

Interreg Alpine Space project “OpenSpaceAlps”  
WP T3 Alpswide strategy and governance planning  
A.T.3.2 Mapping of open spaces on an alps-wide scale

# Basic maps on relevant and potential open spaces in the Alps

Deliverable D.T3.2.1

ALPARC, Chambéry, France

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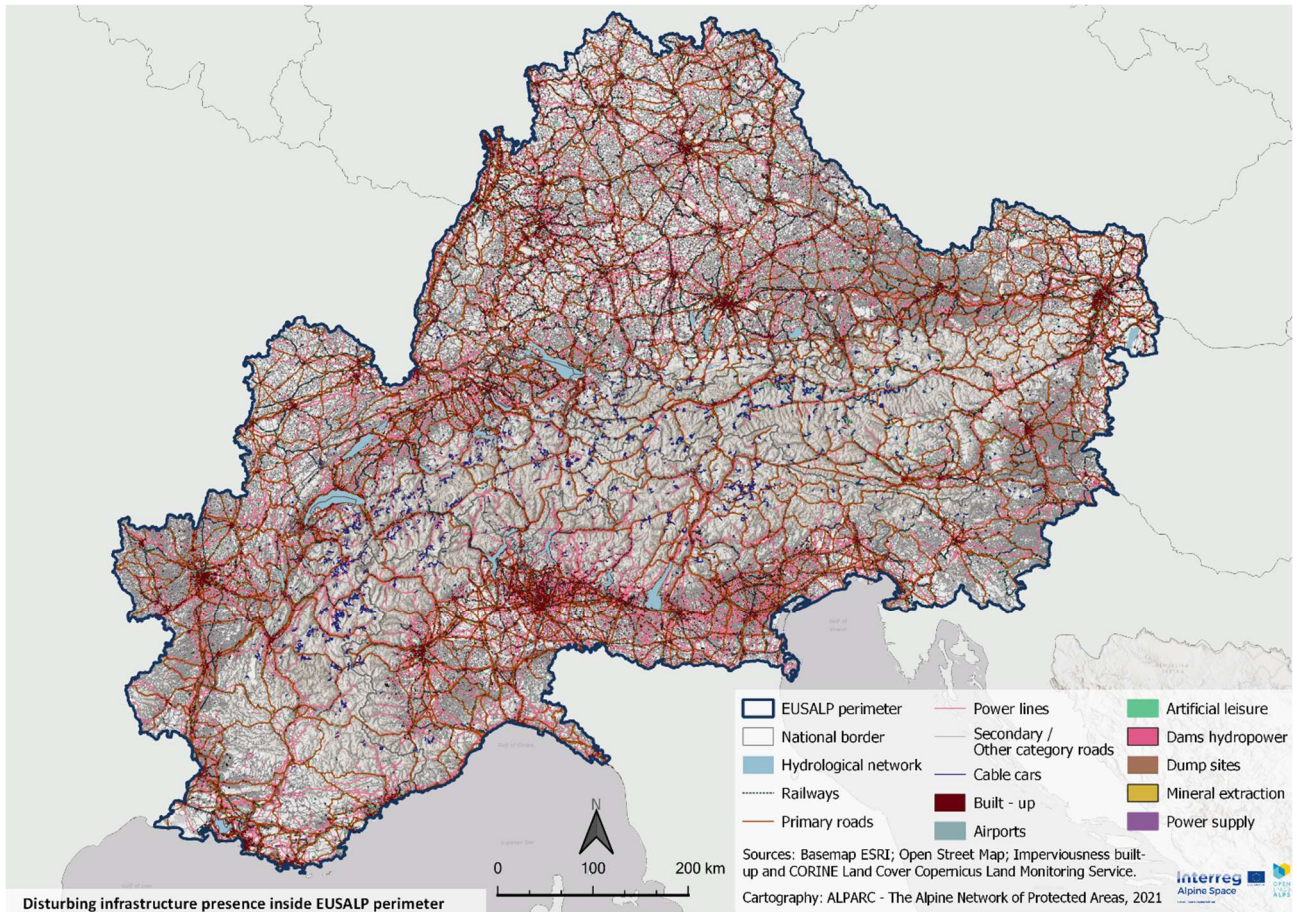
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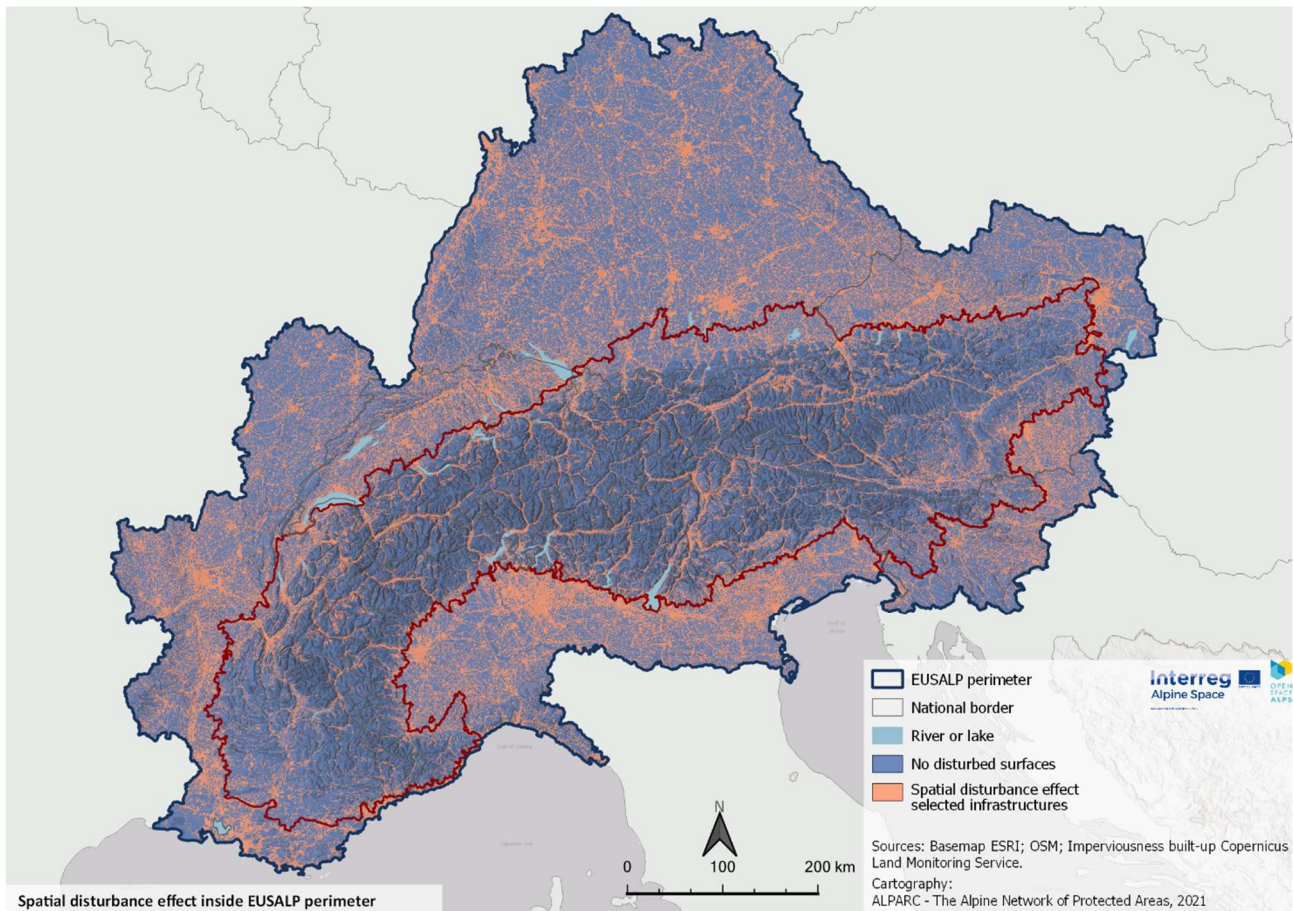
## 1 Spatial development calculation

Figure 1 Infrastructure Components inside the EUSALP Perimeter



The infrastructure components map makes it possible to visualize the distribution and the level of coverage of 11 infrastructure components inside the EUSALP perimeter.

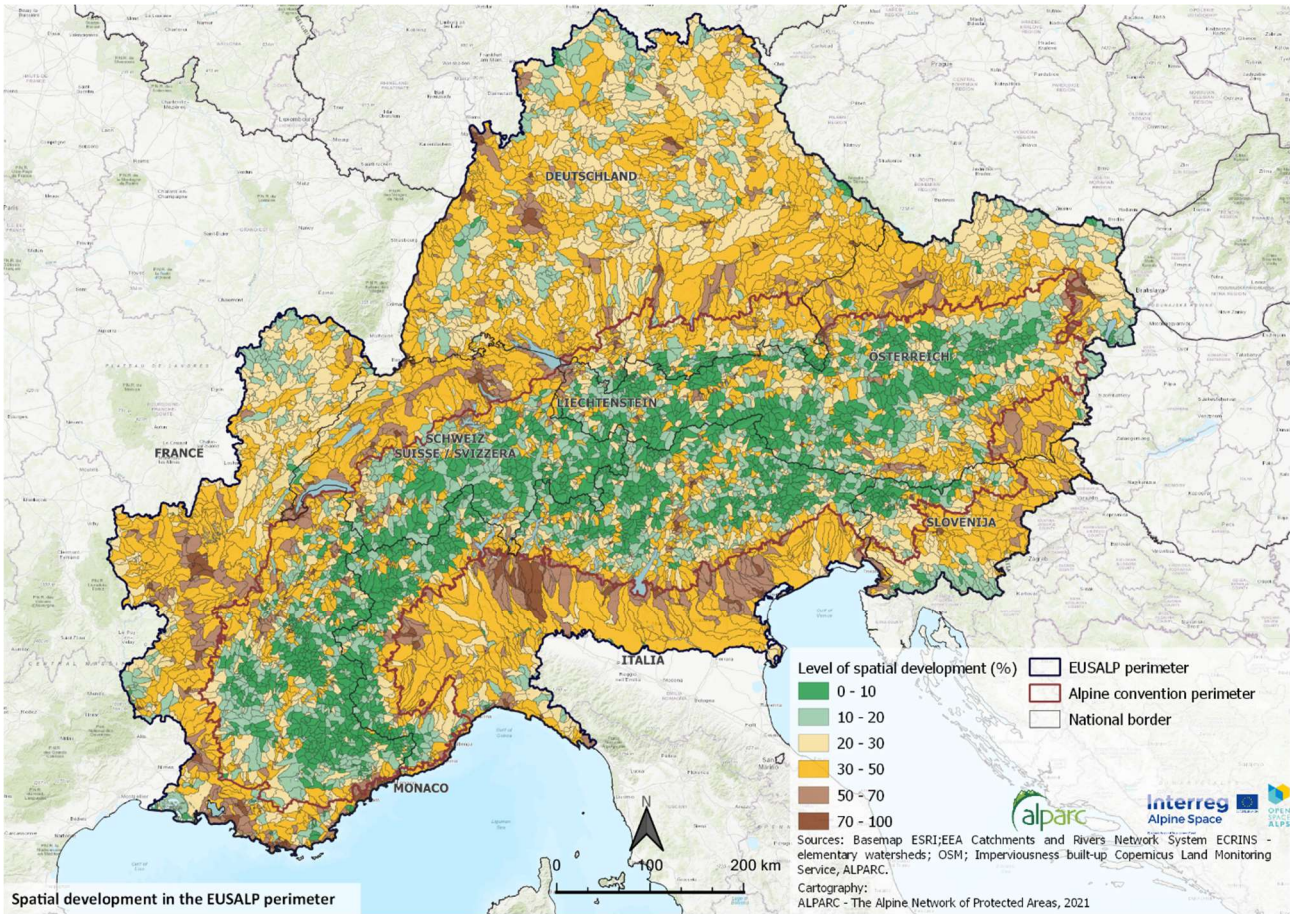
Figure 2 Spatial disturbance effect inside EUSALP perimeter



After the identification of the presence of these infrastructures, the next step consists in identifying the spatial disruptive effect. A buffer zone is elaborated for each infrastructure, the size is established accordingly to their level of disturbance.



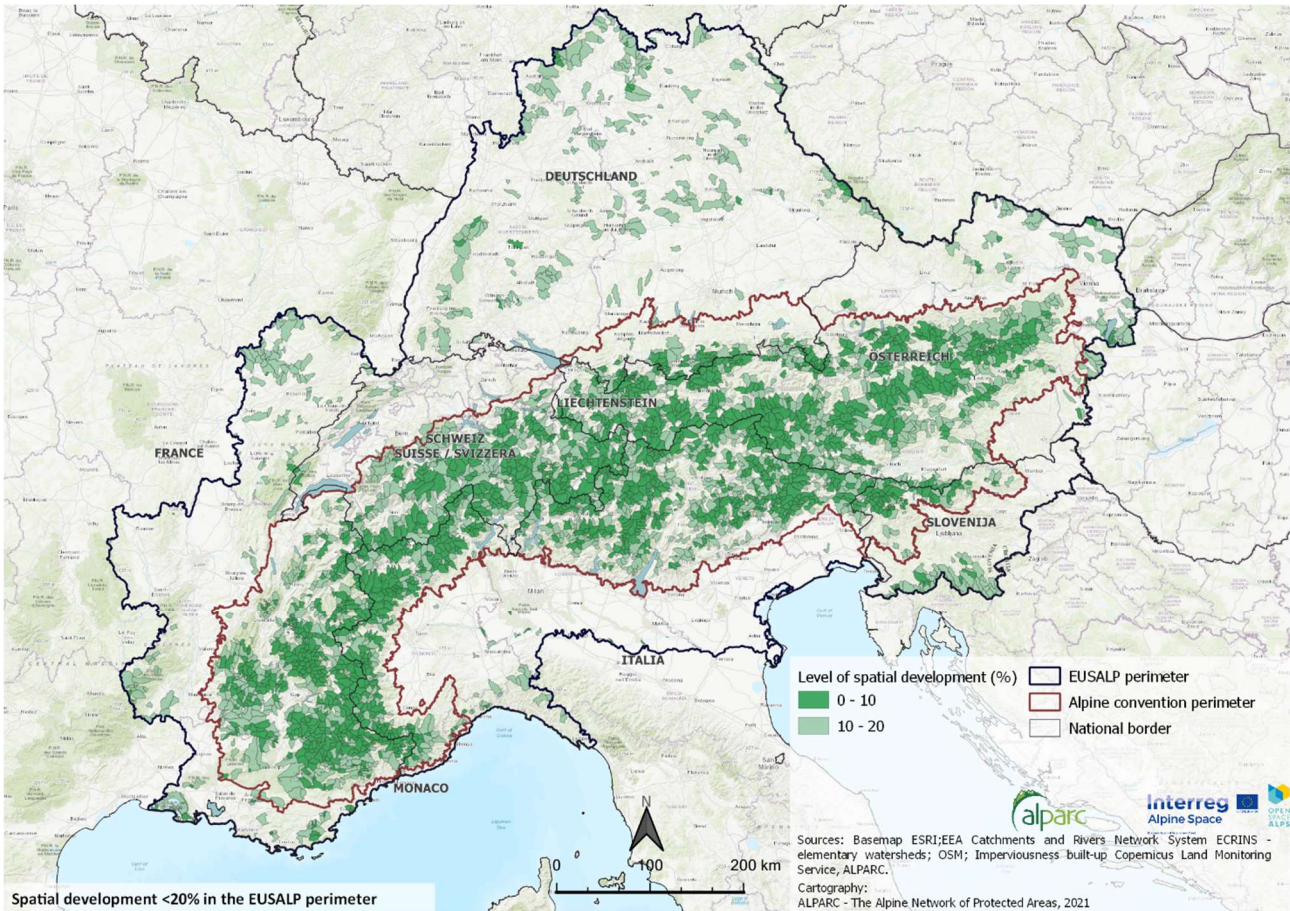
Figure 3 Spatial development in the EUSALP perimeter



The level of the spatial development indicator uses a natural demarcation (watersheds) to represent the infrastructure coverage inside the spatial unit, the percentage is calculated as the proportion of land covered by the infrastructure and the buffer area over the surface of a watershed.



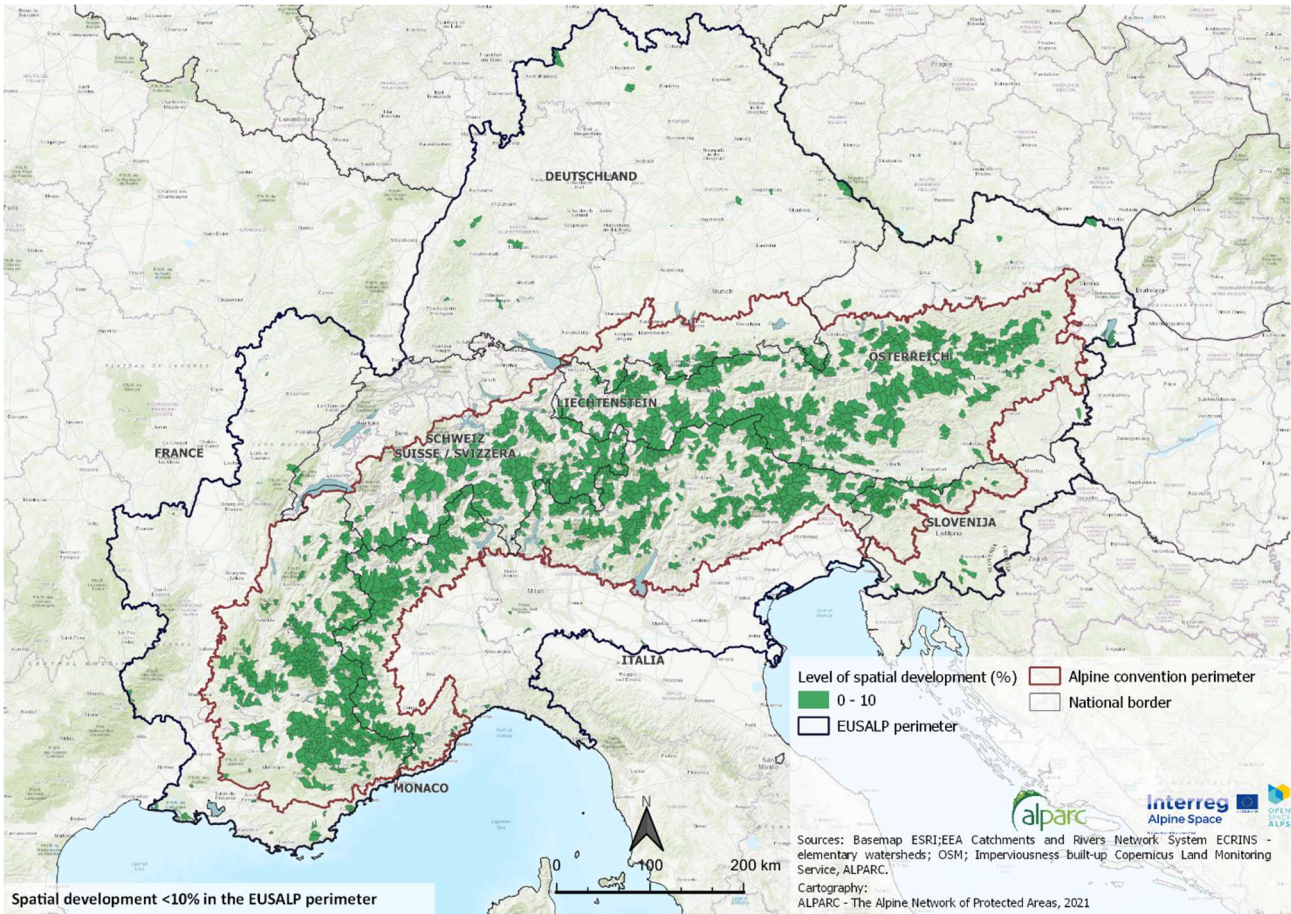
Figure 4 Spatial development under 20% in the EUSALP perimeter



The surfaces identified on the map correspond to the areas with a spatial development under 20%, these areas cover nearly 29% of the EUSALP space and are mostly located inside the Alpine convention – AC perimeter, at least 55% of the AC surface is covered by the surfaces with a low spatial development level.



Figure 5 Spatial development under 10% in the EUSALP perimeter

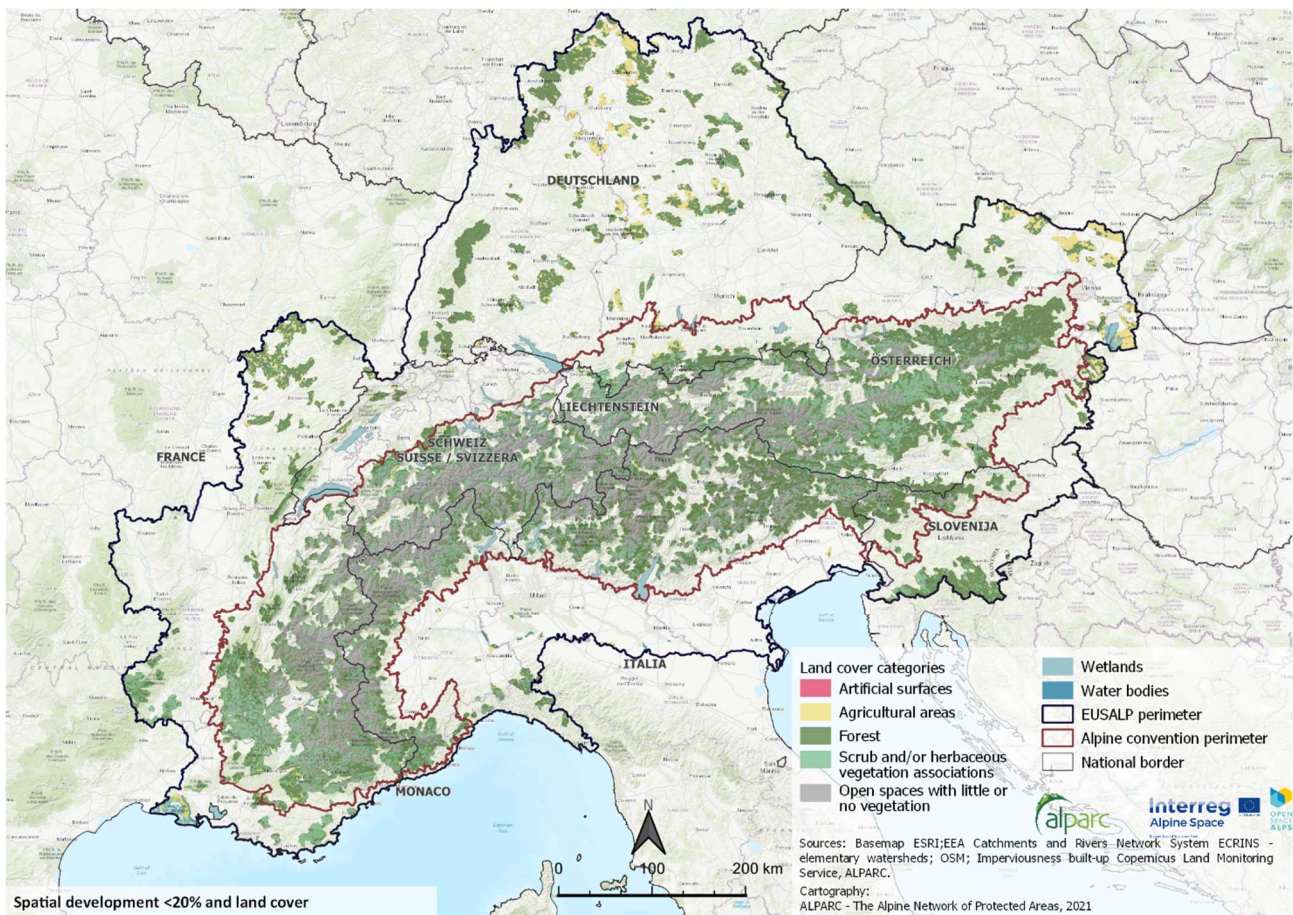


At least 14% of the EUSALP surface is covered by areas with a spatial development under 10%, more than 97% of these areas are located inside the Alpine convention perimeter with a coverage of 31%.



## 2 Qualitative and quantitative criteria

Figure 6 Spatial development under 20% and land cover



95% of the surface with a low level of development under 20% is located in surfaces classified under the Forest and semi natural areas category. Which regroups three main sub - categories: Forests (40%), Scrub and/or herbaceous vegetation associations (26%), Open spaces with little or no vegetation (34%).



Figure 7 Spatial development under 10% and land cover

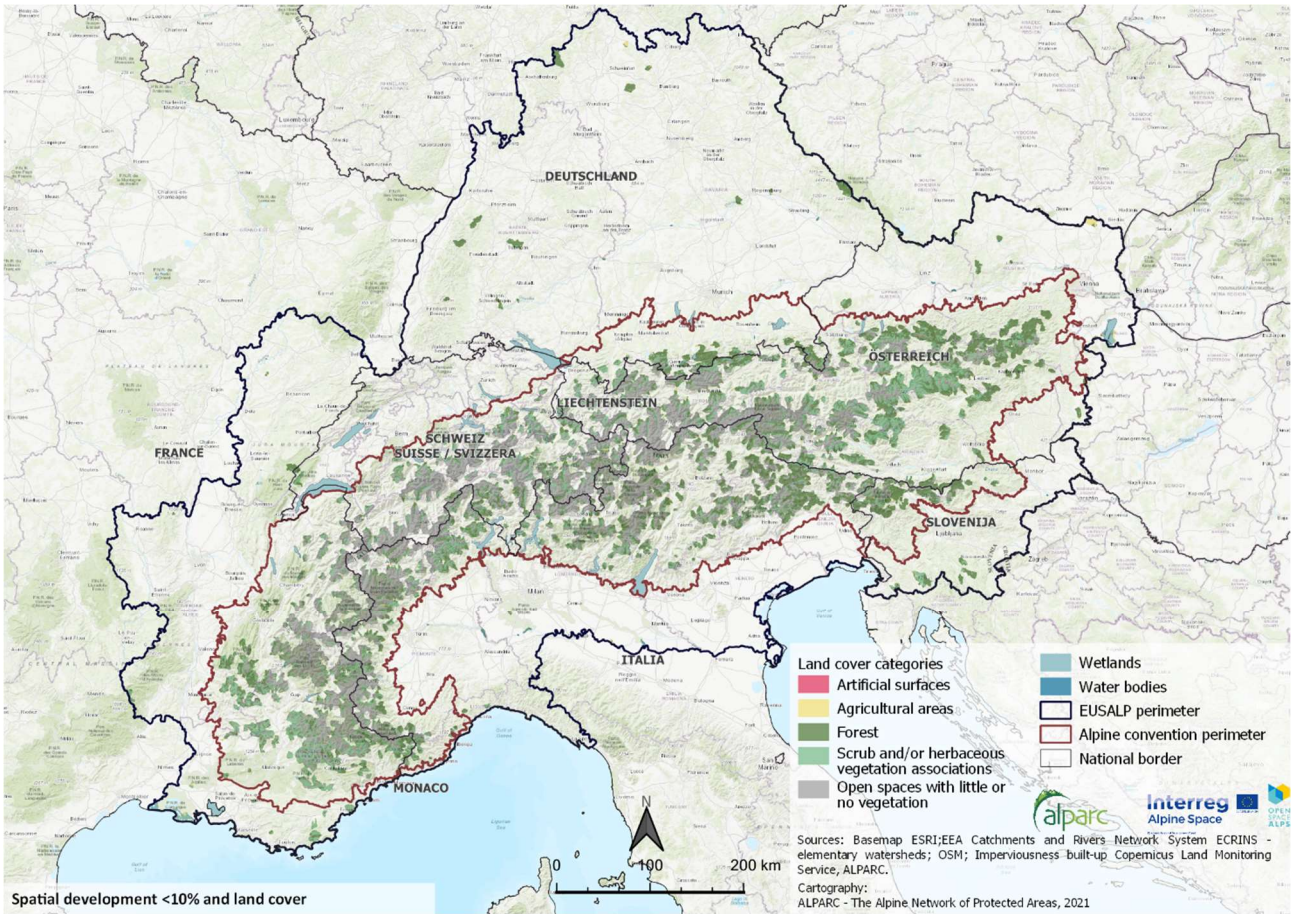
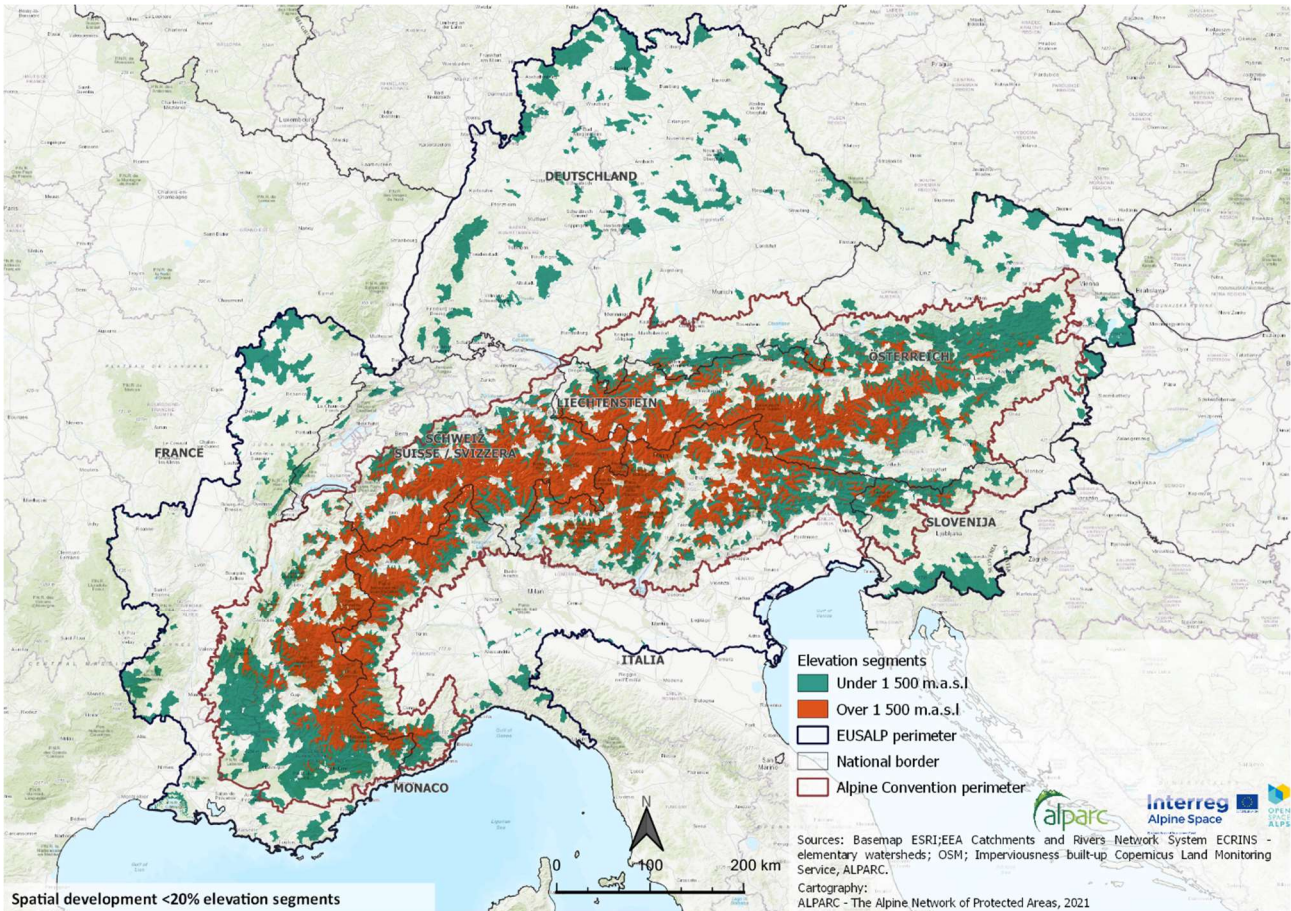




Figure 8 Spatial development under 20% elevation segments

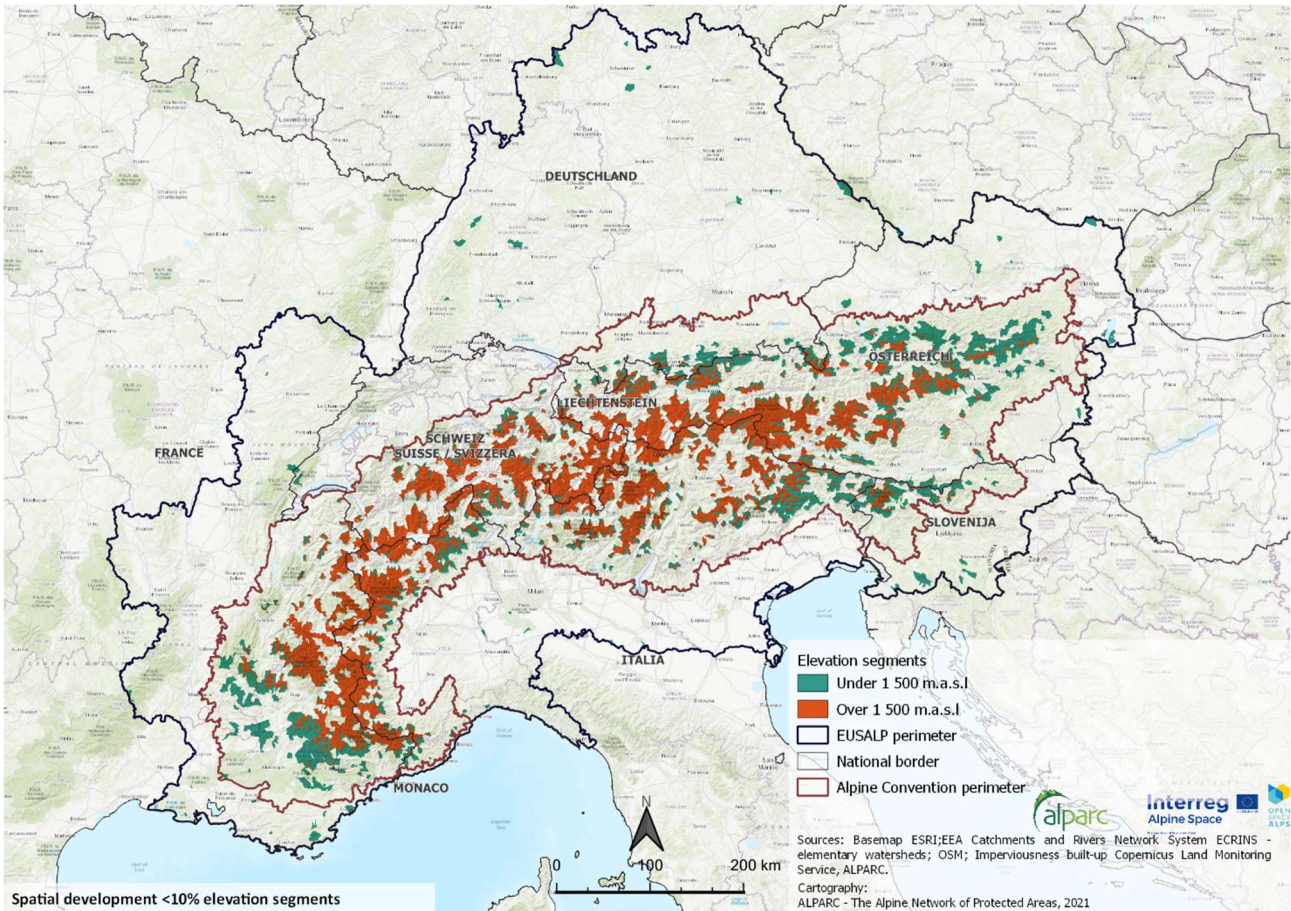


The presence of zones with a level of spatial development under 20%, inside the Alpine convention perimeter amounts to: 46% for areas under 1 500 m.a.s.l. (in green) and 54% for areas located in an altitude higher than 1 500 m.a.s.l. (in orange).

The proportions for the EUSALP space are 44% for areas under 1 500 m.a.s.l. and 56% for the areas located in an altitude segment higher than 1 500 m.a.s.l.



Figure 9 Spatial development under 10% elevation segments

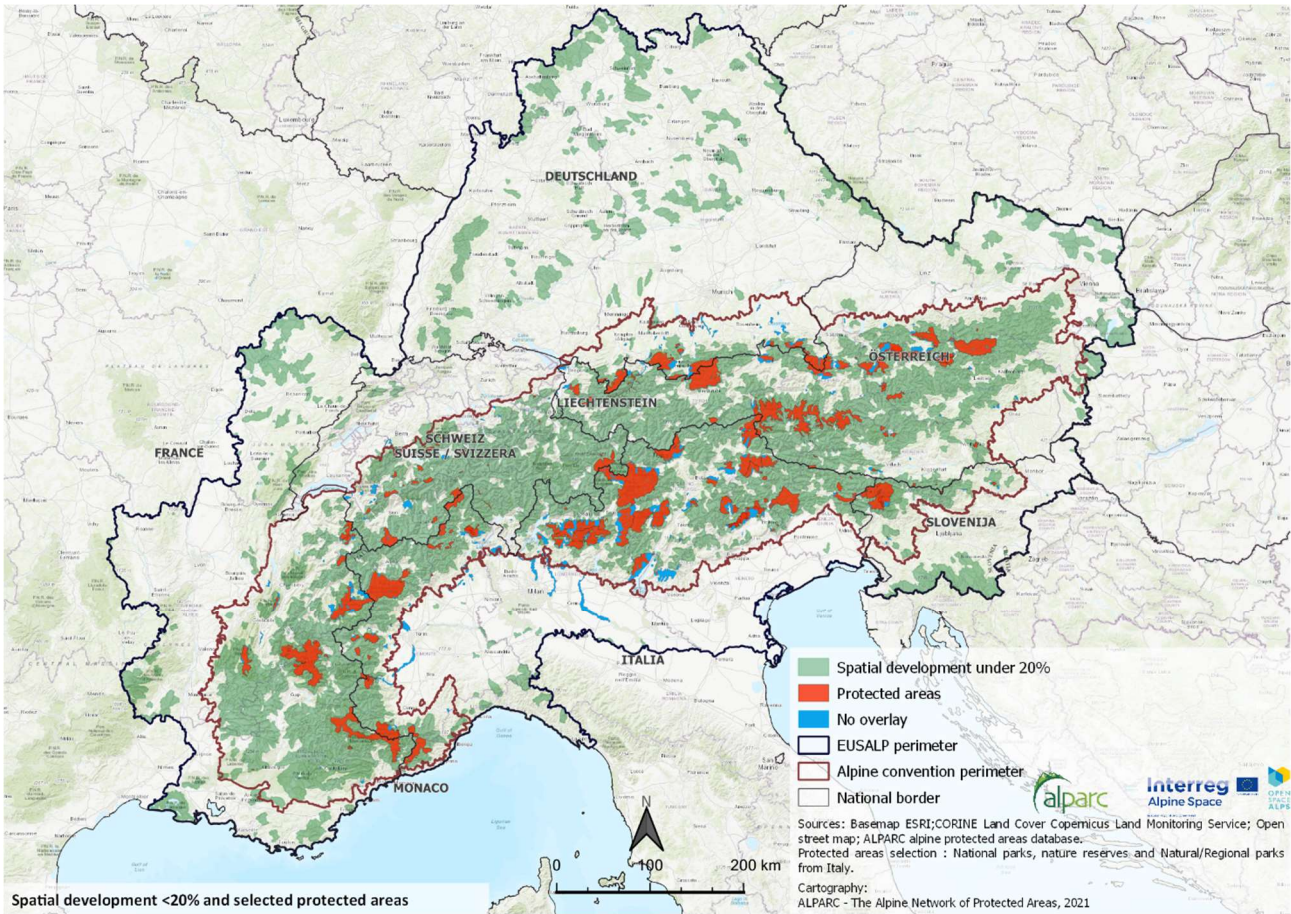


The presence of zones with a level of spatial development under 10%, inside the Alpine convention perimeter amounts to: 35% for areas under 1 500 m.a.s.l. (in green) and 65% for areas located in an altitude higher than 1 500 m.a.s.l. (in orange).

The proportions for the EUSALP space are 37% for areas under 1 500 m.a.s.l. and 63% for the areas located in an altitude segment higher than 1 500 m.a.s.l.



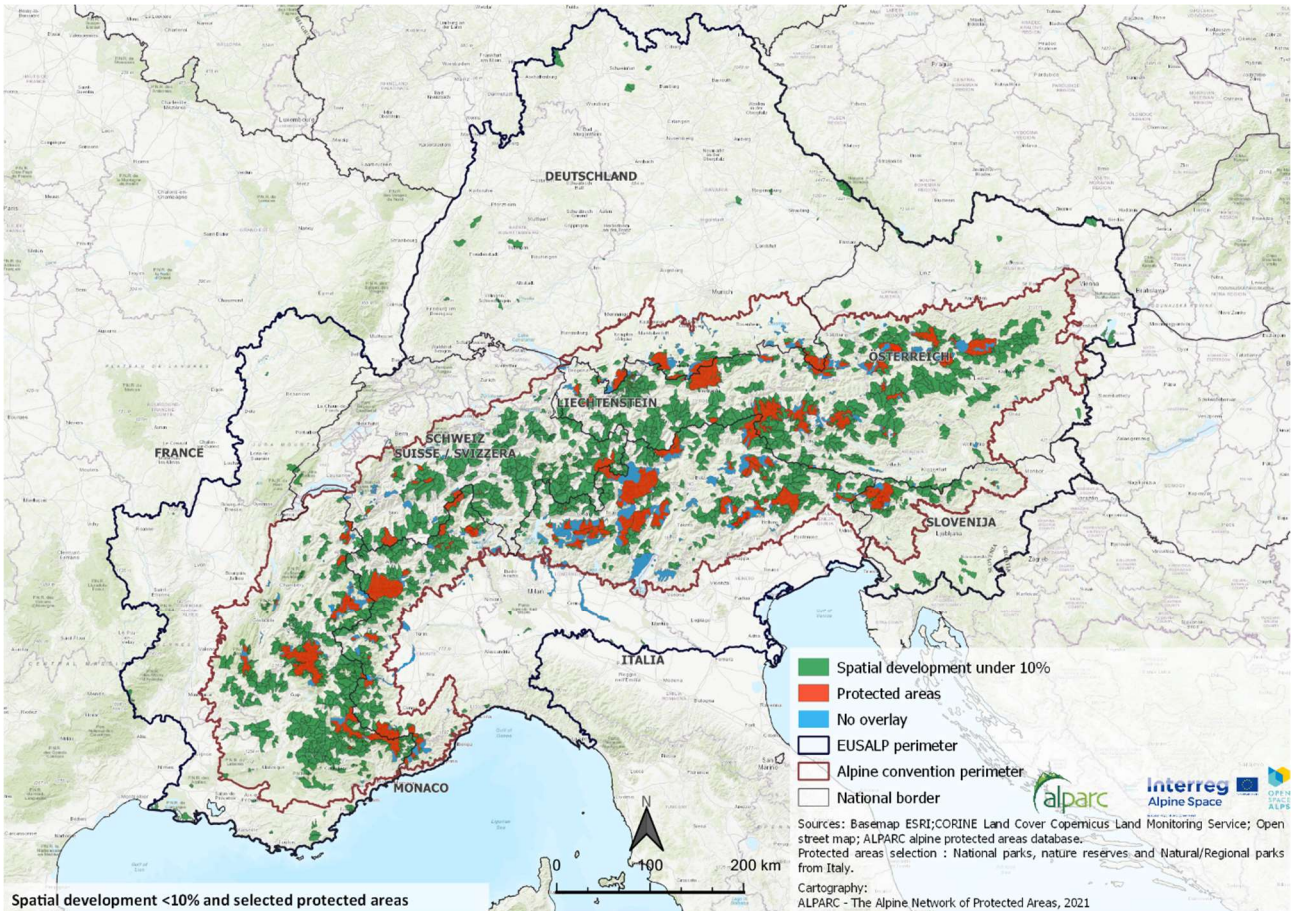
Figure 10 Spatial development under 20% and protected areas



Over a selection of three categories of Alpine protected areas (National parks, nature reserves, Regional/Natural parks from Italy), the 83% or their surface overlays with the spaces with a level of spatial development under 20%.



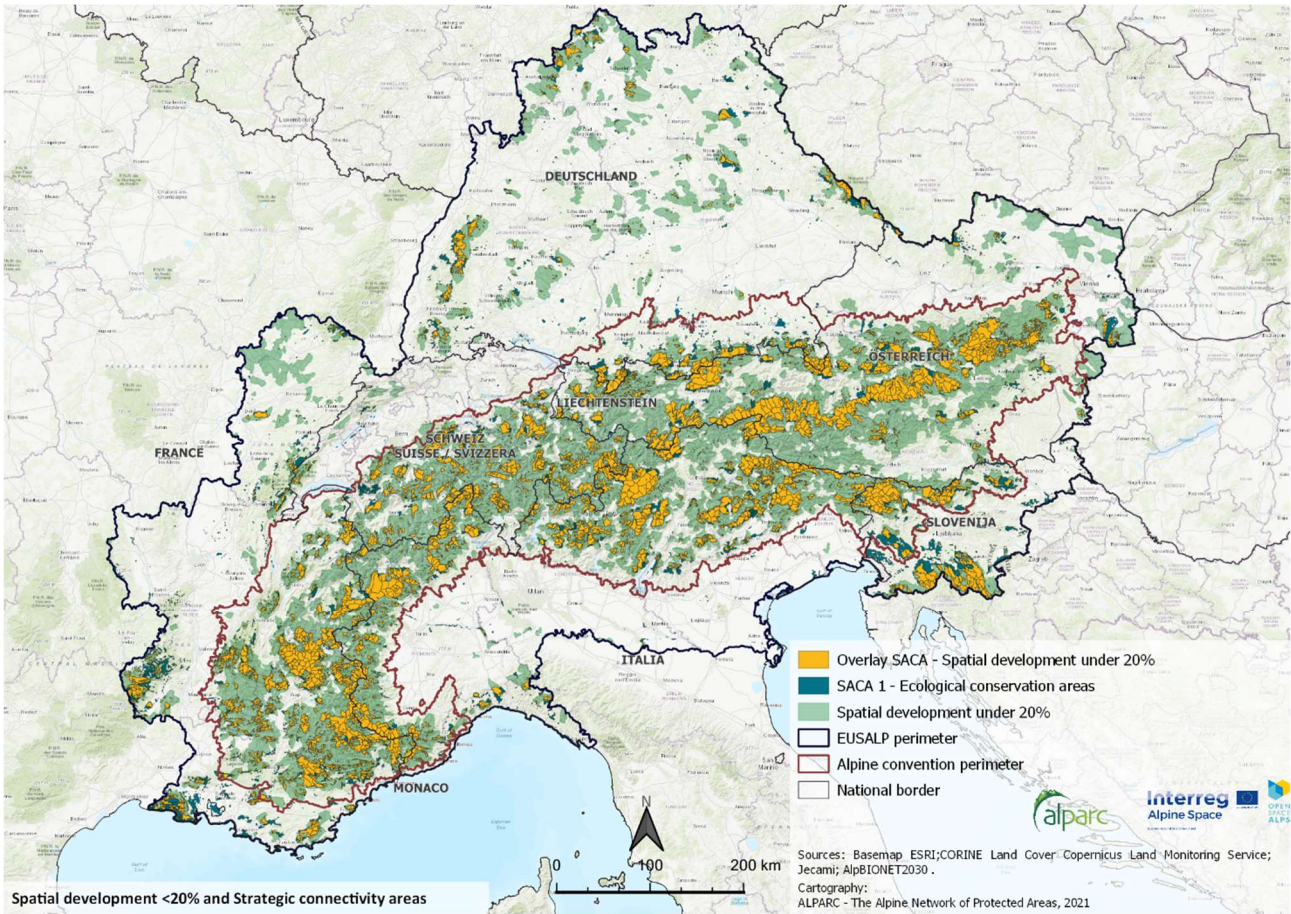
Figure 11 Spatial development under 10% and protected areas



The category of spatial development under 10%, cover most of the surface of the selected protected areas, the spaces identified on red colour are among the closest to natural, undisturbed space inside the protected areas. This is the case of all national parks and most of the surface of Alpine nature reserves



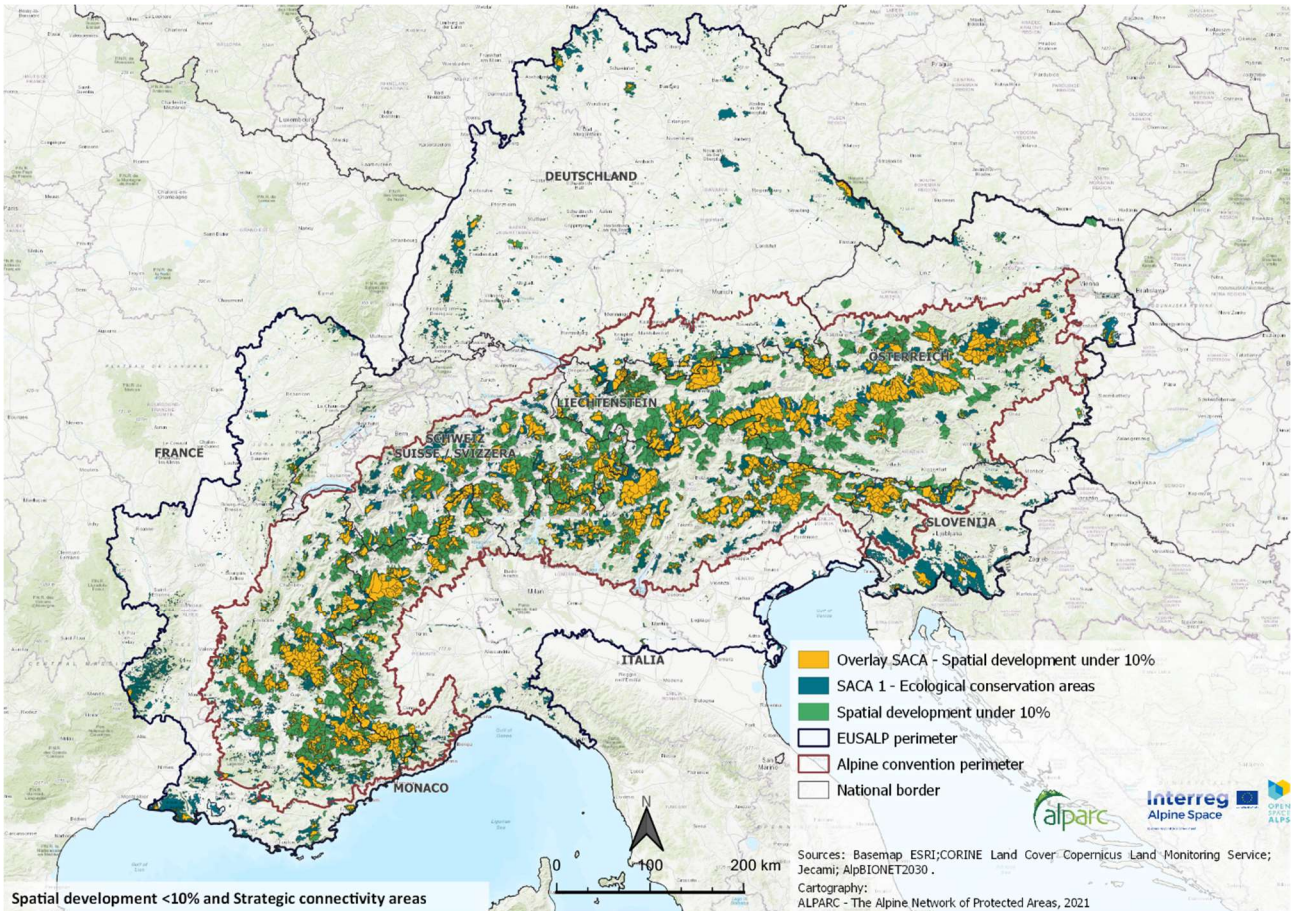
Figure 12 Spatial development under 20% and Strategic connectivity areas



The Strategic Alpine Connectivity Areas are compared with the areas presenting a level of spatial development under 20%, as a result, 80% of the SACA 1 surface is covered by the compared layer.



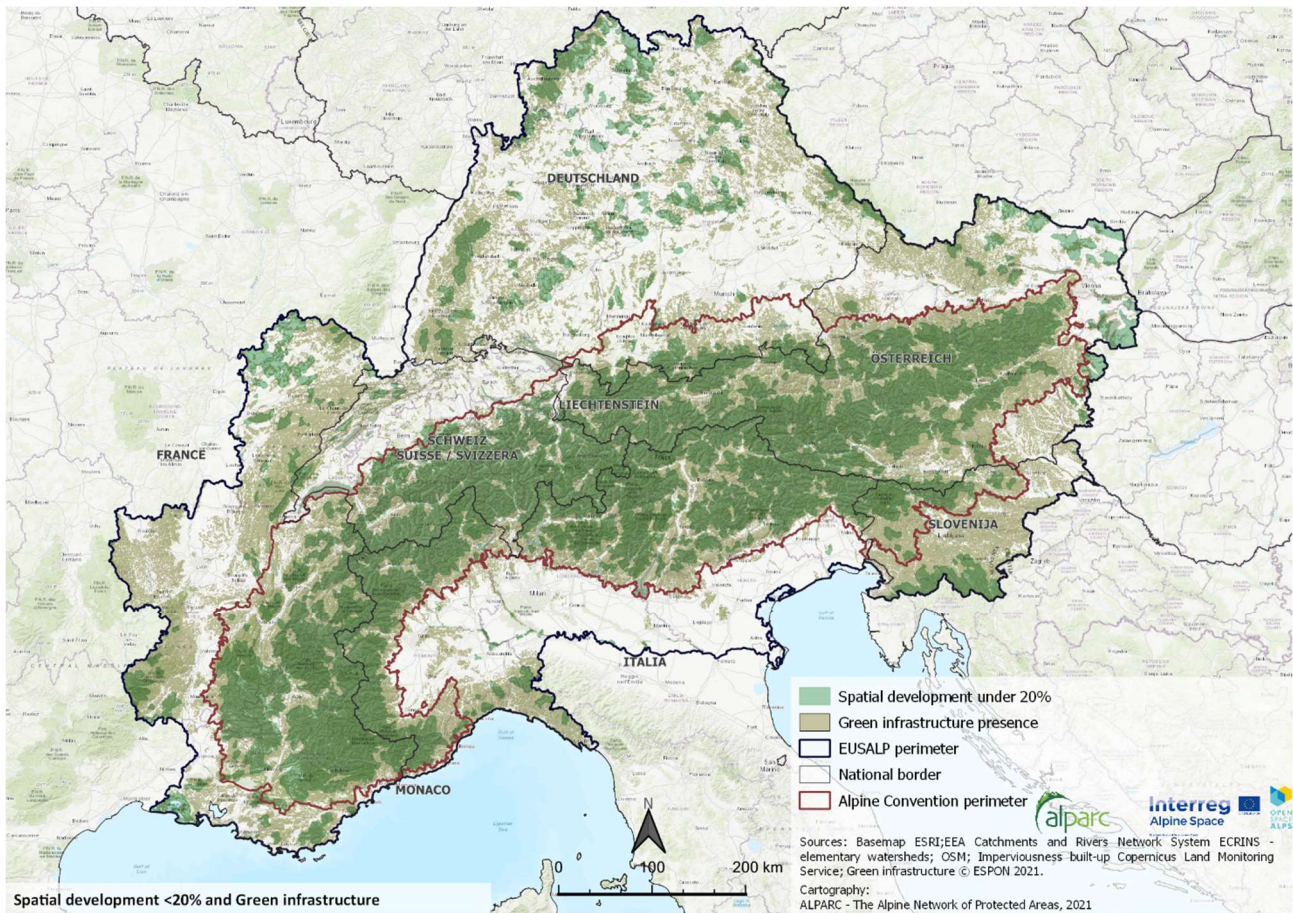
Figure 13 Spatial development under 10% and Strategic connectivity areas



When comparing the Strategic Alpine Connectivity Areas with the areas presenting a level of spatial development under 10%, at least 53% of the SACA 1 surface is covered by an area with a low level of spatial development.



Figure 14 Spatial development under 20% and Green infrastructure

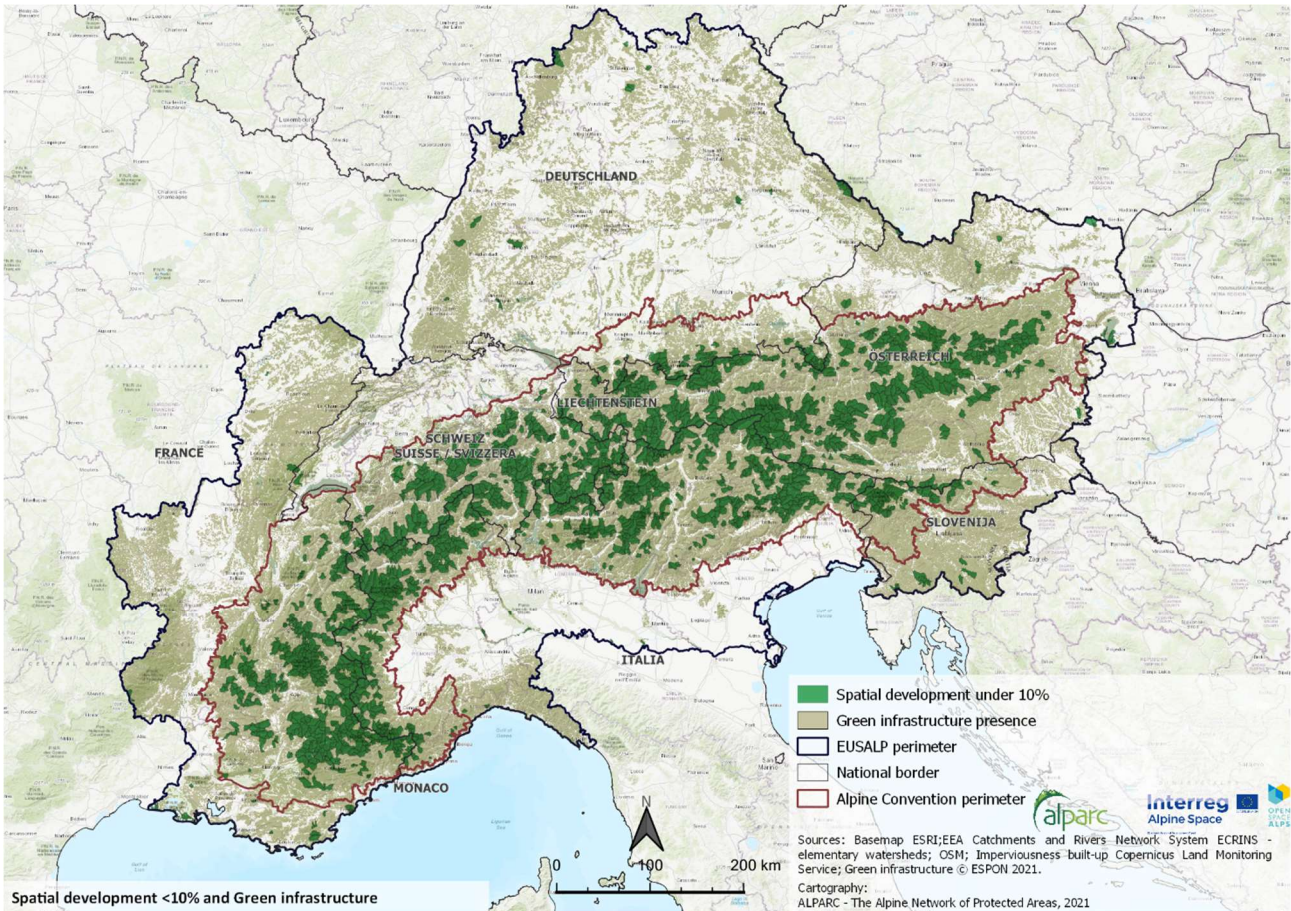


The spaces identified under the category of Green infrastructure excludes:

- Artificial Surfaces, Arable land, permanent crops that are not classified as High Nature value (HNV) farmland.
- Other Artificial Surfaces, such as those covered by the Imperviousness layer, isolated patches of natural and semi-natural areas, not connecting protected sites.
- By size: patches of natural and semi-natural areas smaller than 25ha or with a minimum mapping width less than 100m. (ESPON database, 2012)

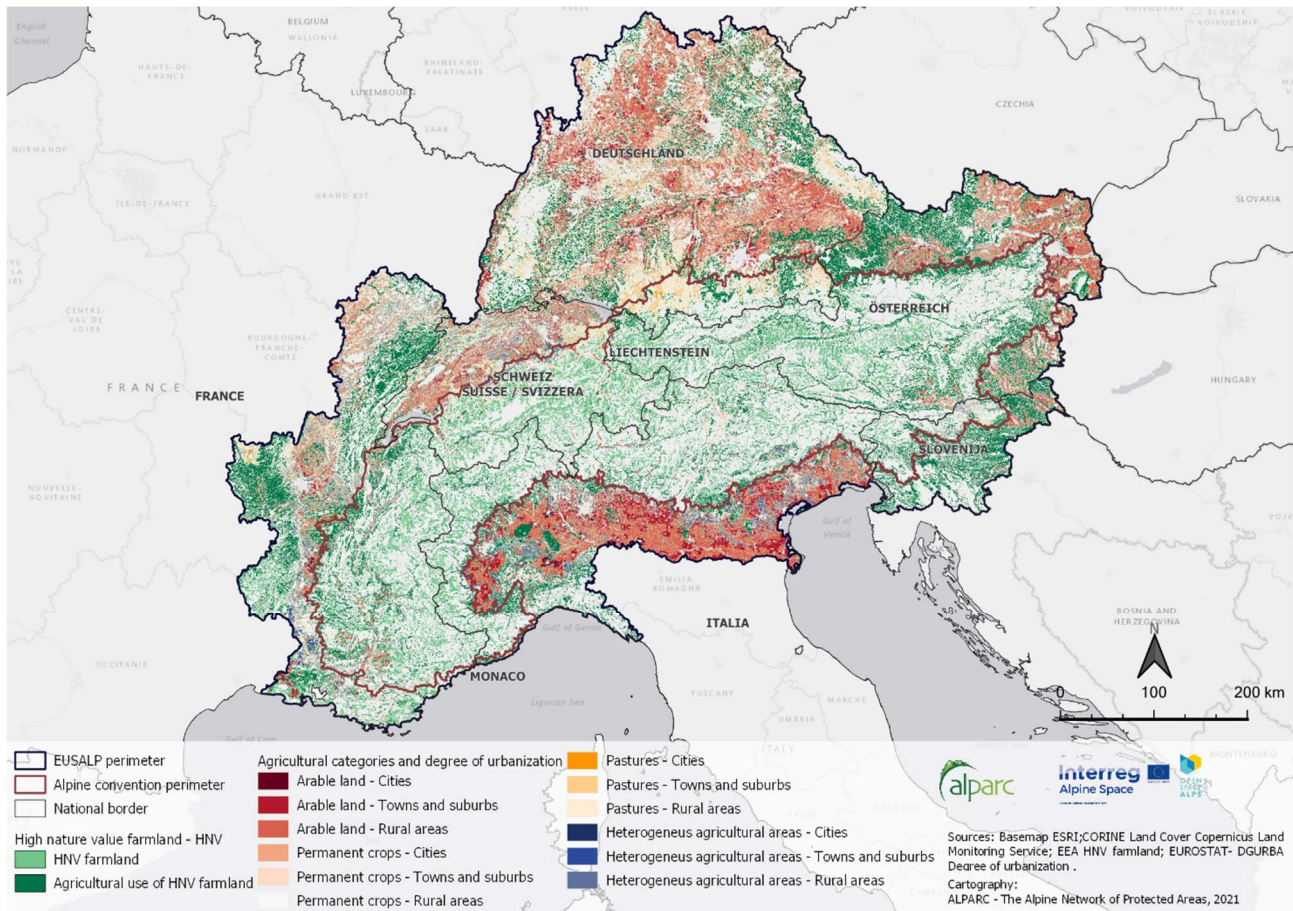


Figure 15 Spatial development under 10% and Green infrastructure



When comparing the areas with a level of spatial development of under 10% and the green infrastructure layer, there is a total coverage which shows that these areas can be catalogued as green infrastructure and in terms of the definition of the GI.

Figure 16 HNV farmland, degree of urbanization and agricultural activities



The map combines three indicators: the presence of agricultural land from CORINE Land Cover, the degree of urbanisation and the High nature farmland distribution. The categories represented on the map were organized according to their level of pressure regarding two factors: the location (urban degree categories) and the agricultural categories. Less pressure was shown by a lighter colour for all the rural areas and a darker colour for the urban areas.



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### D.T 3.2.1

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#### OpenSpaceAlps project partners:



OpenSpaceAlps – Sustainable development of alpine open spaces by enhancing spatial planning governance

<https://www.alpine-space.eu/projects/openspacealps/en/home>