



Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
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Eidgenössisches Departement für
Umwelt, Verkehr, Energie und Kommunikation UVEK

Bundesamt für Umwelt BAFU
Abteilung Gefahrenprävention

Sektion Rutschungen, Lawinen und Schutzwald

Country Report of Switzerland Protection Forest Policy and Implementation

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Responsibilities for protection against natural hazards

Confederation



Cantons



Third parties
(municipalities...)

Strategic management:

- Legal framework
- Technical guidelines
- Financing

Operational management

- Project management
- Regional master plans
- Financing

Practical implementation

- Local development plans
- Land-use planning ...



Legal Bases

- **Article 77 of the Swiss Federal Constitution:** the Confederation has to ensure that the forests are able to fulfil their protective function.
- **Forest Act of 1991:** “The forest shall be managed in such a way that it can fulfil its functions without interruption or restriction (sustainability)... Where required by the protective function of the forest, the cantons ensure a minimum level of maintenance.”



Delimitation of Protection Forests

- Generally accepted definition 2003: “A protection forest is a forest, which protects an acknowledged damage potential against a natural hazard or reduces the potential risks”
- Project SilvaProtect-CH:
 - Protection forest delimitation according to uniform criteria throughout Switzerland
 - Basis for the harmonized protection forest delineation of the Cantons





SilvaProtect-CH

Four main steps:

- **Modelling hazard perimeter:** avalanches, rockfalls, landslides and channel related processes
- **Determining the damage potential:** infrastructure
- **Evaluating damage-relevant process areas:**
Hazard perimeters that may damage the protecting infrastructure were specified
- **Determining the damage-relevant process areas in forests**

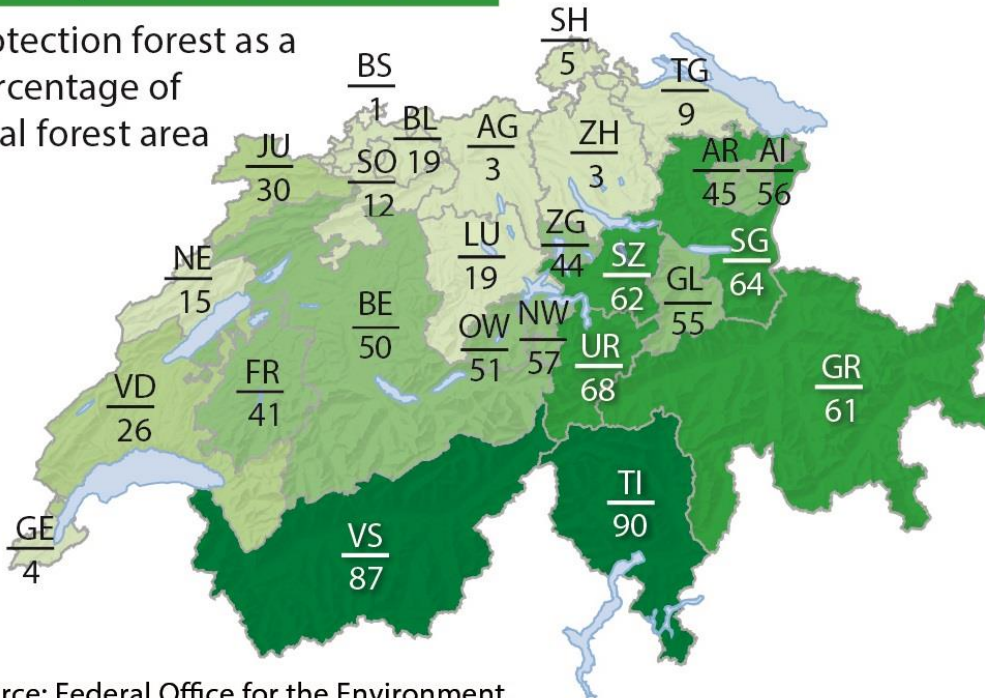
Based on these damage-relevant process areas in forests, the Cantons delimited their harmonized protection forest.



Protection Forest in Switzerland

Swiss protection forests

Protection forest as a percentage of total forest area



Source: Federal Office for the Environment
Graphic: Ringier Infographics

What the protection forest protects against*



Channel processes**
80 percent



Landslides
27 percent



Avalanches
21 percent



Rockfall
8 percent

What the protection forest protects*



Roads
76 percent



Buildings
71 percent



Railway lines
24 percent

* Percentage of total protection forest

** Overbank sedimentation, debris flow, driftwood, erosion

Source: Federal Office for the Environment
Graphic: Ringier Infographics, modified



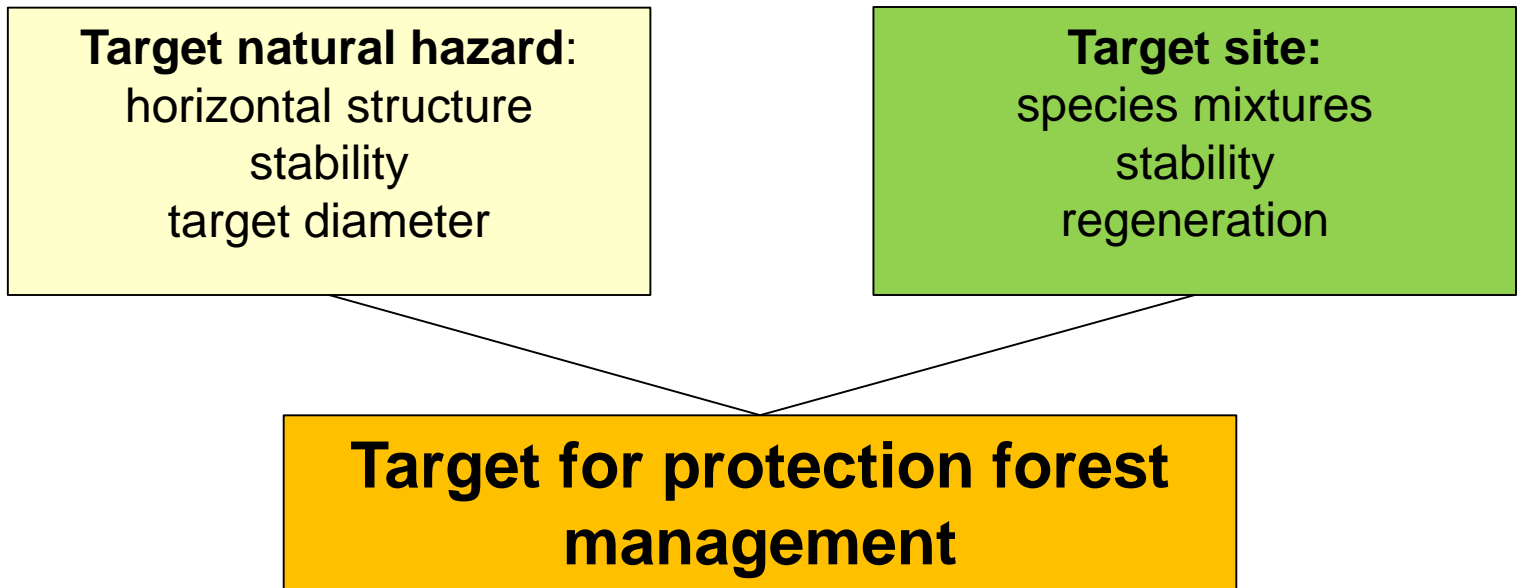
Programme agreement “Protection Forest”

- Result-oriented performance agreement between the Confederation and the Cantons
- Defines targets for
 - protection forest management (ha)
 - infrastructure required for protection forest management
 - forest protection
- Confederation provides around CHF 70 million annually for the Protection Forest Programme (ca. 40 % of total costs)
- Remaining costs for all programme objectives are supported by the cantons and other beneficiaries



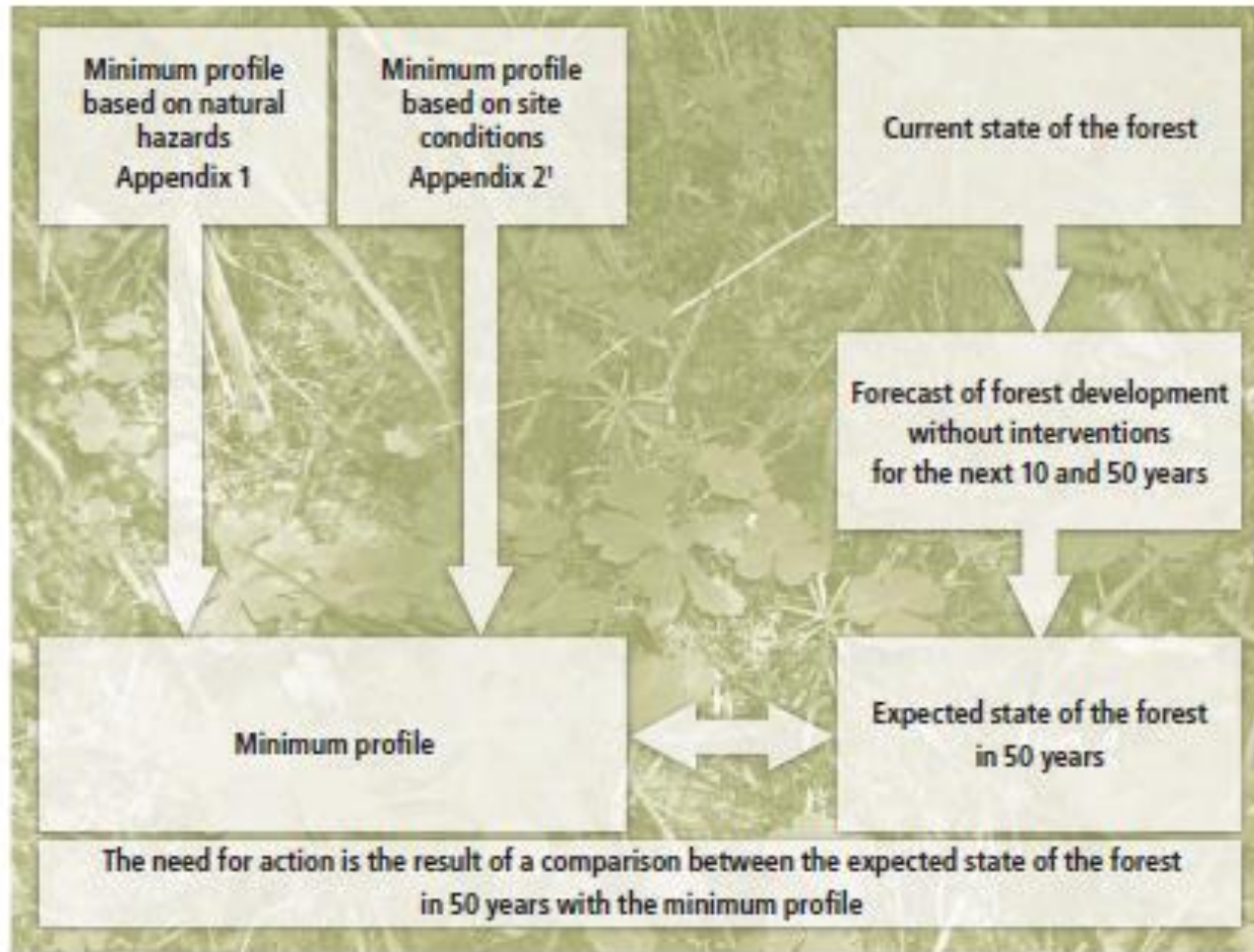
Quality in protection forest management

- Programme agreement regulates also quality indicators for protection forest management
- Core element: enforcement aid “Sustainability and Success Monitoring in Protection Forests” (NaiS)





Determining the Need for Action





Public Awareness of Protection Forests

Survey was carried out in 2010, answered by 3,022 representative respondents:

- Most important forest functions: majority answered that the forest is a habitat for animals and plants and provides protection against natural hazards.
- 95% believe that public contributions for forest management are justified or somewhat justified





Challenges

- Switzerland's protection forest management system is working well and is recognized and appreciated by all partners involved
- Challenges:
 - Influence of browsing by game on forest regeneration
 - Willingness of the public sector to finance the safeguarding of the protective effect of forests
- Major challenge climate change:
 - research programme "Forests and Climate Change"
 - Implementation of the results in NaiS
 - Tree-app.ch



Thank you for your attention