



# Principles for biodiversity vulnerability to climate change

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## Fauna



## Forests



“Vulnerability is the degree to which a system is susceptible to, and unable to cope with, adverse effects of climate change, including variability and extremes.

Vulnerability is a function of character, magnitude and rate of climate change and variation to which a system (or species) is exposed, its sensitivity, and its adaptive capacity.”

# PRINCIPLES AND APPROACHES OF INTERNATIONAL AND EUROPEAN LAW

Principles and Approaches and Soft law

Framework Convention on Biological  
Diversity

Framework Convention of Climate Change

Bern Convention on Conservation of  
European Wildlife and Natural Habitat

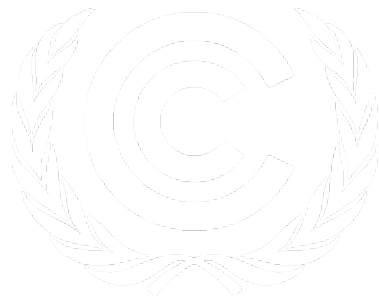
EU Legislation

## PRINCIPLES WITH DIFFERENT FUNCTIONS

Principles of sovereignty, prevention and precaution

Principles of sustainability, of ecosystem management and systemic integration and related principles

Principle of adaptation and related principles: To avoid maladaptation



- **Principles in the UNFCCC // Principles adopted by the CoP**
- The Paris Agreement **recognises the protection of the integrity of ecosystems and biodiversity for both climate change mitigation and adaptation actions.** It specifically lays out **principles of adaptation** that takes ecosystems into consideration. It also calls for **integrating adaptation** into relevant environmental policies and actions, where appropriate, as well as for building resilience of ecosystems through sustainable management of natural resources, taking into account the imperatives of a just transition of the workforce”.
- **National plans of adaptation as main tool from Kyoto to Paris**



## Convention on Biological Diversity

- **Principles in the CBD**
- **Principles adopted by the CoP: Voluntary Guidelines for the Design and Effective Implementation of Ecosystem-based Approaches** to climate change adaptation and disaster risk reduction.

The Bern Convention  
& Scienseed present  
**#notAlone**



The Bern Convention on the Conservation of European Wildlife and Natural Habitats launched the social media campaign #NotAlone on the issue of urban heat waves.

It is aimed at raising awareness on how biodiversity helps protecting human well-being and mitigating the effects of climate change. <https://www.not-alone.eu/>

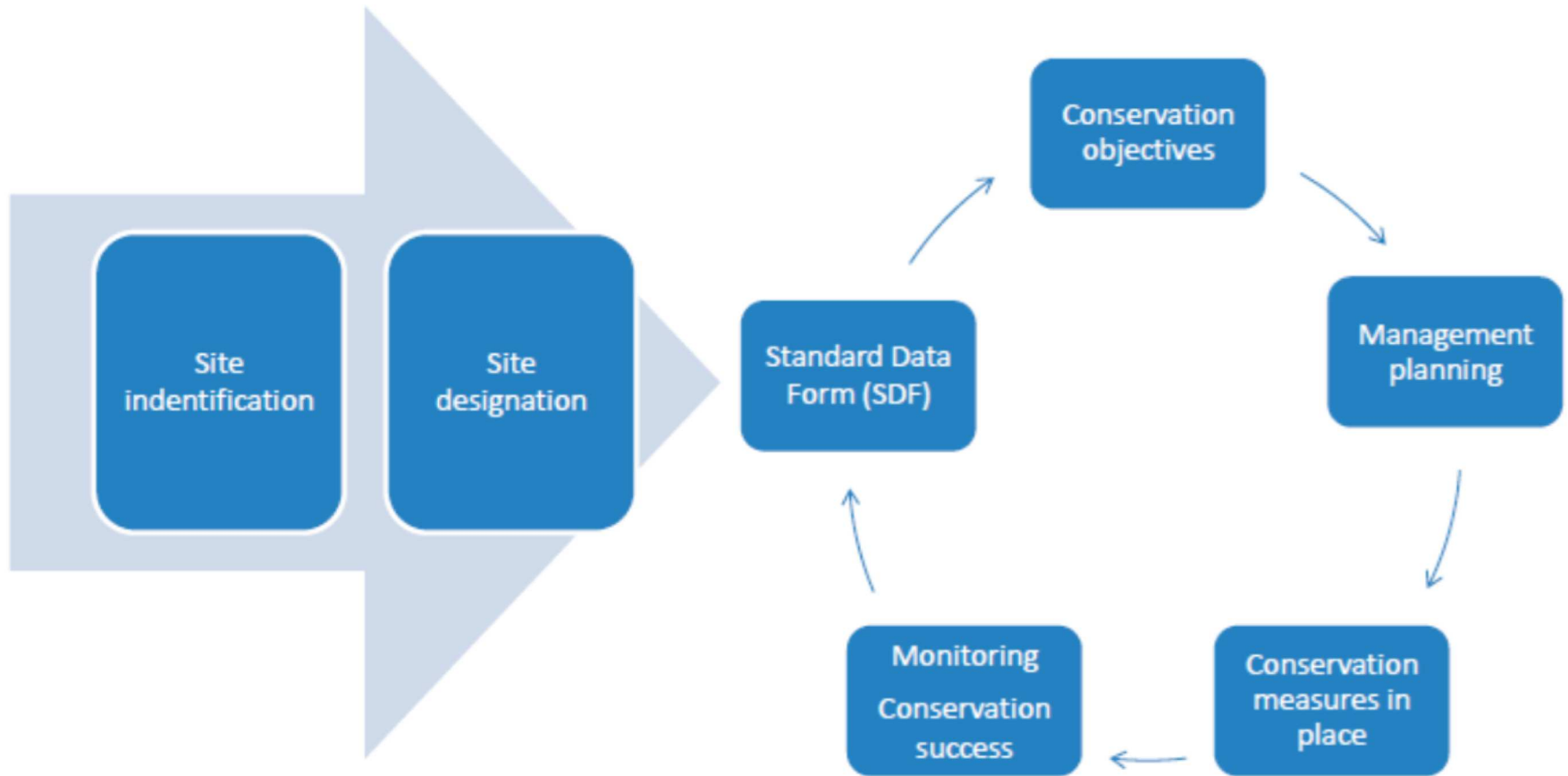
The Bern Convention  
& ScienceSeed present  
**#notAlone**



- **Approaches not principles:**  
green infrastructure and ecosystem-based approaches to adaptation
  - **The adaptive management approach**
- **Monitor using common approaches:**
  - to assessing and attributing climatic change impacts upon species.
- **Guidelines on the management of Emerald sites in the context of Climate Change 2015**
- **Recommendation No. 206 (2019) of the Standing Committee, on nature-based solutions and management of protected areas in the face of climate change.**



# Adaptive management



Phase I and II of the Emerald

Phase III of the Emerald Network

# EU Principles



- EU Strategy on Biodiversity
- EU Strategy on Adaptation
- The Climate Law
- Principle of integration:
  - to fight vulnerability to climate change we need **more integrated policy responses**, meeting biodiversity and climate change objectives:
  - searching for synergies and avoiding cases of maladaptation.
- Principle of precaution / Principle not to cause harm / Principle to avoid maladaptation
- To monitor the implementation of adaptation policies and measures:
  - to show whether vulnerability of habitats and species can be reduced effectively through adaptation actions.



## Guidelines on Climate Change and Natura 2000

Dealing with the impact of climate  
change

On the management of the Natura  
2000 Network of areas of high  
biodiversity value

These guidelines are primarily aimed at Natura 2000 site managers and policy makers. The purpose is to underline benefits from Natura 2000 sites in mitigating the impacts of climate change, reducing vulnerability and increasing resilience, and **how adaptation of management for species and habitats protected by Natura 2000 can be used to tackle the effects of climate change:**

- How vulnerable are the Natura 2000 species and habitats (in my site, region or country) to the (predicted) effects of climate change?
- How can the vulnerability to climate change be managed? (e.g. which impacts can we address through particular measures)



**PIMA ADAPTA  
CONOCIMIENTO Y ACCIÓN  
FRENTE A LOS RIESGOS DERIVADOS  
DEL CAMBIO CLIMÁTICO**

**2020**



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