Priority criteria list for the preservation and safeguard of open spaces in the EUSALP area

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1 Introduction

According to the Cambridge Dictionary (2021a) “priority” [noun] is described as “something that is very important and must be dealt with before other things”. A “criterion” [noun] is referred to by the Cambridge Dictionary (2021b) as “a standard by which you judge, decide about, or deal with something”. Using the words as one expression, a priority criterion, or the plural form “priority criteria” can be seen as standard upon which decisions are made before other factors are considered. In terms of spatial planning or nature conservation planning multiple approaches have been developed to identify priority areas, but implementation of various techniques has been lacking (Knight et al., 2006). In the OpenSpaceAlps project we have aimed to develop a list of specific criteria that should facilitate safeguarding of open spaces in the EUSALP area.

The following priority criteria list is based on previous activities and reports on “Current governance and planning systems for open spaces in pilot sites”, “Pilot implementation strategies”, “Cross-border case studies and workshops” and “Conditions for transferring local spatial planning approaches for open spaces to alpine and EUSALP areas” of the project. Here we provide a priority criteria list for policy makers at local level but also for the EUSALP area to enhance preserving open spaces for different intended purposes. Specifically, the list collects criteria to preserve and safeguard open spaces in spatial planning, which could be used for an intermunicipal and transnational harmonization dealing with open spaces.

Criteria for safeguarding open spaces can be defined for a variety of planning fields. According to the experiences in the former activities of the project, the following points should be considered:

- Endangered open space functions:
  The need for protection exists for endangered open space functions, which are less considered by nature protection or spatial planning.
- The scale of planning (macro-regional level, regional or intermunicipal level):
  At local level, planning decisions can be made for individual projects, by taking into account a wide range of influencing factors. When it comes to intermunicipal or transboundary spatial planning, the indicators must be more general.
- The need for harmonization:
  The need for harmonization across borders is given for most of the open space functions because ecosystem services do not stop at administrative borders.
- The planning approach:
  Planning for open spaces can be done by a positive planning approach through safeguarding open spaces, or by a negative planning approach through limiting disturbing infrastructure.

The variety of indicators in the analyzed spatial planning instruments is too broad to make a comprehensive list of criteria and to harmonize them across different planning levels. Therefore, a selection was made based on the considerations mentioned above, that are important for the cross-border case study areas and pilot sites in the Interreg OpenSpaceAlps project.

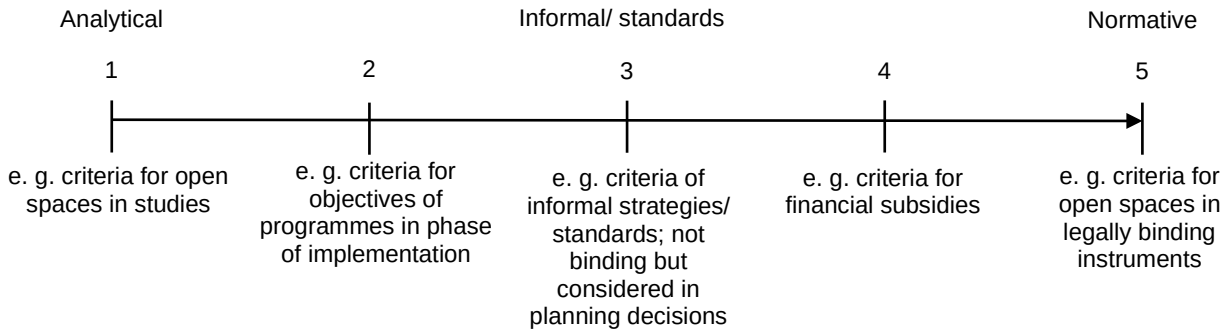
For the priority criteria list, we focus on criteria for ecological connectivity, agricultural areas and recreational areas, which are mostly endangered open space functions and less considered in open space planning, as revealed in previous activities (Laner et al. 2020), considering a positive planning approach. We present criteria for **landscape permeability/ ecological connectivity**, for the preservation of **agricultural areas**, and for **near natural and recreational areas**. Cross-functional criteria are not excluded. For the three categories, we subdivided two different scales of planning:

The **macro-regional or alps- wide/ national level** and the **intermunicipal/ regional level** for the single regions or pilot sites of each country. Criteria for transnational border regions, which consist of two or more regions in different countries, can be derived from the regional level.

We allocate each criterion along a gradient, differentiating between analytical (1) and normative instruments (5).

1) Analytical instruments classified as category 1 refer to describing approaches/instruments, for example scientific studies, where no direct implementation is required.
2) The second category consists of (spatial) plans which are still in development. In other words, there is a will for implementation, but the documents are not ready to serve as basis for specific actions.
3) The third category can be described as informal implementation, for example the white zones of Vorarlberg.
4) The fourth classification category is characterized by financial resources, which should encourage willingness for implementation, but are not legally binding.
5) The last category (5) has a strong binding character as regulations at different spatial scales do and match top-down implementation strategies.

Figure 1: Gradient of analytical to normative criteria



1.1 Overview

Table 1 provides an overview of different approaches aiming to safeguard landscapes including their functions, without claim to completeness.

Table 1: Overview of legal and analytical approaches for safeguarding open spaces according to functions and levels

Functions								
Level	Macro - regional		Ecological		Economic		Social	
			Natural landscapes	Cultural landscapes	Agriculture	Forestry	Recreation	Protection function
		Legal	Natura 2000, UNESCO Geoparks (Network), Environmental impact assessment, Strategic impact assessment (EU)		Sectoral Plan on Crop Rotation Areas (Sachplan Fruchtfolgeflächen) (CH)			EU flood directive
		Strate-gical	EU Biodiversity Strategy, EU Green Infrastructure Strategy, EU Soil Strategy					
		Analytical	Maintenance of genetic diversity (Ecosystem Services – ES) Strategic Alpine Connectivity Areas based on the Continuum Suitability Indicator, Soil typology				Analysis of open spaces in Switzerland <20% of a landscape chamber influenced by disturbing infrastructure, Accessibility (Distance from infrastructure) Variety of potential (recreational) uses	

<table>
<tr><td rowspan="5"></td><td rowspan="5">Regional to local scale</td><td rowspan="3">Legal</td><td colspan="6">Alpenplan Bavaria (DE)</td></tr>
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Fodder provision (ES)</td><td>Raw materials (ES) and
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Landscape aesthetics (ES)</td></tr>
</table>

2 Priority Criteria List

2.1 Landscape permeability/ ecological connectivity

2.1.1 Criteria for Strategic Alpine Connectivity Areas

Legal character: Analytical (1) Level: Macro- regional

For landscape permeability/ecological connectivity we base the priority criteria list on the values of the Continuum Suitability Index (Lüthi et al., 2018) as well as the categorization of Strategic Alpine Connectivity Areas (SACA) areas (ALPARC, 2019).

Table 2: CSI for environmental protection status.

Environmental protection indicator ENV (EUSALP)	
Legal protection status	**Indicator val. (0-10)**
Strict conservation status, no economic use	10
Protected areas with strictly regulated economic use	9
Protected areas with legal restraints	6 - 7
Protected area where the management serves the sustainable development of natural ecosystems	5
Protected areas without legal restraints	5
No protection	0

Table 3: CSI for fragmentation.

Fragmentation indicator FRA (EUSALP)	
s eff (all)	
Number of meshes per 1000 km² (s eff)	**Indicator value (1-10)**
< 0.5	10
0.5 - 1	9
1 - 2	8
5 - 10	7
10 - 20	6
20 - 30	5
30 - 50	4
50 -75	3
75 - 100	2
>100	1

Table 4: CSI for land use.

Land use indicator LAN (EUSALP)	
Land use (based on CORINE Landcover)	
Land cover class	**Indicator value (0-10)**
Artificial surfaces (Continuous urban fabric)	0-5
Natural areas	6- 10
1. Artificial surfaces	0-2
2. Agricultural areas	2-5
Land principally occupied by agriculture, with significant areas of natural vegetation	6
Agro-forestry areas	5
3. Forest and seminatural areas	6-10
Natural grasslands	8
Moors and heathland	10
Bare rocks	7
Sparsely vegetated areas	8
Beaches, dunes, sands	7
Glaciers and perpetual snow	7
4. Wetlands	10
5. Water bodies	8-10
Water Courses	7-9
Lagoons	10

Table 5: CSI for population density.

Population indicator POP (EUSALP)	
Inhabitants per ha	**Indicator value (0-10)**
≤ 2	10
2 - 5	9
5 - 9	8
9 - 16	7
16 - 26	6
26 - 43	5
43 - 67	4
67 - 106	3
106 - 172	2
172 - 300	1
> 300	0

Considering a disturbance buffer according to the population density (ca. 1 km).

Table 6: CSI topography indicator.

Topography indicator TOP (EUSALP)	
Altitude (m. a. s. l.)	**Indicator Value (0-10)**
≤ 1500	10
1500 - 1675	9
1675 - 1850	8
1850 - 2025	7
2025 - 2200	6
2200 - 2375	5
2375 - 2550	4
2550 - 2725	3
2725 - 2900	2
> 2900	1
Slope (°)	**Indicator Value (0-10)**
≤ 30°	10
30-40°	7
40-45°	5
> 45°	3

Continuum suitability index:

Is calculated by the weighted mean of mean indicator values (land use, population pressure, fragmentation, topography, environmental protection). Land use and population pressure are the most important factors and count double as much as the other indicators.

Strategic Alpine Connectivity Areas (SACAs)

SACA 3, CSI < 5: Ecological restoration areas
Because of fragmentation interlinked habitats and a transparent landscape matrix are no longer realistic. They represent important barriers between Ecological Conservation Areas.

SACA 2, CSI 5 – 7: Intervention areas, important for the implementation of ecological corridors
High potential for connectivity where lager, non-fragmented zones could be created. E. g. by connecting Natura2000 sites.

SACA 1, CSI 8-10: Ecological conservation areas (ECAs)
These areas have considerable space for connectivity with non-fragmented surfaces and where connectivity should be conserved. Area sizes are not given. (Plassmann & Kohler, 2019)

2.1.2 Criteria for ecological networks and wildlife corridors

Legal character: Informal to Binding/ normative (3-5) Level: Regional/ Local

Based on the example of ecological networks and wildlife corridors within the Cantonal Structure Plan Valais/Wallis (Switzerland) we present how to preserve diverse habitats and enhance ecological connectivity (Koordinationsblatt des kantonalen Richtplans VS, A.11, 2019).

The areas are divided into 4 categories:

- core areas: high-quality natural areas with optimal conditions
- connection zones: protected areas or provisional areas with importance to migratory animals
- continuum: neighbouring areas not suited as habitats but for migratory activities
- buffer zones: protection of the core areas from negative impacts at the margins

In general, to define ecological/wildlife corridors, a habitat-analysis of selected umbrella species or of the landscape permeability (structural connectivity) is done. Those habitats are then connected by applying various methods. A common one is the LCP (Least Cost Path) method, which estimates the LCP the surface area of the least-cost movement path of an individual (IUCN, 2020). Such a study about ecological corridors has been done for Salzburg (Leitner 2014, Dollinger 2021). Yet, to verify the resulting corridors, a field inspection needs to be done or the corridors need to be pruned with other data, e. g. road kills. (Hilty et al. 2020; Dollinger, 2021; Perrin et al., 2019)

Perrin et al. (2019) offer a comparative overview of spatial planning approaches for considering ecological connectivity at the Alpine scale.

The Green and Blue Frame (Trame Vert et Bleue – TVB) based on the example of the Auvergne-Rhône-Alpes region in the Regional Planning, Sustainable Development and Territorial Equality Scheme has on one hand some specific criteria for wildlife preservation. On the other hand, it gives qualitative criteria by defining objectives for multifunctional areas:

Specific criteria for areas necessary for species':

- Movement
- Completion of the life cycle
- Adaption to environmental changes

Qualitative objectives:

- Enhance the richness and diversity of remarkable and ordinary landscapes, heritage, and natural spaces
- Preserve and develop land potential to ensure viable agricultural and forestry activity, respectful of soil quality, biodiversity and resilient to the impacts of climate change
- Preserve the areas and proper functioning of the region's waterways and water resources (SRADDET, 2021)

Following categories and criteria were implemented in the Regional Territorial Government Plan (PGT) of the autonomous region Friuli-Venezia-Giulia:

Core Areas:

- High functional and qualitative value
- Suitable for maintaining the vitality of the target populations
- constituting the basic structure of the ecological network

Buffer Areas:

- Border areas between core areas and areas of substantial human pressure

Stepping-Stone Areas:

- (small) nature reserves along transit zones
- Provide shelter for mobile organisms

Restoration Areas:

- Provide for renaturation interventions
- Habitats capable of filling structural gaps

Mountain ecological links

Agricultural ecological links

(Regione Friuli Venezia Giulia 2018)

2.2 Preservation criteria for agricultural areas

Concerning agricultural land or agricultural preservation areas, different approaches based on the outputs of former activities of the project, mainly activity A.T1.2, have been analyzed.

2.2.1 Criteria for Crop Rotation Areas

Legal character: Binding/ normative (5) Level: National

The aim of the Sectoral Plan on Crop Rotation Areas Switzerland (germ. *Sachplan Fruchtfolgeflächen*) is to secure at least 438.460 ha of Crop Rotation Areas for the entire Swiss territory. Thereby the overall goal is to ensure the agricultural supply base in case of import shortages as Switzerland is largely dependent on food imports. Each Canton must safeguard a minimum area of contingents/quotas (ARE, 2020).

- Location within a suitable climate zone: A1-D4
- slope gradient below 18%
- depth of the soil that can be used by plants/roots (germ. *Pflanzennutzbare Gründigkeit*) of at least 50 cm
- concentration of pollutants below a certain threshold of test values.
  For cultivating food crops the Sectoral Plan on Crop Rotation Areas requires soils which contain the same amount or less quantities of the following pollutants/chemical elements. The values refer to mg/kg dry material for soils with up to 15 % humus, or mg/dm^3 for soils with above 15 % humus and are derived from the regulation on pollution of the soil (VBBo), 1998:
  - Lead (Pb): ≤ 200
  - Cadmium (Cd): 2
  - Copper (Cu): no values for food crops
- include primarily arable land and ley pastures in rotation as well as arable natural meadows

2.2.2 Criteria for Agricultural Provision Areas and soil productivity index

Legal character: Binding/ normative (5) Level: Regional/ local

Criteria with threshold values for agricultural provision areas, implemented in Tyrol are the following:

- soil climate index/ productivity index: > 30 points threshold value (in some areas > 25 points)
- surface area: > 4 hectares
- slope: less than 35 %

Amt der Tiroler Landesregierung (2019; 2017)

Soil productivity index and land valuation:

The Austrian system for soil estimation/ land valuation is legally based on the law for soil estimation (germ."*Bodenschätzungsgesetz*") from 1970. The results of the estimation build the basis for the determination of the agricultural unit values. The land valuation comprises an estimation of soil composition and the soil condition in appraisal maps (based on the cadastral map) as well as appraisal books and the determination of the yield capacity. This estimate is derived from the natural yield conditions (soil composition, terrain, climatic conditions, and water conditions). The assessment value number ranges from 1 - 100. (BMF, 2021)

Yield index

The yield index (germ. *Ertragsmesszahl*) is based on the legally binding land valuation results for each agriculturally used plot of land and is determined by the land surveying offices. It is the product of the plot area, or partial area and the determined land value figure (arable land or grassland figure) or the respective determined value figures. (BMF, 2021)

Soil Climate Index

The soil climate index (germ. *Bodenklimazahl*) of a property is a ratio between 1 and 100. The ratio represents the natural yield capacity of agriculturally used soil area of the property in relation to the most productive soil in Austria with a value index of 100. (BMF, 2021)

2.2.3 Types of agricultural production for the definition of agricultural zones

Legal character: Binding/ normative Level: Regional/ local

The aim of the Agricultural Zones, for example in the Cantonal Structure Plan of Valais/Wallis is to preserve the natural and cultural landscape as well as to limit settlement development to maintain agricultural areas (*gem*. *"Landwirtschaftszonen*"). Therefore, four agricultural zones, depending on the type of use are distinguished. (Koordinationsblatt des kantonalen Richtplans VS, A.1, 2019)

I. priority areas with high suitability
II. agricultural areas used in the common interest, especially in locations with a limited natural productivity
III. protected agricultural zones: important agricultural components of the cultural landscape that need to be preserved
IV. special agricultural zones: for special purposes such as greenhouses, that require further planning on the municipal level

2.2.4 Soil function assessment – Evaluation (Land Salzburg, 2014)

Legal character: Informal/ standards (3) Level: Regional/ local

The soil function assessment in Salzburg is composed by following criteria:

- Habitat for soil organisms: Potential microbial biomass content - indicator for edaphon. Allocation of one of the 14 pre-defined biotic communities
- Site potential for natural plant communities: Evaluation of extreme water balance, rocky weathered soils, peat soils, extensive types of use. For other sites, additional criteria are possible, like the potential natural vegetation of a priority habitat, according to the guidelines from the European Habitats Directive.
- Natural soil fertility: Arable land or grassland indicator (germ. *Acker- und Grünlandzahl*). The degree of function fulfillment of soil fertility is determined relatively by considering the surrounding production area. 20% of the best soils in the reference area fulfill the highest functional performance level.
- Drainage regulation: Water soil conditions, soil type, slope, if applicable pore aquifer
- Filter and buffer against pollutants: Binding strength of heavy metals; binding/degradation of organic pollutants; acid neutralization capacity. (Land Salzburg, 2014).

2.2.5 Crop potential

Legal character: Analytical Level: Regional/ local

This indicator is used to estimate the potential to grow crops based on

- climatic conditions: Growing Degree Days, which show daily temperature accumulations),
- water availability: Precipitation – Evapotranspiration
- topography: slopes steeper than 26.5° were excluded.

Soil was not considered as a limiting factor since for agriculture soil treatment and preparation are always necessary and possible to some extent.

(LUIGI, WP 1, Bock et al.,2018)

2.2.6 Fodder provision

Legal character: Analytical Level: Regional/ local

Annual grassland biomass (fodder) production subdivided in intensively, moderately and extensively used areas. Thereby, the optimum yield is assessed according to:

- length of the growing season
- the respective growth functions
- the specific land use types.

Biomass productivity is assessed by regarding:

- region-specific precipitation patterns
- local small-scale topographic conditions

(LUIGI, WP 1, Jäger et al. 2020)

2.3 Near natural and recreational areas

In this chapter we present priority criteria for near natural and recreational areas.

2.3.1 Criteria for a macro- regional definition of open spaces

Legal character: Analytical Level: Macro - regional

The definition of open spaces elaborated during this project includes several criteria, which could be transferred to a spatial planning category in the EUSALP area.

For the macroregional level, the mapping activity in the OpenSpaceAlps project already collected several studies and reached to elaborate common indicators.

The buffer distances shown in Table 7 and Table 8 are based on the findings of Nikisch et al. (2018).

Table 7: Excluded land use and buffer distances

Excluded land use for open spaces	Buffer distances
Buildings	25 m
Motorways/ primary roads	200 m
Secondary/ tertiary roads 3-4 m wide	100 m
Private driving area	100 m
Private car park	100 m
Traffic area	100 m
Public car park	100 m
Pressure line single/multiple	200 m
Antennas	200 m
Railways	200 m
Ski lifts/ facilities, cable cars	500 m
Ski jumping hills	500 m
Wind power plants	500 m
Material cableway/ ropeway	200 m
Airports	1000 m
Helipads	200 m
Mine, stone quarry, raw material extraction site	500 m
Artificial leisure areas (golf courses, amusement parks, camping sites, swimming pools etc.)	200 m
Health- and educational infrastructures	200 m
(High voltage) power supply lines	200 m
Dams, hydropower facilities	200 m
Landfill/waste deposit sites	500 m
Power plants, waste incineration plants etc. (high emission facilities)	1.000 m

Table 8: Non-disturbing infrastructures in open spaces.

Non-disturbing infrastructure
Paths, 1 m, 2m, Path fragments, 1 m, 2m Hiking trails, Via ferrata, Stairs
Infrastructure for water supply: Pressure tunnels for water supply, Bisse Suone, Fountains, Water basins
Forest roads, Agricultural roads
Transportation ropes/cables
Small docks, Ferries
Tunnels, Galleries
Alpine huts, Barns
Arboretum/ Tree nurseries
Historic areas/structures
Sacred towers/buildings: Chapels, Wayside shrines, Crosses on mountain summits, Cemeteries
Monuments
Walls, Avalanche barriers, Constructions against flooding
Triangulation pyramids

Source: based on Nischik et al. 2018

2.3.2 Criteria for Alpine Quiet Areas

Legal character: Binding/ normative (5) Level: Regional/ local

The category Quiet Areas Tyrol (*germ. "Ruhegebiete*") is based on the Tyrolean Nature Conservation Act (§ 11, TNSchG 2005). Besides nature protection the Quiet Areas Tyrol should also serve preservation of spaces for outdoor recreational needs (Meyer, 2020). Consequently, large-scale undeveloped landscape entities, free from infrastructure, should be preserved. The following criteria characterize those spaces:

- Areas outside settlement areas which are particularly suitable for outdoor recreation
- high degree of quietness
- absence of noisy businesses
- absence of cableways for passenger transport
- absence of public roads if preservation is particularly important for recreation

In the regulation has the effect of prohibiting noisy businesses, cableways for passenger transport, public roads, any kind of considerable noise emissions, landings or take-off of powered air crafts with serval justified exceptions. The use of motor vehicles and other noisy activities require a special permission.

Quiet areas in Salzburg:

The aim of quiet areas in the federal state of Salzburg is to preserve undeveloped areas in the alpine space from further development (SIR-Raumordnung/ Regionalverband Tennengau, 2020) and to safeguard spaces with high ecological and/or landscape aesthetical value as well as to enforce the development of liveable spaces with high biodiversity (Schoßleitner, 2016; Land Salzburg, 2021).

- all areas above/outside of the permanent settlement space especially:
  - forest aeras
  - alpine pastures
  - alpine wasteland

Excluding: quarry fields, tourism development areas

- areas free from development

According to Schoßleitner (2016) most of the Alpine Quiet Areas are:

- above 1.000 m a. s. l.
- located above the lower edge of the closed forest belt in alpine areas, including forests
- ecologically intact spaces

Spatial delimitation of alpine quiet zones based on the following formula:

Municipalities within the Alpine region (according to the Alpine Convention)

– (minus) generalized and extended permanent settlement area (without "permanent settlement area islands" in valley locations)

– (minus) incompatible area designations ("exclusion areas")

= Alpine quiet zone in the Salzburg alpine region municipalities

2.3.3 White Zones

Legal character: Informal (3) Level: Regional/ local

In Vorarlberg “White zones” are distinguished methodically and inventoried if the areas are:

- valuable of preservation
- largely undeveloped alpine spaces

White zones so far have not been legally anchored, but they are part of an informal development concept. Therefore, specifications for use are rather vague:

- The expansion of the rural road network needs to be checked
- Customary management is not questioned
- Low-impact tourism should be enabled, however without tourism infrastructure

(Schoßleitner, 2016)

Criteria for white zones:

- Exclusion of disturbing infrastructure
- Distance to disturbing infrastructure of 200m
- Percentage of disturbing infrastructure of a landscape chamber < 20%

Amt der Vorarlberger Landesregierung (2017a)

2.3.4 State Green Zone

Legal character: Binding/ normative (5) Level: Regional/ local

The aim of the State Green Zone was to maintain remaining large scale open spaces, bordering urban areas, to avoid fragmentation of these areas, as well as to maintain agriculture.

The following criteria were mapped by local planning experts, doing numerous filed visits:

- Continuous open spaces, that are not fragmented by building land and artificial constructions
- Spaces with high quality of recreational, landscape (aesthetic), nature conservation and agricultural value

(Amt der Vorarlberger Landesregierung, 2017b)

In 1977 the federal state of Vorarlberg (AT) designated supra-local open spaces in the Rhine valley and Walgau valley floors (“Landesgrünzone”) for the

- preservation of a functional ecological balance and the landscape
- maintaining of local recreation areas
- securing the spatial conditions for an efficient agriculture

(Kopf, 2020)

2.3.5 Landscape aesthetics

Legal character: Analytical (1) Level: Regional/ local

Here, the characteristics of landscapes which enable aesthetic experiences are described. The following two factors define the value:

- the visibility of an area (i.e. pixel) observed from:
  - the rest of the region
  - from built-up areas
  - from locations where Flickr photos are taken.
- the objective aesthetic beauty of the area, modelled using:
  - proxy values for landcover types
  - focal averages within 500 meters.

(LUIGI, WP 1, Schirpke et al., 2021)

The monitoring program Switzerland (LABES) gathers data characterizing physical and perceived qualities for open spaces based on 30 indicators. The indicator “perceived beauty of the landscape” describes landscape aesthetics which are high, when the landscape seems:

- divers
- harmonious
- open (to some extent)

The landscape experience consists of two components:

- the universally perceived landscape structure of all humans (evolutionary)
- a culturally shaped perception of the landscape structure

The applied scale ranges from 1 to 5 and the mean value at the presented example of Switzerland lies at 4.0.

(LABES, 2019)

2.3.6 Outdoor recreation potential

Legal character: Analytical (1) Level: Regional/ local

Outdoor recreation potential can be calculated by assessing the capacity of ecosystems to support nature-based recreation opportunities.

For calculating daily outdoor recreation near urban areas one model creates a Recreation Opportunity Spectrum (ROS). Therefore, two thematic maps – Recreation Potential and a Proximity – are cross-tabulated.

Criteria for Recreation Potential:	land use, natural features, size of urban parks
Criteria for Proximity map:	presence of access facilities – roads or bus stops
	User facilities – mountain huts or benches

In addition, for assessing the general potential for mountain outdoor recreation during weekends and trips a model maps the following criteria:

- the recreational value of protected areas,
- degree of human impact,
- distance to water,
- diversity of land cover types,
- terrain roughness
- density of mountain peaks.

(LUIGI, WP 1, Schirpke et al., 2021)

3 Summary of priority criteria

Criteria for the definition of open spaces at macro-regional/ national scale:

- Open Spaces
  - Exclusion of sealed soil
  - Distances to technical infrastructure to define areas affected by disturbance.
  - Percentage of built-up areas, infrastructures and their extent of disturbance below 20%, projected to certain landscape- units

Criteria for protection of open space functions on intermunicipal or regional level

- Nature protection:
  - Habitats of certain species according to sectoral nature protection laws
- Landscape permeability and ecological connectivity
  - Natural habitats and protected areas
  - Distinction between artificial and natural land use
  - Human disturbance
  - Fragmentation and size of natural areas/ habitats
  - Altitude and slope
  - Distances of natural connections/ corridors between natural habitats
- Agriculture:
  - Productivity of agricultural soil/ natural yield conditions (soil composition, terrain, climatic conditions, water conditions)
  - Continuous size of the patch area
  - Slope
  - Concentration of pollutants
- Forestry:
  - Forested areas under sectoral forestry law
- Recreation and near – natural areas:
  - Exclusion of disturbing infrastructure and definition of non-disturbing infrastructure.
  - distances to disturbing infrastructure.
  - Max. noise level
- Protection:
  - Areas at risk for flooding events and other natural hazards according to sectoral instruments

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Priority criteria list for the preservation and safeguard of open spaces in the Alps and EUSALP

WPT2 - Local governance and implementation level. Deliverable D. T2.5

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