

Outdoor recreation planning & management in protected areas

using the Conservation Standards

VERSION 1.0



About this document

Outdoor recreation planning & management in protected areas using the *Conservation Standards* is a product of collaboration between experts from protected area management authorities in Sweden and FOS Europe. The group was convened by the Swedish Environmental Protection Agency with the intent to harmonise the management of conservation and outdoor recreation in the Swedish protected area network.

The approach has been developed using examples from different Nature Reserves and National Parks in Sweden. This is an initial version built on existing management plans and experiences. We then applied it in depth with teams responsible for the designation of new National Parks in Sweden. Learnings from these applications have been integrated into this version of the guidance. The concepts developed in the process have informed the planning for various other PAs.

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Executive summary

This guidance supports protected area managers to integrate conservation and outdoor recreation in their work and enables strategic visitor and site management for high-quality and sustainable recreation. It provides a basis for conservation and outdoor recreation to be mutually supportive.

The approach is built around the CMP Conservation Standards¹. Based on several years of expert discussions and field-testing in National Parks and Nature Reserves in Sweden, the guidance proposes tweaks and additions to steps 1 and 2 – *Assess and Plan* – of the Conservation Standards cycle.

The guidance explains how to assess the overall outdoor recreation situation in an area and introduces the concept of **outdoor recreation targets**. Being grounded in the protected area's conservation targets, outdoor recreation targets constitute a special type of cultural ecosystem service that the management team chooses to maintain or enhance.

¹ Conservation Measures Partnership, 2020: Open Standards for the Practice of Conservation, Version 4.0. <https://conservationstandards.org/>

Building on that, the guidance describes how to integrate outdoor recreation into the planning of actions and monitoring. By using outdoor recreation targets as anchor points, the opportunities for outdoor recreation and visitor experiences in protected areas can be improved while avoiding harm to conservation targets. The guidance helps teams identify options to reduce threats to biodiversity and conflicts between visitors while enhancing opportunities for outdoor recreation.

Through working in line with the solid adaptive management framework that the Conservation Standards provide, it is ensured that continuous evaluation and learning shapes the improvement of actions over time. The guidance is composed to be accessible without prior knowledge of the Conservation Standards. However, for a more comprehensive understanding, it is beneficial to consult the complete documentation of the Conservation Standards, especially for details on steps not elaborated extensively in this document.



PHOTO: SARA ESTLANDER

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Introduction

A person with blonde hair, wearing a brown hat, a black jacket, and black leggings, stands on a rocky mountain peak. They are looking out over a vast mountain range with green and brown slopes under a cloudy sky. The word "Introduction" is written in large white letters across the middle of the image.

PHOTO: TOA HEFTIBA/UNSPLASH

Opportunities for outdoor recreation are some of the many services that biodiversity can provide to people. For many, engaging in outdoor recreation is a quality-of-life factor and an essential part of their lifestyle. Research shows that most people are involved in outdoor recreation to some extent, and many perform outdoor activities often, especially during weekends and longer holidays.² A significant part of outdoor recreation occurs in protected areas (PAs) and their popularity among recreationists is increasing.

The presence of many visitors in turn increases pressure on biodiversity and can bring conflict between different visitor groups to PAs. Consequently, outdoor recreation is commonly considered a threat that requires sufficient regulation. Simultaneously, high-quality outdoor experiences may help foster pro-environmental attitudes and increase societal support for conservation and PAs. Outdoor recreation also contributes to other societal benefits such as health, social cohesion and jobs. Therefore, it is important to support management efforts that both protect biodiversity and provide opportunities for outdoor recreation.

2 See for example Fredman, Ankre, & Chekalina, 2018.

Access to appealing outdoor recreational activities is considered a national priority in the management of PAs in numerous countries. Sweden, for example, enacted national objectives for outdoor recreation. They underscore the importance of PAs in offering recreational opportunities.

In response to policies like these, coupled with the global interest in outdoor activities, PA managers are tasked with balancing conservation efforts while simultaneously providing sustainable recreation opportunities for an increasing number of visitors. This guidance establishes outdoor recreation as an integral part of protected area management. It builds on the widely used CMP Open Standards for the Practice of Conservation³ (hereafter 'Conservation Standards' or 'CS'), the leading framework for practicing adaptive management in the field of nature conservation. It focuses on planning and management on the site level. However, the approach can also be used on a PA network or system level.

3 CMP, 2020: Open Standards for the Practice of Conservation, Version 4.0. <https://conservationstandards.org/download-cs/>.

Defining outdoor recreation

The definition of outdoor recreation applied in this guidance is “[...] staying/being outdoors in natural or cultural landscapes for wellbeing and nature experiences without requirements for competition.”⁴

This definition embraces any outdoor recreational activity, except for competitive sports. It goes beyond activities performed during leisure time and includes, for example, outdoor activities within educational contexts.

The definition makes no distinction between outdoor recreation and tourism – when outdoor recreation occurs outside the recreationist’s home environment, it is also tourism (see [Figure 1](#)). As the definition refers to natural and cultural landscapes, outdoor recreation can occur practically anywhere outdoors. Accordingly, this guidance embraces a broad perception of outdoor recreation as a phenomenon with many expressions and practices.

Outdoor recreation occurs within a biophysical and socio-economic context that restricts how it can be performed. In PAs, outdoor recreation is delimited by the area’s specific conditions and conservation aims. This guidance helps PA managers and stakeholders develop sustainable, high-quality recreation opportunities appropriate for the particular PA context.

⁴ Official definition in Swedish: “Friluftsliv är vistelse utomhus i natur- och kulturlandskap för välbefinnande och naturupplevelse utan krav på tävling.” Förordning SFS 2003:133.

DEFINITIONS

Recreation: Something done for pleasure or to relax during leisure time.

Outdoor recreation: Staying/being outdoors in natural or cultural landscapes for wellbeing and nature experiences without requirements for competition.

Tourism: The movement of people to areas outside their usual environment for personal or professional purposes.

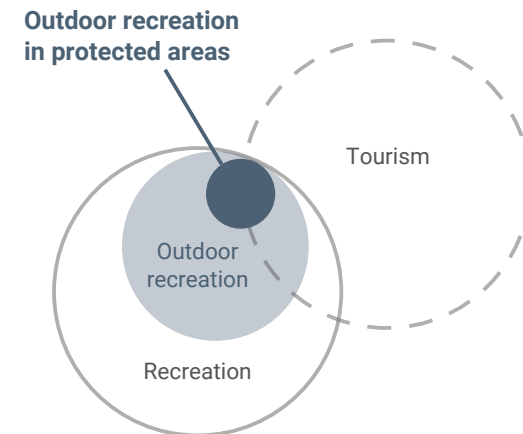


Figure 1. Outdoor recreation in protected areas, in relation to recreation, outdoor recreation, and tourism. Modified from Emmelin et al., 2010.

Integrating outdoor recreation with the Conservation Standards

Prompted by a long-lasting trend of increasing numbers of visitors to natural areas worldwide, practitioners and researchers in outdoor recreation have developed various planning and management frameworks. They all aim at addressing the double challenge of protecting the environment while still enabling satisfactory recreation experiences. Some examples are the Recreation Opportunity Spectrum⁵, the Limits of Acceptable Change,⁶ and the Visitor Impact Management Framework.⁷ The approach presented in this guidance has features in common with these frameworks (and others) – just as they have common features between themselves. The contribution of the method laid out here is the conscious integration of perspectives from recreational planning and management with best practices in conservation, as represented by the Conservation Standards.

The Conservation Standards provide the conservation community with a robust, evidence-based framework for designing, managing, and monitoring conservation initiatives to ensure effectiveness, impact, and learning. They are composed of five steps: (1) Assess, (2) Plan, (3) Implement, (4) Analyse & Adapt, and (5) Share (see [Figure 2](#)). In this guidance, we suggest supplementary steps that are essential for seamlessly incorporating outdoor recreation into the standard adaptive management process.



Figure 2. The Conservation Standards Cycle Version 4.0 (CMP 2020).

5 E.g. Driver & Brown, 1978.

6 E.g. Stankey et al., 1985.

7 E.g. Graefe, 1990.

In particular, we propose additions and tweaks to steps 1 and 2 of the Conservation Standards cycle. Step 1 outlines an assessment of the area's outdoor recreation situation, including an analysis of the management context, visitors and their activities, existing infrastructure and facilities, and ongoing information and interpretation efforts. Moreover, we introduce the concept of *outdoor recreation targets*.

The second step is similar to the usual tools and processes in step 2 of the Conservation Standards. The trick is to take a solid outdoor recreation lens when planning strategies. With increasing pressure from visitors, occasionally, regulation of use is unavoidable. Still, outdoor recreation targets can be designed to help decrease threats to sensitive conservation targets and avoid conflicts between visitor groups. The approach presented in this guidance aims at assisting teams in spotting opportunities for win-win situations that help achieve conservation goals while delivering enhanced outdoor recreation opportunities and associated human-wellbeing (see [Figure 3](#)).

Integrating outdoor recreation perspectives can start at any point in the management cycle (see [Figure 2](#)). Depending on your particular situation, some steps presented in this guidance can be more or less relevant:

- The area is actively managed for years, and intends to update the management plan to better include outdoor recreation
- The intention is to designate a new PA that provides opportunities for outdoor recreation
- The area has high visitor pressure, and you are trying to find constructive solutions, ideally with the consent and participation of stakeholders
- The site is close to settlements or cities with easy access for many people
- The PA has a particular role in the broader network of PAs regarding conservation and/or outdoor recreation goals

	Standard CS steps	Additions in this guidance
A S S E S	Purpose & team	
	Scope & vision	
	Targets & viability	Outdoor recreation targets
	Threats	Threats to outdoor recreation targets Outdoor recreation activities and conflicts as threats
	Conservation situation	Outdoor recreation situation: <ul style="list-style-type: none"> • Outdoor recreation context • Management context • Visitors and outdoor recreation activities
P L A N	Goals	Outdoor recreation goals
	Strategies	Outdoor recreation strategies
	Theories of change	
	Monitoring	Monitoring of recreational use and outcomes
	Operational plan	

Figure 3. Additions and tweaks to integrate outdoor recreation into the Conservation Standards planning process.

PHOTO: KAUR MARTIN / UNSPLASH

Assess the situation



In the process of defining the purpose of your efforts, compiling the team, and developing your scope and vision, we propose to add considerations about outdoor recreation. When putting your team together, consider both conservation and outdoor recreation expertise. If outdoor recreation experts cannot be included in the team, for example due to insufficient resources, an alternative may be further training of one or more of the managers already in place. By involving outdoor recreation in the planning process, you have the opportunity to co-create with stakeholders and avoid conflicts between managers, locals, and other user groups in an area.

A PA is delineated by its geographic scope. The scope frames the biodiversity the PA is aiming to conserve and delineates the spatial context for outdoor recreation. For PAs trying to serve an outdoor recreation purpose in addition to its conservation focus, a shared vision often includes conservation, outdoor recreation, and human wellbeing considerations (see example in [Box 1](#)).

BOX 1. EXAMPLE OF AN INTEGRATED VISION

The PA preserves the coniferous lime forest with its characteristic species richness and offers good opportunities for visitors to experience the forest, the mountain scenery and to learn about the unique geology at the site. Enhanced outdoor recreation opportunities benefit visitors and the local population and avoid harm to biodiversity.

The assessment of the situation reveals possibilities and constraints for management and lays the foundation for adaptive management. It should build on the best available knowledge. For outdoor recreation, surveys are commonly used to gather information from and about visitors. Other methods to consider include using data tracked by smartwatches and phones of visitors (e.g. Strava), visitor counters, observations, and interviews with visitors, experts, and PA stakeholders (see also [Monitoring](#)).⁸ Moreover, academic literature on outdoor recreation management can be an essential source of information. We propose the following sub-steps:

- Analyzing the overall recreation context, focusing on visitors, outdoor recreation activities and current conflicts.
- Identifying targets, including conservation, human wellbeing, and outdoor recreation targets.
- Identifying threats to conservation and outdoor recreation targets, and integrating conflicts between users requiring management.

Following these steps allows you to gradually build a model that portrays the outdoor recreation situation and the relationship between different factors revealed in the assessment (see [Complete situation model](#)).

⁸ For further reading on visitor monitoring in PAs, see for example Griffin et al., 2010.



Outdoor recreation context

A prerequisite for being able to manage outdoor recreation in a conservation site is to have sufficient knowledge of what is being managed. Therefore the logical starting point is to analyse the present recreational context. It includes:

- the management context, also including existing infrastructure, facilities and ongoing information and interpretation efforts;
- the recreationists visiting the area;
- the outdoor recreation activities currently being practised, and how threatening they are for biodiversity *and*
- the timing and location of activities and consequent conflicts between different visitor groups.

MANAGEMENT CONTEXT

The analysis of the management context focuses on what is currently being done to manage outdoor recreation activities performed in the area, as well as the legislative and policy circumstances that guide conservation and outdoor recreation management. The latter may include recreation accessibility guidelines and how outdoor recreation management in PAs should promote various aspects of human wellbeing – often related to public health, regional development, and increasing knowledge and environmental awareness.

Understanding the financial resources and staff capacity is also essential at this stage and may imply prioritization for work within and between different PAs. Overall, the analysis of the management context should clarify the possibilities and limitations related to outdoor recreation management in the PA.

The analysis of the management context should also include an inventory of the current managerial efforts. These include existing infrastructure and facilities, such as:

- Roads, trails, paths, platforms etc.
- Toilets, benches, barbecue places, entrances etc.
- Any other physical structures related to outdoor recreation

It is good to point out existing infrastructure and facilities on a map. This, together with the location of ongoing outdoor recreation activities (see [Temporal and spatial analysis](#)) provides a good overview of the outdoor recreation setting.

Any ongoing interpretative efforts, i.e. efforts that aim to communicate the area's more profound meaning, are generally part of the existing information-sharing and should also be included in your analy-

sis (see also [Strategies](#)). To get an overview of this, we recommend reviewing all area-related information, such as on-site arrangements like signs, maps, trail markings, and brochures, or web-based data. Additionally, you should consider the perspectives and stories of locals about the area. Especially in the process of designating new PAs, information from pre-study assessments involving the public, can help in that regard.

Finally, PAs are not isolated items, but operate in the context of all areas in the larger PA system. That has consequences for every single PA, and needs to be considered as part of its management context.

VISITORS

Information about the area's visitors and the activities they are performing is essential for planning and managing outdoor recreation. Ideally, the assessment of visitors includes:

- visitor motivations for engaging in outdoor recreation in the area;
- number of visitors;
- visitor preferences and needs regarding accessibility, facilities, and services;
- visitor concerns (e.g. conflicts, crowding, etc.).

Other important considerations are the visitors' origins and their sociodemographic and cultural characteristics, and those of people who are not visiting an area.

ACTIVITIES

To understand the outdoor recreation context of a PA, an inventory of people’s recreational activities in the area is critical. There are many outdoor recreation activities and new ones keep emerging. [Appendix 1. Common outdoor recreation activities](#) presents a list of 45 commonly performed outdoor recreation activities in Sweden. This list of popular outdoor recreation activities can be a helpful resource for analysing what activities people are performing in an area and how intensively people are using a particular site for outdoor recreation purposes.

The critical management question associated with outdoor recreation activities is which of them require active management or regulation. The first aspect that matters here is if outdoor recreation activities are threatening conservation targets. Additionally, assessing visitor concerns is vital to answering this question. The findings of this analysis will inform the subsequent process of [Threats and threat rating](#).

Temporal and spatial analysis

Besides understanding *what* people do, it is critical to determine *when* and *where* people are practising outdoor recreation activities. A **seasonal calendar** (see [Figure 4](#)) helps identify when outdoor activities occur and how they overlap with patterns in the natural environment, like the breeding of birds. It is also useful to compare with other human uses in the area and their intensity.

Similarly, the location of outdoor recreation activities is essential. We recommend using a map to make spatial patterns visible. You can consider combining this with gathered information of the area’s infrastructure and facilities (see [Management context](#)).

The temporal and spatial analysis provides essential information when selecting strategies to deal with potential threats to targets caused by visitors or to avoid conflicts between different user groups (see sections [Targets](#) and [Conflict analysis](#)). Moreover, when regulation is required, it is easier to tailor it to particular threatening activities or mitigation of conflicts. Often, activities don’t have to be regulated or forbidden throughout the year or all over the area. Proper distribution of activities in time and space can help decrease threats to sensitive conservation targets and avoid conflicts between outdoor recreation activities and other ways of using the area.

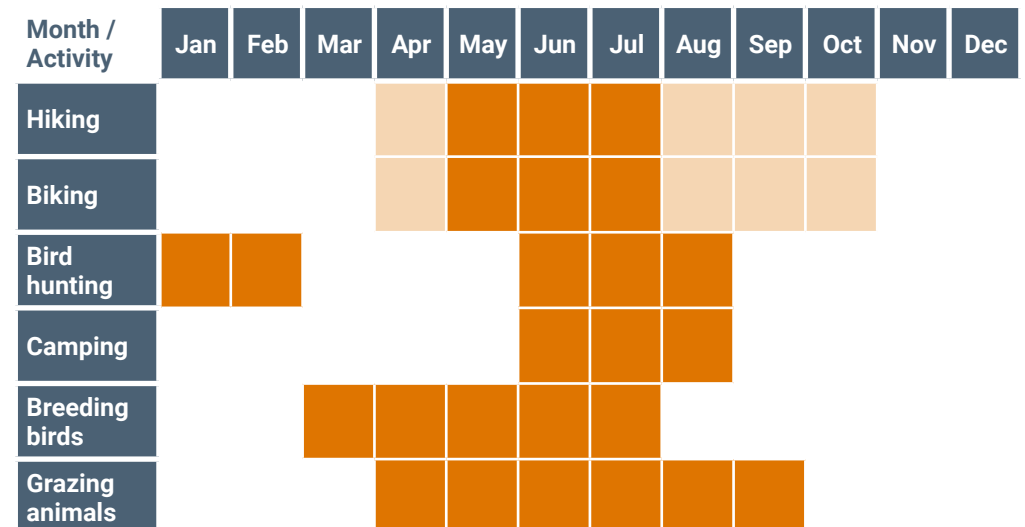


Figure 4. Simplified seasonal calendar containing recreational activities and other time bound events and phenomena . Lighter colour indicates less intense use.

Conflict analysis

The temporal and spatial analyses are prerequisites to assessing existing and potential conflicts between different visitor groups and between visitors and other land users. It is critical to get a good understanding of these conflicts. Activities that overlap temporally or spatially may be at particular risk of conflict. Some conflicts are asymmetric, so activity A is a problem for activity B but not vice versa. Conflicts can also occur between visitors practicing the same activity. The assessment of visitor concerns proposed above (see [Visitors](#)) provides information about current conflicts in the area.

A conflict matrix can help to get an overview of the conflicts (see [Figure 5](#)). High-rating conflicts between visitor groups can require management actions, although they might not directly threaten outdoor recreation- or conservation targets. We recommend including these conflicts in your situation analysis as threats (see [Figure 8](#)) to ensure you can consider them when you prioritise strategies for the PA.

Activities	Hiking	Biking	Bird hunting	Camping
Hiking	Crowding		Disturbance from off-trail hiking	
Biking	Risk of accidents	Crowding		
Bird hunting	Noise, getting scared	Noise, getting scared		Noise, getting scared
Camping				

Legend: Conflict categories			
Severe conflict	Conflict	Low conflict	No conflict

Figure 5. Simplified example of a conflict matrix. The matrix is to be read so that the activity in the left column affects the activity in the top row. For example, biking affects hiking much more than hiking affects biking.

Targets

After analyzing the overall recreation context, it is time to identify the targets. In a broader context, targets are *focal features a management team wants to protect or enhance*. Targets lay the foundation for all the following steps in this guidance. An agreed-upon list of targets helps you focus your efforts and prioritise the use of resources. This section presents conservation- and human wellbeing targets as they are defined in the Conservation Standards and introduces the concept of outdoor recreation targets. We also clarify how the different target types relate (see [Figure 6](#)).

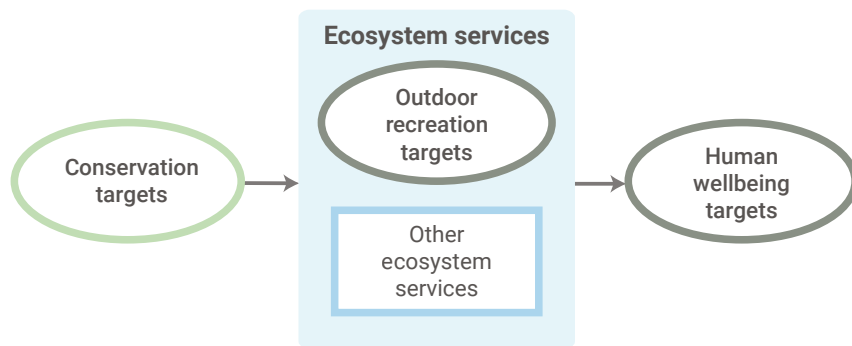


Figure 6. Generic illustration of the different types of targets and how they relate. As there is no symbol for Outdoor Recreation Targets in Miradi software⁹, we recommend using the gray oval (the standard symbol for Human Wellbeing Targets).

9 Miradi Adaptive Management Software: <https://www.miradi.org/ux/home>. Miradi is a project management software designed by conservation practitioners, for conservation practitioners. Miradi uses multiple analysis tools, data views, reports, and common examples from conservation, or 'building blocks', to help conservation teams practise good, evidence-based conservation from the project to the program scale. Miradi provides teams with the guidance and tools to implement the Conservation Standards.

DEFINITIONS

Target (broader definition): A focal feature that a team wants to protect or enhance.

Conservation target: An element of biodiversity (species, habitat, or ecological system) at a project site on which a project has chosen to focus. All targets should collectively represent the biodiversity of concern at the site.

Outdoor recreation services: The range of recreational opportunities and experiences humans enjoy that conservation targets provide.

Outdoor recreation target: An outdoor recreation service of interest for visitors that depends on one or more conservation target(s), and that a management team chooses to maintain or enhance.

Human wellbeing target: An aspect of human wellbeing that the management team chooses to focus on. In the context of a conservation project, human wellbeing targets focus on those components of human wellbeing affected by the status of conservation targets.

CONSERVATION, OUTDOOR RECREATION, AND HUMAN WELLBEING TARGETS

Conservation targets

For any PA, defining a limited number of conservation targets representing the full array of biodiversity at the site is crucial. These targets – by the Conservation Standards defined as species, ecological processes, or ecosystems – provide a variety of ecosystem services, including cultural services. A critical part of cultural services are outdoor recreation services, here defined as the *range of recreational opportunities and experiences humans enjoy that conservation targets provide*.¹⁰

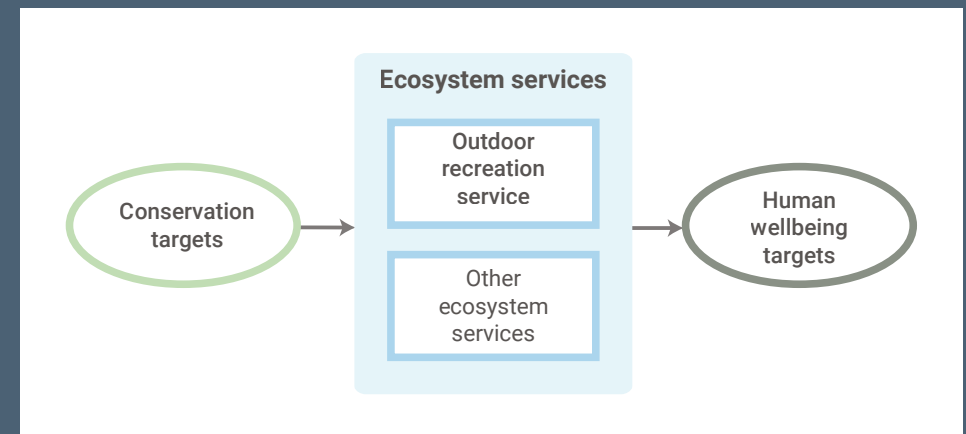
Outdoor recreation targets

As every PA may provide many recreational opportunities, this guidance suggests that you focus on a selection of these opportunities: your **outdoor recreation targets**. We define outdoor recreation targets as *outdoor recreation services of interest for visitors that depend on one or more conservation target(s), and that a management team chooses to maintain or enhance*. Together, these targets represent the value proposition for visitor experiences, that represent the PA's character, specialty, and uniqueness.

¹⁰ Cf Hermes, Van Berkel et al., 2018.

BOX 2. HEADS-UP FOR CONSERVATION STANDARDS AND MIRADI USERS – TARGETS VS. ECOSYSTEM SERVICES

It is optional to call and visualise selected outdoor recreation services as targets. The advantage is that it stresses the importance of outdoor recreation. However, you can decide to treat them like other ecosystem services, using boxes rather than ovals, and still follow the steps in this guidance. Keep in mind that in this case, “goals” for outdoor recreation services will be treated as objectives in Miradi. Please be aware that the view of ecosystem services differs depending on the view you are using in Miradi. In a situation model, they will appear as orange boxes, whereas in a theory of change view they will appear as blue boxes like in the example below.



Human wellbeing targets

Human wellbeing targets are *aspects of human wellbeing that the management team chooses to focus on*. In conservation, these targets are linked to conservation targets and the ecosystem services these provide. Many facets of human wellbeing – be it on an individual, family, community, or societal level – are tied to recreational use. That contributes to human wellbeing in the form of public health, knowledge, environmental awareness, regional growth, and social cohesion. For more details about human wellbeing targets we recommend the guidance on human wellbeing.¹¹

SELECTING OUTDOOR RECREATION TARGETS

Outdoor recreation targets differ from conservation targets in several ways. They are a type of cultural ecosystem service and are thus associated with human opinion and context. Moreover, they provide an option for the management to enhance outdoor recreation opportunities, and they are tools to decrease threats to conservation targets, reduce conflicts between visitors, and improve contribution to human wellbeing targets. By actively considering and designing each target's environmental, social and managerial conditions,¹²

11 Conservation Measures Partnership, 2016: Incorporating Social Aspects and Human Wellbeing in Biodiversity Conservation Projects. Version 2.0. <https://conservationstandards.org/library-item/addressing-human-wellbeing/>.

12 In principle, these conditions can form the basis for key attributes and a viability assessment as per the Conservation Standards (see Define Viability Assessment in the FOS *Planning for Conservation* how-to guide: <https://express.adobe.com/page/Gctq6QNC7QbpP>). However, because the design of outdoor recreation targets depends on the rest of the situation assessment, we do not recommend spending time on it at this stage, but rather to consider circling back to it later in the process.



PHOTO: JENNY HERTZMAN

managers can ensure that the set of outdoor recreation targets can deliver on their multipurpose role (also see [Setting goals](#)).

For these reasons, the selection of outdoor recreation targets is a delicate matter and requires a good understanding of the outdoor recreation context in the area (see [Outdoor recreation context](#)). To begin, collect the outdoor recreation services in the PA to get an initial overview. Then use the questions below to gradually sift out suitable targets, for which you can answer all the questions below with **YES**. If the answer to any question is **NO**, we recommend considering other outdoor recreation services instead.

- Are the services unique and/or do they mirror the characteristics of the area?
- Can the services be used for recreation without harming conservation targets?
- Would the target address an existing or potential visitor demand (see [Visitors](#) and [Activities](#))?
- Would the target contribute to desired human wellbeing?
- Would the target (if designed well) help reduce threats and/or conflicts?

Resources may limit the number of targets to focus on. Many smaller PAs with limited resources might only focus on one or a few outdoor recreation targets, while the spectrum of outdoor recreation targets in areas with more resources and visitors is larger. Sometimes PAs may also choose to have a pretty broad set of outdoor recreation targets but only choose to enhance one or two of them with management actions (see [Plan actions and monitoring](#)).

[Figure 7](#) shows targets for an area in northern Sweden, which will be used as an illustrative example for a PA throughout this guidance. Targets, threats, and strategies are realistic for the chosen example and region. Some of them might not fully resonate with other areas, but were selected to showcase the process.

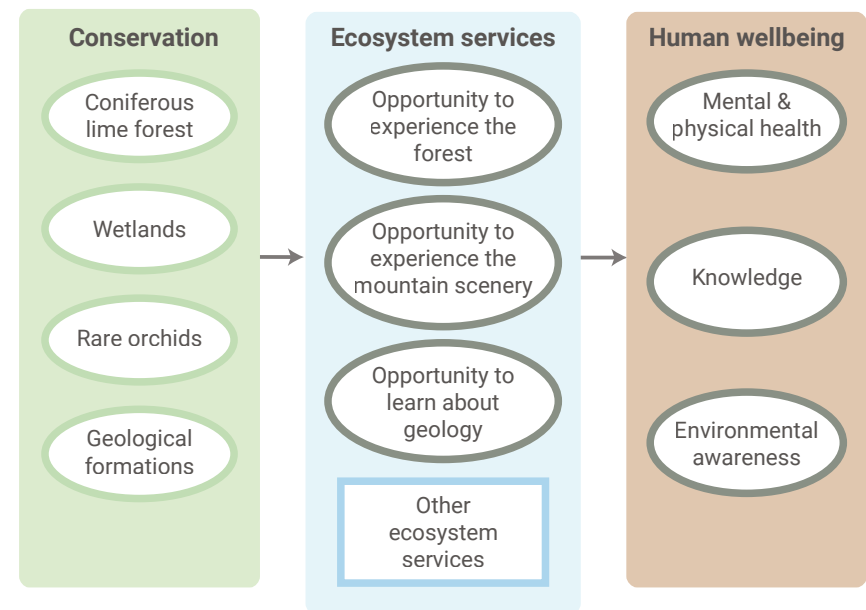


Figure 7. Examples of outdoor recreation targets (gray ovals in the blue box) and their related conservation targets (green ovals) and human wellbeing targets (gray ovals in the brown box).

Threats and threat rating

Once targets are selected, it is time to identify threats that affect them. Threats are human actions or human-induced events and natural phenomena that directly degrade one or more targets. Direct threats to conservation targets may indirectly alter outdoor recreation targets (see [Figure 8](#)). At the same time, outdoor recreation activities can threaten conservation targets. Sometimes activities require regulation or have to be forbidden, but often it is possible to find softer measures that help decrease the threat (see [Strategies](#)).

There may also be direct threats to outdoor recreation targets, that is, actions or events that may directly reduce the recreational opportunities, or cause the loss of them. The assessment of visitor concerns proposed above (see [Visitors](#) and [Activities](#)) can provide information about potential threats toward outdoor recreation targets. Common threats are conflicts between visitor groups/recreationists. High-rating conflicts should be included in your situation model, allowing you to develop strategies to tackle them.

[Figure 8](#) shows examples of threats to different targets. The top-most threat directly affects an outdoor recreation target. The two other threats indirectly alter outdoor recreation targets via the deterioration of the conservation targets. The figure also shows a proposal for how to display threat ratings, with the rating relevant to conservation targets top left and the rating relevant to outdoor recreation targets top right¹³. The bottom left threat box represents conflicts between visitor groups in the area. Review your conflict analysis and include conflicts that require management attention in your situation model, even if they are not directly influencing any of your targets.

After identifying threats, the next step is to rate them to understand which ones you must prioritise to avoid harm in the best possible way with limited resources. The most pressing threats that require attention are threats to conservation targets. Especially in PAs with high visitor numbers, outdoor recreation activities also tend to be or become threats. In light of that, you may choose to focus on these conventional threats and not rate threats to outdoor recreation targets separately. If so, the standard process and rating criteria as suggested by the Conservation Standards applies. If you are unfamiliar with threat rating, we propose reviewing the complete documentation of the Conservation Standards for context.

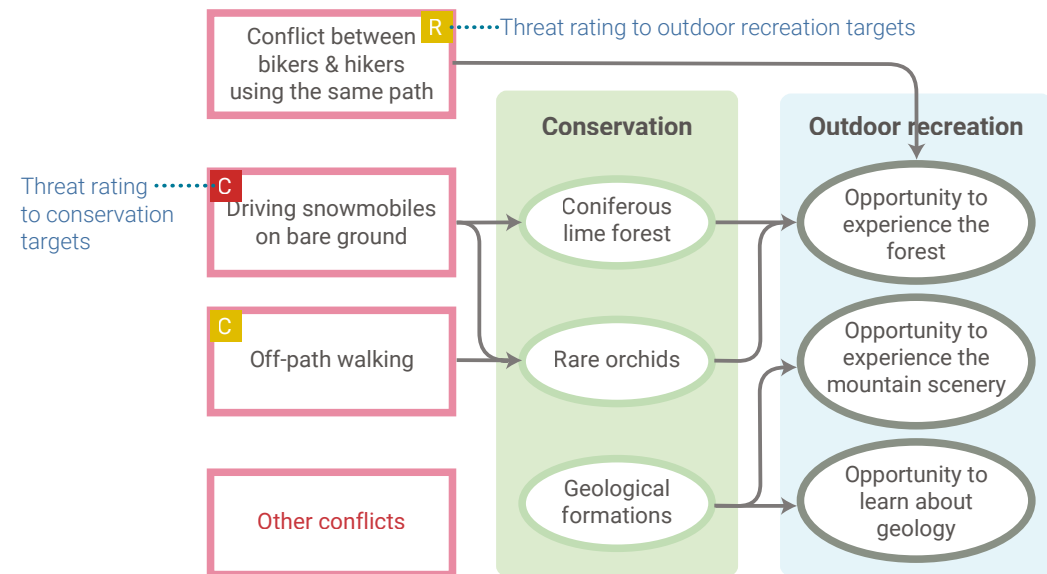


Figure 8. Examples of threats to different targets. Both direct and indirect threats, indirectly altering outdoor recreation targets via the deterioration of the conservation targets, are displayed.

¹³ Ratings on threats to outdoor recreation targets cannot be done in Miradi at this point.

If analysing threats to outdoor recreation targets is relevant in your context (cf. Figure 9), you rate every threat-target connection just like you would with conventional threats and conservation targets. When rating threats to outdoor recreation targets we recommend adjusting the rating criteria in line with other guidance supporting the Conservation Standards, such as the Climate-Smart Conservation Practice¹⁴ and the Conservation Standards Applied to Ecosystem-Based Adaptation.¹⁵

- **Scope:** the proportion of the outdoor recreation target that is affected by the threat (spatially, temporally, proportion of users)
- **Severity:** the extent to which the threat reduces the outdoor recreation opportunity for visitors who want to use it.
- **Management challenge:**¹⁶ the challenge that the PA management team faces to handle the threat and maintain a good outdoor recreation opportunity (see Table 1 for rating definitions).

It is important to note again, as outdoor recreation targets depend on conservation targets in good condition, threats to conservation targets outweigh threats to outdoor recreation targets and need to be prioritised accordingly.

Table 1. (opposite) Rating criteria for threats to outdoor recreation targets.

14 GIZ & CMP, 2020: Climate Smart Conservation Practice: <https://conservationstandards.org/library-item/climate-smart-conservation-practice/>

15 GIZ & CMP, 2020: Conservation Standards applied to Ecosystem-based Adaptation. <https://conservationstandards.org/library-item/conservation-standards-applied-to-ecosystem-based-adaptation/>

16 We are recommending to replace the rating criterion “irreversibility” that is normally suggested by the Conservation Standards for rating threats to Conservation Targets with “management challenge” when rating threats to outdoor recreation targets.

Scope – The proportion of the outdoor recreation target that is affected by the threat (spatially, temporally, proportion of users)	Low – The threat is likely to be very narrow in its spatial and/or temporal scope, affecting the opportunity for recreational experiences for a small proportion of visitors (1-10%).
	Medium – The threat is likely to be restricted in its spatial and/or temporal scope, affecting the opportunity for recreational experiences for some proportion of visitors (11-30%).
	High – The threat is likely to be widespread in its spatial and/or temporal scope, affecting the opportunity for recreational experiences for a high proportion of visitors (31-70%).
	Very high – The threat is likely to be pervasive in its spatial and/or temporal scope, affecting the opportunity for recreational experiences for a very high proportion of visitors (71-100%).
Severity – Within the scope, the level of damage to the target from the threat that can reasonably be expected. Severity is measured as the degree of destruction or reduction of the outdoor recreation opportunity, within the scope.	Low – Within the scope, the threat is likely to only slightly degrade/reduce the opportunity for recreational experiences.
	Medium – Within the scope, the threat is likely to moderately degrade/reduce the opportunity for recreational experiences.
	High – Within the scope, the threat is likely to seriously degrade/reduce the opportunity for recreational experiences.
	Very high – Within the scope, the threat is likely to destroy or eliminate the opportunity for recreational experiences.
Management challenge – The challenge that the PA management team faces to handle the threat and maintain a good outdoor recreation opportunity.	Low – It is likely that there are strategies that could help to maintain the opportunity for recreational experiences AND this would take a relatively small investment of resources.
	Medium – There is some possibility the effects of the threat can be addressed, AND addressing them would be feasible with a moderate commitment of resources.
	High – There is some possibility to maintain the opportunity for recreational experiences, BUT strategies have low feasibility because they require a moderate to high amount of resources, are socially, politically or are technically challenging.
	Very high – It is very unlikely there are strategies that could help to maintain the opportunity for recreational experiences and strategies have very low feasibility, because they require a significant amount of resources (beyond what is currently available), are socially, politically or technically challenging.

Complete situation model

With targets and threats identified, the final step of the situation assessment is to complement it with contributing factors to populate the rest of your situation model that describes the drivers behind threats in the area. Your situation model is now complete and displays the situation in and around the PA, including conservation, outdoor recreation and the factors influencing them. If you have been using a situation model before at your site, you can complement that with outdoor recreation elements instead of starting from scratch. As presented in [Figure 9](#), these include outdoor recreation targets and, possibly, new direct threats or conflicts and associated contributing factors. For more details about situation models and how to develop them, please refer to the Conservation Standards documentation.

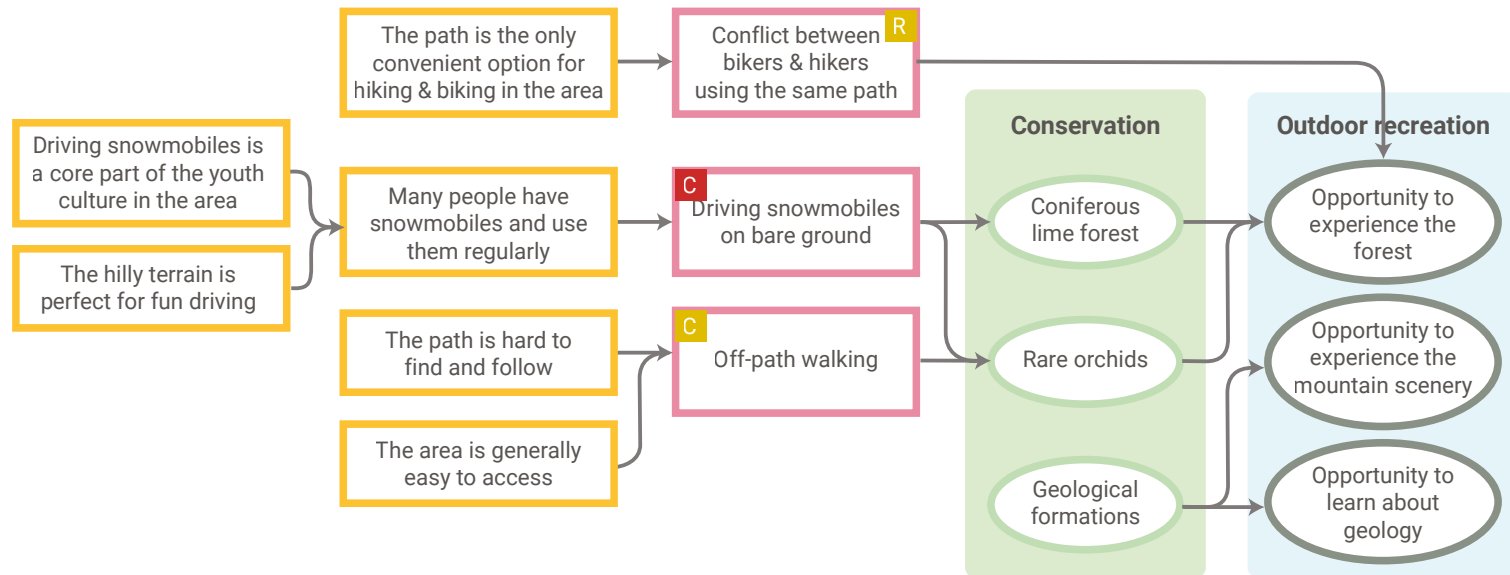


Figure 9. Simplified situation model with conservation and outdoor recreation targets, related threats and contributing factors (orange boxes).

Plan actions and monitoring



PHOTO: DAN KECK / PIXABAY

Grounded in the PA situation assessment, the next step is to plan your actions and monitoring. The overall strategic approach proposed in this guidance is to complement the regulation of recreational activities with softer measures to decrease visitors' threats and improve outdoor recreation opportunities. Having the selected outdoor recreation targets as a key focus in strategy design increases the likelihood of finding strategies that simultaneously enhance visitor experiences, reduce identified threats and provide better ways to achieve human wellbeing. As such, the strategies aim to achieve conservation and outdoor recreation goals more effectively.

Goals

Generally, goals are formal statements that detail the desired future status of targets and help managers be specific about their management aims. Goals related to outdoor recreation should help maintain or improve biodiversity while detailing high-quality opportunities for visitor experiences that contribute to human wellbeing.

SETTING GOALS

Information from all parts of the earlier situation assessment is required to set goals. The process is iterative and involves frequent

revisions. When setting outdoor recreation goals, managers should take several aspects into account. These include whether conservation targets are viable enough to deliver the desired outdoor recreation opportunities, whether any regulations are needed to prevent misuse of opportunities, and whether human wellbeing can be achieved through outdoor recreation.

Managers should also consider which threats to address through outdoor recreation target design, and the activities visitors likely want to perform to experience outdoor recreation targets, location or area requirements, and the period of use for the target.

It helps to think about outdoor recreation targets based on the three following conditions:

- **Environmental conditions** include the status of conservation targets providing the outdoor recreation target and other ecological or landscape conditions needed.
- **Social conditions**, such as the number of people or encounters with others and the level and type of interaction between people.
- **Managerial conditions** include infrastructure, facilities, and information and interpretation.
 - ▶ Infrastructure and facilities required for visitors to have safe and optimal access to outdoor recreation targets and can experience them sustainably.
 - ▶ Information required so visitors have basic or orienting information to be aware of the opportunity in the first place. And interpretation that delivers meaning about outdoor recreation targets for visitors.

It's important to reflect on people's demands when setting goals for outdoor recreation. People perform outdoor recreation for different reasons, and preferences for environmental and social conditions vary. [Table 2](#) presents a description of outdoor traditions based on three components: practice, arena, and motivation. These traditions are not absolute categories. The same activity may be performed for different reasons and be part of two or more traditions. Moreover, visitors may relate to several traditions during one single visit.

Table 2. Outdoor recreation traditions in Sweden. Modified from Lisberg Jensen & Ouis, 2014.

	Practice	Arena	Motivation
Romantic	travel, hike, wonder	untouched nature, preferably away from urban areas	get away from civilization, spiritual encounter with nature
Physical	challenging activities and exercise	nature (as a track	train the body, endurance, stamina, adventure, challenge
Related to tradition & history	group activities, guided tours	old/historic places, cultural remains, outdoor museums	connect to the past & traditions
Motivated by resource use	hunt, fish, collect, pick, cultivate	well-known gathering places, garden	usefulness for household, wellbeing
Related to natural science	identify, watch, count, compare, study	nature of interest	mapping nature, learning, checking species
Social	group activities, picnic	pleasant, arranged, easy access	socialise, relaxation, rest

To formulate your goal make use of the conditions and traditions above and summarise the different aspects in a formal statement of what you want to accomplish. [Box 3](#) presents a goal statement based on the desired condition for the outdoor recreation target "Opportunity to experience the lime forest". The goal spells out the opportunity that managers would like to provide for visitors to satisfyingly experience the forest in the area. Its design also contributes to other benefits: it addresses the conflict between hikers and bikers and the threat to forest species that comes with off-path walking, while enhancing human wellbeing such as nature understanding and environmental concern.

BOX 3. EXAMPLE OF DESIRED CONDITIONS AND GOAL STATEMENT FOR THE TARGET "OPPORTUNITY TO EXPERIENCE THE LIME FOREST"

Desired environmental conditions: Untouched coniferous lime forest

Desired social conditions: Not more than 50 hikers on the trail simultaneously. At least 600 and not more than 3000 visitors per year.

Desired managerial conditions: On site orientation information for easy access, interpretation providing knowledge about interesting natural features and understanding of the value of the forest.

Outdoor Recreation Goal:

By 2024, there will be an easy to reach and orientate one-way trail, free of bikers, through the untouched coniferous lime forest for undisturbed, educational, satisfying and safe hiking during the bare ground season. The trail is used by at least 600 but not more than 3000 visitors per year, and encounters with other hikers are limited.

Strategies

After setting outdoor recreation goals, the next step is to choose strategies. Generally, the selection of strategies, the development of theories of change, and a framework for practicing adaptive management that we describe in the following steps does not differ from the process that the Conservation Standards suggest. For explicit guidance about how to go about these steps, we therefore encourage you to refer to their full documentation. However, when integrating outdoor recreation into the process, it helps to think about some of these steps from slightly different perspectives and to take key aspects from the previous assessment of the outdoor recreation context, selection of outdoor recreation targets, and setting of goals into consideration.

To select strategies, use the situation model to identify key intervention points – i.e., the factors you want to influence (see [Figure 9](#)). Consider threats and conflicts to both conservation and outdoor recreation targets, the goals you formulated and how you can contribute to various human wellbeing targets, and select appropriate strategies for the change you intend to make.

SITE MANAGEMENT

Successful outdoor recreation management often involves a combination of site and visitor management strategies. Site management typically involves strategies that maintain or improve the infrastruc-

ture and facilities of an area, such as roads, trails, ramps, toilets, and other required facilities. These physical arrangements are used to protect the environment and set levels of recreational accessibility. Proper site management can have a triple effect of maintaining or increasing ecological resilience, improving outdoor recreation opportunities, and enhancing visitor experience.

VISITOR MANAGEMENT

To manage outdoor recreation, site management is frequently complemented by strategies that address visitors more directly. The most commonly used visitor management strategies in PAs are various forms of regulations. These may include measures to limit visitor numbers, control spatial or temporal access, or prohibit activities. However, visitor management should to the extent possible also include strategies that improve recreational opportunities and guide visitors to better experiences. We recommend regulation of outdoor recreation activities only in cases when conservation targets are at risk of being harmed and when other measures are not sufficient.

In larger PAs, zoning is used to allow for different levels of environmental protection, accessibility, and use of different parts of the site. Each zone generally describes the desired environmental, social, and managerial conditions that must be considered when selecting strategies.

INFORMATION AND INTERPRETATION

Among these other measures, the use of information and interpretation is particularly important.¹⁷ Comprehensive information is necessary to guide visitors; by developing brochures, websites, and on-site arrangements like signs, maps, trail markings, and guides, visitors can access information necessary for their visit. Proper use of information can influence the amount, type, timing, and distribution of recreational use in the PA.

Interpretation is closely linked to information, although it can be challenging to distinguish between the two. While information is practical, interpretation is a communication process that delivers a more profound meaning to visitors of outdoor recreation targets and the PA. Ideally, interpretation centers on a chosen theme and presents related messages for visitors to reflect on during and after their outdoor recreation experience. Interpretation can be essential for accomplishing desired human wellbeing targets, including increased visitor knowledge and understanding of environmental issues and conservation work. It can also stimulate emotions and increase enjoyment, making the use of outdoor recreation opportunities a more rewarding experience. Interpretation efforts can be mutually supportive with information and site management efforts, for example, through the design of facilities.

BOX 4. ACCESSIBILITY

In many countries, there is a strong political commitment to make societies, and its PAs, more accessible to people. Special focus is on people with physical and mental disabilities, but children and people with other origins may also experience accessibility barriers that prevent them from using PAs for outdoor recreation. Managers can improve accessibility by providing an appropriate combination of infrastructure, facilities, and information – all to meet the variation in visitor needs and preferences. Not all PAs can be accessible for everyone. Still, it is helpful to clarify the desired level of accessibility for the PA in focus, in relation to what other surrounding PAs or other areas can offer. Larger nature reserves and national parks can use zoning to provide for different levels of accessibility.¹

¹ For further reading, see World Tourism Organization, 2021 and Naturvårdsverket, 2018.

¹⁷ For more examples of visitor management activities, see Manning, 2011.

SELECTING STRATEGIES

When selecting strategies, consider the set goals and the current situation regarding infrastructure, facilities, information, and interpretation in the context of overall PA management. It is necessary to consider other opportunities for outdoor recreation within the protected area to avoid inconsistency, duplication, and possible adverse effects of one strategy on another. Typically, the combination of normal conservation strategies and additional ones to enhance the outdoor recreation opportunity together deliver on outdoor recreation goals. [Figure 10](#) provides an example of strategies to achieve the goal linked to the target “Opportunity to experience the lime forest”.

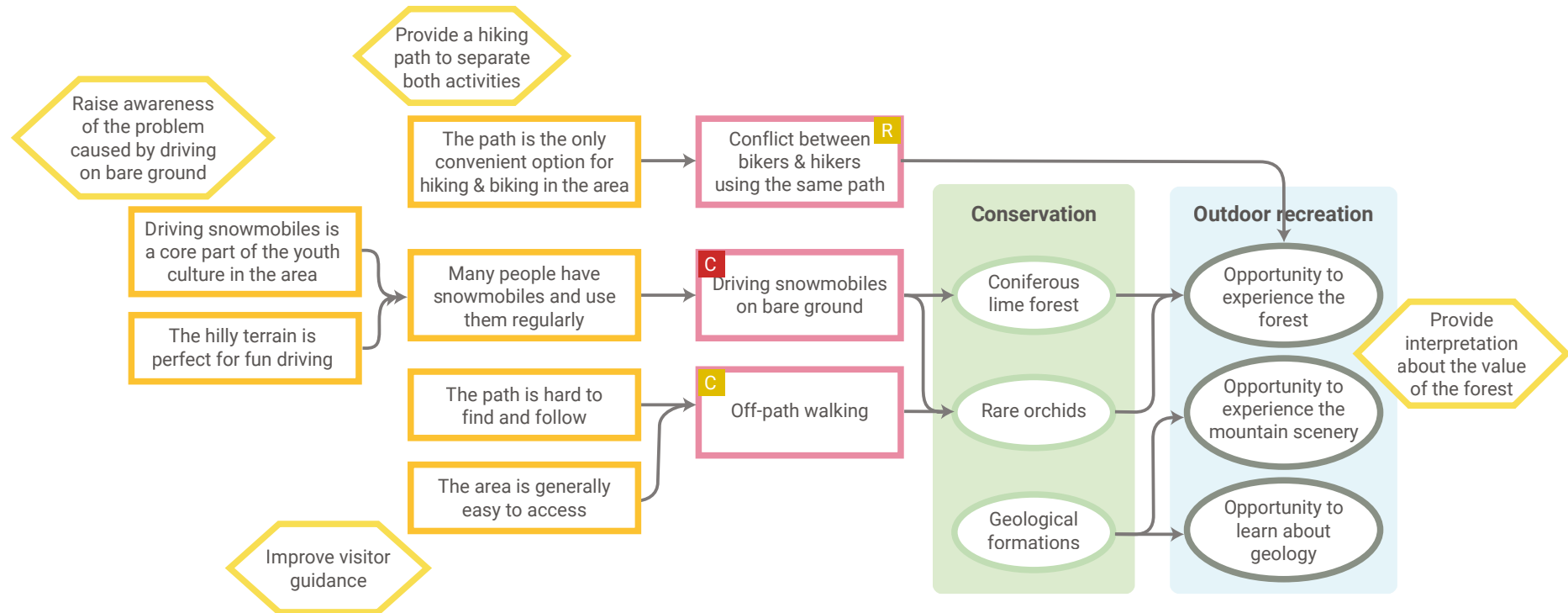


Figure 10. Examples of outdoor recreation management strategies (yellow hexagons) related to key intervention points in a situation model.

Theories of change

Once appropriate strategies are selected, it is time to turn the logic around and ask: *how* are these strategies going to help? Theories of change (TOCs) visualise how planned strategies contribute to desired results and targets and the achievement of respective objectives and goals.

Figure 11 illustrates a TOC that combines different threat abatement strategies with a strategy to enhance the “Opportunity to experience

the lime forest”. The combination of improving visitor guidance and providing a hiking trail reduces off-path walking and enables hikers and bikers to perform their activities without conflict. This set of strategies helps conserve the lime forest, improves the opportunity to experience it, and contributes to visitors’ safety. Additional interpretation efforts aim at making hikers aware of the value of the forest and its ecology.

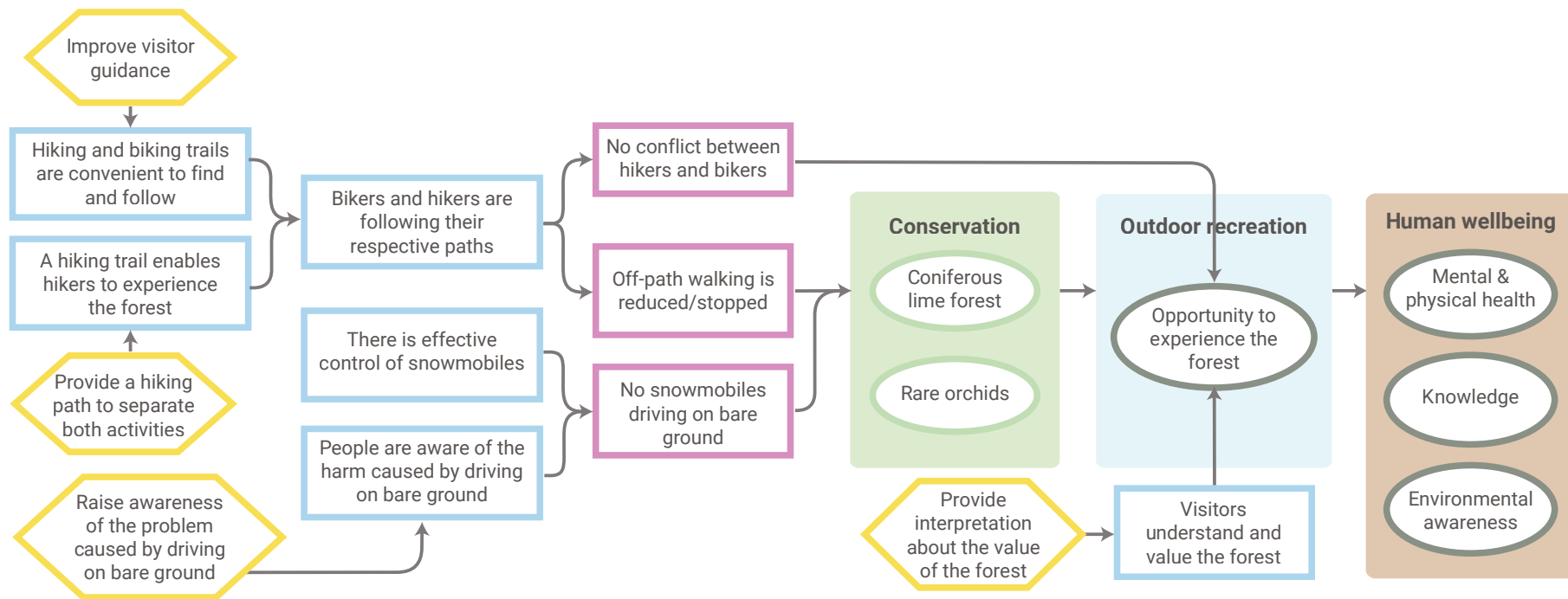


Figure 11. Simplified TOC related to the target “Opportunity to experience the forest”. The TOC includes expected intermediate (blue boxes) and threat reduction results (purple boxes).

Apart from the dedicated strategy to enhance visitors' opportunities through interpretation, nothing is surprising about the set of strategies presented in the example above. Any team managing this PA could have devised these by focusing on the reduction of threats to conservation targets alone. However, experiences from practising the approach as laid out in this guidance show that it helps to focus on options for enhanced outdoor recreation opportunities anchored in outdoor recreation targets when developing strategies. The steps proposed in this guidance comes with the following advantages:

1. The potential harm of outdoor recreation activities is easier to address

By considering outdoor recreation activities as potential threats to conservation targets, these can be addressed with strategies. In the example presented above, the detailed analysis helped the team to identify the exact problem of the hiking activity in the area – off-path walking is threatening rare orchids.

2. The likelihood of using soft measures increases

When formulating threat abatement strategies, the likelihood of finding suitable soft measures that enable smarter regulation of recreational use, or help avoid regulation entirely, is higher. In the example, a simple solution to prevent the threat of off-path walking affecting the orchids is to close the path

and deny people access. Thinking about visitors' opportunity to experience the forest as a target helps to consider another solution to the problem: improved guidance through better trail marking and information provision. Strategies like this are only available if the viability of the conservation target allows for that and if resources are available.

3. Conflict mitigation is naturally integrated in strategy design

Conflicts between visitor groups are represented as threats in the situation model, which makes it easier to consider them in the strategy design. In this example, a constructive solution to the conflict between bikers and hikers is to provide another path for hikers. That is under the assumption that biking does not threaten the conservation targets and that resources are available to build a separate hiking path.

4. Visitor satisfaction and human wellbeing is easier to address

Strategies that directly enhance the opportunity for visitors would be forgotten without the attention that outdoor recreation targets bring. As the example above shows, it is a lot easier to think about dedicated interpretation efforts to enhance the experience of the forest ecosystem and increase the likelihood for visitors to connect to the values it provides. Focusing on visitor experience and desired human wellbeing targets draws attention to the need for good opportunities.¹⁸

¹⁸ As mentioned above, investment in such strategies has to be balanced in light of the limited resources that PAs have available. Moreover, strategies that abate threats to conservation targets always have priority.

PHYSICAL ARRANGEMENTS

Outdoor recreation strategies often involve physical infrastructure and facilities that require construction and maintenance. Additionally, PAs must also provide essential infrastructure like parking lots, toilets, entrances, and information centers depending on the size and context of the site. To ensure that strategies and activities related to the construction and maintenance of these physical arrangements are incorporated into the work plan for the PA, it may be beneficial to highlight them in a separate overview, integrate them directly into the work plan, or create an additional TOC for them.

Table 3 (next page) provides an example overview of strategy types and related physical arrangements and targets. The table illustrates how some physical arrangements are NOT related to outdoor recreation targets. Rather, they serve as general infrastructure required for people to have a convenient stay at the sites. The table also shows how in some cases, physical arrangements support several outdoor recreation targets. If possible, it helps to deliberately plan for such arrangements as they decrease associated costs and effort. In addition, some strategies and activities relate to more than one type of strategy.

BOX 5. PHYSICAL ARRANGEMENTS IN MIRADI

In Miradi, if you include physical arrangements in a TOC either in a separate diagram or integrated into an existing diagram, we recommend using biophysical factors for physical arrangements. Using this factor type conveys the message that physical arrangements are part of the managerial condition of the outdoor recreation targets. This follows the same logic as biophysical factors, which are a part of conservation targets.

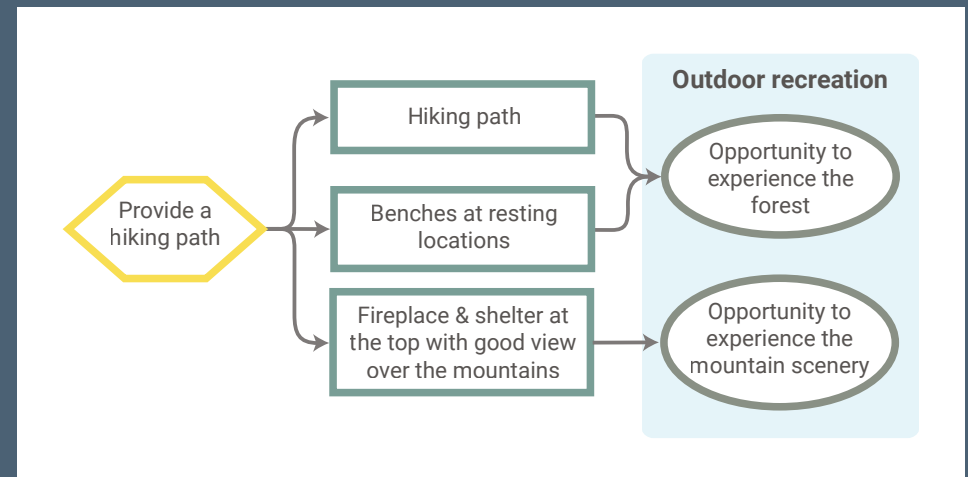


Table 3. Illustration of the link between different strategies and activities to physical arrangements and outdoor recreation targets.

Strategy type	Strategy	Activity	Physical arrangements (infrastructure & facilities)	Outdoor recreation target
Site management	Provide a hiking path	Delineate the best track for the new path	Hiking path	1. Opportunity to experience the forest
		Build the path with wooden planks		
		Build benches	Benches at resting locations	
		Maintain the fireplace and shelter	Fireplace and shelter at the top with good view over the mountains	2. Opportunity to experience the mountain scenery
		Provide firewood		
	Maintain existing infrastructure	Keep the parking lot accessible during all seasons	Parking lot	
Empty garbage bins regularly		Garbage bins at the parking lot		
Visitor management	Raise awareness about the problems caused by driving on bare ground	Install sign at the parking lot about the problems caused by driving on bare ground, with indication of option for snow mobiling in the area	Information signs at the parking lot	
	Regulate the walking direction along the hiking trail	Add directional guidance with arrows to path markings	Markings along paths with arrows that indicate the direction	1. Opportunity to experience the forest
Information & interpretation	Improve visitor guidance	Install a sign at the parking lot showing available paths, color coding and symbols for hiking and biking	Sign with available paths at the parking lot	
	Provide interpretation about the value of the forest	Develop the key realisations about the forest and its ecology that visitors should walk away with	Signs along the hiking path (that help interpret the value of the forest and how its species composition is linked to the typical geological and climatic conditions at the site)	3. Opportunity to learn about geology
		Design the concept for interpretation that helps visitors of different ages and backgrounds experience the value of the ecosystem and its special features		
		Identify places along the path that illustrate key learnings and help visitors to connect their learning with the site		
Install signs and potentially other means for interpretation at selected places				

Monitoring

Measuring recreational use and outcomes for a PA is essential to ensure sustainable use of the area, to provide with quality recreational opportunities, and to promote human wellbeing. Systematically gathered information is likely also of great interest for planning and decision-making on a regional and national level. Moreover, visitors and the public are often interested in this type of information.

On the site level, monitoring is necessary to assess the outdoor recreation situation, including visitor use (what activities performed

where and when) and numbers, conflicts and visitor characteristics, preferences and needs (see [Assess the situation](#)). This assessment must be repeated regularly to spot any changes and upcoming trends significant to the management. Monitoring is also needed to ensure the effectiveness of management efforts, including the quality of visitor experiences and to what extent outdoor recreation and human wellbeing goals are achieved.

In practice, that means following the achievement of objectives and goals along to the key results and targets in the theory of change. This allows for testing the validity of the intervention logic. [Figure 12](#) shows an example.

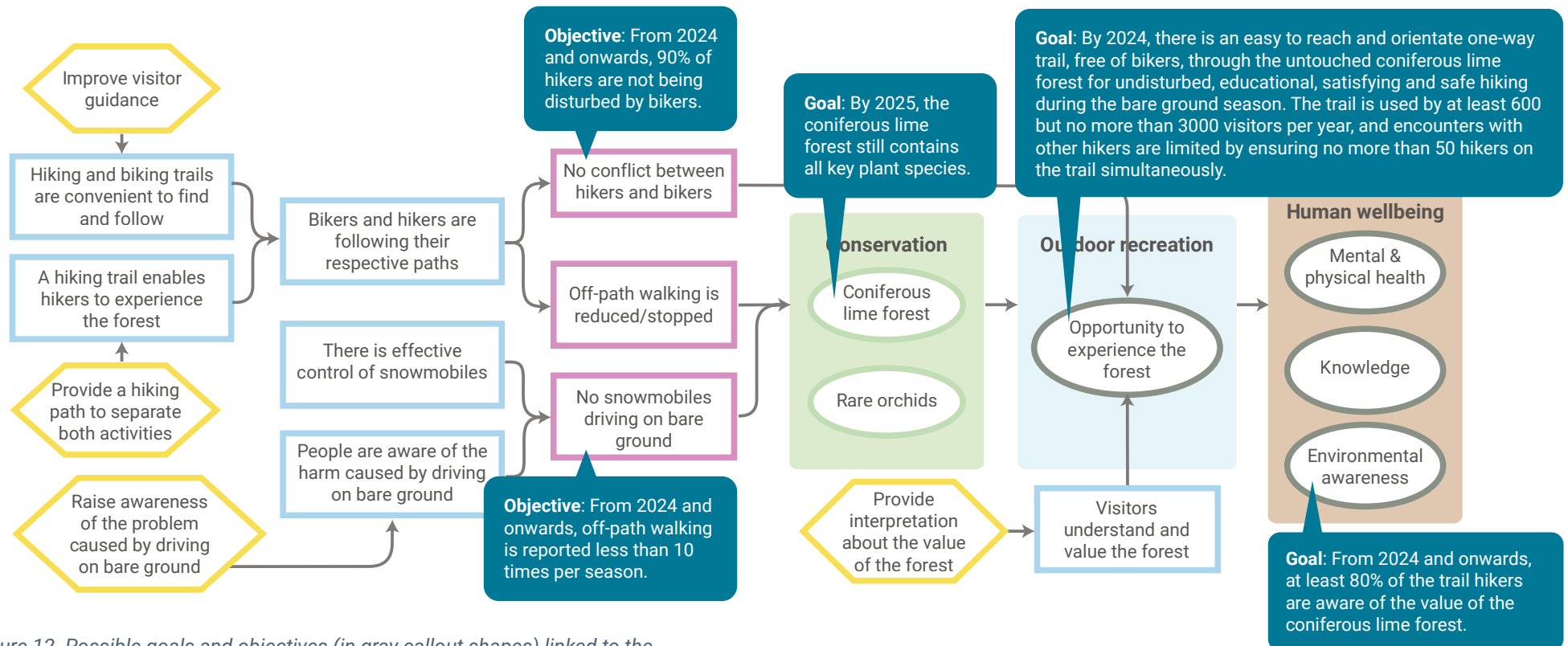


Figure 12. Possible goals and objectives (in gray callout shapes) linked to the simplified TOC related to the target "Opportunity to experience the forest"

Building on setting the ambition level by formulating SMART¹⁹ goals and objectives, the next step is to identify indicators that will help track their achievement and, thus, the achievement of the desired results and status of targets.

Common methods for visitor monitoring may include automatic counters, manual counts, visitor books, observations etc. Interviews (on or off-site), focus groups, and questionnaires (on-site guided or postal) can help gather visitor feedback. The choice of method is based on information needs and indicators, and may vary with the type of area, type of activity, number, and types of visitors. Resource availability can impact the choice of method and monitoring intensity and frequency. A good monitoring plan should strive for comparable and reliable information across time and different parts of the area.²⁰

Table 4 shows an example of a monitoring plan, including a goal, objective, indicators and appropriate methods to gather data. Often, there are additional monitoring needs which are not directly linked to the theory of change. If required, these should be addressed with additional indicators.

¹⁹ S = Specific, M = Measurable, A = Achievable, R = Results-Oriented, T = Time-limited.

²⁰ For further reading on visitor monitoring in PAs, see for example SEPA, 2007 and Griffin et al., 2010.

Table 4. Extract of monitoring plan presenting an outdoor recreation goal, objective, related indicators and methods.

What (Indicator)	How (Method)	When	Who
Objective: From 2024 and onwards, the off- path walking is reported less than 10 times per season.			
Total # of reports for off path walking received via ranger observation, email, phone call, visitor survey, visitor book and other means	Review of all relevant reports	Until 10 December each year	
Goal: By 2024, there is a one-way trail that is easy to reach and easy to follow, free of bikers, through the untouched coniferous lime forest for undisturbed, educational, satisfying and safe hiking during the bare ground season. The trail is used by at least 600 but no more than 3000 visitors per year, and encounters with other hikers are limited by ensuring no more than 50 hikers on the trail simultaneously.			
# of signposts in good condition on the trail	Infrastructure monitoring	May and October	
# of the interpretative information boards in good condition on the trail	Infrastructure monitoring	May and October	
Total # of reported bikers on the trail via ranger observations, email, phone call, visitor survey, visitor book and other means	Review of all relevant reports	Until 10 December each year	
% of the trail visitors who state they are satisfied with the hike	Monthly visitor survey	Each month in the bear ground season	
Annual # of visitors of the trail	Data from automated visitor counters	Ongoing, 24 hours a day	
# of cases when more than 50 hikers are recorded simultaneously on the trail on visitor monitoring days	Data from automated visitor counters	Ongoing, 24 hours a day	



Closing the loop

PHOTO: LINNEA WÄNGDAHL

This guidance is built around the adaptive management framework proposed by the Conservation Standards for implementing and monitoring conservation projects and programs. While this manual focuses on the design and planning stages, all other steps of the management cycle are equally relevant to bring adaptive management to life. Capturing and analyzing monitoring data to formulate lessons learned and adapt your measures during implementation is crucial. It enables you to learn from experience, avoid problems, and more effectively achieve conservation and outdoor recreation goals in PAs.

Properly integrating outdoor recreation in PA planning and management is to acknowledge visitor demand, visitor satisfaction and the potential for human wellbeing that outdoor recreation may bring – for individuals, households, communities and the broader society. Therefore, besides learning from the results of management efforts, an adaptive approach also implies following recreational related trends and changes, and changing conditions not only within the protected area but also in its surrounding community, region, country and the world – and reacting with adequate measures. These changes and trends include, for example, development of new activities, use of new technology, demographic changes, and shifting landscape relations. Events in recent years, especially the Covid-19 pandemic, have shown how important it is for managers to design and perform their work with a large degree of flexibility, building on a solid adaptive management framework that enables informed decision-making.²¹

21 Cf. Hansen et al. 2023.



PHOTO: SARA ESTLANDER

References

Conservation Measures Partnership (CMP) (2016). *Incorporating Social Aspects and Human Wellbeing in Biodiversity Conservation Projects*. Version 2.0.

Conservation Measures Partnership (CMP) (2020). *Conservation Standards Version 4.0*.

Driver, B. and Brown, P. (1978). *The Opportunity Spectrum Concept in Outdoor Recreation Supply Inventories: A Rationale*. Proceedings of the Integrated Renewable Resource Inventories Workshop USDA Forest Service General Technical Report R55, 24–31.

Emmelin, L., Fredman, P., Lisberg Jensen, E and Sandell, K. (2010). *Planera för friluftsliv. Natur, samhälle, upplevelser*. Stockholm: Carlssons.

FOS (2021). *Planning for Conservation: A How-To Guide*. Available online at <https://express.adobe.com/page/6XaDPKyVSjTfU/>

Fredman, P., Ankre, R. & Chekalina, T. (2019). *Friluftsliv 2018: Nationell undersökning av svenska folkets friluftsvanor*. Naturvårdsverket. Rapport 6887.

GIZ & CMP (2020). *Climate-Smart Conservation Practice: Using the Conservation Standards to Address Climate Change*. Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH, Bonn, Germany.

GIZ & CMP (2020). *Conservation Standards applied to Ecosystem-based Adaptation*. GIZ, Germany.

Graefe, A.R. (1990). Visitor impact management. In R. Graham and R. Lawrences (Eds.), *Towards serving visitors and managing our resources* (pp. 271–296). Waterloo: ON: Tourism Research and Education Centre, University of Waterloo and Canadian Parks Service, Environment Canada.

Griffin, T., Moore, S., Grilley, G., Darcy, S. and Schweinsberg, S. (2010). *Protected Area Management: Collection and Use of Visitor Data. Vol. 1: Summary and Recommendations*. Gold Coast, Queensland; Cooperative Research Centre for Sustainable Tourism, Griffith University.

Ham, S. H. (2013). *Interpretation: Making a difference on purpose*. Golden, Colorado: Fulcrum Publishing.

Hansen, A.S., Beery, T., Fredman, P. & Wolf-Watz, D. (2023). Outdoor recreation in Sweden during and after the COVID-19 pandemic – management and policy implications, *Journal of Environmental Planning and Management*, 66:7, 1472–1493.

Hermes, J., Van Berkel, D., Burkhard, B., Plieninger, T., Fagerholm, N., von Haaren, C., Albert, C., (2018). Assessment and valuation of recreational ecosystem services of landscapes. *Ecosyst. Serv.* 31 (C), 289–295.

Lisberg Jensen, E. and Ouis, P. (2014). *Det gröna finrummet*. Stockholm: Carlssons.

Miljöbalken (The Swedish Environmental Code). Ds 2000:61

Manning, R.E. (2011). *Studies in Outdoor Recreation. Search and Research for Satisfaction*. Oregon: Oregon State University Press.

Naturvårdsverket (2018). *Naturvägledning i natur- och kulturområden En handbok för planering och genomförande av naturvägledning i skyddade natur- och kulturområden. Ett komplement till handboken Tillgängliga natur- och kulturområden*. Rapport 6846.

Regeringens skrivelse 2012/13:51. *Mål för friluftspolitiken*. (The Swedish national objectives for outdoor recreation). 2012/13:51

Stankey, G., Cole, D., Lucas, R., Peterson, M., Frissell, S. and Washburne, R. (1985). *The Limits of Acceptable Change (LAC) System for Wilderness Planning*. USDA Forest Service General Technical Report. INT-176.

SEPA (2007). *Visitor monitoring in protected areas – a manual based on experiences from the Nordic and Baltic countries*. TemaNord 2007:534.

SFS (2003). *Förordning 2003:133 om statsbidrag till friluftorganisationer*.

SFS (2011). *Förordning 2011:629 om områdesskydd*. (Ordinance on area protection).

World Tourism Organization (2021). *Accessibility and Inclusive Tourism Development in Nature Areas – Compendium of Best Practices*. Madrid: UNWTO.

APPENDIX 1. Common outdoor recreation activities

The list below presents 45 common outdoor recreation activities in Sweden.²²

- Walking for pleasure or exercise
- Walking the dog
- Hiking in the mountains
- Hiking on trails in lowland terrain
- Jogging, cross country-running
- Pole walking
- Mountain Biking/off-road cycling
- Biking on roads
- Inline skating
- Skateboarding
- Wild swimming
- Swimming in open air pool
- Diving/snorkelling
- Being out in the woods and fields
- Canoeing, kayaking
- Sailing, boogie/bodyboarding, wind/wave surfing
- Waterskiing, wakeboarding
- Recreational fishing
- Cross Country skiing
- Snow shoeing
- Downhill skiing
- Snowboarding
- Skating
- Motor boating
- Snowmobiling
- Playing paintball, Live action role-playing
- Geocaching
- Sun bathing
- Hunting
- Dog sledding
- Jet Skiing
- Golfing
- Orienteering
- Mountaineering, rock climbing
- Sledding
- Riding
- Gardening
- Tenting
- Picnicking/outdoor barbequing
- Nature studying, birdwatching
- Berry picking
- Mushrooming
- Practising outdoor yoga or meditation
- Sport flying
- Kiting, hang gliding, parachuting etc.

²² Fredman, Ankre, & Chekalina, (2018).