Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

National Centre for Climate Services NCCS

Federal Office of Meteorology and Climatology MeteoSwiss
Federal Office for the Environment FOEN
Federal Office for Agriculture FOAG
Federal Office for Civil Protection FOCP
Federal Office of Public Health FOPH
Federal Food Safety and Veterinary Office FSVO
Swiss Federal Office of Energy SFOE
ETH Zurich
Swiss Federal Institute for Forest, Snow and Landscape Research WSL

The Swiss National Centre for Climate Services NCCS

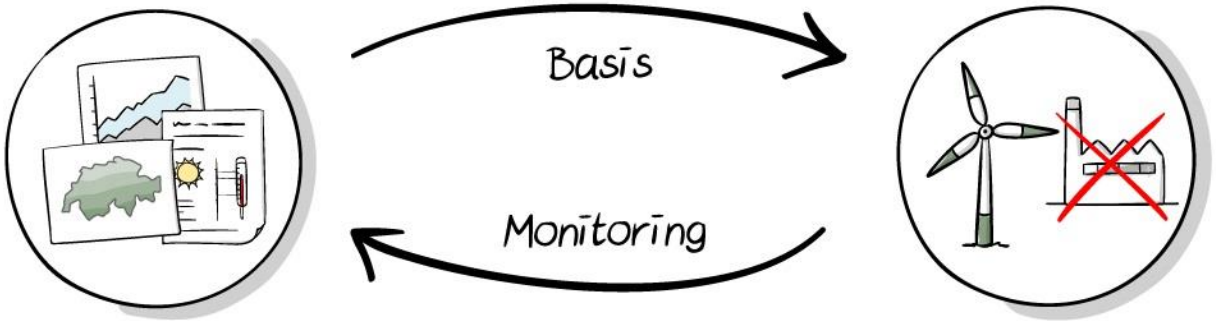
accomplishments and future perspectives

Andreas Fischer, Angela Michiko Hama, Mischa Croci-Maspoli

8 September 2021, EMS Annual Meeting

The NCCS as a user-centered network and platform for climate services in support of adaptation

Climate Services for Climate-sensitive Decisions



Climate Services

Mitigation and Adaptation

Motivation & Framing



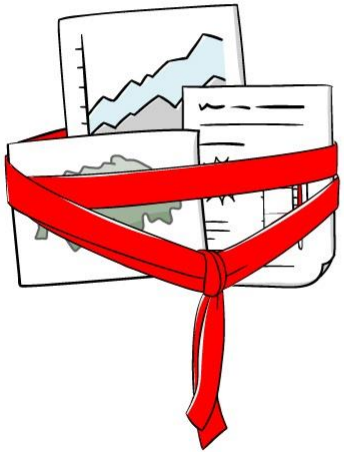
GFCS
GLOBAL FRAMEWORK FOR CLIMATE SERVICES

opernicus
Europe's eyes on Earth

Climate Change Service
climate.copernicus.eu



Vision and Goals



Bundling & coordinating



Identifying needs & fostering dialogue



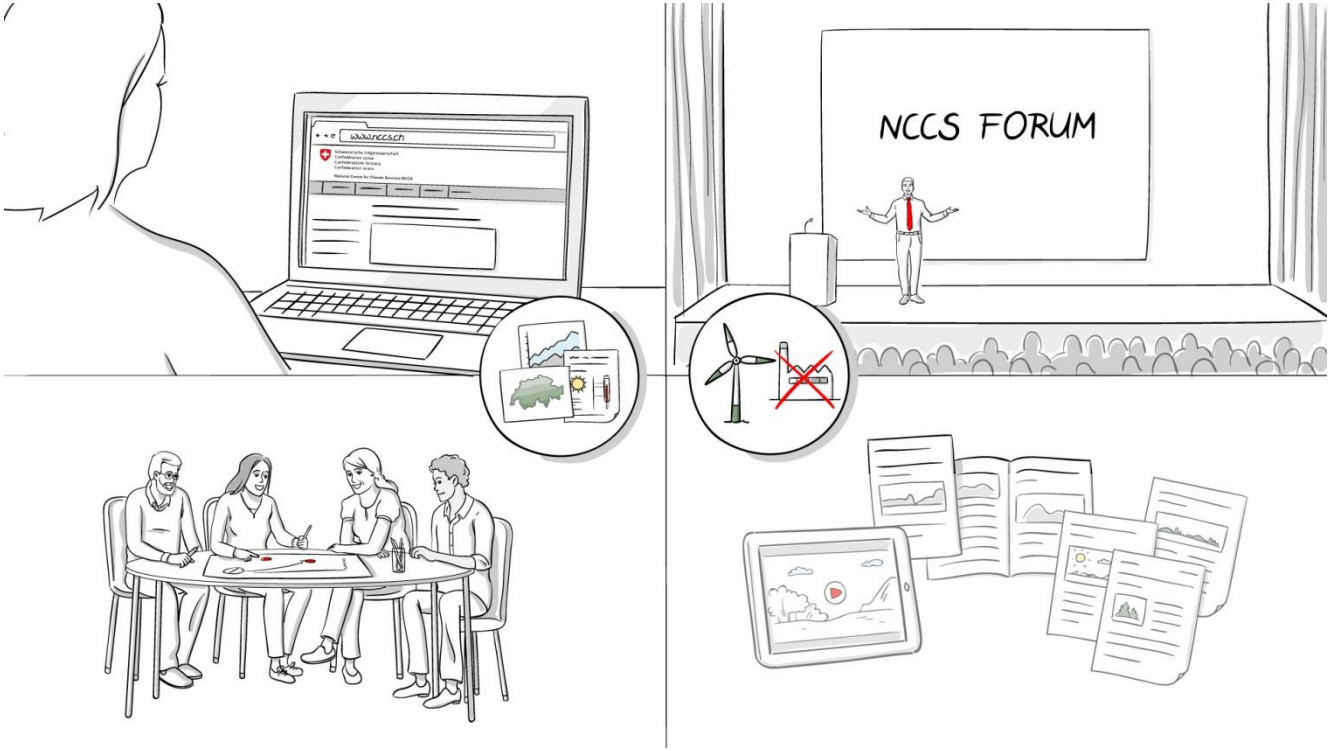
Co-producing services

Stakeholders

1. NCCS members and partners
2. National to local administrations and policymakers; interest groups
3. Providers and users from the private sector
4. International climate services actors
5. Media
6. Academia



Becoming a Network Agent and Knowledge Broker

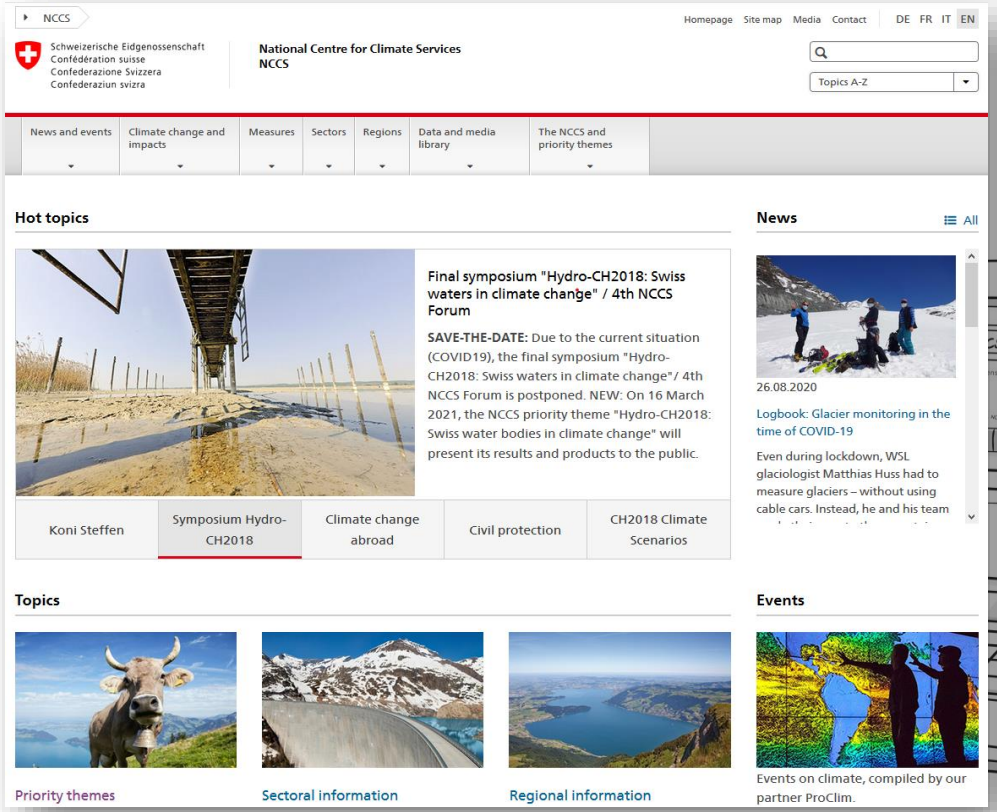


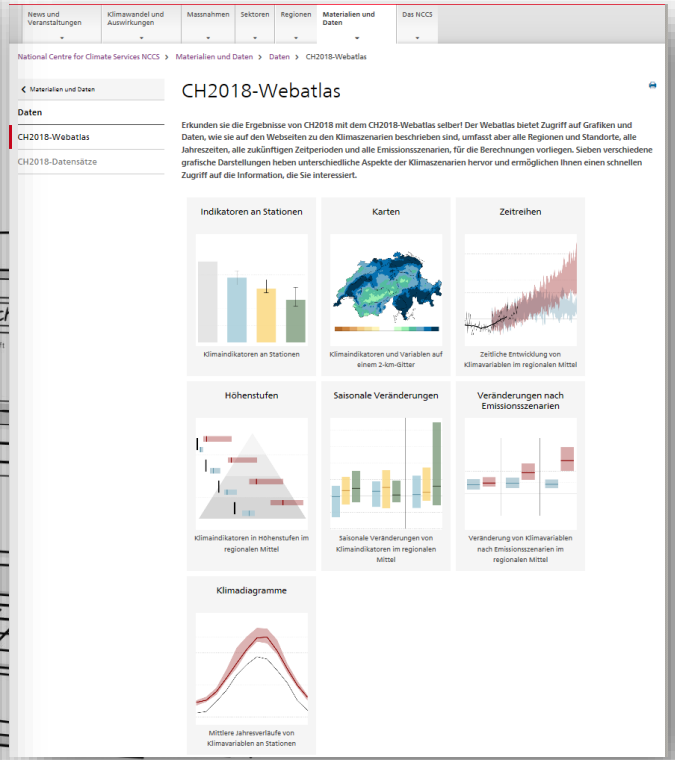
Annual NCCS Forum

Main networking event

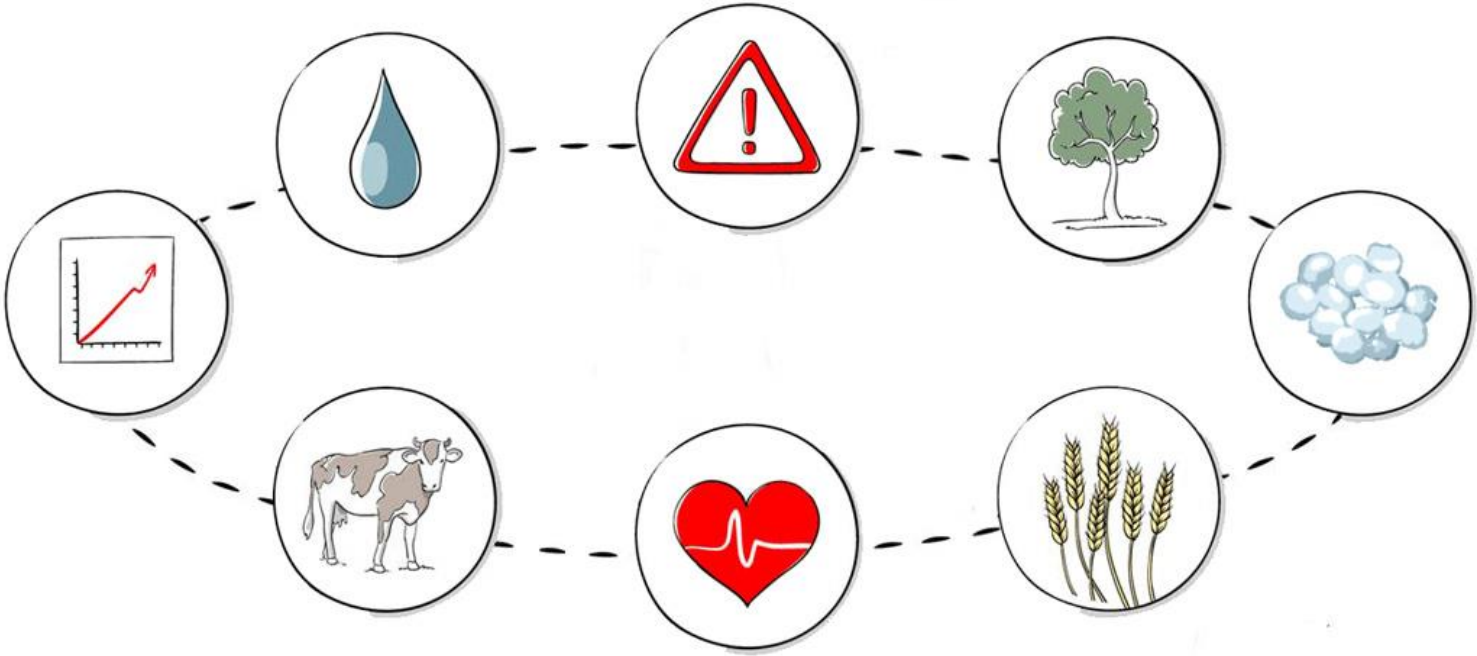


Platform www.nccs.ch





Priority Themes



Example 1 – Priority Theme
«Swiss Climate Scenarios CH2018»

Priority Theme «Climate Scenarios CH2018»

Key messages



Dry Summers



Heavy Precipitation



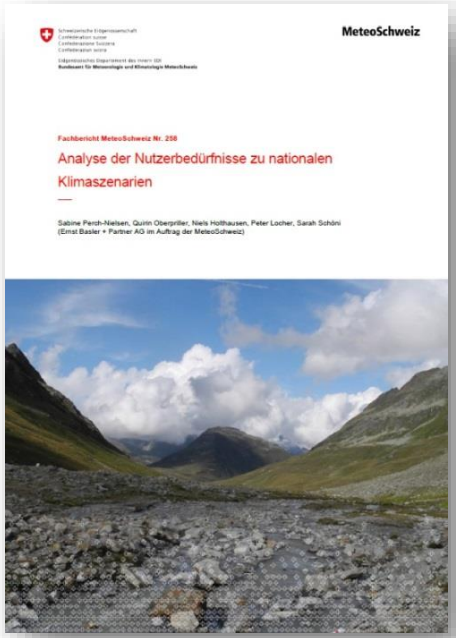
More Hot Days



Snow-Scarce Winters

Priority Theme «Climate Scenarios CH2018»

User Survey



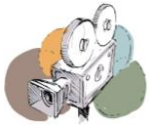
External study by EBP on behalf of MeteoSwiss (2016)

Recommendations

- Consider all user types, esp. practitioners
- More weight on communication and dissemination
- Bundle expertise on climate and climate impacts
- More personal guidance and support

Priority Theme «Climate Scenarios CH2018»

User-oriented Products

Researchers		Technical Report
Practitioners and decision-makers		Brochure  Website
Users requiring a more comprehensive picture		Web Atlas
Researchers and science-oriented practitioners		Scenario Data
The general public and media		Videos

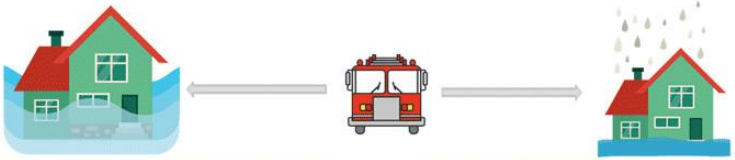
Example 2 – Priority Theme
«Climate Change and Civil Protection»

Priority Theme «Climate Change and Civil Protection»



Priority Theme «Climate Change and Civil Protection»

Study results



25 % of deployments in regions affected by flooding from watercourses and lakes.

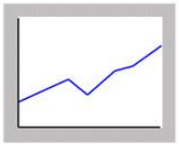
75 % of deployments in regions affected by surface runoff.



Threshold value for long periods of precipitation: Sum **30 mm/12 h**



Threshold value for short periods of heavy precipitation: maximum intensity in the 3 hours before deployment **15 mm/h**



As a result of climate change, the number of relevant precipitation events will increase from **5 to 6 per year** by 2040.



Due to population trends, the number of people in vulnerable areas **will increase by about 25% by 2030 and by about 30% by 2040.**

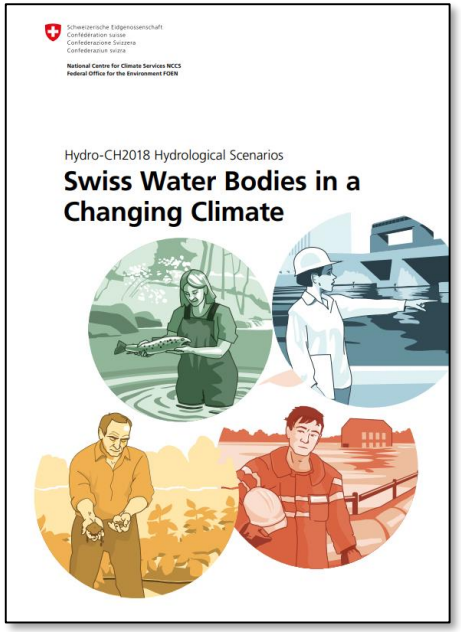
Priority Theme «Climate Change and Civil Protection»



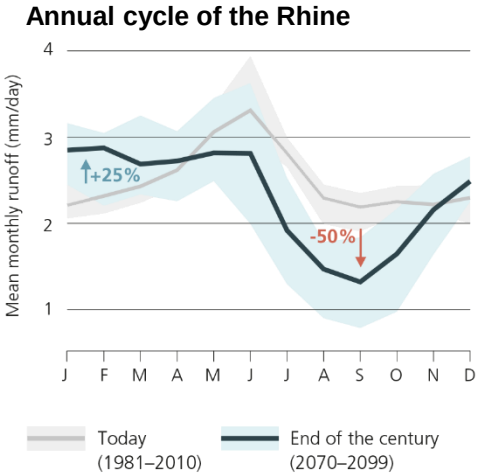
Study on the impact of extreme precipitation on deployments of the Zurich protection and rescue services

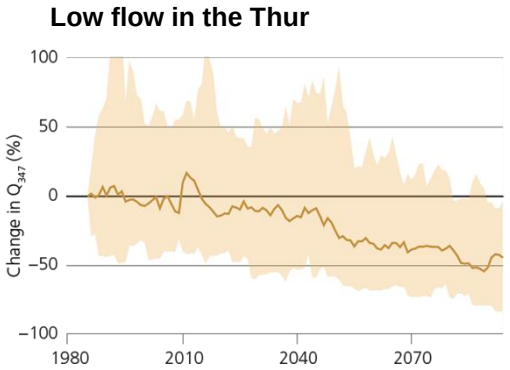
Example 3 – Priority Theme «Hydrological Scenarios»

Hydrological Scenarios



NCCS 2021





Hydrological Scenarios

Key messages



Changes in runoff



Water shortages in summer



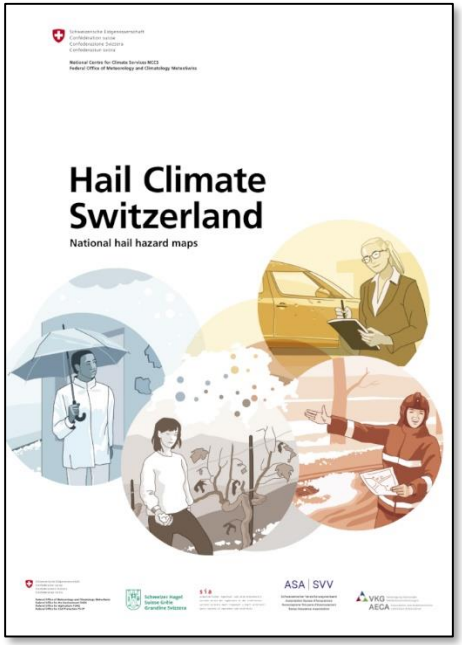
Growing hazard potential



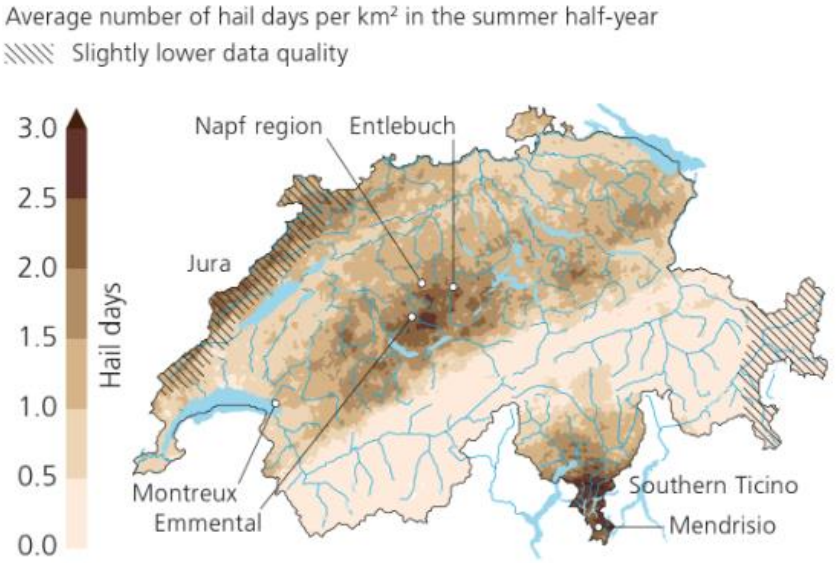
Aquatic life at risk

Example 4 – Priority Theme «Hail Climate Switzerland»

Hail Climate Switzerland



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Hail Climate Switzerland

Products and new methods



Hail Frequency



Hailstone Sizes



Return Periods

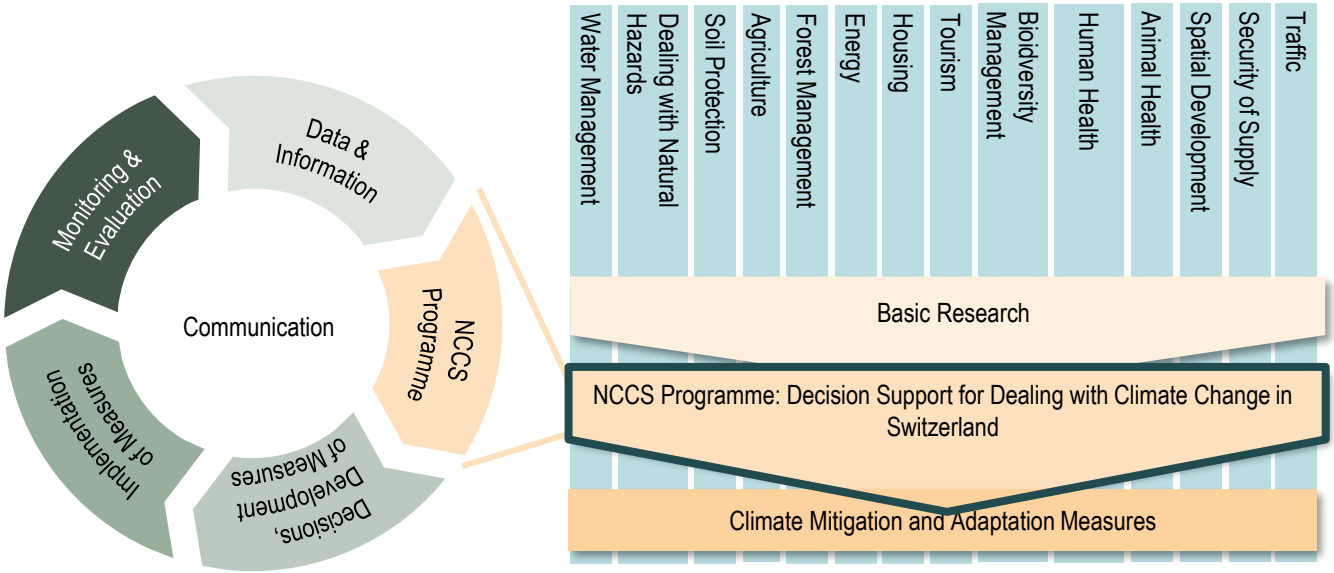


Methods

Example 5 – NCCS Programme: «Decision Support for Dealing with Climate Change in Switzerland (NCCS-Impacts) »

NCCS Programme «NCCS-Impacts»

Cross-sectoral Impacts and Decision-making; start in 2022

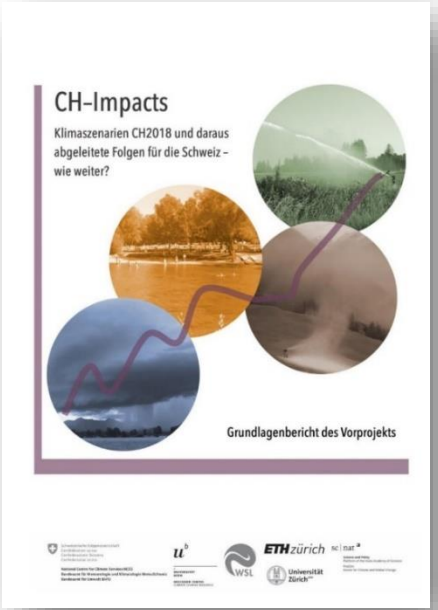


NCCS Programme «NCCS-Impacts»

Scoping Meeting



70 stakeholders from research, administration and private sector



Basis report on current knowledge and user needs

Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

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Federal Office of Public Health FOPH
Federal Food Safety and Veterinary Office FSVO
Swiss Federal Office of Energy SFOE
ETH Zurich
Swiss Federal Institute for Forest, Snow and Landscape Research WSL

Thank you.

