information from the interviews into text. Here, there are two dimensions of this translation, as it is both a translation of the informants' perceptions and the direct translation of specific quotes. What was most challenging in this part was to transfer the inherent cultural aspects of outdoor recreation. These can be difficult for me, as a Norwegian myself, to take into account because it is something both the informants and I take for granted. Some terms and expressions can also be lost in translation because they are connected to culture. This stage is also connected to how I understood the informants. I hope and believe, however, that I, through these two stages of translation, have managed to convey the correct perceptions of the informants. The final stage concerns how the audience interprets my study. As this to a large extent depends on their backgrounds, this translation is done individually and differently by each of the readers. However, if the translations of the first two stages are done well, it is more likely that the audience's understanding of the results corresponds with that of the informants and myself.

4.2.4 Observation

Before the interviews, in September 2019, I traveled for around a week in and around the study area. The work here was mostly concerned about the observation of the facilitation and natural state of the area but additionally included some informal conversations with visitors about the existing facilitation. The observation also allowed me to document facilitation initiatives in photos. It is important to consider the choices made in conjunction with observations in the field. It is the researcher who decides what is seen and how it is seen (Kearns, 2016). In this study, it was important to observe the most visited entrance points to see the state of the facilitation and information which were important means of channeling in this area. It was also essential to visit the places where visitors most frequently pass, such as Nedalshytta in Sylan. The observation part was, however, probably limited somewhat because of the bad weather while I was there. Most specifically, the number of recreationists was lower than if the weather had been better. Additionally, the circumstances made it more difficult to enter the most pristine parts of the protected areas. I would prefer to repeat the observation several times, both to get a better understanding of human traffic and their behavior and to be able to cover longer distances. Because of limited time and economic resources, however, this was too challenging. It is further difficult to estimate whether these circumstances influenced the outcome of the observation. Nevertheless, the observations in the field are here used mostly as a background and were done to gain a broader and more personal experience of the study area. The informal conversations were useful because they gave me a deeper understanding of visitor needs. Yet, they are not explicitly part of the results.

Kearns (2016) argues that all research consists of at least some observational parts and that it is important to consider the degree to which one is participating. This is because a researcher always affects the situation in one way or another. In my informal conversation with visitors in the protected areas, I was open about my aim with the trip. This proved to be beneficial as people appeared interested in my topic of research and gladly told about their opinions of the area. By being open about my role, therefore led to topics of conversation which otherwise might not have been addressed. In other situations, I was mostly concerned about observing the state of the area and was merely perceived as an average recreationist. In this context, this approach was more beneficial as I concentrated on observing the natural and managerial features of the area and not so much the human behavior. As this observation was happening in a familiar context of domestic outdoor recreation, it was easy to take a natural part of the social environment.

4.3 Analysis

4.3.1 Transcription

All interviews were audio-recorded with written consent from each of the informants. According to Dunn (2016), this is, together with note-taking, the most used techniques to record interviews. The audio recordings proved to be useful in and after my interviews, particularly because of their length and content. During the interviews, the recorder allowed me to concentrate on the informant and the conversation. It contributed also to a more natural type of communication. However, as Dunn (2016) points out, it is necessary to take notes in case of a technical problem or similar. Notes were therefore taken as a complementary recording technique. I had, however no major difficulties with the audio recordings. Yet, the notes were helpful in some cases as I also wrote down if any of the informants were showing me something and what that was.

In the aftermath of the interviews, I did a word-by-word transcription of them. The transcriptions are mostly based on the audio recordings but, if needed, with help from the written notes. Even though this is very time-consuming, it is an essential preparation for the analysis (Dunn, 2016). The transcriptions were done as soon as possible after each of the interviews. Even though this is most important in a situation where written notes are the only recordings of the interview, it is preferable also when transcribing audio recordings in order to have the interview experience relatively fresh in mind. However, in my situation, some of the transcriptions were done several days after the interview. This was the case if several interviews were done on the same day or in consecutive days. Nevertheless, I experienced these transcriptions similarly to those that were done immediately. The transcriptions were done without special software. The process involved listening to some seconds of the audio recordings and writing it down word by word. Often a second listening was needed to make sure everything was written down correctly. I also included pauses, laughter, and if the informant appeared insecure. Moreover, words that were mumbled or that I of other reasons could not understand were also marked. Sometimes, these words became understandable later in the process.

Crang & Cook (2007) argue that the interview is a method to *construct* data, rather than *collect* it. Already here, the analysis of data material has started, and it continues in the process of transcribing. Furthermore, this process can be beneficial in order to engage further, or once again, in the data material (Dunn, 2016). This helped me better understand the data material and starting to see patterns in the opinions of the

informants. Notes were taken to remember these observations and reflections. During this process, I also became aware of certain quotations that could be useful when presenting the results in the thesis. These quotations were underlined so that they were easier to find in the following analysis.

4.3.2 Interview data analysis

The analysis of transcriptions from interviews aims for the researcher to more carefully evaluate the data in order to find meaning in it and patterns in the material (Crang & Cook, 2007). As a first step, it is important to thoroughly review the transcriptions as preparation for coding and categorizing the data (Thagaard, 2013). This was the way I started my analysis, before extracting certain parts of the interviews that represented important perceptions, opinions, or experiences expressed by the informants. These bits of text were given keywords or codes that described the topic of the content. Here, I went through all interviews individually. I also made sure to continue writing down thoughts about the data that emerged during the process. After the coding process, the snippets of text were categorized according to the codes, classifying identical or similar codes into one category. For example, text labeled with "tourism" and "outdoor recreation" would be classified into a category called "facilitating outdoor recreation". The text was classified across the different informants so that all opinions on the same topics were placed together. The bits of text were, however, always labeled with the numerical code previously given to each of the informants. Each of the categories reflected important topics in the study. Some of the categories were directly linked to questions that were asked to every informant during the interviews, while others were more open. As Thagaard (2013) states, the classification of text into categories can make the data material clearer. This simplifies the researcher's recognition of important topics and patterns while at the same time contribute to the development of his or her understanding of the information in the data. Placing the snippets of text from different interviews together in categories helped me discover where there were consensus or disagreement about the topics. This thematical approach to analysis, or cross-sectional analysis, has been criticized for lacking a holistic view of the data material (Thagaard, 2013). This is because one extract small pieces of the transcription out from its context. It is important here to consider the situation in which a statement was made. I have attempted to solve this in my analysis by writing down comments for each snippet of text which includes what question or context it is connected to. When working with the presentation of results I always went back to the original transcription if I was uncertain about the context. The results are also presented in connection with the different categories of informants. Even though my analysis is relatively thematical, it is, therefore, also to a certain degree contextual. Furthermore, I have attempted to explain the informants' perceptions on a broader scale by connecting the meanings and patterns found in the transcripts to central discourses connected to nature conservation. The concept of discourse analysis is explained below.

4.3.3 Document analysis

As the main topic of this thesis is visitor management and the development of a new visitor strategy, I considered it important to analyze the user study conducted by NINA in the study area (Selvaag et al., 2017) as well as the completed visitor strategy (The National Park Board for Skarvan and Roltdalen and Sylan, 2020). Some results from the user study were presented in chapter 2, but the analysis of this survey will be brought up in the discussion in chapter 6.

Textual analysis is often based on the thought that “the world is socially constructed and mediated” (Winchester & Rofe, 2016, pp. 10-11). Texts may, in this context, refer to both written, visual, and audio sources as well as landscapes. In this thesis, however, it is the written sources that will be analyzed. The analysis of text usually aims to deconstruct the plain text and discover meanings and discourses within it (Winchester & Rofe, 2016). As transcribed interviews can also be seen as textual, it is necessary to distinguish the textual analysis from interview content analysis. Thagaard (2013) emphasizes this distinction by using the term document analysis. The most important factor separating document analysis from analysis of interviews is that the documents which are studied are initially produced for another purpose (Thagaard, 2013). The document analysis in this study is closely connected to discourse analysis. As explained in section 3.2.4, a discourse is here referring to a common understanding of a topic and is creating, supporting, and maintaining structures in the world (Benjaminsen & Svarstad, 2017). The discourses are based on assumptions and arguments about how the world is and should be. Thus, discourse analysis is based on social constructions and aims to investigate how and why these are expressed directly or indirectly in different forms of text and communication (Waite, 2016). Thus, looking for interpretations and depictions of the world and its structures is central in discourse analysis. In a written text, discourses can be discovered by examining explicit statements but can also be found by reflecting on what is not included in the text. Furthermore, the text can, both explicitly and implicitly, present particular perceptions of the world as true. This can contribute to the production and maintenance of certain power structures and affect the distribution of knowledge (Waite, 2016). When doing discourse analysis, it is also important to take into consideration both who the author is, under what circumstances the text was produced, the source materials it builds on, and who the text is written for (Waite, 2016). In this study, discourse analysis is used to discover and compare the different perceptions of how the included protected areas should be. It is applied to get a better understanding of the various considerations which are emphasized in nature protection. In the transcriptions, the discourses have become evident through the implementation of the initial analysis, while the document analysis allows for a comparison between the considerations taken in the documents and the perceptions expressed in the interviews.

4.4 Ethical considerations

In qualitative studies, personal and individual experiences are often involved. Therefore, it is essential to take into account ethical considerations. Dowling (2016) emphasizes three ethical aspects that should be kept in mind when applying qualitative research methods. First, the researcher has a certain responsibility for everyone involved in the research process. However, the most important responsibility is the commitments made to the persons who are subjects of research. This is an issue of research ethics. The informants’ privacy and confidentiality are important concerns in this aspect (Dowling, 2016). In this study, the informants are not providing particularly sensitive information. However, I have chosen to maintain the total privacy of my informants. There is a clear reason for this. By anonymizing the informants, I believed it more likely that they would talk from a personal rather than a professional perspective. This appeared to be partially successful. Most of the informants had both a personal and a professional point of view, and many of them explicitly distinguished between these roles. However, some of the informants had a clearer professional perspective. Before the interviews, all informants

received a letter with information about the study and how the data would be used as well as a letter of consent that needed to be signed (Appendix 1). The informants were anonymized throughout the process following the interviews and were given numerical codes so to separate them in the processes of transcription and analysis. The audio recordings were saved and kept in a personal space at the NTNU server. The study has also been reported to and approved by the Norwegian Center for Research Data (NSD). All data is deleted at the end of the project period. The most problematic issue in this study is that the study area and the surrounding communities are small, especially within the field of nature protection. Yet, I have, to the best of my ability, made sure that the informants will not be recognized from the information they have provided to the study.

The second ethical aspect is the consideration of power relations in the research process. Here it is important to exercise critical reflexivity, that is to evaluate the situation and your own position as a researcher and how this may influence the results (Dowling, 2016). There are several reasons for why power is an issue in qualitative research. First of all, knowledge is powerful, and a study may influence the lives of both participants and others. Second, there always exists some sort of power relation between the interviewer and the informants. In this study, one might say that the power relations were different in the various interviews. However, they mostly varied within what Dowling (2016) calls asymmetrical relationships. In such situations, the position of the researcher is different from the position of the participants. In my study, the informants typically had more knowledge on the topic and more direct possibilities to influence the situation that is studied than I as a researcher had. Yet, some of the informants had more power than others and appeared more confident in sharing their views. In other situations, the informants and I were more equal and had rather different types of knowledge connected to the research topic. Here, the power relation was closer to a reciprocal relationship where the research and the informant have "relatively equal benefits and costs from participating in the research" (Dowling, 2016, p. 36). Even though I believe that these power relations have had little influence on the final results, it has been important to continuously reflect on this issue. To maintain critical reflexivity, I wrote down my perceptions of each of the interviews after they were conducted. Here, I evaluated the different situations which occurred during the interviews. What mainly recurs in these notes is that the informants mostly appeared comfortable in the interview setting, even though some expressed a little insecurity about the situation during the first minutes. This was also my own opinion. In general, the informants also appeared happy to talk to me about their experiences and perceptions.

Finally, the third ethical aspect addressed by Dowling (2016) concerns the concepts of objectivity, subjectivity, and intersubjectivity in qualitative research. These issues also require critical reflexivity. As objectivity is typically achieved through a distance between the researcher and the participants on the one hand and between the researcher and the production of data on the other, it is often more feasible and important in quantitative studies. To achieve objectivity in qualitative studies, however, is considered difficult or even impossible (Crang & Cook, 2007; Dowling, 2016). This is because qualitative research often involves individual and subjective perspectives as well as interactions between people. The concept of subjectivity is therefore more emphasized in this context. Subjectivity refers to involving "personal opinions and characteristics into research practice" (Dowling, 2016, p. 39). Personal experiences are always present, both in the process of communicating with informants, in the analysis process, and the presentation and discussion of the results. Thus, my thesis is influenced by my personal experiences and opinions. For example, when exercising outdoor recreation, I have

always been drawn towards areas that are characterized as pristine and have little facilitation. My perception that these areas are more valuable than highly facilitated areas can result in a situation where I seek information or opinions that support this view. It has therefore been important to me in this process to be aware of the contrasting views and reflect upon the subjectivity connected to my research. My interpretation also relies on how I am an "outsider" or "insider" in the situation which is examined (Dowling, 2016). In this study, I can be considered as an outsider because I have few personal connections with the place and the situation which is researched. Neither have I any personal relations with any of the participants. However, as Dowling (2016) argues, a researcher will always, to some degree, be both an insider and an outsider as his or her characteristics (such as gender, economy, ethnicity, or language) will somewhat overlap with those of the informants. This is also the case in my study. For example, I speak the same language as the informants, and I engage in the field that several of them work in. Connected to subjectivity is the concept of intersubjectivity. This is also highly relevant in qualitative research. Even though the term "data collection" is widely used, it is important to consider the role of social interactions. Through such interactions, the researcher and the participants produce data together (Thagaard, 2013). Intersubjectivity refers to this coproduction of data. The information which is produced and the presentation of it is therefore affected by the characteristics of both the informant and the researcher. In the context of my study, there are probably several factors that may have influenced the results. For example, the way I asked the questions during the interviews likely resulted in other information than if the questions were asked differently. Additionally, both the informants and I had before the interviews already formed assumptions regarding the outcome of the interviews. What is most important here is to reflect upon these concepts of subjectivity and intersubjectivity and be aware of and understand the effects they may have upon the results and the discussion of them (Dowling, 2016).

4.5 Reliability, validity, and transferability

To evaluate the quality of this study it has been important to consider the methods used and to be open and clear about them. With a thorough presentation of my research methods and the choices that have been done in the process, I hope to achieve a reliable study. According to Thagaard (2013), reliability is also based upon the clarification of relations between the researcher and the participants as well as the researcher's experience in the field. Another important issue in qualitative studies is the validity of the researcher's interpretations of data. As addressed above, several factors may influence these interpretations. Mansvelt & Berg (2016) argue that transparency is important, also when regarding the research validity. By clarifying how the data has been collected or produced, the audience gains a better understanding of the background of the researcher's interpretations and what implications this may have for the participants. Furthermore, Thagaard (2013) connects validity to the position of the researcher in relation to both the participants and the field of study. It has therefore been important to include reflections around my position and how this is connected to the data material in this chapter.

Another aspect that can be especially connected to case studies is transferability (Thagaard, 2013). Baxter (2016) argues that a case study is a methodology rather than a method because it is not a way to collect data but a research design approach. A

primary view on case studies is that examining specific situations can be valuable and useful in itself regardless of the cases not included in the study (Baxter, 2016). Analyzing the different perceptions of visitor management as well as the developed visitor strategy in Skarvan and Roltdalen and Sylan can be useful to understand what type of management may be suitable in this particular place. However, a case study should aim to have relevance beyond the specific situation which is studied (Thagaard, 2013). In qualitative research the applicability of the results in other cases is often referred to as transferability (Baxter, 2016). When discussing the study's transferability, the selection of informants and cases is central. In this thesis, I have aimed to select informants based on who is relevant for visitor management in this area. At the same time, stakeholders and management officials similar to those in this study may be found in most of the large protected areas in Norway. Furthermore, all Norwegian national parks have now been working particularly with visitor strategies. This contributes to making my study relevant also in other areas. However, a subject that is much emphasized in the data material here but not present in all large protected areas in the country is that of Sami reindeer herding. This can make the study less transferable. Nevertheless, the issues connected to reindeer herding are often related to conflicts with other stakeholders. Baxter (2016) also states that case studies usually draw the findings for the particular case into a broader perspective. This is because the situation which is studied "is viewed as neither entirely unique nor entirely representative of a phenomenon" (Baxter, 2016, p. 134). One of the reasons for connecting the different considerations and perceptions of the informants and sources to discourses about nature conservation in this thesis is to examine the case study in a broader perspective. This opens for a deeper understanding of how the context of which the case exists influences the situation which is being researched.

5 Results

This chapter presents and explains how the visitor strategy and facilitation in the study area are perceived by the local actors and managers who were interviewed. This information will be supplied and compared with the visitor strategy. The main topics in the results are outdoor recreation and associated experiences, the aims of the visitor strategy, possibilities for strengthening the local economy, and the relationship between use and conservation of these areas. Each part of the chapter explains the main perceptions found in the primary and secondary data and presents the contrasts in opinions between the different informants.

Part 5.1 examines the perceptions of informants and visitors regarding the facilitation of recreational activities and visitor experiences in the study area. It includes the views on the current facilitation and how they wish for it to be in the future, as well as the views expressed in the visitor strategy. Part 5.2 investigates the importance of facilitation to protect conservation values. It focuses mostly on information and channeling initiatives, as these appear to be the most essential management tools. Further, part 5.3 examines the opportunities for strengthening the local economy that lies in the facilitation of these protected areas and the visitor strategy. Part 5.4 presents the various considerations in the implementation of the visitor strategy which are important to the informants. Moreover, it includes the different perceptions of cooperation in the work on the strategy. Finally, part 5.5 explains the paradoxical aspect of conservation practices and facilitation which is expressed by several informants in the interviews, including the informants' view on how the increased focus on facilitation for visitors in the study area may challenge conservation priorities.

5.1 Recreation and experiences

The main basis for the development and implementation of new visitor strategies for Norwegian national parks is to strengthen visitor management in these protected areas. The informants interviewed for this study were therefore asked about their thoughts of outdoor recreation, why people come to visit, and how the protected areas should be facilitated for visitation. This section will present the most important findings regarding the use of the areas and the views on the facilitation for outdoor recreation.

5.1.1 What is "simple outdoor recreation"?

The opportunities for outdoor recreation as stated in the conservation regulations are referring to activities of a simple and traditional character. But what defines "simple outdoor recreation"? Through the interviews, some informants ask questions about the extent of this term. According to them, simple outdoor recreation does not include the high standard offered at, for example, DNT cabins. One local informant, who is generally positive to the facilitation today, argues that some find it unfair that usufructuaries have several limitations regarding what they can do with their buildings in the area, while others can do "everything they need" to facilitate recreational use. He explains:

The reason it feels unfair is that they stand behind that they facilitate simple outdoor recreation, while I don't think that what they offer is facilitation for simple outdoor recreation anymore when they can arrive at a cabin, take a hot shower, order a beer or a glass of wine, while they are waiting for a three-course dinner.

Even though some informants are critical to the use of the term, most informants refer to the current use of the areas as simple or traditional outdoor recreation. For example, a regional informant working in the tourism business argues that their main focus is on traditional use. He explains that people, in his experience, appear to “very much like the traditional outdoor recreation activities, (...) to go hiking the old-fashioned way”. Yet, he emphasizes that outdoor recreation practices are changing over time: “[A] kind of forward-looking outdoor recreation use is what we want, but still using their own legs, and it will be simple and traditional, but it will probably not be exactly the same as of today”.

Regardless of their perception of the current use of the areas, all informants express a wish for simple outdoor activities to continue in the future. Several informants, both managers, and local and regional ones, appear to be negative to more modern activities. The local manager says that even in the border zones this type of activity might be disturbing to wildlife as well as visitors seeking silence and peace out in nature. However, all informants rather focus on the number of visitors than on the type of activities they exercise. One of the local informants says:

I think the principle of simple facilitation is nice. It is a good thing that people are there and exercise simple outdoor recreation (...), but at the same time, I see the challenge that we should not have much greater visitor pressure than we already have.

The amount of traffic in the protected areas, especially in Sylan, is pointed at by most of the informants, and section 5.1.3 contains a further presentation of the different views on this issue.

To make it easier to understand the results, I will in this thesis use the terms “traditional outdoor recreation” or “simple outdoor recreation”, defined as hiking, skiing and/or harvesting where the visitors, in case of an overnight stay, sleep in tents or tourist cabins. This is also the way most informants use these terms. This conforms with what Selvaag et al. (2017) call “traditional outdoor recreation”.

5.1.2 Which experiences do visitors seek?

All interviewed informants appear to agree that most visitors come to Skarvan and Roltdalen and Sylan to exercise traditional outdoor recreation. Additionally, several informants have noticed that more visitors now hike mainly on existing and marked trails. Yet, the informants have experienced that some visitor groups have other interests. For example, several informants have seen an increase in the number of applications for organized activities, such as orienteering events, as well as an increasing number of visitors engaged in more modern outdoor activities. Biking, snowkiting, and snowmobiling are mentioned as examples of activities that are more requested by visitors now than earlier. One of the reasons for such requests is, according to a local informant, that this type of activity is very common and more facilitated for on the Swedish side of Sylan. Yet, the informants argue that the vast majority still seeks traditional outdoor experiences. The user pattern they describe applies for visitors in general, not only their own customers. This is what they have experienced in their work

and visits to the protected areas. The most mentioned reasons, by the interviewees, for visitors to seek these areas in particular are the beautiful nature and the advertisement of cabins and hiking/skiing routes by organizations and companies, most importantly Trondhjem's tourist association. The facilitation in general and the accessibility are also stated as important reasons. One of the regional informants argues that if similar places elsewhere, such as Forollhogna national park, had been facilitated in the same way, there would be more people there as well. Several local informants express that they share this view.

When asked what the informants believe to be the visitors' most desired experiences, several informants repeat the results from the user study. All informants experience an increase in the total amount of visitors. Most informants mention that the traffic is greatest around Nedalshytta and in Sylan landscape protection area. This conforms to the results from the user study (see section 2.5). One of the local informants explains that the area around Nedalshytta is the starting point for several popular mountain hikes, especially to the tops of Storsylen and Storsola, located in Sylan mountain area. Further, he argues that the amount of traffic is generally highest around the tourist cabins and on the marked paths. Another mentioned reason for the number of visitors being greater in Sylan is the accessibility of Nedalen, as opposed to the national park which is surrounded by mountains and therefore less accessible. One of the regional informants, however, argues that this characteristic might make the national park more fascinating to some visitors. He explains that "even though there are mountain farms and such in there, it is a very inaccessible and pristine area anyway". According to some informants, the connection to the Swedish side of the mountain area and the nearby private cabin areas might help explain the higher visitor volume in Sylan. One informant adds that there are many visitors in the national park as well, especially because of the large web of trails and the popular route "Across Norway".

The knowledge about visitors in the visitor strategy is based on the user study by Selvaag et al. (2017) as well as the traffic counters, which has been located in the same places during the summer seasons of 2016, 2017, and 2018. The management board has also gathered data on the number of visitors from TT and NTT, both of which are parts of DNT, and from visitor registrations for the different mountain peaks. According to the National Park Board, both TT and NTT have experienced an increase in their number of members and the number of visitors staying at the tourist cabins in Skarvan and Roltdalen and Sylan. Further, the visitor strategy accounts for the cabins and mountain-farm houses inside the protected areas as well as private cabin areas located nearby (The National Park Board for Skarvan and Roltdalen and Sylan, 2020).

5.1.3 Facilitation for outdoor recreation

Most of the interviewed informants are relatively positive about the current facilitation regarding outdoor recreation. There are some concerns, however. One of the local informants argues that the facilitation in some cases is too well developed. A consequence of this is that people who lack knowledge and experience in outdoor activities easily have access to the areas. The informant states that this may have negative effects on nature and lead to an increased number of rescue operations. Another reason that more people without sufficient outdoor recreation skills seek the protected areas is, according to the informant, that the different routes are presented as feasible to everyone, regardless of their experience. He says: "There come people who think that as long as the trails are marked it is like walking on a sidewalk" and state that many people cannot understand their own limitations. Another local informant argues

that this also might have consequences for the natural environment because some of the visitors have “little or no knowledge about nature and use it kind of like an amusement park”. Several informants mention the need for toilets in the most visited areas, especially by parking lots and entry points. Another problem with the facilitation of paths, which is mentioned by several informants, is that they often are made as convenient as possible for users. In several cases, this results in paths going straight over wetlands and open areas where the visitors are highly exposed and visible for animals. The paths might, therefore, become a greater barrier in nature. Two informants suggest that paths, in some cases, should be moved to drier areas in or close to the forests. Several informants stress that the channeling effect of facilitation is positive because it directs visitors away from vulnerable areas. Yet, some are worried about the amount of traffic in the places people are channeled to. This is particularly mentioned in conjunction with concern for the stressing of animals in the protected areas.

Most of the informants are more concerned about future facilitation, especially when referring to the fact that the visitor strategies are meant to facilitate for more visitors. All informants are concerned about how to balance an increase in the number of visitors with the protection of conservation values. One of the local informants says that “the Public Right of Access is a great thing, that is, everyone should have the possibility [to do outdoor activities]”. Yet, he argues that everyone should not necessarily be engaged in outdoor recreation always and everywhere. Another local informant supports this view: “Our traffic does something to nature; we need to acknowledge that. So, I’m not sure that we should be everywhere at all times”. Further, according to the informant, it is often argued in the management board that such nice areas should be facilitated for visitors. The informant, however, has a different view: “(...) but no, maybe it is so nice that we shouldn’t facilitate”. According to her, the management administration on the Swedish side of the border is now working on reversing some of the facilitation due to excessive use of the area. The informant sees such retreat as difficult and is worried that the management board on the Norwegian side will be in the same situation in the future. Moreover, she argues that the managers lack instruments to stop or control the new types of outdoor recreation, meaning activities such as fat biking, dog sledding, and snowkiting. She is satisfied with the current facilitation for simple outdoor recreation but is worried that these new activities might expand in the future. Several informants have also seen more wear and tear in the areas as a result of the expanding tourism, particularly around the marked trails. They argue that this may become an even more substantial problem in the future. However, the stone stairs located somewhat north of Nedalshytta in Sylan (see Figure 8), is mentioned by several informants as a good measure to handle the traffic and stop further wearing of the ground in this area. One of the local informants also mentions these stairs as an example of how facilitation for outdoor recreation, as well as having a channeling effect and prevent damage of nature, might attract visitors by themselves.



Figure 8: One of the new stone stairs located in Syllan landscape protection area, somewhat north of Nedalshytta. The stone stairs were built in 2019. Photo: Ida Nilsen Hidle.

Contrastingly, the two regional informants are relatively positive about increasing the number of visitors. Their perspectives, however, differ somewhat. One of them, working with tourism, stresses that outdoor recreation is positive for public health and that it should be a priority to have more people in these natural areas. Additionally, he says, the greater focus on having more visitors will be positive for their business and increase the legitimacy of their work in the areas. The other regional informant is also positive to have more people exercising outdoor recreation because it is good for public health. Yet, he emphasizes that the visitor strategy must address how they can “facilitate so that the

national park doesn't get damaged, but at the same time could offer people different things". The informant states that he was skeptical about the visitor strategy at first but, after seeing the local management board's great focus on protecting nature and conservation values, he changed his mind. According to him, the visitor strategy should match "the national park's premises".

Evidently, the management board has had this in mind when making the visitor strategy. In the process, they have formed the vision: "Welcome as a guest on the premises of nature". To make this vision visible on all information materials is one of the planned information initiatives (The National Park Board for Skarvan and Roltdalen and Sylan, 2020).

Even though one of the aims with the new visitor strategies, in general, is to welcome more people into the national parks, the interviewed local manager is focusing more on strengthening the visitor management for the people who already visit the area rather than wanting more people to come. Instead, she wants more people around the protected areas and in the nearby villages. This might be possible by making more interesting and informing points and visitor centers in the villages or viewpoints near the protected areas. Yet, the management board has not found a suiting spot for such a viewpoint. This management informant stresses that it is important to have in mind that there might come more people regardless of how they facilitate, as other factors are affecting the visitor volume as well. One of the regional informants, however, is struggling to see how the management is working on making the border zones and the nature around the protected areas more attractive to the visitors. According to him, they need to explain "what can you do in the border zones, because it is kind of no services there today (...). As a visitor strategy, it is (...) naïve. 'You may come and look at our signs but rather not walk any further than that', right?".

The local manager says that their wish is for the visitors to experience nature, peace, and silence, and refers to the results of the user survey. According to her, they focus on facilitating simple use, more specifically "people walking on their feet or skiing". She says that this is based on the conservation regulations. However, she emphasizes that the main reason for facilitation is to protect conservation values. The other management informant agrees and stresses that "in a protected area one should not intervene or put out planks if it isn't to counteract wear and tear". However, she says, the facilitation "serves two functions", both as a "management measure and as a facilitation measure for the user[s]". The local manager argues that because most of the visitors stick to the existing trails, the management board has a good possibility to channel the traffic. The informant says that they both channel people *to* specific places and *away from* other places. Further, she explains that before channeling people to a particular destination, it should be carefully considered if this area is suitable for more visitors. The reason for channeling people away from places is usually to avoid traffic in vulnerable nature.

The National Park Board for Skarvan and Roltdalen and Sylan (2020) describes the degree of facilitation in these protected areas today as "partly high" in regards to simple outdoor recreation. According to the visitor strategy, its main aims are to "[s]trengthen and maintain nature values and cultural heritage in all the affected protected areas" and to "secure existing nature-based business activity, such as Sami reindeer herding, grazing practices, mountain farming, hunting and fishing" (p. 38). Outdoor recreational use is not included here but the improvement of the visitor management, in general, is stated as an additional goal. Further, one of the four listed categories of strategic choices

is to “[m]eet new forms of outdoor recreation” (p. 39). It is clear from these strategic choices that the national park board wishes to continue to facilitate the use of a simple and traditional character and “first and foremost secure the possibility for exercising simple outdoor recreation (...)” (p. 48). It is argued that different forms of modern outdoor recreation, such as biking and snowkiting, have negative effects on wildlife and that there should not be much facilitation for this type of activity. The other categories of strategic approaches concern traffic channeling to protect natural values, information, and implementing the new brand for Norwegian national parks. The strategic choices mentioned in the visitor strategy are based on the conservation purposes for each protected area, including the possibility for the commons to exercise traditional outdoor recreation. (The National Park Board for Skarvan and Roltdalen and Sylan, 2020). The most important type of facilitation in the visitor strategy is clearly information initiatives, which will be presented in section 5.2.1.

5.1.4 Section summary

The informants’ perceptions of the use and facilitation for use in the study area are relatively coherent. Most informants describe the existing use and facilitation in the study area as simple, even though they have seen some requests regarding more modern activities. They agree that traditional outdoor recreation and simple facilitation is positive and that this should continue in the future. The management board is also focusing on simple facilitation and the maintenance of existing use. All informants have experienced an increase in the number of users in the last years. The local informants are worried about this, while the regional informants are more positive. The visitor strategy does not aim to increase the number of users in the area but to better facilitate for the existing number.

5.2 The importance of facilitation in management

The visitor strategy focuses on the different facilitation measures needed to handle visitation and maintain high-quality conservation. Some of these measures are physical facilitation initiatives, but the distribution of knowledge and information is particularly emphasized. The informants are also mostly concerned about information measures. This section will present the different views on facilitation measures, most notably information initiatives, and why the informants consider this as important in visitor management. Furthermore, it will consider the opportunities presented in the visitor strategy.

5.2.1 Information

Both the interviewed management officials and stakeholders see a need for improved information about the protected areas. Yet, their views on what type of information is needed and what are necessary information initiatives are more diverse. The informants interviewed in this study are mostly concerned about the visitors’ knowledge about nature and how to behave in protected areas. One of the local informants says:

There are many [people] who are good at outdoor recreation and to manage outdoor recreation, and there is a high equipment level and such, but when it comes to the knowledge about nature’s year cycle, I think that is lacking.

Another informant says that many people “have little knowledge about the reindeer herding and the Sami’s use of the area”. He argues that the information about this has

been insufficient and that people, therefore, do not realize how their behavior in the protected areas may have consequences for important conservation values. Others simply say that the general information so far has been too poor and focus more on how to strengthen it:

There is no doubt that it is too bad. Then the question is how you should make it better. Of course, people must do an effort themselves to obtain information. Today, people are used to it almost being knocked into their heads, I think. (...) It will come more [information], but then the question is where it will come (...). If this is a place we don't wish to promote as an entry point, but that people use anyway ... if we put up an information sign, then it will, in a way, get promoted as [an] entry point. If we don't put it up, then they get no info.

According to this informant, there is also a conflicting aspect to give out information. This is because the information is a measure to encourage visitors to use the area, as well as a means of regulating how it is used. The informant indicates that the problem occurs when there is a conflict between the needs of the managers and the preferences of the users.

The managers interviewed also focus on strengthening the communication between the management and the visitors through better information. Information about hiking and skiing as well as maps of marked trails and cabins in the area is already relatively easy to find through websites such as www.ut.no. However, the local manager expresses the need for an informative website about Skarvan and Roltdalen and Sylan in particular. She appears to place greater emphasis on information about the values of conservation, such as local cultural heritage sites, vulnerable nature and species, and the Sami reindeer herding. Providing more and improved information for visitors through websites is especially emphasized. According to the management informants, this will allow the users to have greater knowledge about the protected areas while planning their visits and before they enter the areas. Such a website could include information on hiking routes, wildlife, Sami culture, cultural heritage, entry points, regulations, and other relevant issues regarding these specific areas (The National Park Board for Skarvan and Roltdalen and Sylan, 2020). Today, the online information about Skarvan and Roltdalen and Sylan is scattered and it often focuses on either management issues and reports (through management websites) or plain tourist information such as recommended hiking routes or accommodation (through tourist websites). The local management informant addresses that a new visitor customized website is planned:

It is a thing that (...) stands as a measure in the visitor strategy, that we should have an audience-friendly website. It will be information about the areas and natural values and such, and where you can begin your trip (...). It will be such information that is of a somewhat lasting nature.

A new website as described here will also help the management control what types of information the users will receive. She emphasizes that "it is important that the management handles the information about the areas (...), that no one else writes the information, because then it will easily be ... wrong compared to how we want the traffic to happen".

One of the management informants argues that information is the management's strongest tool to channel the traffic and to ensure that the correct information is given. She says: "Info material is the instrument to get people to go where you want (...), and it

also helps to underpin the experience [that] we want people to have by giving them [the] information they are interested in”.

In the visitor strategy, information is listed as one of the four categories of strategies to improve visitor management (The National Park Board for Skarvan and Roltdalen and Sylan, 2020). The category about the implementation of the national park brand is also strongly related to information. The information initiatives include maps, relevant hiking routes, tips on accommodation, food, and activities, as well as knowledge about different topics, such as Sami reindeer herding, millstones, the arctic fox, and/or mountain farming, depending on the location. Instructions about important regulations regarding for example leash injunction or campfire restrictions could also be included here, according to the visitor strategy. Most of the information initiatives focus on information which is essential to protect the conservation values. According to the visitor strategy, the information will be presented in different locations and channels, most importantly on boards at information points in the adjacent villages and the protected areas’ entry points (see Figure 9), as online information, and as written information located on accommodation sites and tourist offices. The visitor strategy emphasizes that “all information materials etc. should be designed in line with the National brand strategy for Norway’s national parks” (National Park Board for Skarvan and Roltdalen and Sylan, 2020, p. 49). Yet, it should be adapted to and reflect local values, and both Norwegian and Sami geographical names should be used in the maps. Information will also be given in English.



Figure 9: Information boards at two entry points to Sylan landscape protection area and Skarvan and Roltdalen national park. The one to the left is located by Nedalshytta in Tydal municipality, while the one to the right is located by Bjørneggen/Rotvoll in Meråker municipality. The information boards will be updated according to the new brand strategy for Norwegian protected areas. Photo: Ida Nilsen Hidle.

Although all informants agree that there is a need for more and better knowledge about the protected areas among visitors, some address the challenges connected to these information initiatives. A regional informant emphasizes that the given information must be of a character that reaches out to visitors in all user groups. He says:

The people who visit the area, they might also have different interests. Some like to hike (...), some don't want to walk that far, but they want to experience nature (...). The visitor strategy should make sure that you reach all these groups with different

interests. It is also important that you don't get stuck in thinking that in Skarvan and Roltdalen, people [only] want to walk in the tourist track.

Further, he argues that the information should be "diverse" and says that "it is a pedagogical challenge, because the (...) normal mountain tourists, they have their knowledge, but to reach they who might now come to a greater extent, that is important". Others focus more on the possibility that the information is not being read or followed. The other regional informant says:

The conservation management puts up huge, nice posters and spend a lot of money on that in parking lots around in the mountains and puts up signs by the entrance to the national park. When you come to the path you meet a sign that says, 'protected area'. And this website, where you inform about things ... I think – to be a little simple, a little brutal – that it will not be read.

This view is backed up by a local informant, saying: "We do try to inform a little with posters and such, and info points, but if it helps that much, I don't know. It might help somewhat, but ...". One informant suggests that such information will work better if given by tourist associations and companies.

5.2.2 Other facilitation measures

Apart from information initiatives, the visitor strategy and the informants mention different measures to ensure and strengthen visitor management in total. One of these suggested initiatives is to create viewpoints close to the national parks for visitors to enjoy nature without walking directly into it. One of the informants showed great interest in this: "I'm a little bit innovative and think that it was actually a great idea (...) that one thinks a bit untraditionally and make something a little spectacular on that kind of viewpoint". The informant argues that this could be a natural place to stop for tourists passing by and that it could create income for local businesses, for example by having a cafeteria building or similar. Another informant stresses that if there should be any viewpoint for these areas it should be located near existing roads, preferably the highway. Most informants have little emphasis on this type of facilitation. It is, however, mentioned briefly as an idea by some of them. The interviewed local manager argues that they have failed to find a suitable location for a viewpoint around these protected areas. The visitor strategy also concludes that "[f]or Skarvan and Roltdalen and Sylan there is no such point which stands out as suitable for such a high degree of facilitation" (The National Park Board for Skarvan and Roltdalen and Sylan, 2020, p. 8). However, the strategy presents an idea of a viewpoint along the main road between Tydal and Røros, where visitors will be able to see into both Skarvan and Roltdalen and Sylan, as well as Skardsfjella-Hyllingsdalen, which is a landscape protection area south of Sylan. Yet, the idea appears to include an extended information point only. There are no mentions of facilitation of a higher degree, such as buildings (The National Park Board for Skarvan and Roltdalen and Sylan, 2020). The local manager says that their strongest tool in trying to handle the problems they have had related to reindeer herding and traffic is information. Further, she says that an information center regarding Southern Sami reindeer herding has been discussed. The informant suggests that the center could include information about the Southern Sami culture and their use of the areas and argues that this could also have ripple effects for local businesses.

The other initiatives regard the locations of trails and entry points/information points. The future facilitation presented in the visitor strategy is mainly based on the existing

trails and traffic patterns in the protected areas. However, it presents some planned changes to the trails to avoid specific vulnerable areas. It is, for example, emphasized that it is not desirable with several parallel trails close to each other. Additionally, as mentioned, some of the informants are concerned about the trails going straight over open wet areas. One initiative in the visitor strategy is to restructure one of the existing trails in Stråsjøen-Prestøyan nature reserve. Today, this path is directed straight across a mire, while the new one will go along the edge of the mire but on firm ground. There are also mentioned some changes to the number of entry points/information points, mainly to prevent an increase of visitors to these areas. An example of this is the merging of two existing starting points, Sildra and Sundal, into one entry point. In connection with this, one of the trails in this area will also need to be moved. There are several similar examples. Additionally, some of the existing entry points will not be marked as entry points in future maps (The National Park Board for Skarvan and Roltdalen and Sylan, 2020). The local manager says that the choice of entry points should mirror both what the users want and the management board's goal of protecting conservation values, as well as satisfy reindeer herders. The strategic relocation of trails and entry points is, together with information initiatives, part of the measures to channel the traffic. The visitor strategy has a strong emphasis on this type of channeling. The visitor strategy also emphasizes that each of the entry points should be facilitated in different ways, in accordance with the main challenges in these areas and the amount of traffic one wishes to channel to these points. The time frame of the action plan, which includes all planned information and facilitation initiatives, is 2019–2023. After this, the visitor strategy will be evaluated and revised (The National Park Board for Skarvan and Roltdalen and Sylan, 2020).

Despite the use of channeling initiatives, one informant is concerned about the lack of management mechanisms to control modern forms of outdoor recreation. The main reason for this, according to the informant, is the strong position of the Public Right of Access among Norwegians. Additionally, she argues that the management has generally few such mechanisms for controlling traffic beyond giving out information and manage entrance points and pathways. Another local informant says that after the protection of these areas was implemented it has been more difficult to control the traffic. He says: "The only thing you can do is to lay the paths as far away as possible and hope that people follow them, put up signs and count on people reading them, right?". The informant says that before the protection, landowners could tell people off for walking in vulnerable or dangerous areas. Other informants also mention this problem, especially the fact that the Public Right of Access is very important for Norwegians. Even though all informants appear to agree that the Right of Access is positive, some of them argue that it limits the local management board's possibilities to control the traffic.

5.2.3 Section summary

All informants agree that there is a need for more and better information about the protected areas. The local informants emphasize that visitors often lack knowledge about local nature. The local manager focuses on more audience-friendly information by gathering all relevant visitor information in one website. This is also emphasized in the visitor strategy. One local informant and one regional informant are worried that information at the entry points is not reaching out to many visitors. Apart from information initiatives, the visitor strategy focuses on simple physical facilitation based on the existing network of trails and entry points. In general, more complex facilitation and infrastructure are not emphasized by the informants, and the management board

has not found a suitable spot for a viewpoint. Both management informants emphasize the channeling effect of facilitation.

5.3 The impact on the local economy

According to the Guide to Visitor Management in Protected Areas in Norway (2015), the strengthening of local economies connected to protected areas is one of the three purposes of the visitor strategies. This goal is strongly related to the aim of facilitating for more people to visit the national parks. Several informants are concerned about how this can be done. This section will present their views regarding local value creation connected to Skarvan and Roltdalen and Sylan.

5.3.1 Opportunities for strengthening the local economy

The local informants who work with tourism in these areas have most of their activities around the protected areas or in the border zones. Furthermore, most of them have more activity in or close to the landscape protection area than the national park. This might be partly because of the selection of informants, as most of the informants have greater connections to Tydal, and thus to Sylan, than they have to the other municipalities and the national park. Yet, both regional actors and the local management also says that the number of visitors is higher in the Sylan area, as mentioned in section 5.1.2. One informant says that they have virtually no activity in the protected areas, especially not in the national park. He says that "when it comes to [the] national park, it is really only one thing you can make money from, [and] that is to walk together with people as guides into the area". Yet, he argues that guiding is problematic, as Norwegians have little interest in this, and that in order to make money on guiding you need to target international visitors. This informant cannot see other possibilities for developing or improving the tourism business inside the protected areas because of the regulations.

Even though most informants argue that an increase in the number of visitors is problematic for the protection of conservation values, they see that more visitors means more possibilities for the strengthening of the local economy. However, one of the local informants states that a challenge with visitor management is the frequent focus on quantity rather than quality. She says: "We have much focus on the fact that it's good to have a lot of people here, but it may not be so good, neither for the local community nor the conservation values". The informant says that people working with regional and municipal business development tend to "measure success in the number of guests, for example". The problem with this, she argues, is that there is a lack of focus on quality and the actual value of the visitors. She adds that the answer to the strengthening of the local economy is not to increase the number of visitors but rather to find better ways to generate more income from the people already visiting. The informant adds that many private cabins, or second homes, in the area help to increase the number of visitors but not to generate more income. She argues that these visitors should also be counted for in the strategies, both by the management board and by the municipal planners. Another local informant supports this view and says that he is not interested in more visitors, but rather that each visitor spends more money and thus generate higher income. He adds that he would prefer more visitors to the adjacent areas and local villages, rather than inside the protected areas. This would help to create more income. The informant mentions that there are already possibilities for the tourism businesses and stresses that

it is "up to the locals to manage to create something that people want to spend money on". He adds that most of the local practitioners in these areas work with selling fishing or hunting permits or are reindeer herders. He argues that only a smaller amount of it regards tourism and that most of it has existed for a long time. Furthermore, a regional informant argues many local stakeholders either are unaware of the potential to strengthen their businesses or fail to take advantage of it. He says:

I feel, perhaps, that that the local communities in a way distance themselves, they do not quite manage to see their [own] role in it. [...] At least they haven't seen the potential, I think. I don't think they quite see that it is [...] anything for them to do in there.

Two local informants are concerned about the increasing interest in these areas for international businesses. One of them worries that the local businesses will be outmatched by international ones in the future. She states that the management board lacks "mechanisms for us as local actors to have any (...) benefits compared to an international actor, for example. They have no mechanisms to control that, and that is actually at the core (...) in all areas". Moreover, the informant expresses a wish for a certification scheme for doing business in Norwegian protected areas so that it would be "made requirements to [those] who run business in the areas". She says that this would be beneficial for all parts. The other informant, however, is more worried that the international businesses have little relations to the local areas and that this may lead to more harmful use of vulnerable nature. He argues that the tourism market in these areas should be big enough for both local and international companies. According to him, the problem is rather that "there is a greater chance of losing control" with a higher number of international businesses operating in the protected areas.

In general, the informants are positive to the strengthening of the local economy related to the protected areas. However, several stress that it should not be at the expense of conservation values. Several informants say that tourism in these protected areas already influences the conservation values negatively. Therefore, many struggle to see how it should be done in practice. Several informants say that it does not appear to be a well-developed plan for this, even in the Environment Agency.

The local manager stresses that "it's not the management board's job to conduct business development". Further, she says that it is up to the businesses to "take advantage of the value of having a national park". However, she says, the managers should be aware of possible ripple effects of their facilitation, even though this is not their main goal. According to her, the information initiatives are examples that might have positive effects, also for the tourism businesses. The informant argues that the implementation of the new visitor strategy might help to increase the value of the local communities, especially since one of its aims is to have more visitors in the nearby villages. Even though this aim is based on the protection of conservation values, it can have several positive results. She also says that they will not relocate trails with the main aim to strengthen local economies. The reason for this, she argues, is that they base the planned facilitation on the existing network of trails and that "it would have been different if we had somehow had a completely virginal land", referring to a landscape without existing trails.

The other management informant states that protected areas have the potential to create income for local businesses without being at the expense of conservation values. She mentions the program named "Nasjonalparkkommuner" ("National park

municipalities”), where municipalities having a national park within its borders may apply to the Environment Agency to become national park municipalities. The initiative was established in the context of the new brand strategy in 2015. Its objective is to front these municipalities to make them more attractive for visitors, while at the same time encourage cooperation between different stakeholders. To be assigned the status of a national park municipality, the municipality needs to meet a number of specific criteria set by the Agency. The criteria include, among other things, that the municipality must involve plans and strategies regarding the national park in their own plans and focus on how they can offer different experiences to visitors. The municipality must also have certain facilities and implement measures to strengthen the visitor management (Norges nasjonalparkkommuner og nasjonalparklandsbyer, 2017). According to the Environment Agency, none of the municipalities in which Skarvan and Roltdalen are located have applied for this. I have not succeeded to get an answer from the local municipalities on why this is.

In general, the tourism industry is not of main emphasis in the visitor strategy. Yet, the strengthening of local economies is mentioned as a part of the purpose of the development of visitor strategies and as an additional aim of this particular visitor strategy. Furthermore, the visitor strategy says that the facilitation measures “should be a positive contribution to business development in the surrounding villages” (The National Park Board for Skarvan and Roltdalen and Sylan, 2020, p. 4). It is also mentioned that tourism is of priority in Trøndelag County Council and that the protected areas are incorporated in their plans regarding innovation and strengthening of local economies. Yet, such regional development should conform to principles of sustainability and the visitor strategy (The National Park Board for Skarvan and Roltdalen and Sylan, 2020). Furthermore, in the development of the visitor strategy, the management board has mapped out the different tourism businesses relevant for the protected areas, although a more thorough examination of their needs “has not yet been completed” (The National Park Board for Skarvan and Roltdalen and Sylan, 2020, p. 9). It is briefly mentioned, however, that dialogue between stakeholders from the tourism industry and the management board is essential to visitor management. The focus on tourism is generally limited to sub-targets about possible ripple-effects. Furthermore, the visitor strategy is mainly focusing on the protected areas only, and not on facilitation in the surrounding areas. The visitor strategy emphasizes, however, that existing traditional industries, such as mountain farming and Sami reindeer herding, are important to protect. This is stated as one of the main aims of the strategy. It argues that such activity helps to maintain the conservation values and important features in the landscape. It is also stressed that reindeer herding is included in the management regulations for Skarvan and Roltdalen national park and Sylan landscape protection area, and that other traditional grazing is included as a sub-goal in the management plan for the national park.

5.3.2 Section summary

The tourism businesses connected to Skarvan and Roltdalen and Sylan base most of their work around the protected areas or in the border zones. Several local informants argue that the development of the local tourism industry should aim to earn more money off the existing number of visitors rather than having more visitors. However, the local stakeholders are generally split between wanting to earn money on tourism and not wanting more visitors within the protected areas. Several informants struggle to see how

the protection of nature can be combined with more tourism. Some informants say it is difficult to earn more money on tourism in this area, while others state that the locals do not see or take advantage of its potential. The management informants argue that managers should not emphasize regional development but facilitate opportunities for tourism. The local manager and the management board focus on the potential ripple effects of the visitor strategy.

5.4 Implementation of a visitor strategy

The informants have different opinions on what is important in the development and implementation of the visitor strategy. This section presents their perceptions of which factors and interests should be considered in visitor management and how the study area should be developed in the future. Their views on different parts of cooperation in visitor management are also presented.

5.4.1 Which considerations are perceived as most important to the informants?

Through the interviews, all informants were asked what they think is the most important part of the management of these areas in general and/or the visitor strategy in particular, and what value it could have for them. All three visitor management purposes (use, strengthening local economies, and protecting valuable nature) were represented in the answers.

A regional informant emphasizes that even though there is a guide to visitor strategies, every protected area is different from the rest. The focus of each visitor strategy should, thus, conform to the local conditions. Further, when asked about the most important focus areas of the visitor strategy he mentions two issues: (1) that it should be based on the premises of nature, and (2) that it should be forward-looking. According to the informant, this should be the basis for all initiatives and facilitation. He argues that it is good to be prepared for future use and that if the visitor strategy is "used and carried out in the correct way (...), it can be an advantage for the park". A local informant agrees that one of the most important issues, especially regarding the facilitation of these areas, is to be forward-looking. She says:

I think it should be focused more on having a long-term view of the things that are done now. And that one is aware of the fact that there are few mechanisms. Ergo, one should, in my opinion, have a (...) precautionary attitude regarding facilitation, because once you have facilitated and you get an increased volume of visitors, the possibility of retreat is so little (...).

The informant believes that the management has focused on this in the new visitor strategy. She argues that the managers have experienced previous attempts of facilitation which have led to an increase in visitors to particular areas and that they now take this into consideration. The local manager also mentions this. She says that this has made them aware of what problems a single facilitation initiative could trigger.

Some of the local informants are more concerned about the traditional practices in the area, such as grazing and reindeer herding. One of them says that the management should concentrate on facilitating "existing practices so that they can continue (...) to evolve". The informant states that the main priority should be the conservation values

and that parts of the botanic values in these areas are products of grazing. Therefore, he argues, it is important to protect and encourage existing practices. The informant adds that most people are unaware of the local practices inside the protected areas, such as mountain farms, or have little knowledge about their importance. Additionally, he mentions information about the protected areas as an important part of the visitor strategy. Another local informant says that the most important priority for managers should be to “protect the areas and leave it in the same conditions as it was in when the protection came [into force]”. He argues that the visitor strategy should concentrate on the protection of conservation values rather than increasing the number of visitors, mainly because more visitors will be of greater disturbance for wildlife. He also supports the view that existing practices are given too little attention. According to him, the new visitor strategies focus mostly on creating new businesses rather than developing or safeguarding the existing ones, such as reindeer herding. Several informants argue that these existing industries have helped to develop and maintain the areas’ landscape features which are protected as conservation values.

One of the regional informants considers the most important part of the management of these areas to be “a balance between (...) a reasonable use of the areas and protecting them”. Furthermore, he states that the management board, today, spends too much time on small issues and too little time on the overall context. The informant particularly emphasizes the importance of forward-looking management:

The world is moving forwards, and it will be more people there. Maybe it shall be less of something and more of other things, so to spend some time to look forward and think forward could maybe be an idea, even in a protected area.

However, the informant stresses that he understands why the management board also needs to spend time on minor issues. Yet, according to him, “maybe one should spend some more time on how one wishes to develop the use of the areas”. Additionally, the informant says that the visitor strategy could be beneficial for their business because

one in a way get a greater focus on that hiking and outdoor recreation is a good thing to do in the protected area and that it is given increased attention, and that we in a way get increased legitimacy for what we do, maybe?

The informant also mentions that he hopes for an overall improvement of the facilities to make it more attractive for visitors. He argues that it may be positive for nature to have people using the areas in a traditional way. He states that “the best way to create a love for nature, and respect for nature, is maybe to use it” and that people who love nature will to greater extent care for it and respect it. In that way, one creates a virtuous circle benefiting both people and nature. A local informant, also working with tourism, agrees that increasing the number of visitors could be positive. He says: “[W]hen the area is visited more, we will benefit from it”. Therefore, he says, the visitor strategy could be of value to their business. Yet, from a personal point of view, the informant is worried that an increased number of visitors have negative effects on the natural environment. When asked what the main focus of the visitor strategy should be, he mentions several facilitation initiatives that could help to strengthen local businesses. One of these is the idea of a viewpoint, as mentioned in section 5.2.2. The informant argues that this could help the development of local businesses without leading more visitors into the protected areas.

The local manager explains that the main purpose of the brand strategy is to welcome more people into the national parks, while the visitor strategy is a tool to handle the increased traffic. She says that, with the new brand strategy, they “should not only tell people about all the restrictions in a protected area but also facilitate for more people to visit the protected areas and then you must have a plan for it”. She argues that the visitor strategy aims to protect the facilitation values, even with more visitors. Yet, she says that, in the management board, they do not necessarily want more people visiting the protected areas in particular, but that they need to be prepared for it, nevertheless. She emphasizes that their main aim with facilitation, in general, is to prevent problems with wear and tear. The informant considers the most important goal of the visitor strategy to be to “welcome [people] into the area but in a way that does not come to the expense of the conservation values”. The other management informant agrees on this, saying that the most important goal is to “manage to protect the conservation values with more visitors”. Yet, she specifies that she thinks all three pillars should be included, also to strengthen local economies. The informant argues that the process of implementing visitor strategies could lead to local managers having “more motivation to actually make contact [with stakeholders] and make a long-lasting plan for how you will maintain the cooperation with the tourism industry (...)”. She argues that local tourism businesses tend to be positive to this type of cooperation and that this is linked to the fact that many of them now have become more concerned about sustainable tourism. She specifies that it, usually, is easier to cooperate with “small-scale stakeholders located in that area” than “the big destination companies”, because the latter lack local affiliation and, thus, lack interest in cooperating. The informant adds another important part of the visitor management process, namely that managers are forced to have a more holistic view “across all municipalities” which the protected areas are part of.

5.4.2 Future development of the protected areas

All informants, except the two management informants, were also asked about how they want the area to be developed in the future. Most informants argue that these areas should not be developed at all, but rather stay in the same conditions as they were in when the protection was implemented. Their arguments are based on the main reason for protection, which is to conserve relatively pristine and wild nature. Yet, one of the local informants states that the areas appear to be protected to be developed because they are facilitated for other people than the ones who have always been there: “[That is] how it seems. Then it’s not protection, then it’s something else ... actually”. One of the regional informants, however, argues that if the managers want more people to visit, it is indeed necessary to develop the facilitation in line with the increasing number of visitors. Furthermore, he emphasizes that it is important to think forward, also when it comes to the use of the areas. According to him, the protection of nature appears to mean that all new forms of activity in these areas are perceived as unwanted, while everything that happened a hundred years ago should be preserved. He says:

(...) [I]f one has said that yes, mountain farming we want to have in our area, we want reindeer herding, we want outdoor recreation, then one must also think that this must kind of be developed in line with the times we live in.

Even though most informants are negative to an increase in the number of visitors, they appear to agree that the management must be prepared for and correspond to the actual and anticipated volume of visitors and traffic. The two regional informants, however, argue that an increase of visitors and development of infrastructure and facilitation is positive because of its public health benefits. Informants working with tourism have

generally divided opinions about this issue because their personal interests differ from what benefits their businesses. Most of them express concern about the increasing number of visitors because of the negative effects on nature. Simultaneously, from a business perspective, they see how more traffic can contribute to the strengthening of their own businesses and the local economy in general. One of them emphasizes that how the areas should be developed depends on the number of visitors. Yet, he argues that it is problematic if the facilitation makes it easier for more people with little knowledge about nature to come to visit. A local informant emphasizes that she does not wish for the development of more modern outdoor activities in these areas. On the contrary, she wishes for a continuation of the current facilitation for traditional outdoor recreation. Yet, she argues, it may be positive to find more environmentally friendly materials to use for facilitation and in this manner develop the facilitation. She believes that the impregnated timber used today might be harmful to the surrounding nature and is more impressed by the new stone steps close to Nedalshytta.

In the visitor strategy, the management board agrees that an increase in the number of visitors is undesirable. Further, it emphasizes the importance of precautionary planning, especially regarding the facilitation for use: "Even though it is not the board's wish for the use to increase, we need to take into account that it might happen" (The National Park Board for Skarvan and Roltdalen and Sylan, 2020, p. 39). As mentioned in section 5.1.3, the visitor strategy is first and foremost focusing on maintaining the opportunities for visitors to use these areas by exercising simple outdoor recreation. It is strengthened also by the vision presented in the visitor strategy: "Welcome as a guest on the premises of nature" (The National Park Board for Skarvan and Roltdalen and Sylan, p. 38).

5.4.3 Cooperation in the development of a new visitor strategy

An important part of the process of making management plans is to involve different stakeholders. Several informants address challenges in the cooperation between different stakeholders and the management in the processes of making a new visitor strategy. A local informant who is also a part of the management board expresses that it is difficult to influence the decision alone:

You have one voice in a board of ten-fifteen, right? You can't influence, but you can come up with arguments. Very often, you have some local knowledge, so that everyone who has something to say know the same and get a better knowledge of the issues and the local conditions. That I think is healthy.

Several local informants having usufruct in the areas express a wish for them to have more authority in the management processes. Additionally, some of them think that landowners should have more control over the use of the areas. Apart from this, the informants are generally satisfied with the dialogue between different stakeholders and management. One of the regional informants says:

As long as we don't get it exactly as we want, it's not quite that great. But (...) it is good, that is, in the sense that we have a frequent dialogue[s]. And we also experience that we (...) are heard and that it is acceptance for our business.

Another regional informant supports this view, while also stressing that it is important for the different actors to "join in when the train leaves" if they want their statements to be heard. Further, he says: "When the train has been going for a while, then it is more difficult to be heard and be taken into consideration". He argues that the process has been positive, including "the administration's attitude to include all stakeholders'

statements". A local informant talks about how they are working on the dialog with other local actors: "We try to (...) balance the way we use the areas so that there is acceptance for it from [the people] it is important to get acceptance from". He considers the tourist association, landowners and reindeer herders as the most important stakeholder to cooperate with.

According to the conservation regulations, organized activities in the protected areas need special permission from the management board before it can happen (Forskrift om Skarvan og Roltdalen nasjonalpark, 2004; Forskrift om Sylan landskapsvernområde, 2008). If the application is rejected, it is possible for the organization to plan the activity to submit a complaint about the decision to the Environment Agency. One of the local informants expresses concern about this practice. He states that the Agency considers all cases individually and therefore fails to see the total impact of these activities. According to the informant, the Agency also lack knowledge and expertise on the conditions in every specific area and how much traffic these areas can tolerate. Another local informant also mentions this problem and that it limits the control of the local management board. The national management informant explains that the people handling such complaints study each case thoroughly. According to her, they also contact local Nature Inspectors or local managers if in doubt or need of more information about the case or local conditions. She emphasizes that an important part of the development of visitor strategies is to have a good dialogue between the agency and the local management boards. The local manager mentions an example where someone applied for an orienteering event. The request was rejected by the local management board but, after complaining to the Agency, it was approved. The informant says that this event alone was no problem, as the number of participants was relatively low. However, she says, it went against their principle of not channeling visitors into that particular area. In regards to cooperation between the management board and local stakeholders, the local manager admits that it might be easy to forget some of the stakeholders in management processes. She says that reindeer herders, for example, can be "perceived as very negative, but it is actually so that they just need to make themselves visible for us to actually pay attention to them". The informant says that the management board has mapped out which tourism businesses that exist in the area but that they have not been involved in the process of making the visitor strategy.

The visitor strategy mentions several stakeholders with whom it is important to have a good dialogue (The National Park Board for Skarvan and Roltdalen and Sylan, 2020). For example, some facilitation initiatives, such as moving a marked path, require permissions from landowners. According to the visitor strategy, the management board is also cooperating with TT and NTT in much of the facilitation, as most of the marked trails in the protected areas are maintained by them. Further, it is mentioned that one should cooperate with the tourism industry, especially regarding information. One of the sub-targets in the visitor strategy is for the tourism businesses to have a better knowledge of the protected areas and the conservation values. It is mentioned, however, that they have not yet obtained a complete overview of the wishes and needs of the tourism industry (The National Park Board for Skarvan and Roltdalen and Sylan, 2020).

5.4.4 Section summary

The informants' opinions regarding the most important considerations in visitor management vary according to their own personal and professional interests. Two informants emphasize a forward-looking and holistic approach, while some local stakeholders focus mostly on the importance of traditional practices. One regional and

one local stakeholder argue that the visitor strategy should focus on tourism but in a balanced and sustainable way. The management informants emphasize the balance of these interests in visitor management. Most informants argue that the management board should aim to preserve the pristine nature and not to develop the area. However, local stakeholders have various opinions because of their different personal and professional roles. When it comes to cooperation in visitor management, several local informants wish they had more influence in the decision-making process. The general view, however, is that the informants are satisfied with the dialogue between the stakeholders and the management board. Some informants are concerned about the Environment Agency overriding local management decisions.

5.5 The conservation paradox

5.5.1 The self-contradiction of the national park status and visitor strategies

Through the interviews, several informants expressed a concern connected to the conservation status given to these protected areas and the impact this may have on the conservation values. It was clear that this is a challenge many locals have given a considerable amount of thought. Several informants argue that by giving a nature area the status of a national park, the area will automatically be given more attention and attract more visitors. A local informant explains:

What is a bit strange about conservation and national park[s], is that it can tend to work against its purpose. By that, I mean that ... a national park, for example, it will be part of a fairly big marketing apparatus. (...) [I]f it had not had that status, visiting it would have been less attractive.

According to several informants, the higher status of the areas leads to more people wanting to visit them and, according to one of the local informants, the emergence of "disturbances that hadn't come if [it] hadn't been protected". Several informants address this self-contradictory part of conservation. Furthermore, an important goal in the new brand and visitor strategies is to welcome more people into Norwegian national parks. Simultaneously, the most important aim of protection is to preserve valuable and vulnerable nature. The informants argue that the increased focus on more visitors will make the paradox an even greater problem. Another local informant says: "In very many areas, it is so that you facilitate for more people to come. It ... it destroys the conservation values. I mean that many areas would have been better off not being protected. He explains that this also applies to the protected areas in this region. The informant says he has experienced increased stress and disturbance to the protected nature as a consequence of the conservation. According to the informant, the result of the protection has been that the people who have maintained the conservation values for generations now have lost control, while the commons have got better access. Several local informants support this aspect. A regional informant says that the protection of an area leads to the creation of "some new lines of conflict" and that he understands why the landowners and the usufructuaries might feel unfairly treated: "It limits their activities, and [it is] kind of disrespectful to the management they have been doing for hundreds of years which makes the areas so valuable, right?". However, the regional informant is personally generally satisfied with these areas being protected: "We must be

very happy that big mountain areas in Norway are protected against, for example, development of wind power". Another local informant agrees and understands that many locals who are strongly connected to the areas, see the management regulations and practices as unfair. She says:

They experience it as a paradox with the visitor strategy that, in principle, one has no mechanisms to control the type of traffic that maybe threatens the conservation values more than the activity of the ones who have mountain farms or are usufructuaries [and] in relation to the ones Sami settlements and such have. That I think is difficult to understand for many [people].

One of the local informants explains another part of the paradox, namely that a situation with more visitors creates a need for more facilitation to avoid the wearing of nature and, further, that more facilitation again attracts even more visitors.

Some informants focus mainly on the paradox of the national park status in itself, while others talk more specifically about the visitor strategy, and that it is a problem that the brand is now being strengthened. Common to both ideas is the argument that it is paradoxical to increase the number of visitors when this can harm the nature one wishes to protect. How the informants consider the possible threat of traffic to the conservation values will be further explained in section 5.5.2 below. One of the regional informants argues that the reasons for visiting are not influenced by the conservation status of these areas:

It is possible that one thinks like far back in their head (...) that protected areas are probably nice, national parks are probably nice. It means that it is pretty and that we take care of it, but for me, it doesn't matter.

One of the local informants doubts that this is the case. On the contrary, he argues, the desire to be able to tell others that you have visited a national park is strong among many of the users. Several of the other informants also believe that the national park status is of importance to visitors. They argue that the protection in itself is an attraction to people and thus generates more visitors.

The local manager says that it can be difficult to balance the amount of facilitation so that it is enough to satisfy the visitors and protect conservation values, but not so much that it generates too much traffic. As an example, she mentions that some visitors have said that in certain areas, such as around Nedalshytta, there are too many people on the trails. She also mentions the stone stairs in Sylan as an example where the facilitation was necessary even though the initiative could lead to more visitors. The manager emphasizes that it is problematic if the number of visitors is significantly increased in these areas and acknowledges that the protection of conservation values and increasing the number of visitors are "opposite poles". She argues that an increase is likely as the areas are located close to an airport and a high-populated region. The informant also mentions that she thinks it, in the general process with visitor strategies, appears to be too little focus on the possible threats of increased traffic.

The other management informant says that it is important to consider the consequences of traffic. Even though she mentions that some national parks have problems with too many visitors, she argues that the main reason for this is the general promotion of these areas, not the visitor strategies. Lofotodden national park in Lofoten is mentioned as an example. She explains that Skarvan and Roltdalen and Sylan are quite complex areas, especially regarding the popularity of the Sylan area. Further, the informant stresses that

it is important to take into consideration the possible future use of the areas when planning and implementing facilitation. She says that a possible and often-used initiative to protect important conservation values with increased traffic is to channel the visitors around the protected area or into the border zones. The informant also emphasizes that the goal to increase the number of visitors applies to the national parks and that this is only a small part of the protected areas in Norway.

5.5.2 How traffic may threaten conservation values

Most of the informants argue that they, initially, are positive to the protection of these areas because it prevents human interventions in nature. The most mentioned of these interventions is wind power plantations, which is currently a highly contested topic in the country. However, one of the local informants argues that protection has led to a new type of intervention: increased traffic. He states that the attractiveness of the areas would have been lower and the traffic less intense without the protection status, even though the protection averts other big interventions: "You can prevent other initiatives, yes, like road-building and snowmobile trails in the protected area and such, but not the free traffic. That is difficult to stop". When asked if he sees a solution to the problem with increased traffic, the informant argues that some restrictions could be possible, particularly closing off roads leading to the protected areas by inserting barriers: "You put a restriction to the access. And you may in form of a regulation deny, for example, entrance to the calving area for reindeer, but that is quite drastic measures that are difficult to implement (...)". Several informants agree that even though the protection is beneficial to stop destructive human interventions, the intensified traffic is a problem and that it is (partly) due to the protected area status. According to a local informant, the protection, as well as former power development in the area, has resulted in more roads and better access to nature. The informants mention several issues with the increased traffic, the most common of which is that it creates a higher pressure upon the grazing reindeer. Additionally, two informants specify that infrastructure, such as parking lots, roads, paths, and buildings, becomes barriers for animals and thus change their migration patterns. One of them adds that the change in migration patterns of reindeer leads to an increase in the use of motorized vehicles to keep them in their designated grazing areas. Other negative effects of the increased traffic to reindeer mentioned by the informants are increased stress levels, and loss of grazing areas and "ventilation areas" (luftingsområder).

One of the local informants argues that also the facilitation in itself might have negative effects on nature. She mentions planks over wet areas as an example. Even though this is a good measure to channel the traffic, one should, according to her, discuss how the impregnated wooden planks might be toxic to the environment. One should thus ask the question of when "the facilitation in itself [becomes] a threat to the conservation values". The informant says that this is a continuous dilemma for the managers. She thinks, therefore, that the stone stairs in Nedalen are a better solution: "It costs money, yes, but it is durable [and] sustainable (...)". Additionally, the informant argues that the management board must have a holistic view on the facilitation of these areas, especially seeing the effects it might have on reindeer herding: "One might say that to have a sustainable, viable Sami reindeer herding is in a way a Litmus test for all the other conservation values. If you take care of that, you have taken care of everything else". The informant thinks, however, that the management board has become more conscious of the life cycle of nature and thus have a more holistic approach.

The local manager explains that an important issue in their work is to “find solutions which can be combined with the operation of Sami reindeer herding”. As this is incorporated in the regulations, the informant argues that it is necessary to recognize which effects traffic might have on it. She mentions the disturbance of reindeer and changes in their migration patterns as examples of the effects of traffic and says that this is problematic for the reindeer herders. The informant understands that the facilitation of these areas “might be a disadvantage to the reindeer herding” as well as some of the landowners who think the traffic is disturbing. However, she states, there are places where some wish for more activities, but the management board is not interested in this.

The other management informant understands that increased traffic in these areas might be problematic, particularly in consideration of the reindeer herding. She says that the high number of visitors in the Sylan area has been especially difficult and that the management board, therefore, wants to channel the users differently. Further, she argues that the local management board appears to have done a good job with their visitor strategy, mostly because they have done careful considerations of the different management measures.

The local manager explains that the dialogue, both with other stakeholders and with the visitors, is important to balance the three pillars in the best way possible. She says that clarifying “that it *is* a balance, to increase the understanding of this for all parties” might help to reduce conflicts. When it comes to the visitors, she argues that a stronger awareness of why the conservation regulations are as they are and that there is a reason behind the decisions made by the management board may have the same effect. The manager emphasizes that their decisions are initially based on the protection of conservation values: “That’s what lies at the top and if we don’t protect that, then it falls away, the basis for all other activity as well. So that is in a way the foundation. We need to protect that.”

As mentioned in section 5.4.2, the management board appears to wish for a continuation of today’s use rather than an increase in the number of visitors or the facilitation for more modern activities. The visitor strategy recognizes, however, that there are certain challenges with visitor management (The National Park Board for Skarvan and Roltdalen and Sylan, 2020). It summarizes the main challenges in the development of the new visitor strategy in three points (p. 38):

- *To be able to protect the conservation values against the trend of increased interest in outdoor recreation and new forms of outdoor recreation (mountain hikes, biking, snowkiting, paddling etc.)*
- *Channeling of traffic so that vulnerable areas are shielded. Challenging to balance this in relation to the existing random traffic.*
- *Sustainable dimensioning of business activities in the areas – providing benefits for nature-based industries such as Sami reindeer herding, cattle farming, mountain farming, hunting, and fishing.*

All three of these points address the difficulty of balancing the considerations regarding use and conservation. The planned facilitation measures presented in the visitor strategy are, however, strongly based on the different vulnerability assessments in Skarvan and Roltdalen national park and Stråsjøen-Prestøyan nature reserve (Lyngstad, Arnesen, Fandrem, & Thingstad, 2017), in Sylan landscape protection area (Høitomt & Opheim, 2018), and regarding reindeer herding (Fjelldriv, 2017)

5.5.3 Section summary

The informants generally see the aim to both have more visitors and protect vulnerable nature as contradictory. The local stakeholders are most worried about this. Some argue that the national park status is counterproductive, and several informants define visitor management as paradoxical. The management informants emphasize the balance between use and protection but agree that this balance can be difficult. Most informants are concerned about the consequences that an increased number of visitors might have in the protected areas, especially regarding the effects on flora and fauna. The effects on reindeer are emphasized by several visitors, who have already experienced some of these impacts. The management informants agree that intensive use is problematic for reindeer, reindeer herding, and other traditional practices are considered in the visitor strategy.

6 Discussion

The results presented in chapter 5 show that the views on facilitation in Skarvan and Roltdalen national park and Sylan landscape protection area are various. The most contrasting perceptions appear to be the ones regarding which stakeholders or factors that are and should be given most consideration in the visitor management. Not only does it vary between different informants but many of the informants also have various views depending on their personal and professional points of view. Furthermore, many informants see a contradiction in the aims of Norwegian visitor management. They describe the focus on encouraging more people to visit the protected areas, while at the same time prioritizing the conservation values, as a paradox. Additionally, there are contrasting views on the opportunities for local value creation. Yet, there are some similarities between the different informants, especially in the perceptions of the current use of these protected areas and how it should be in the future. Most informants are concerned about the current development in the direction of increased traffic and more modern outdoor activities in the areas.

In this chapter, I discuss the results in the context of the objective of the new brand and visitor strategy, the user survey, and relevant theory, as presented in chapters 2 and 3. The discussion examines how and why some interests are considered more in the visitor strategy. Further, it aims to give a better understanding of the informants' perceptions and how they are connected to a broader context.

6.1 Why are Skarvan and Roltdalen national park and Sylan landscape protection area important?

When analyzing the results of the interviews, as well as the user survey and the visitor strategy, it becomes evident that Skarvan and Roltdalen and Sylan are important in different ways. First, for the local informants, the areas appear to be of great personal value. They argued that these are important natural areas to protect, both because of their personal ties to the areas and because of the distinct nature and biodiversity existing here. For several of them, the nature within and around the protected areas is essential for the local culture and practices, most explicitly the traditional mountain farming and the Sami reindeer herding. This becomes clear as some of the informants put a strong emphasis on the importance of ensuring the continued operation of these practices and how the landscape is mutually benefitting from them. The practice of reindeer herding was not only mentioned as something important to protect but was by many informants also seen as a practice that is heavily affected by human traffic. As several informants argued, this is already a problem and they feared that an increase in the number of visitors or an intensified use will make the problem even worse. Second, all informants agreed that the natural features of these areas are important to protect at different geographical scales. Both regional informants stressed that the protection of these areas ensures that they are shielded, particularly from technical intervention, such as wind power constructions. The respondents in the user survey also appeared to, first and foremost, appreciate the beautiful natural experiences these areas can offer as these

are the main motivations for people visiting Skarvan and Roltdalen and Sylan. The managers and the visitor strategy refer mainly to the conservation objectives and, thus, emphasize how the distinct landscapes in these areas make them important to protect at a national, and international, scale. Third, for some informants, the areas were also valuable for their tourism businesses. However, this appeared to be of main interest only for the regional informant working with tourism. He emphasized the importance of having people exercising outdoor activities in the areas, both for the tourism business and for increasing the knowledge and respect for nature among visitors. The other informants who mentioned the value of tourists have personal ties to the areas and their opinions are thus split between what is beneficial to their business and their personal interests. On the one hand, more tourists can generate higher income for the businesses and thus have a positive impact on the local economy. On the other hand, they argued that traffic may have negative environmental consequences. Several informants explicitly mentioned that they have such conflicting views. Yet, as they mostly emphasized the negative effects of tourism, this appears to be of greatest concern to them. The regional informants, however, lack this personal connection, and therefore mainly focused on the positive impacts of visitor use.

6.2 Positive impacts of visitation?

Strongly connected to the perception of these areas' natural features and their importance, are the views on the current and future management and use. According to Gundersen et al. (2011), the use of protected areas in Norway has changed substantially. They address two main reasons for this development. First, there has been an increase in building and constructions in and around mountain areas, which has made the protected areas more accessible for a larger number of people. Second, the concept of outdoor recreation now includes more and new types of activities. Gundersen et al. (2011) argue that these processes have led to a higher number of visitors to the protected areas and more concentrated use. Despite this general development, they argue that the number of visitors to protected areas in Norway is low in an international context. This may be because the promotion of protected areas has, until recent years, not been emphasized in conservation management. Yet, natural experiences, in general, are major tourist attractions in the country, both for domestic and international tourists (Norwegian Environment Agency, 2015). That the government, with the implementation of the new brand and visitor strategies, now wishes to strengthen the protected area brand, shows that conservation management is moving towards an approach with a stronger emphasis on the positive impacts of tourism and outdoor recreation. The positive impacts on public health were the main basis for Meld. St. 18 (Ministry of Climate and Environment, 2016) where the government expressed a goal of increasing general participation in outdoor recreation. Furthermore, the positive effects of tourism and visitation in protected areas constituted the foundation on which the new brand strategy built. This conforms to the approach of Leung et al. (2018). They recognize the problematic sides of tourism in protected areas but have a strong focus on potential positive effects.

In the context of Skarvan and Roltdalen national park and Sylan landscape protected area, and large Norwegian protected areas in general, outdoor recreation is part of the conservation values or objectives (Forskrift om Skarvan og Roltdalen nasjonalpark, 2004; Forskrift om Sylan landskapsvernområde, 2008; Gundersen et al., 2011). What is safeguarded in the regulations is the use of these areas for traditional outdoor recreation

which needs little technical facilitation. The results show that the general perception of the use in these areas is that it complies with this simple recreational use. According to the user study, this is also what most of the visitors are interested in and. All informants appeared to agree that traditional use and outdoor recreation is positive, both because they think it is good that people experience the beautiful nature, because it can contribute to local value creation, and because this type of tourism does not require a high level of technical intervention in nature. Furthermore, the Public Right of Access to the outdoors is an important part of the Norwegian recreational culture. As several informants argued, this gives the concept of outdoor recreation a strong position, also in the context of protected nature. This can provide some challenges in visitor management (Vistad & Vorkinn, 2012). Gundersen et al. (2011) argue that, in Norway, one must be careful with regulations that compromise on the Public Right of Access. Thus, restrictions regarding reducing traditional outdoor activities, for example as suggested in one of the common approaches to limit negative impacts from use, are not perceived as a positive way to regulate tourism in the protected areas. It is clear, both from the user study and from the interviews with stakeholders and management authorities that the area is well-used for outdoor recreational activities. As argued here, the traditional outdoor recreation stands strong in the Norwegian culture and is, therefore, difficult to control even in protected areas.

The stronger managerial emphasis on the positive effects of tourism and outdoor recreational use substantiates that the use intensity in Skarvan and Roltdalen and Sylan also will increase in the future. Additionally, the informants argued that the proximity to the Trondheim region and the airport makes these areas accessible for local visitors as well as tourists coming from other parts of the country or from abroad. Furthermore, the connection to Sweden may lead to an increase in more modern activities also on the Norwegian side. Even though it was not very high among the respondents in the user survey, the interest for modern outdoor recreation may be larger in the population in general, as the self-registration boxes in the survey were placed along popular trails and entry points. It is likely that the use along these trails for the most part includes hiking or traditional harvesting activities in the summer season. One of the informants addressed this problem. He argued that the user study is problematic as it includes only the visitors who are already using the areas in a specific way and compared it to asking people in church if they are Christians. However, in the subsequent web-based survey, the respondents were also asked about their activities throughout the year and traditional outdoor recreation was once more clearly most popular. Furthermore, the objective of the user study was, after all, to examine the existing use of the areas and the motivations behind it. By founding the visitor strategy on the user study, the management approach is clearly connected to the ROS framework. Beyond the description of user patterns, the user study includes motivations for visitation and the visitors' facilitation preferences. The Purism Scale is also applied. However, since the user study mainly focuses on the existing use, it does not investigate the possibilities to increase the opportunities for other types of recreation. Likewise, the visitor strategy builds on the existing use and facilitation as described in the user study and, thus, avoids planning for more diverse recreational opportunities. The visitor strategy does include some examples of places they want to reduce the amount of traffic and places where more traffic is acceptable, especially when planning entry points. These zones are pointed out according to the conducted vulnerability assessments for the area but not on the background of the opportunities for outdoor recreation. To facilitate various opportunities is an essential part of the ROS concept (Clark & Stankey, 1979). Yet, as the

informants expressed in the interviews, more modern activities are not desired in the study area. Furthermore, the goal of maintaining traditional use and simple facilitation is legitimized both in the management regulations and in the user study. While the development of modern activities in the area is not desirable, the informants were most concerned about increasing the *amount* of traffic. One of the local informants said:

I think the principle of simple facilitation is nice. It is a good thing that people are there and exercise simple outdoor recreation (...), but at the same time, I see the challenge that we should not have much greater visitor pressure than we already have.

This statement summarizes what appeared to be the general view of the informants. The emphasis on the intensity of use and the number of visitors is connected to the current goal of having more people into protected areas in general. The informants argued that this increase can be harmful to the conservation values and that it does not correlate with the protection objectives. The most frequently mentioned challenge with increased traffic is the disturbance of wildlife and, most importantly, reindeer. Several informants argued in the interviews that unacceptable negative effects of tourism are already evident in the protected areas. For example, the wear of the vegetation was the reason for building the stone stairs in Sylan where the traffic is most intense. As mentioned, several informants had different attitudes according to their roles connected to the protected areas. In the arguments on impacts of use, most of the local informants appeared to talk from a personal perspective, emphasizing the importance of protecting their local natural and cultural landscapes. Furthermore, they appeared to base their arguments on their first-hand experiences of the use and its impacts. The effects of use in the areas may, therefore, seem closer to them. The local manager and the national park board share the view that an increased number of visitors is undesirable. Thus, the increasing national emphasis on the positive effects of visitation is less evident in the management of Skarvan and Roltdalen and Sylan.

6.3 Facilitation approaches in the study area

One of the informants argued that the high standard offered at some DNT cabins, for example, is not simple facilitation. However, even though these cabins offer three-course dinners, alcoholic beverages, and, as for one of them, a sauna, they do not encourage people to exercise more modern forms of outdoor recreation. Nevertheless, with a higher standard, these cabins may attract other user groups than the self-serviced and non-serviced cabins do. Another reason for this opinion may be that this standard does not conform to the general perception of traditional outdoor recreation. However, most of the informants perceive the physical facilitation in the protected areas as simple and complying with the aim of facilitating traditional outdoor recreation. According to the user study, the visitors are generally satisfied with the current facilitation and it appears to comply with their use of the areas (Selvaag et al., 2017). Marked trails and tracks and planks over wet areas were important features in an outdoor recreation area for the respondents. Several asked for even more logs and planks along the trails. These facilitation measures are also central in the visitor strategy (The National Park Board for Skarvan and Roltdalen and Sylan, 2020). The existing facilitation in Skarvan and Roltdalen and Sylan can, for the most part, be described as "hardening" initiatives as presented by, among others, Leung et al. (2018) and Mason (2005). As many parts of these areas are characterized by wet ground and mires, many trails are partially covered

by planks. Together with marking the hiking paths and skiing tracks, putting out wooden planks and bridges over wet areas is what is usually meant by facilitation in protected areas in Norway (Gundersen et al., 2011). This initiative may have two purposes. Firstly, as Leung et al. (2018) argue, the hardening of the resource (the landscape) aims to increase its durability and resilience and, thus, limit the impacts of use. The hardening of hiking trails by using stones or planks has a well-documented positive effect on reducing the vulnerability of an area (Hagen et al., 2019). Secondly, such initiatives make the areas more accessible and easier to use for visitors. Some informants argued that putting planks over wet areas often is essential to make it achievable for visitors to walk the routes between the tourist cabins in one day. The hardening approach can, therefore, be beneficial both for the managers working to protect conservation values and for the visitors. Both purposes appear to be part of the reasons for the planks and bridges in the study area. Yet, the local manager argued in the interview that the management board first and foremost facilitates to protect vulnerable nature. One of the local informants was skeptical, however, about putting out more planks. He was afraid that a large number of planks at the start of trails may encourage more people to walk in these areas. Furthermore, he argued that a higher number of visitors will have insufficient hiking skills or equipment, as the routes can be perceived as easier and more facilitated. Both Mason (2005) and Hagen et al. (2019) argue that although the hardening initiatives in many cases are an advantage for managers, they can make the site more attractive to users and, thus, lead to an unwanted increase in the number of visitors and more negative impacts. Therefore, facilitation may, eventually, result in the need for even more facilitation. As the connection between visitor behavior and facilitation is complex and often difficult to predict, an adaptive, or objective-based, management approach can be useful (Gundersen et al., 2011; Hagen et al., 2019). By testing a facilitation initiative, managers can see its effects and evaluate if the initiative contributes or not to achieving the established management objectives. Based on this, the initiatives can be adjusted or removed. According to the visitor strategy, it is supposed to be revised after the end of the implementation period (The National Park Board for Skarvan and Roltdalen and Sylan, 2020). In this way, the strategy has an adaptive approach. The basis for potential adjustments is not explicitly mentioned in the visitor strategy. As emphasized in the LAC concept, this basis should be defined by measurable indicators (Stankey et al., 1985). However, it appears that the traffic counters will continue to be operative in the area also in the future. This can show an increase or decrease in the traffic intensity. In the interview, the local management informant mentioned that they had earlier seen how certain facilitation initiatives had had effects on the intensity of traffic in that area. This can, thus, be an indicator on the limit of acceptable change. Yet, there are only a few such traffic counters in the area, and there can be several reasons for the changes in use and user impacts.

Facilitation can, in addition to the management of paths and trails, include information initiatives. In the context of the Norwegian management system, the managers have the most leeway to influence the visitors through physical facilitation and spreading of information and knowledge about the conservation area (Hagen et al., 2019). Both the interviewed informants and the respondents in the user survey wish for more relevant information. According to the user study, the most important information for visitors is maps over trails and routes, trip advice, and other information regarding outdoor recreation. The informants, however, are more concerned about spreading more knowledge about the nature and conservation values in the area, as well as instructions on how to behave in a protected area. They argued that the current information is

insufficient, and some were concerned that the visitors do not read it. Even though the user study showed that many respondents had found information on beforehand, it is likely that they focus on the information regarding outdoor recreation, rather than seeking knowledge about the conservation values. Currently, these two types of information are highly spread out on the internet. Websites giving information on outdoor recreation rarely include information from the management authorities and vice versa. Thus, even though most of the respondents perceived it as easy to find information, it is probably not the type of information that managers would define as important for the management objectives. The management board now appears to focus more on making information that is both relevant for recreationists and visitors in general and beneficial for the regulation of traffic.

6.4 Considerations in the visitor strategy

6.4.1 Visitor considerations

The implementation of visitor strategies is seen as a tool to balance the considerations of the visitors and nature while trying to increase the number of users and the local value creation (Norwegian Environment Agency, 2015). These considerations are also at the core in the visitor management concept in general and, managed appropriately, this balance should both improve the visitor experiences and the local economies, and contribute to the achievement of management objectives. As each protected area is different, it is essential that the visitor strategies are developed in the context of the local conditions for it to be as efficient as possible (Gundersen et al., 2011; Leung et al., 2018). In Skarvan and Roltdalen and Sylan it is, for example, important to consider the impacts of use upon reindeer. As presented in the results chapter, the visitor strategy for these areas is mostly building the future facilitation upon the existing entry points and network of trails. This is arguably beneficial for visitors, especially those who have visited these areas before, as the routes and entry points will be predictable. Even though the visitor strategy presents some changes to entry points, mostly removing some of them as official entry points, there will still be convenient entry points in each of the municipalities in which these protected areas are located. The changes to trails presented in the strategy are mostly regarding small parts of the routes only. Multi-time visitors will likely, to a large extent, accept such changes as the remaining parts of the trails stay unchanged. Yet, these planned changes are initially based on the concern for conservation values.

One of the most mentioned issues in the interviews regarding the facilitation of these areas was the quality of relevant information. The general perception among the informants was that it was insufficient. The local manager also agreed on this. The visitor strategy is therefore highly emphasizing information initiatives, both physically in and around the protected areas and online. The existing information materials will be updated according to the new brand strategy and contain the portal logo, which symbolizes that the protected areas are inviting visitors in. The focus on information in the visitor strategy has a clear parallel to the idea that enlightenment through appropriate information can be a positive way to better regulate the visitors' behavior and their spatial distribution (Gundersen et al., 2011; Hagen et al., 2019). Furthermore, the management board's emphasis on information measures is natural as most of the visitor facilitation that is and will be done by the managers regard different types of information

initiatives. This is because most of the physical facilitation out in the protected areas, like the marking and maintenance of tracks, is carried out by DNT. Moreover, “hard” restrictions beyond those stated in the protection regulations are not commonly used in Norwegian management. Information initiatives are therefore important tools for the managers to control tourism in such areas. Mason (2005) argues that an educational, or “soft”, approach in visitor management can be beneficial. This includes the altering of visitor behavior and attitude towards nature through interpretation. Even though the management board in the visitor strategy mentions that the information material should include information that may increase visitor experiences (such as routes, accommodation, and attractions), they first and foremost focus on information that could benefit the conservation values and lead to better regulation of the visitors. The information relevant to outdoor recreation and tourism will also encourage visitors to seek particular places where the managers want them to go, and despite the concern expressed by some of the informants that the information will not be read, around half of the respondents to the user study did gather information about the area in advance of their visit(s) (Selvaag et al., 2017). The instructions on how to behave in nature clearly aim to protect natural values. However, their potential contribution to lower the impacts of use may eventually benefit users, as the area, to a greater extent, will maintain its natural features. These features are often the main reason for a person to visit the area. Furthermore, the interviewed local manager emphasized that another important aim in visitor management is to clarify for all stakeholders and visitors that the management board is balancing several considerations. This is also one of the reasons behind the focus on information in the visitor strategy. Gundersen et al. (2011) argue that by spreading knowledge about the cultural and ecological values in protected areas among the visitors, their recognition and appreciation of the protected area management can be strengthened.

6.4.2 Considering local value creation

One of the positive impacts of having more tourists in the protected areas is that it can contribute to the strengthening of local economies. Some of the local informants argued in the interviews that there is little potential for tourism businesses within the protected areas. Most of them are concentrating their work in the surrounding natural areas. Some stated that there was little emphasis on local value creation from the management’s side. The local manager, however, stressed that it is up to the tourism businesses to take advantage of the opportunities which come with the national park and the other protected areas. This was also mentioned by some of the other informants. Yet, the local manager said that some facilitation initiatives can contribute to local value creation in addition to being a measure to strengthen the conservation and visitor experiences. Furthermore, she says that even though an increased number of visitors within the protected areas is unwanted, she wishes for more tourists in the surrounding villages. Based on the visitor strategy, the management board aims for more cooperation with the tourism industry in the future, even though their needs have not been completely mapped prior to the work with the strategy (The National Park Board for Skarvan and Roltdalen and Sylan, 2020). In general, the visitor strategy tends to present the strengthening of the local economy as a positive ripple effect.

The information material described in the visitor strategy is mainly textual. Additionally, it is mentioned a plan to create more visual materials, especially using informatory film clips. Both Hagen et al. (2019) and Mason (2005) suggest the use of guides as an efficient way to spread information and increase the visitor experience. As Hagen et al.

(2019) mention, guides and personal communication is rarely used as information sources in Norwegian protected management, except at Svalbard where most visitors use guides. They believe that the potential for guiding is large, also on the mainland, and say that this could be beneficial both for the visitors, the conservation values, and for the local economy. One of the interviewed informants, however, argued that very few domestic visitors are interested in being guided. He explained that most Norwegians believe that they already have sufficient knowledge and skills to experience these areas by themselves. Another reason could be that most visitors are exercising outdoor recreational activities. Outdoor recreation is, among Norwegians, usually associated with activities done individually or in small groups, such as friends or family. The informant argued that if you want to work with guiding you must turn to international tourists. As most of the visitors to Skarvan and Roltdalen and Sylan are domestic and a relatively high amount are locals, the current potential for guiding in this area appears to be relatively low. Personal communication could also be used in visitor centers. The interviewed local manager says that a visitor center closer to the connected areas would be positive and especially one that focuses on the Sami culture. The closest national park center is now at Røros, but an idea about a similar center is briefly mentioned in the visitor strategy (Selvaag et al., 2017; The National Park Board for Skarvan and Roltdalen and Sylan, 2020).

One of the regional informants argued that the management board should work more on facilitating the surrounding areas if they want to have more visitors here. The network of trails is coherent throughout the protected areas and their surrounding natural areas. All the entry points are located outside the protected area borders, whereas some are very close and others further away. As the marked trails are connected and eventually leading into the protected areas, they also encourage visitors to continue into a more vulnerable nature. A possible solution could be to facilitate shorter routes in adjacent natural areas or in the border zones which is not connected to the main network of trails. They could be single-day routes, especially if they are partly located in a protected area or multi-day routes outside the protected areas. The former alternative would permit people to walk into protected areas while being to minimal disturbance. The latter alternative could go by places where camping is of minimal disadvantage to nature. The visitor strategy mentions another alternative, namely the creation of a viewpoint close to the protected areas. One such viewpoint which is well-known in conjunction with protected areas in Norway is Viewpoint Snøhetta, situated close to Dovrefjell-Sundalsfjella national park (Nasjonalparkriket, n.d.). This has become a tourist attraction in itself, both because of its architecture and its view into the national park and the Snøhetta mountain. However, a viewpoint requires quite extensive facilitation and infrastructure and the national park board has not found a suitable place for this close to Skarvan and Roltdalen and Sylan (The National Park Board for Skarvan and Roltdalen and Sylan, 2020).

6.4.3 Considering the protection of conservation values

The visitor strategy for Skarvan and Roltdalen and Sylan does not aim at increasing the number of tourists within the national park or the landscape protection area (The National Park Board for Skarvan and Roltdalen and Sylan, 2020). However, they wish to maintain the existing use. The planned initiatives are relatively small-scale measures and are likely to contribute to a continuation of the traditional outdoor recreational use. The interviewed local manager said that the management board is not interested in more modern use in the future. They are not planning to facilitate such use in other surrounding areas. However, as one of the local informants argued, it may be difficult for

the management board to be able to stop such use if it becomes widespread in this area. Snowkiting, for example, is allowed in protected areas and can, therefore, be difficult to regulate. The most effective means in the visitor strategy appears to be to spread information about the potential impacts such use may have on the conservation values. Biking, dog sledding on dryland and organized horseback riding is only allowed on particularly designated trails and will not be permitted in other areas (The National Park Board for Skarvan and Roltdalen and Sylan, 2020). Apart from these activities, the national park board is not working on zoning different types of activities to different places in or around the protected areas. However, by channeling the traffic, the intensity of use is concentrated to smaller areas and the visitor strategy, therefore, has a zoning approach. This channeling of use can be seen, not only as a regulation initiative but also as a way to create opportunities for visitor experiences. As the visitors in this area are generally low-purists and to a high degree appreciate the current facilitation, these measures will encourage them to use the area. Even though the management board initially facilitates the protected areas to limit negative impacts, the channeling approach would not work well if the visitors were critical to such facilitation. Gundersen et al. (2011) argue that the visitors' attitudes towards different types of facilitation are connected to the potential efficiency of the facilitation initiatives. It is essential to understand the visitors' expectations and facilitate in a way that matches these expectations, which is why "Recreational Opportunity Spectrum-based planning and zoning are so important in protected areas" (Spenceley et al., 2015, p. 738).

The protection of the conservation values, including natural and cultural features, appears to be the main concern in the visitor strategy. The strategy builds upon a knowledge foundation that includes visitor preferences and their use of the study area as well as several vulnerability assessments. The choices that are made about changes on the trails and entry points are to a large extent based upon advice from the vulnerability assessments. Yet, the user study shows that the visitors are likely to accept these changes and that it would not be to any disadvantage for them. The planned visitor management, thus, conforms to the management objectives. It also correlates with the general view of the informants. As the respondents in the user study were generally satisfied with the state of the facilitation and the opportunities for outdoor recreation in this area, it is likely that they will continue to be positive to the future facilitation. However, the visitor strategy is not aiming at increasing the number of visitors within the protected areas but rather to maintain the current status. As this is based on the principle of prioritizing the conservation values, it is not necessarily opposed to the Environment Agency's guide to visitor management. As Leung et al. (2018) argue, strategies regarding tourism should be "consistent with conservation" (p. 28). The interests of users should not compromise on the aims of conservation. Nevertheless, for visitor management to be successful, it is important to facilitate according to visitor preferences (Hagen et al., 2019). The visitor strategy for Skarvan and Roltdalen and Sylan considers this and is careful not to make too significant changes, as the visitors appear satisfied with the current facilitation. Additionally, many of the current and planned facilitation measures are, or can be, beneficial both for the nature conservation, the tourism businesses, and for the visitors.

The visitor strategy mainly has a channeling approach, where the management board tries to limit the disperse of use. Leung et al. (2018) argue that this can be useful to reduce negative impacts by limiting those impacts to a smaller area. They call such an area a "sacrifice zone". Yet, the concentration of use may have negative social impacts (Gundersen et al., 2011). According to the user study, visitors in Skarvan and Roltdalen

and Sylan prefer not to meet too many people when using the area (Selvaag et al., 2017). If the intensity of use is high and this use is channeled to smaller areas, the visitor experiences could be reduced. Additionally, as Gundersen et al. (2011) mention, the impacts of use may become more visible for visitors when limited to particular areas. However, the impacts of use may to a larger extent overlap with vulnerable areas if the distribution of traffic is more dispersed (Hagen et al., 2019). Several interviewed informants argued that the measures in the visitor strategy should be precautionary and forward-looking. The precautionary approach is also an important principle in the Nature Diversity Act (2009). In the visitor strategy, it is stated that it is important to take an increase in the number and intensity of use into account, even if it is undesirable. One of the local informants argued that it is essential that the managers evaluate how their current and planned facilitation initiatives may have consequences in the future. Additionally, she believed that they should have a holistic view on the relationship between the facilitation, the use of the areas, and the impacts of use. The importance of a long-term holistic view is also stressed by Leung et al. (2018). They argue that a proactive and forward-looking approach contributes to the visitor management being more effective. The adaptive management process of trying, monitoring and adjusting is essential in this process. The visitor strategy and the planned facilitation and information initiatives will be evaluated in later years.

The visitor strategy clearly states that the management objectives should be the main priority in these areas and that an increase in the visitor volume is undesirable. Several local informants with roots in traditional practices argued that these practices should, to a greater extent, be considered in the general management of the protected areas because of their important position in both the cultural and natural landscape. One of them wished that these practices should be in focus rather than creating and supporting newer industries. It is also argued that the continued operation of Sami reindeer herding and traditional mountain farming is one of the management objectives included in the management plans for these areas. In the visitor strategy, the management board is supporting this view by especially emphasizing the importance of safeguarding traditional practices.

Tourism in protected areas is important for the local and national economy, but it can also contribute to a better understanding and acceptance of the conservation of nature (Leung et al., 2018; Spenceley et al., 2015). The latter factor is not much considered for in the visitor strategy for Skarvan and Roltdalen and Sylan, even though it is one of the reasons for the development of a new brand strategy (Norwegian Environment Agency, n.d.-c). One of the regional informants argued in the interview that by encouraging more people to participate in outdoor activities, one could increase their respect of nature and thus their acceptance of the protection. The other informants did not mention this potential positive impact.

6.5 Paradoxical visitor management?

The Norwegian Environment Agency (2015) emphasizes the importance of a sustainable *balance* between use and protection. Visitor management should consider visitor experiences, local value creation, and conservation values simultaneously. This balance was also emphasized by the management informants in this study as well as in the visitor strategy. Figure 10 shows that the visitor strategy is balancing between these three interests and purposes. It can be pulled towards the different interests according to what is considered as most important in local visitor management. Yet, the visitor

strategy strives to balance in the middle. The balance may be seen as an attempt at compromising the interests in a way that is acceptable for all stakeholders. Visitor management, however, often builds on the idea that visitors, local economies, and conservation values can mutually benefit from this balance. For example, the new brand and visitor strategies wish for better protection of nature by encouraging more people to visit and, thus, increase the general knowledge about nature (Norwegian Environment Agency, n.d.-c).

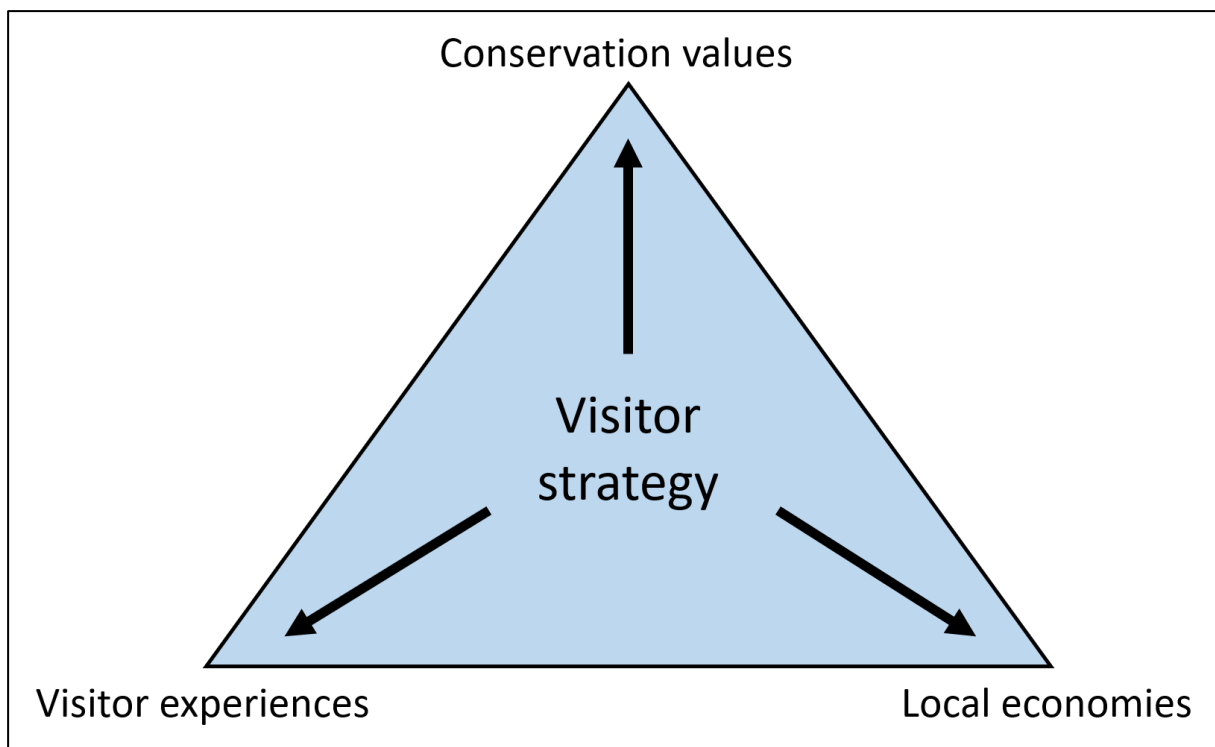


Figure 10: The balance of interests in visitor management. The figure shows how a visitor strategy can be pulled in different directions towards the different groups of interests which should be considered in visitor management: visitor experiences, local economies, and conservation values.

This visitor management approach highly conforms to the approach of Leung et al. (2018). The Environment Agency emphasizes the potential positive impacts of tourism yet acknowledges the need for specifically defined strategies as a tool to handle, limit, and prevent the potential negative impacts. The positive attitude towards increased visitation in Norwegian protected areas can be compared with this more general win-win discourse. The management's emphasis on how an increase in visitor volume can contribute to nature conservation presents visitor management as something both visitors, stakeholders, and nature will benefit from. For example, it is argued that by strengthening the visitor experiences, more people will engage in outdoor recreation, the public health will be improved, and the local economies will be strengthened. Furthermore, this can create "acceptance for shielding other, more vulnerable areas" (The Norwegian Environment Agency, 2015, p. 21).

Similar to the win-win discourse on nature protection, the positive approach to visitor management has also been challenged by other views. In the interviews, several local

informants argued that the objectives of visitor management are contradictory. They believed that, instead of being mutually beneficial, the different goals will work against each other and be mutually disadvantageous. That the Environment Agency is now aiming to both increase the number of visitors and protect vulnerable nature is, therefore, a paradox, according to several informants. The skepticism of these stakeholders somewhat mirrors the earlier general approach to visitor management, where the focus was on limiting the negative impacts of visitors (Mason, 2005). Leung et al. (2018) also argue that the management objectives can be conflicting and emphasizes that tourism can only be a positive contribution to conservation if managed appropriately. Some informants argued that the paradox also lies in the conservation system. They stated that the contradiction in the management objectives is increased because the labeling of an area as a national park automatically makes the area more attractive to visitors. Because of this, one of the informants said that he thought "many areas would have been better off not being protected". When the management authorities are aiming at a higher number of visitors on top of this status, these informants were afraid that the pressure upon the protected nature will be too much. The user survey, however, shows that the fact that these areas are protected did not matter very much to the respondents, even though most of them knew that the areas were protected before visiting (Selvaag et al., 2017). There are two problems with this. First, the national park, or protected area, status may lead to more attention towards these areas in general, making sure that more people know that they exist and find information about them. Second, the importance of the conservation status can be subconscious so that, when responding to the survey question, they would believe that the status was less influential than it actually was. Furthermore, according to the user study, this status is generally of higher importance for international visitors than for the domestic ones (Selvaag et al., 2017). As international tourists often seek the Norwegian nature when visiting the country, a stronger branding of the national parks may lead to a higher volume of international visitors to the protected areas in addition to those already visiting.

The definition of the combination of use and protection as a paradox arguably emphasizes the potential negative impacts of visitation. This view is built on personal experiences of use leading to damage or disturbance of nature. Furthermore, it is based on a fear that a stronger emphasis on more tourism will be at the expense of nature conservation and, thus, increase these negative impacts. Therefore, the view of visitor management as contradictory supports the central approach in the radical discourse on nature protection. This discourse criticizes the win-win approach for not practicing real local participation. Furthermore, it sees the traditional practices as sustainable use of local resources (Benjaminsen & Svarstad, 2017). Similarly, the support of the radical discourse was represented in the interviews in two main ways. First, several informants implicated that they wish they had more influence in management decisions. At least some of these informants were also part of the management board. Yet, several were critical to the way final decisions can be made by the Environment Agency. Furthermore, one of the local informants argues that the management board has few mechanisms to control undesired types of use. This also shows that the regulation initiatives, which are part of the four strategic ways to limit negative visitor impacts, are difficult to use in Norwegian visitor management. Second, several informants emphasized the importance of protecting local traditional practices such as mountain farming and reindeer herding. They argued that this is essential both for the local culture and for the maintenance of

the natural landscape. This is also supported by the view that Skarvan and Roltdalen and Sylan would be better protected if they did not have official protected area labels.

Nevertheless, all the informants were concerned about protecting the valuable nature of Skarvan and Roltdalen and Sylan. Moreover, most of the local stakeholders argued that local participation and maintenance of traditional practices first and foremost is important for nature conservation. The paradox emerges because the different interests or goals in visitor management (as seen in Figure 10) do not have the same starting point. Campbell (1996) presents a triangle similar to Figure 10 for sustainable urban development. He argues that the balance of all these goals is seen as the ideal. Yet, planners often end up representing one of them. According to the Environment Agency (2015), there is a clear principle in visitor management of protected areas: The considerations of visitors and the local economy should not be at the expense of the protection of nature. In a situation with a conflict between interests, conservation values should always be prioritized. According to several informants, this is not the case in the nature conservation system, especially regarding the new and increased focus on having more visitors in protected areas. The conservation values are, thus, considered higher than the other goals, also by the local stakeholders. Therefore, even though Figure 10 presents the different interests as though they have the same starting point, the conservation values will always have a head start. This was emphasized by the management informants in this study. For example, they both agree that the main reason for facilitation in protected areas is to “counteract wear and tear”, not to promote visitor experiences. However, they clearly strive towards a balance, even though they argue that it may be difficult. The visitor strategy also presents this balance as the main goal of visitor management. Yet, as it appears to rely mostly on the vulnerability assessments and little on tourism, it implicates a strong emphasis on the conservation values (The National Park Board for Skarvan and Roltdalen and Sylan, 2020). Thus, the views on visitor management presented by the local stakeholders and the management board correspond to a relatively high degree. Neither the stakeholders who defined visitor management as paradoxical nor the visitor strategy are necessarily critical to all use but rather to more intense use than is seen in these protected areas today. Furthermore, the local stakeholders appear to refer to the visitor management in general as contradictory, not the one in Skarvan and Roltdalen and Sylan in particular.

The balance between use and protection is an important issue in conservation in general. Hagen et al. (2019) argue that it is difficult to generalize how use may affect nature as it depends on spatial and temporal factors as well as what types of activity are being exercised and to what extent. A comprehensive understanding of the use in the areas is therefore important and this is the background for the user studies conducted in conjunction with the development of the visitor strategies. Furthermore, Leung et al. (2018) address the challenge of weighing positive and negative impacts against each other. They argue that adaptive management with continuous monitoring and evaluation is essential when trying to handle this balance. This can make it easier to understand the effects and impacts of facilitation initiatives. Some informants, however, do not consider the potential positive impacts of tourism, while others argue that it is the extent and type of use that can be problematic.

6.6 Future use

The critical view among most of the informants upon the aim of increasing the number of visitors to Norwegian protected areas shows that they emphasize the importance of maintaining the traditional and pristine characteristics of these protected areas. Even though the visitor strategy somewhat opposes the national goal, the informants' reactions and concerns are understandable. The strengthening of the protected area brand may in itself lead to more intense tourism in these natural areas. By experiencing the impacts of use upon the natural and cultural landscapes and practices first handed, they have become skeptical of this development. Yet, tourism can as well give more acceptance of and support to conservation processes and contribute to the local economy. This view was emphasized by the regional informant working with tourism. He argued that having more people out in nature would help them love nature more and thus encourage them to take better care of it. As Spenceley et al. (2015) argue, the protection of pristine nature is important also for visitors as it is already seen as one of the most valuable tourist attractions.

Although most of the informants fear an increase in the number of users, the national park board has a strong emphasis on the protection of conservation values. However, as Leung et al. (2018) argue, there are a number of social, economic, and environmental factors that could be changing in the future, making it more difficult to plan for long-term management. Some examples are climate change, globalization, changes in user patterns, demographic development, and new technologies (Eagles et al., 2002; Leung et al., 2018). Even though these developments are likely to happen, it is difficult to estimate how they will affect different protected areas and tourism within them. This emphasizes the importance of a flexible adaptive management approach, where both the impacts of the management facilitation upon visitors and the impacts of visitors upon the conservation values are regularly evaluated and adjusted. Different factors of change, such as regional population growth or tourism development on the Swedish side of the border, may lead to more visitors in the future, also in these protected areas. Such development may also lead to changes in the preferences of the visitors. Additionally, some impacts of tourism are already seen in these areas. However, Gundersen et al. (2011) argue that the main priority for managers should be to focus on handling the challenges and issues which are possible for them to control. Thus, the channeling of tourists and facilitation for a certain use is the most important tool in visitor management. This is also strongly emphasized in the visitor strategy. As the strategy is founded on a knowledge base concerning both the interests of the visitors and the vulnerability of the conservation values, the management board will have an assumption regarding the effect of their facilitation initiatives. As the changes presented in the visitor strategy are relatively small, the existing multi-time visitors are likely to adapt to them. The fact that most visitors follow existing trails, also makes such channeling more successful. Additionally, the visitor strategy will be evaluated after the end of the implementation period. This may make it easier for the management board to understand the effects of their facilitation and will make it possible to change, remove or develop their visitor management approach in the future.

7 Conclusions

7.1 Concluding remarks

This study of Skarvan and Roltdalen national park and Sylan landscape protected area has examined how the perceptions of visitor management among local and regional stakeholders as well as managers differ according to their personal and professional values and interests. Their perceptions mirror the various, and somewhat conflicting, considerations which must be taken into account when developing and implementing a visitor strategy. Furthermore, the visitor management process can be viewed in an optimistic or pessimistic way. By experiencing the impacts of use upon the natural and cultural landscapes and practices first handed, several informants argued that the management objectives are contradictory. In this view, visitor management becomes a paradox, including the conflicting considerations of use and conservation, where the potential negative impacts of tourism overshadow the positive ones. As seen in the thesis, this view emerges because, in the concept of visitor management, the conservation values are meant to be prioritized. Nevertheless, tourism in protected areas can give more acceptance of and support to conservation processes and contribute to the local economy. These positive impacts of use require an appropriate management and facilitation approach, and visitor management thus involves a balance between use and conservation. This optimistic view emphasizes how visitors and nature mutually benefit from each other and is the foundation upon which the new brand and visitor strategies are built.

The visitor strategy for Skarvan and Roltdalen and Sylan presents, however, an approach somewhere in between these optimistic and pessimistic views. With a strong emphasis on the importance of protecting natural and cultural conservation values, it aims to maintain the current traditional recreational use of the protected areas. An increase in visitor volume is undesirable. Even though this approach is not explicitly conforming to the aim of the national visitor management, it is in line with both the conservation objectives and the interests of the visitors in the study area. The management board is clearly facilitating with the intention of protecting vulnerable nature from negative user impacts. Yet, as this study shows, the facilitation and information initiatives are likely to create sufficient and relevant opportunities for the existing type of visitors. The strengthening of local economies, however, is of little emphasis in the visitor strategy although the study area appears to have the potential for such development. A stronger focus on this and better cooperation with local and regional tourism businesses could lead to acceptable facilitation for more diverse activities, which could be beneficial for other visitor groups as well. Both the informants in this study and the local management board are torn between a wish for more opportunities for tourism businesses and the reluctance of having more visitors within the protected areas. This study suggests for the management to consider more diverse facilitation in the surrounding natural areas and the border zones. This could serve two functions. First, the facilitation of shorter hiking or skiing routes may attract other visitor groups, which can contribute to more diverse opportunities. Second, as several informants argue for the important motivational role of the national park status, routes in the border zones can create alternatives for visitors

mainly wishing to experience the national park, without them being disadvantageous for vulnerable conservation values.

The national visitor management objectives conform to the international development of visitor management, such as the guidelines promoted by the IUCN (Leung et al., 2018). It represents a win-win discourse on the relationship between use and protection and strongly emphasizes the mutual benefits of tourism. Similarly, the struggle to combine different considerations in visitor management is not unique to Skarvan and Roltdalen and Sylan. The views of local stakeholders in the area can be compared to a general critique of the win-win approach of visitor management. However, both the informants and the visitor strategy are highly emphasizing the conservation values. This equal prioritization of the protection of vulnerable nature may lead to less local conflict. However, it can also lead to more static management and facilitation where potential positive effects of visitation are missed out on. Stronger use of the concepts in the ROS and LAC frameworks, for example, as described by Gundersen et al. (2011), could have contributed to the facilitation of a wider specter of opportunities for outdoor recreationists.

7.2 Reflections around the study and the need for further research

This study on visitor management in Skarvan and Roltdalen and Sylan has shown the different views and opinions regarding what objectives should be considered when developing a visitor strategy. Furthermore, it has shown a critical perspective on the national goal of having more visitors to protected areas. Even though visitor management often includes strategies to limit or reduce the negative impacts of tourism, it rarely looks at the effect of the protected area status. Furthermore, the study shows that "harder" regulations are to a small extent applicable in the Norwegian context. This is both because of the strong position of outdoor recreation and because the Public Right of Access is highly respected in protected area management. This emphasizes the importance of developing plans and strategies in accordance with the local context.

Studying Skarvan and Roltdalen and Sylan has been interesting, most of all because there are little existing studies regarding these areas. This has made the information from informants especially important. There are, however, some limitations to this study. First, the informants are mainly connected to the Sylan area and Tydal municipality. This was not a strategic choice but a result of coincidences and convenience. As there are most tourism stakeholders in this area, these informants were easiest to get in contact with. However, Sylan is clearly the most visited area and most visitors start their trip from Tydal, which makes this area especially relevant in this context. Yet, a broader informant selection including stakeholders from other surrounding municipalities could have provided a more diverse basis of discussion. Second, the inclusion of stakeholders working with economic development was not initially prioritized in the informant selection process since this was not the main topic for this thesis. Eventually, it proved difficult to get in contact with relevant representatives. The inclusion of these actors could have provided more information about how the protected areas are used in local economic development.

The connections between regional economic development and the management of the protected areas could be interesting for further research. Cooperation between the local

national park board for Skarvan and Roltdalen and Sylan and the tourism industry is not emphasized in the new visitor strategy. This may, however, change in the future. It could also be interesting to further investigate how the conservation status is used in the promotion of the area as well as other local communities surrounding protected areas. Finally, the process of monitoring and adjustments should be examined. This could also explain how specific management facilitation initiatives potentially change the use of protected areas.

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Appendix 1: Information letter to management informants (translated)

Information letter to management informants

In this letter, you will receive information about the purpose of Ida Nilsen Hidle's master's project and what participation will entail for you.

Purpose

The background for the interview is a master's thesis in Natural Resources Management conducted at the Department of Geography, NTNU, Trondheim. The main topic of the master's thesis is the new visiting strategy for Skarvan and Roltdalen national park and Sylan landscape protection area. Through the project, I want to investigate how the management board in this area facilitates good experiences for the visitors and what considerations are taken in connection with the management. The task will focus on how the facilitation of the areas is both affecting and influenced by those who visit them, which user groups the management board wants to facilitate for, and any challenges related to this.

Who is responsible for the research project?

The Department of Geography, NTNU is responsible for the project.

What does it mean to participate?

Participation in the project involves participating in an interview that lasts about an hour. Through the interview, I would like to examine what considerations are taken in the management of the mentioned areas in terms of both the values of protection, the visitors, and the local value creation. The questions will be about how the work on the new visitor strategy takes place, what choices are made in the work on this, and what types of uses and experiences are facilitated. If the informant agrees to it, the interview will be audio recorded. I will also take notes along the way.

Participation is voluntary

All participation in the project is voluntary. While the project is in progress, you can withdraw from participating or withdraw certain information provided through the interview at any time and without reason. If you withdraw, all information about you will be deleted. It will have no negative consequences for you if you do not want to participate or later choose to resign.

Your privacy – how we store and use your information

The information about you will only be used for the purposes described in this information paper. The data will be treated confidentially and in accordance with the data protection regulations. The personal data collected includes your name, e-mail address, telephone number, occupation/education, and the informant's role in the management. Only my supervisor and I will have access to this information, and your information will be stored separately from other data. In the finished master's thesis, you will be

anonymized, and no information will be published that directly or indirectly tells you who you are.

What happens to your information when we finish the research project?

All personal data and audio recordings will be deleted at the end of the master project, which is expected to be May 15, 2020.

Your rights

As long as you can be identified in the data material, you are entitled to:

- gain access to what personal data is registered about you,
- rectify personal data about you,
- delete personal information about you,
- obtain a copy of your personal data (data portability), and
- to lodge a complaint with the Data Protection Officer or the Norwegian Data Protection Authority about the processing of your personal data.

What gives us the right to process personal data about you?

We process information about you based on your consent.

The Norwegian Centre for Research Data (NSD) has considered the processing of personal data in this project to be in accordance with the data protection regulations.

Where can I find out more?

If you have any questions about the study or would like to exercise your rights, please contact:

- Master student Ida Nilsen Hidle, by e-mail (idanh@stud.ntnu.no) or phone: 93667601
- Department of Geography, NTNU at Jørund Aasetre, by e-mail (jorund.aasetre@ntnu.no) or phone: 93211139
- NTNU's Data Protection Officer, Thomas Helgesen, by e-mail (thomas.helgesen@ntnu.no) or phone: 93079038
- NSD – Norwegian Centre for Research Data, by e-mail (personverntjenester@nsd.no) or phone: 55582117

Yours sincerely,

Ida Nilsen Hidle
Master student

Jørund Aasetre
Project Manager
(Supervisor)

Appendix 2: Information letter to local stakeholders (translated)

Information letter to local stakeholders

In this letter, you will receive information about the purpose of Ida Nilsen Hidle's master's project and what participation will entail for you.

Purpose

The background for the interview is a master's thesis in Natural Resources Management conducted at the Department of Geography, NTNU, Trondheim. The main topic of the master's thesis is the new visiting strategy for Skarvan and Roltdalen national park and Sylan landscape protection area. Through the project, I want to investigate how the management board in this area facilitates good experiences for the visitors and what considerations are taken in connection with the management. The task will focus on how the facilitation of the areas is both affecting and influenced by those who visit them, which user groups the management board wants to facilitate for, and any challenges related to this.

Who is responsible for the research project?

The Department of Geography, NTNU is responsible for the project

What does it mean for you to participate?

Participation in the project involves participating in an interview that lasts about an hour. Through the interview, I would like to examine what considerations are taken in the management of the mentioned areas with regard to visitors and local value creation. The questions will be about how the informant finds that the management affects the use of the areas as well as the value of these areas for local stakeholders and their members/customers. If the informant agrees to it, the interview will be audio recorded. I will also take notes along the way.

Participation is voluntary

All participation in the project is voluntary. While the project is in progress, you can withdraw from participating or withdraw certain information provided through the interview at any time and without reason. If you withdraw, all information about you will be deleted. It will have no negative consequences for you if you do not want to participate or later choose to resign.

Your privacy – how we store and use your information

The information about you will only be used for the purposes described in this information letter. The data will be treated confidentially and in accordance with the data protection regulations. The personal data collected includes your name, e-mail address, telephone number, occupation/education, and the informant's position/role in the company/association/organization. Only my supervisor and I will have access to this

information, and your information will be stored separately from other data. In the finished master's thesis, you will be anonymized, and no information will be published that directly or indirectly tells you who you are.

What happens to your information when we finish the research project?

All personal data and audio recordings will be deleted at the end of the master project, which is expected to be May 15, 2020.

Your rights

As long as you can be identified in the data material, you are entitled to:

- gain access to what personal data is registered about you,
- rectify personal data about you,
- delete personal information about you,
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If you have any questions about the study or would like to exercise your rights, please contact:

- Master student Ida Nilsen Hidle, by e-mail (idanh@stud.ntnu.no) or phone: 93667601
- Department of Geography, NTNU at Jørund Aasetre, by e-mail(jorund.aasetre@ntnu.no) or phone: 93211139
- NTNU's Data Protection Officer, Thomas Helgesen, by e-mail (thomas.helgesen@ntnu.no) or phone: 93079038
- NSD – Norwegian Centre for Research Data, by e-mail (personverntjenester@nsd.no) or phone: 55582117

Yours sincerely,

Ida Nilsen Hidle
Master student

Jørund Aasetre
Project Manager
(Supervisor)

Appendix 3: Declaration of consent (translated)

Declaration of Consent

I have received and understood the information about Ida Nilsen Hidle's master's project and had the opportunity to ask questions. I agree to:

- to participate in the interview
- use of audio recordings during the interview
- to be contacted afterward for any follow-up questions or clarifications

I agree that my information will be processed until the project is completed, approximately May 15, 2020.

(Signed by project participant, date)

Appendix 4: Interview guide for management informants (translated)

Interview guide – management

Brief presentation of my project

Information letter and declaration of consent

Use of audio recorder and notes

Background information:

- The informant's work and role in the management

1. Visitor strategy

- a. What is the reason why you are now preparing a new visitor strategy for Skarvan and Roltdalen and Sylan?
- b. How did the work start? Who had the initiative?
- c. What is the main focus of the work on the new visitor strategy for these areas? (Protection, outdoor activities, income for the local community)
- d. How is the work on the new visitor strategy organized?
- e. Are you cooperating with local stakeholders or others on the visitor strategy? Who?
 - i. What is the cooperation about?
 - ii. How does the cooperation take place? (Contact with other actors, etc.)
 - iii. How do/did you experience the collaboration?
 - iv. Are any of these actors contributing directly to the work of facilitation? (marking of trails, putting out planks, maintenance or similar)
- f. What sources of information do you use in your work?
- g. A user survey was carried out in the area in the summer of 2016. How do you use this in the development of a new visitor strategy?
- h. A template/guide has been created for the preparation of visitor strategies. Is this something you use in your work?
 - i. How do you use this?
- i. How far has the work on the visitor strategy come?
- j. Have you had any challenges with your work so far?
 - i. Which ones?
 - ii. How have you worked to solve them?

2. Facilitating use

- a. Which user groups do you want to facilitate for?
 - i. Why?

- ii. In what ways do you facilitate these groups?
 - iii. Is this primarily to meet the needs of the general public (users), locals, or others (or to protect vulnerable areas)?
- b. What experiences do you want users to be left with after visiting these areas?
 - i. How do you work to facilitate these experiences?
 - ii. In what way do you think facilitation affects users' experiences in the areas?
- c. What user groups and activities do you want fewer or none of in these areas?
 - i. Why?
 - ii. How do you work to reduce such activities in the area?
- d. With the facilitation you envision, do you want to channel use *to* specific areas or *away from* specific areas? (Or both?)
 - i. What are the reasons for this? (Increase revenue from use by channeling *to* or preventing wear and tear in vulnerable areas by channeling *away from*)
- e. Are there certain areas where you want to facilitate for other groups?
 - i. Why/why not?
- f. Part of the facilitation concerns getting information out to visitors. To what extent do you find that visitors have knowledge of the protected areas?
 - i. Do you plan to implement any information measures related to the new visitor strategy? (About tourism/outdoor activities, considerations in protected areas, background for conservation, local history, etc.)
 - ii. What are these information measures?
 - iii. Why do you consider this necessary/important?
 - iv. Do you work with others to release such information? Who?

3. Local value creation

- a. Is facilitation, channeling and information also useful for increasing value creation for local stakeholders?
 - i. In what way?
- b. How else do you work to increase the value of protected areas for the local community and local actors? (Ref. cooperation on visitor strategy)
- c. Why is it important that protected areas should increase value creation for local stakeholders?
- d. Which industries are emphasized? (Tourism, nature-based, agriculture, income for other industries)
 - i. Why?
 - ii. Which local actors get the most out of the management measures?
 - iii. Are you also working to create ripple effects for local industries and actors who are not directly connected to protected areas?
- e. Who can possibly be against the measures you take in connection with the protected areas?

4. The balance between conservation values, visitors, and local value creation

- a. In what way are the considerations of the conservation values, the visitors and the locals balanced in the work on a new visitor strategy?
- b. Do you see any challenges with this? Which?
 - i. How do you work to solve these challenges?
 - ii. Specific measures?
- c. How do you work to preserve the protection values in the areas?
 - i. Untouched nature?
 - ii. Biodiversity?
 - iii. Cultural heritage?
 - iv. Sami reindeer herding and culture?
- d. What do you see as the main goals in preparing visitor strategy? (More visitors, increased value creation for local players, less wear and tear on vulnerable nature, etc.)

5. Closing up

- a. Anything else you want to add?
- b. Possibility of clarifications and/or follow-up questions?

Thank you!

Appendix 5: Interview guide for local/regional stakeholders (translated)

Interview guide – local/regional actors

Brief presentation of my project

Information letter and declaration of consent

Use of audio recorder and notes

Background information:

- The informant's job and role

1. The stakeholder and their customer/member groups

- Who are you as users?
 - Who are the customers/members? (Walks alone/walks in groups, experienced/inexperienced, age, nationality, etc.)
- What types of use do you prefer?
(Traditional vs. modern outdoor activities, hunting and fishing, summits, day trips vs. multi-day trips, high purists vs. low purists, etc.)
 - Do you see any particular tendencies related to this? (E.g. changes over time or activities related to specific customer groups)
- How do you work to facilitate such types of use?
- What information channels do you use?
- Why do you think people visit these sites? (Possibilities for short/long trips, the degree of facilitation, fishing opportunities, good accessibility, good information, etc.)
- Do you experience that customers/members or others want to engage in activities that are not facilitated in these areas today?
 - Which?
 - Do they seek to other areas instead?
- In which parts of the protected areas are you and your customers/members most active?
- Are there parts of the protected areas you want to be active in, where it is not facilitated for your use?

2. The stakeholder's relationship with the protected areas today

- In what ways are Skarvan and Roltdalen National Park and Sylan landscape protection area important to you and your customers/members?
 - What characteristics of the site do you and your customers/members appreciate?
- What do you think about these areas being protected?
 - Why?

- ii. What are the advantages/disadvantages/challenges you see connected to the protection regulations and your activities in the areas?
 - iii. What conservation values in these areas are important to you?
- c. Do you find that people in the local community (the inhabitants or business owners in Tydal, for example) are positive to these areas being protected?
 - i. Why/how?
- d. How do you consider the way these areas are facilitated today?
 - i. Why?
 - ii. In what ways are you affected by these facilitation initiatives?
- e. Do you think the areas are appropriately facilitated for the experiences you want to create (for yourself and customers/members)?
- f. To what extent do you find that users have information and knowledge about the protected areas today?
 - i. What types of information are important to you?
 - ii. How do you work to distribute such information?
 - iii. Are you cooperating with the management board on this?

3. Visitor strategy and management

- a. What do you know about the development of the new visitor strategy for Skarvan and Roltdalen national park and Sylan landscape protection area?
- b. Have you been involved in the work?
 - i. In what way?
 - ii. How do/did you experience the collaboration? Any challenges?
 - iii. What has been important for you to emphasize during the work on the visitor strategy?
- c. What do you think should be the most central objectives for the management of these areas?
 - i. Is there anything you think should be focused less or more on? (Visitors, conservation values, local community/local actors)
 - ii. Which consequences can it have to focus too much or too little on these issues?
 - iii. In general, how do you think the visitor strategy should be?
- d. How can the visitor strategy be valuable for you?
- e. How will your activities in these areas be affected by the facilitation planned by the management board?
- f. How do you think these areas should be developed in the future? (More visitors, increased value creation for local actors, less wear and tear on vulnerable nature, etc.)
 - i. Do you have suggestions for specific management measures?
 - ii. What visions do you have for the use of protected areas in the future?

4. Finish

- a. Anything else you want to add?
- b. Possibility of clarifications and/or follow-up questions?

Thank you!

