

SWITZERLAND



Source: esri

General

Switzerland - officially the Swiss Confederation - consists of 26 cantons. The country is situated in western, central and southern Europe. It is bordered by Italy in the South, France in the West, Germany in the North, and Austria and Liechtenstein in the East. Switzerland is a landlocked country geographically divided between the Alps, the Swiss Plateau and the Jura. The country has an area of 4.13 Mha (million hectares) with, in 2022, a population of 8.74 million, or 2.1 persons per ha (Wikipedia and United Nations, 2022).

Climate and geography

The Swiss climate is generally temperate, but can vary greatly between the localities, from glacial conditions on the mountaintops to the often pleasant near Mediterranean climate at Switzerland's southern tip. Summers tend to be warm and humid at times with periodic rainfall. The less humid winters in the mountains may see long intervals of stable conditions for weeks, while the lower lands tend to suffer from inversion, during these periods, thus seeing no sun for weeks. A weather phenomenon known as the föhn can occur at all times of the year and is characterised by an unexpectedly warm wind, bringing air of very low relative humidity to the north of the Alps during rainfall periods on the southern face of the Alps. The driest conditions persist in all inner alpine valleys that receive less rain because arriving clouds lose a lot of their content while crossing the mountains before reaching these areas. Large alpine areas such as Graubünden remain drier than pre-alpine areas and as in the main valley of the Valais. The wettest conditions persist in the high Alps and in the Ticino Canton, which has much sun yet heavy bursts of rain from time to time. Precipitation tends to be spread moderately throughout the year with a peak in summer. Autumn is the driest season, winter receives less precipitation than summer, yet the weather patterns in Switzerland are not in a stable climate system and can be variable from year to year with no strict and predictable periods (source: Wikipedia).

Extending across the North and South side of the Alps in West-central Europe, Switzerland encompasses a great diversity of landscapes. It contains three basic topographical areas: the Swiss Alps in the South, the Swiss Plateau or Central Plateau, and the Jura mountains in the West. From the gletsjers in the Alps originate the headwaters of several major rivers, such as the Rhine, Inn, Ticino and Rhône, which flow in four directions into the whole of Europe. The hydrographic network includes several of the largest bodies of freshwater in Central and Western Europe, among which are included Lake Geneva, Lake Constance and Lake Maggiore. Switzerland has more than 1500 lakes, and contains 6% of Europe's stock of fresh water. While the Rhône flows into the Mediterranean Sea at the French Camargue Region and the Rhine flows into the North Sea at Rotterdam in the Netherlands. The northern part of the country, comprising about 30% of the country's total area, is called the Swiss Plateau. There are large lakes found here and the biggest Swiss cities are in this area of the country (source: Wikipedia).

Existing polders

The Group Polder Development (1982) states that polders can be found along some of the lakes.

General characteristics of the polders in Switzerland are shown in Table I.

Proposed polders

No proposed polders have been identified.

Location of the polders in Switzerland as shown on the World polder map

The location of the polders in Switzerland is shown in Figure 1.



Figure 1. Indication that there are polders in Switzerland (source: esri – Batavialand)

References

- Group Polder Development, Department of Civil Engineering, Delft University of Technology, 1982. *Polders of the World. Compendium of polder projects*. Delft, the Netherlands.
- United Nations, Department of Economic and Social Affairs, Population Division. 2022. *World population prospects, medium prognosis. The 2022 revision*. New York, USA.

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Table I. General characteristics of existing polders in Switzerland

Name	Reclamation	Area in ha	Type *)	Latitudes	Longitudes	Elevation in m+MSL	Land use
Polders along some of the lakes							
Total							

*) RLL = reclaimed low-lying land; LGS = land gained on the sea; DL = drained lake