

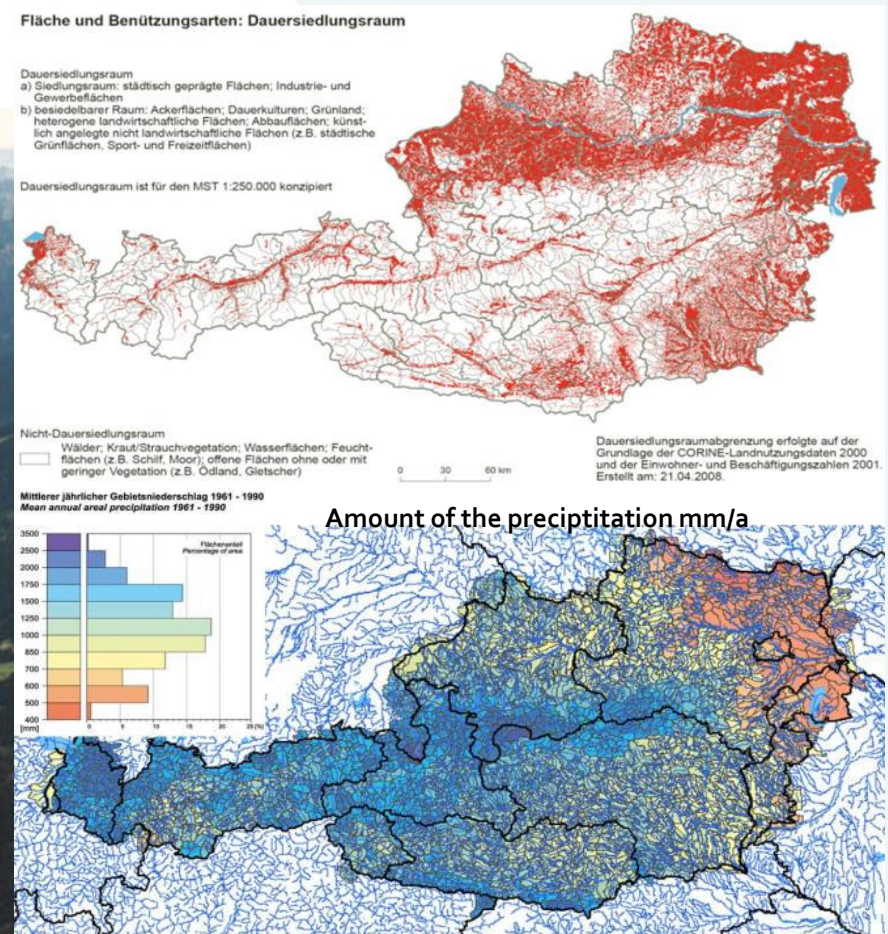


PROTECTIVE FORESTS Country Report Austria

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7th November 2019

CHARACTERISTICS AND BOUNDARY CONDITIONS

- Austria: 2/3 Alpine
- 37 % of area available for permanent settlement (esp valleys and low land regions)
- Pot. high precipitation (altitude)



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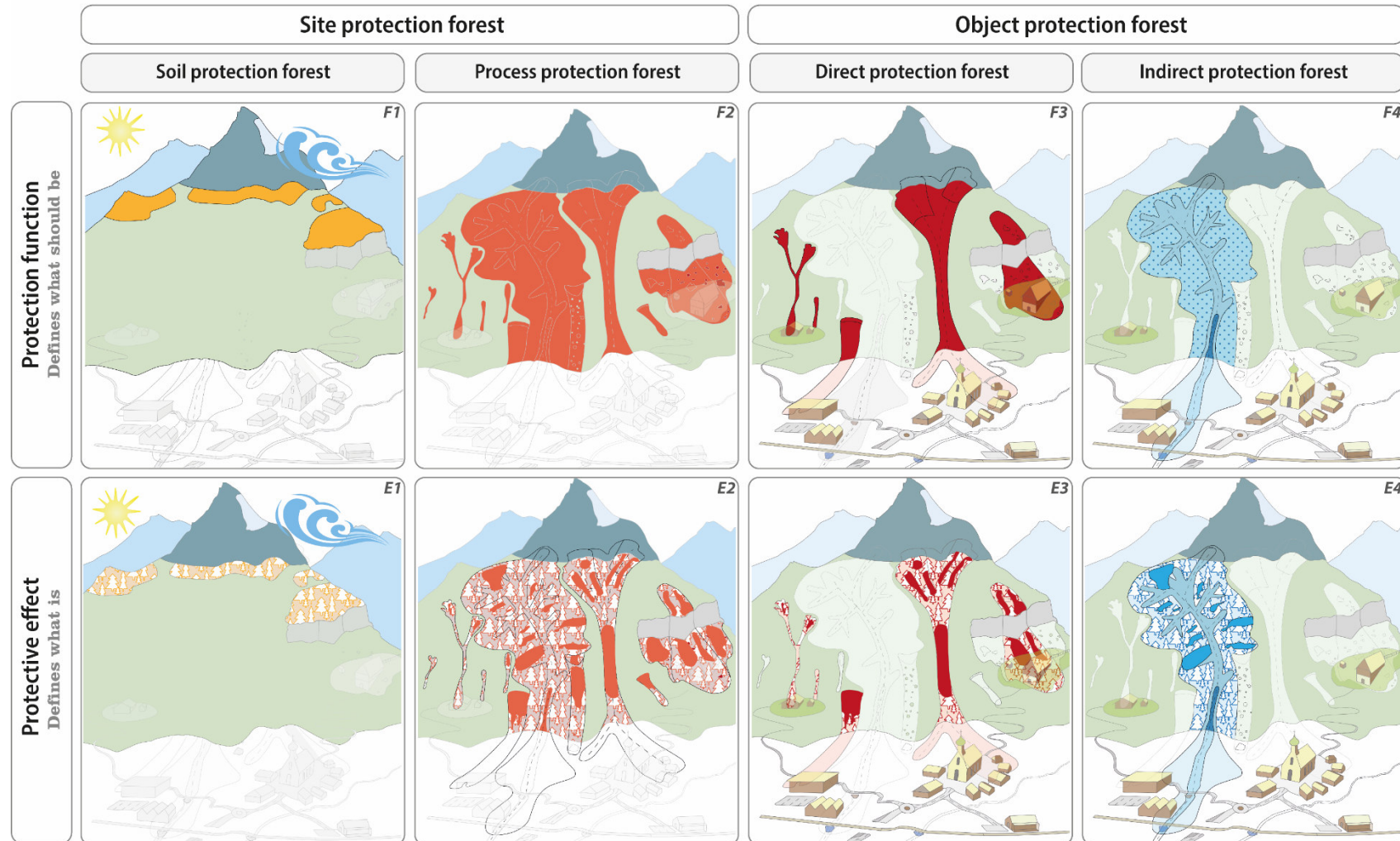
Natural Hazards in Austria

- Exposure to heavy **precipitation, floods, debris flow, thunderstorms, hail and storm and snow avalanches**
- **70% of total area** encompasses torrent and snow avalanche catchment areas
- **12.000 torrent catchments** and **7.000 snow avalanche paths** documented
- **Landslides** and **rock-fall** potential in steep slopes depending on the geology
- Austrian Service for Torrent and Avalanche Control (WLV) founded in 1884
- Around **400.000 objects** are **endangered by natural risks**
- **Economic deficits** with weather extremes in the last 20 years ~ **9.5 billion EUR** (by Munich re-insurance)

Protective Forest

- Forests and their ecosystem services **best option i.e. to reduce runoff- and erosion processes, for rock-fall protection and protection against avalanches**
- Austrian Forest Act 1975 §21f
 - Site-protecting forest: soil and process
 - Object protecting forest: direct and indirect
- **1.2 mio. ha** forests with protective function (30%- WEP)
- **864.000 ha** object protecting forest
- 56% stable protective forest stands
 - 300.000 ha urgent need for action





DEFINITIONS OF PROTECTION FORESTS



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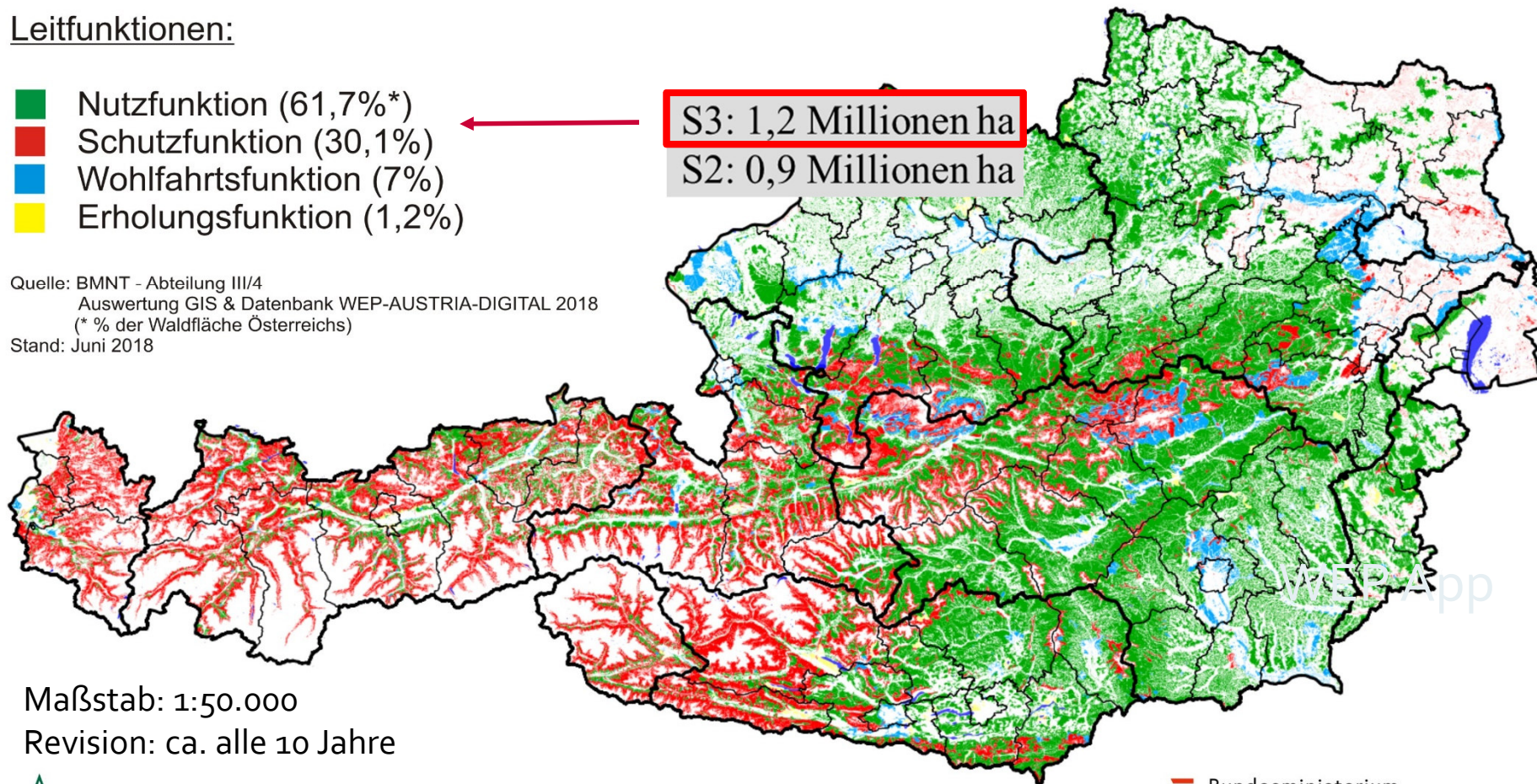
FOREST DEVELOPMENT PLAN

Leitfunktionen:

-  Nutzfunktion (61,7%*)
-  Schutzfunktion (30,1%)
-  Wohlfahrtsfunktion (7%)
-  Erholungsfunktion (1,2%)

S3: 1,2 Millionen ha
S2: 0,9 Millionen ha

Quelle: BMNT - Abteilung III/4
Auswertung GIS & Datenbank WEP-AUSTRIA-DIGITAL 2018
(* % der Waldfläche Österreichs)
Stand: Juni 2018



Maßstab: 1:50.000

Revision: ca. alle 10 Jahre

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Protective Forest Management

- **Specific forest techniques**, such as **transverse felling** of trees and cutting high, developed, increasing the surface roughness
- **Land use management measures:** Technical measures for immediate protection effects, to support silvicultural measures
 - Long-time project planning (15 – 30 years), and regeneration periods



Land use management measures - examples

Example afforestation “Schmittenbach” (Zell am See, Salzburg), raising of the **PA1** tree-line



PA1

hier ging es nicht um die Hebung der Waldgrenze, sondern um eine Wiederbewaldung

Pichler, Andreas; 07.11.2019

Land use management measures – cost effect

Cost of technical avalanche
measures per ha
€ ~ 600.000



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10-times
of the total costs for
restoring protective forests



100-times the costs to
receive the positive
effects of protective
forests

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Protective Forests - Challenges

- **Overaged forests**
- **Missing regeneration** (high populations of hoofed game -deer and chamois)
- Poor accessibility
- Unfavorable tree combination and poor vitality due to altitude
- Infrastructure and settlement development
- Climate change effects
 - Drought and heat
 - Insect calamities
 - Storms
 - Fire risk



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Alpine Hazards and Climate Change – protective forest

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Kals/Osttirol: windfall 29./30.10.2018

Alpine Hazards and Climate Change – protective forest



Alpine Hazards and Climate Change – protective forest



Alpine Hazards and Climate Change – forest fire



Source: fotokerschi.at



Alpine Hazards and Climate Change – forest fire



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Societal challenges



Societal challenges



**Obertauern
2017**

Protective Forest Action Programme – 2019

Goals and Priorities

- Improve the Protective Function and Effect of Forests
- Consideration of i.e. climate change, demographics, land use, structural changes
- Develop legal and planning basis for protective forests
- Nation-wide setting of measures
- Ensure funding for protective forest management
- Strengthen societal relevance, including tourism, hunters, municipalities etc.
- Awareness raising and Training
- Research focus on protective forests: forest genetics, climate dynamics, economy and ecology



EFC Working Party on the Management of Mountain Watersheds – Working Group 3 on Protective Forests

- In Innsbruck large interest expressed
- Concept Paper developed
- First meeting in Fall 2020 at „Forest Campus Traunkirchen“



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EFC—Working Party on the Management of Mountain Watersheds¶



WG3-“Protective-Functions-of-Forests”¶

Draft-Concept-Paper (Oct/2019)¶

Working-Group-3-“Protective-Functions-of-Forests”-was-proposed-in-2019-at-the-thirty-second session-of-the-Working-Party-on-the-Management-of-Mountain-Watersheds-(WPMMW)-to-work-on-interlinkages-between-protective-functions-of-forests,-ecosystem-services,-and-related-challenges-and-impacts-of-climate-change.-The-establishment-of-WG3-is-still-subject-to-revision-by-WPMMW-members-and-participation-of-EFC-member-countries.¶

This-Working-Group-draft-concept-paper-builds-on-the-discussion-at-the-32nd-session-of-the-WPMMW-on-25-September-2019-in-Innsbruck,-Austria.-Members-are-invited-to-shape-the-Working-Group’s-mission-and-themes-according-to-their-interests-and-expectations.¶

Contacts¶

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WPMMW-Secretariat: Ms-Yuka-Makino,-Team-Leader-Water-&-Mountains-(Yuka.Makino@fao.org)¶

I. Critical-topics¶

Working-Group-3-(WG3)-“Protective-Functions-of-Forests”-concentrates-its-work-and-activities-initially-on-important-protective-functions-of-forests-in-mountain-areas.-Policy-issues-relating-specifically-to-protective-

THANK YOU FOR THE
ATTENTION.

www.schutzwald.at

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