

## **Park Assessment in Switzerland: from controlling of single parks to a systematic evaluation across all parks**

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### **Abstract**

The Swiss federal authorities support regional initiatives for the establishment and operation of parks of national importance by providing financial aid and awarding the park label. An evaluation is needed in order to assess whether the parks met the commitments made regarding the award of the label. This is an evaluation in the sense of a controlling of each park. Supplementary, a long-term evaluation is crucial in order to assess the changes in the parks and the impact of the parks in the regions.

Under a mandate of the Federal Office for the Environment (FOEN) we elaborated a concept for assessing the effects of the parks on nature, economy and society. The focus was on developing a systematic long-term impact assessment of all parks of national importance in Switzerland.

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### **Keywords**

Switzerland, parks, park assessment, evaluation, monitoring

### **Introduction**

The first national park in the Alps was established in Switzerland in 1914, almost 100 years ago. Various monitoring programs concentrating on specific issues such as forest monitoring, ungulates movements, spring monitoring and others have been initiated.

However, unlike in other European countries, no further protected areas such as national parks or regional parks with a national label have been created. A partial revision of the Federal Act on the Protection of Nature and Cultural Heritage (NCHA) was needed for setting the legal basis enabling the creation of parks of national importance. Since 2007, the Swiss federal authorities support regional initiatives for the establishment and operation of parks of national importance by providing financial aid and awarding a park label. The aim is thus to promote regions characterised by high natural and landscape values, which are pursuing sustainable development and meet the specified criteria.

According to the Ordinance on the Protection of Nature and Cultural Heritage, the Swiss Federal Office of the Environment (FOEN) shall conduct success evaluations to check that the legally required measures have been implemented and to assess their suitability. This applies also to the issue of parks of national importance. In practice this implies an assessment to evaluate whether the predetermined goals of the parks legislation are met. However, as parks legislation in Switzerland is relatively new, no long-term evaluation instrument for the assessment of parks of national importance exists so far. Therefore, the FOEN mandated a group of experts for drafting an evaluation instrument for parks of national importance (WALLNER et al. 2013).

### **Long-term and large-scale evaluation of protected areas**

Evaluation is based on observation. The continuous observation of protected areas is necessary in order to detect changes and therewith to identify the dynamics of and within these areas. This information is necessary in order to assess whether the observed changes are within natural levels of variability or may be the result of unwanted influences (FANCY & BENNETTS 2012).

Since protected areas worldwide have certain reporting obligations – be it to national agencies or be it within the frame of international programs such as MAB (Man and Biosphere) or CBD (Convention of Biological Diversity) and others – they all discuss similar issues such as the selection of indicators, data management, analysis and reporting procedures. However, only a few national large-scale evaluation programs allowing for the evaluation of several protected areas within one country have been established so far. The US National Park Service has initiated a long-term ecological monitoring program for 32 eco-regional networks containing more than 270 parks with significant natural resources (FANCY et al. 2009). In Canada, a long-term ecological change monitoring program has been developed for parks in the province of British Columbia (WRIGHT & STEVENS 2012). In Germany, an integrative monitoring program for large-scale conservation areas has been developed just recently (PLACHTER et al. 2012).

For the elaboration of a long-term evaluation instrument for Swiss parks of national importance, which shall assess whether the predetermined goals of the parks legislation are met, it was indispensable to adopt a large-scale approach. Therefore, the mentioned large-scale monitoring programs in the US, Canada and Germany were

of great importance for us. However, while the long-term monitoring program in the US National Park Service as well as the one in Canada clearly focussed on ecological aspects of parks, we followed the way of the German model, which includes also economic as well as social aspects of parks and therewith tackled all three dimension of sustainability.

### The Swiss model of long-term evaluation of parks

Since most of the parks of national importance in Switzerland are only in operation for a few years, we could not rely on long-term monitoring programs and evaluations of single parks as a basis for the development of an overall evaluation instrument for all parks.

The US National Park Service defined seven basic steps for designing a long-term ecological monitoring program (NPS 2007). We consulted these recommendations and started by defining the goals and objectives of the evaluation program. In our case, the strategic goals of parks formulated in the Federal Parks Strategy served as starting point of our considerations. Each goal was analysed with regard to existing monitoring programs and potential indicators. Thereby it became obvious, that it was crucial to differentiate between the terms evaluation and controlling. According to our understanding evaluation encompasses the assessment of the impact of certain measures in the regions under consideration where as controlling refers to the supervision of task fulfilment. Most of the strategic goals formulated in the Federal Parks Strategy referred to evaluation of the impact of the parks. However, some of these goals were formulated rather as controlling objectives than evaluation of the impact. It therefore was important to create a common understanding of these terms between the scientific experts and the representatives of the federal agency.

Figure 1 displays the difference of the terms evaluation and controlling and of the terms output and impact. The strategic, superordinate goals of parks formulated in the “Federal Parks Strategy” are at the core of the considerations. For example, parks shall contribute to the *conservation and enhancement of natural habitat quality*. The parks have to define their own specific goals related to this overall goal (example: stable populations of species relevant for each park). Practical measures are then defined in order to achieve the parks’ specific goals (example: supporting and implementing species recovery programmes). The parks have to perform services to implement the defined measures (these services are called the output), which should have an impact in the region. Controlling refers to the supervision of task fulfilment. The assessment of the impact (intended as well as unintended changes), which occurs as a result of the implemented measures, is subject of evaluation.

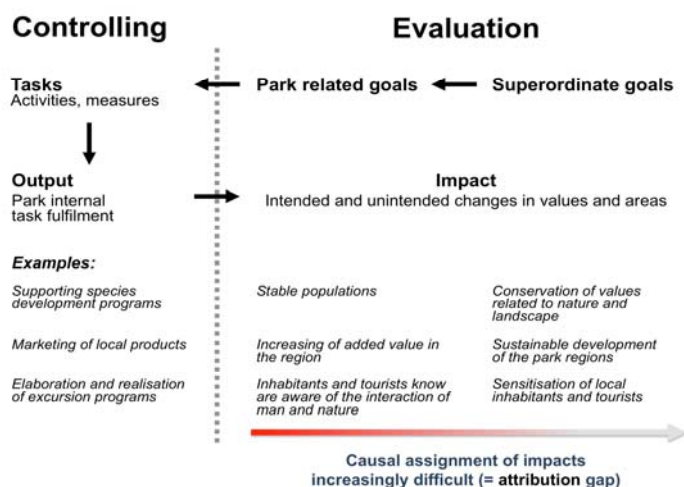


Figure 1: Components of the parks-evaluation program explaining the difference between controlling and evaluation. Adapted illustration from WIESMANN 2009.

The evaluation instrument we developed is clearly focussing on the achievement of the superordinate goals and therewith on the monitoring of the intended and unintended changes in the park regions. Therefore, each goal defined in the Federal Parks Strategy was analysed with regard to potential indicators. The goals were grouped into themes and sub-themes (Table 1).

For each goal and therewith for each subtheme various indicators were defined. We tried to use as many indicators from existing monitoring programs as possible. Therewith it is possible to keep down the costs for gathering and analysing data. However, since we partially rely on monitoring programs not yet fully in progress, some of the selected indicators might have to be replaced if the concerned monitoring program is not coming into force.

### Conclusion

The overall aim of the long-term evaluation program on Swiss parks of national importance is to assess the achievements of the goals defined in the Federal Parks Strategy. The parks in Switzerland not only help to protect and enhance exceptional natural habitats or landscapes of outstanding beauty. At the same time, these parks promote the sustainable economic development of the regions concerned, as well as allowing visitors to

experience nature and offering environmental education. Therefore it is crucial to establish a long-term evaluation program, which not only focuses on the ecological aspects of the parks but also on economic and social issues. However, selecting and analysing social and economic data is often time consuming and cost-intensive since surveys have to be conducted and analysed.

Table 1: Themes and sub-themes of the Swiss parks-evaluation program

Themes	Subthemes
<b>Nature</b>	Habitat Species
<b>Landscape</b>	Beauty Uniqueness and character
<b>Economy</b>	Added value Product marketing Recreation and tourism Agriculture and forestry
<b>Society</b>	Demographic development Quality of life Identity Mobility Participation
<b>Communication</b>	Sensitisation Environmental education Knowledge transfer Research

Knowing the status and trends and therewith understanding the dynamics of parks is not only fundamental with regard to the question of fulfilment of parks legislation goals. It also forms the basis for an early warning system concerning natural hazards or threats and thus for sensitizing the public to specific issues and problems. Furthermore, the knowledge gained through this long-term evaluation instrument shall also assist park managers in developing a broad-based understanding of the dynamics of parks. This is fundamental for management and decision-making aimed to maintain, enhance or restore the ecological, economic and social integrity of parks.

At the moment, the long-term evaluation instrument for Swiss parks of national importance is being discussed by the Federal Office of the Environment. Decisions regarding the scale of the program as well as the timeframe for implementation are not yet defined.

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