



Survey Results - **Summary in english**

Integrating climate change into the management of protected natural areas

Existing initiatives and expectations of managers in Europe

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Summary and key findings

This report presents the **results of a survey conducted in early 2019** as part of the LIFE NaturAdapt project. This preparatory action aimed to identify existing initiatives and to clarify the expectations and needs of European protected area managers to integrate climate change adaptation into management practice.

THE PROJECT

The LIFE NaturAdapt project aims to integrate, by innovating on the basis of existing resources, the challenges of climate change in the management of European protected natural areas. Scheduled over 5 years (2018-2023), it is coordinated by Nature Reserves of France. It is based on a dynamic collective learning process with nine other partners, including six reserve managers.

HOW DID WE ORGANIZE THE SURVEY?

The survey was organized in 3 phases during the first half of 2019. It was distributed to more than 6,000 nature conservation professionals in France and Europe:

1. **497 respondents** participated in a "short survey" distributed online. 43% of replies came from France and 57% from other EU countries. This helped to understand major trends in protected area management practices and how climate change is currently being addressed.
2. Next, **72 respondents** participated in a "in-depth survey" about climate change vulnerability assessment and adaptation practices as well as managers' needs and expectations.
3. Finally, **a series of 10 phone interviews** with protected area managers who have already integrated climate change into their management and / or planning practices were conducted. Their experience enriched the survey results.

The details of the methodology and the profiles of the respondents are available in the section "Methodology of the survey" and detailed results are available upon request.

The survey highlighted a series of **observations, key findings, recommendations and opportunities**.

CLIMATE CHANGE IS ACTUALLY OBSERVED IN EUROPEAN PROTECTED AREAS

Concrete changes observed by our sample are attributable to climate change in the areas they manage. Examples include rising temperatures, prolonged droughts, heavy precipitation over very short periods, rising sea levels, soil erosion, and disruption of seasonal and phenological cycles. Respondents reported that climate change is a priority within 10 years for them. Destruction, alteration and fragmentation of natural environments remain the most significant pressures.

IT IS POSSIBLE TO BUILD ON THE FOUNDATION OF EXISTING MANAGEMENT PLANNING PRACTICES

We found that protected area management is planned for by 80% of respondents and that 61% of them use a standardised methodology. At European level, methodologies vary greatly from one country to another depending on the legal framework, the type of designation, the structure of the conservation sector, etc.

Management planning is a collaborative practice. In 99% of cases, managers say they collaborate with various combinations of actors and stakeholders to plan the management of their protected area. We can therefore assume that the protected area is considered within a broader socio-ecosystem or area of influence. This element is essential if one is to take climate change into account.

CLIMATE CHANGE ADAPTATION IS AN EMERGING PRACTICE

The results show that more than two-thirds (67.7%) of respondents in the short survey did not conduct a climate change vulnerability assessment. Detailed assessments were conducted in only 7% of cases.

22% of respondents say that they take climate change into account in one way or another. In the vast majority of cases, specific monitoring was implemented (61.1%) and adaptation measures were incorporated into the existing management plan (44.4%). The drafting of an adaptation plan, strictly speaking, remains marginal (16.6%).

Among the concrete adaptation measures that are already being tested, we have identified an increase of connectivity, active restoration of ecosystems and their functionalities, free evolution for areas with a high degree of naturalness, setting up of monitoring or specific studies, and development of collaborations with local stakeholders.

MANAGERS NEEDS AND EXPECTATIONS FOR THE INTEGRATION OF CLIMATE CHANGE ADAPTATION IN THEIR PRACTICE

Several reasons for not taking climate change into account have been reported by respondents. They lack human or financial resources (29.7%). They have more urgent priorities (27%) on their site. They do not know how to do it (24.3%). Finally, some say that they lack knowledge about adaptation measures that can be implemented (18.9%).

By looking into this question in the in-depth survey, we found that over 90% of respondents who have not yet made a climate change vulnerability assessment would like to do so. For more than half of them (56%), the priority to carry it out is to have a methodology. Coaching (12%), time (12%) and human resources (9%) are also necessary.

Through the phone interviews, we found out that knowledge about biodiversity response under climatic constraints is insufficient in most cases. Identifying and implementing operational adaptation measures remain the main challenges. Support from and exchanges with experienced managers are useful for developing and implementing an adaptation strategy.

PROTECTED AREAS HAVE A ROLE TO PLAY IN LOCAL MITIGATION STRATEGIES

90% of respondents in the short survey believe that protected areas have a role to play in mitigating the effects of climate change. According to them, these spaces can support the resilience of the territory and provide essential ecosystem services for adaptation to climate change. They can play an observatory or sentinel role for climate changes locally. They are a great tool to raise public awareness on the topic and can be experimental territories for transition.

TYPICAL JOURNEY FOR INTEGRATING CLIMATE CHANGE INTO PROTECTED AREA MANAGEMENT

Adaptation to climate change is a long-term project. The first recommendation made by interviewees is to make decisions, to act and not just conduct studies. While there is uncertainty about the pace and magnitude of climate change over the next few decades, the "paralysis of uncertainty" trap must be avoided at all costs. The need for adaptive management then appears: the evolution of climatic conditions being uncertain, it is interesting to imagine the future, to try adaptation measures, to learn from experience, then to try again.

Through this survey and existing experiences gathered, we can outline the itinerary for the integration of climate change into the management of protected natural areas. It consists of 6 major points:

1. The **trigger** that will put climate change on the agenda of the team of the protected natural area;
2. The **preparatory phase** which includes bibliographic research, exchange with experienced people, researchers, stakeholders, ... and projections about climate change in the future;
3. Establishment or **development of monitoring of climate variables** and the effects of climate change;
4. **Vulnerability assessment**;
5. **Adaptation planning** in a collaborative approach at different spatial scales;
6. **Implementation and monitoring**.

AN OPPORTUNITY TO INNOVATE AND BETTER VALUE NATURE IN LOCAL ADAPTATION STRATEGIES

While adaptation measures are specific to sites and territories, our survey has brought out common features in terms of governance.

Experiences show that a climate change adaptation approach is an opportunity to adopt a creative and inclusive stance.

They also report that integrating climate change into management practices encourages exchanges and collaboration with local stakeholders. Once vulnerability has been defined with the different actors, multi-stakeholder and multi-disciplinary dialogue can be useful to develop concrete, adapted and accepted action plans.

Respondents to the survey explain that in a climate change context, the priority may be to develop resilience and adaptive capacity of the habitat and not only to preserve natural heritage.

Finally, planning for conservation with a view to climate change offers the opportunity to position protected natural areas at the heart of territorial adaptation strategies and to highlight their role and the benefits they bring to communities and stakeholders.

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