# la Mobilière



# La Mobilière's commitment to investigating and preventing natural hazards

### Research into climate change and natural hazards

If you want to protect yourself adequately against risk, it must first be identified. That's why la Mobilière is supporting the University of Bern in its research into the effects of climate change and natural hazards.

Since 2010 the Professorship for Climate Impact Research, which is funded by la Mobilière, has been researching extreme weather events in Switzerland. Professor Olivia Romppainen-Martius is leading research in particular into how windstorms, hailstorms and heavy precipitations arise, where they occur and how they will change in the future.

The Mobiliar Lab for Natural Risks, founded in 2013 as a joint research initiative between Ia Mobilière and the Oeschger Centre for Climate Change Research (OCCR), complements this work. The Lab focuses on high-resolution modelling of hail and flooding and the resulting damage. It also provides the means to ensure that theory is translated into practice.

Both the Professorship for Climate Impact Research and the Mobiliar Lab for Natural Risks pursue innovative research into these topics of interest to society at large that is recognised both nationally and internationally. They develop tools to improve forecasting and early-warning systems and provide decision-making frameworks that will enhance risk management amid the changing climactic conditions. Their close collaboration enables them to span the entire process seamlessly – from fundamental research (Professorship) to applied research (the Lab) through to practical implementation. mobiliarlab.unibe.ch

#### Webtools

The Mobiliar Lab for Natural Risks provides several interactives webtools, including the following three:

• Flood Dynamics

How does a flood event unfold in space and time in the event of extreme precipitations? What impacts result from this? hochwasserdynamik.hochwasserrisiko.ch/en

Flood Memory

A picture is worth a thousand words: more than 4,000 pictures of past flooding are used to improve risk awareness. ueberschwemmungsgedaechtnis.ch/

• Damage Potential

Saying that a hazard exists does not identify what can effectively be damaged by flooding. Efficient risk management must therefore also consider where the exposed physical assets and people are located. This is shown in the «Flood Damage Potential» webtool. schadenpotenzial.ch

Landing page of the Flood Risk Research Initiative with links to all available webtools: hochwasserrisiko.ch/en

#### **Swiss Hail Network**

Hailstorms cause millions of francs worth of damage in Switzerland every year. Forecasting where hailstorms will occur is difficult as they are very localised. To understand hailstorms and how they work, la Mobilière is supporting a unique hail network consisting of 80 fully automatic sensors installed in hail hotspots (the Napf region, the Jura and Southern Ticino). The measurement data are evaluated by the Mobiliar Lab for Natural Risks and the Federal Office of Meteorology and Climatology MeteoSwiss, thereby contributing in particular to improved hail warning and forecasting.

## Supporting prevention projects

Knowing what can happen is one thing but preventing damage is another. La Mobilière therefore supports municipal prevention projects to protect against flooding, rockfalls and avalanches etc. Since 2005, la Mobilière has participated in more than 160 prevention projects, contributing around CHF 43 million for this purpose.

For an overview of the supported prevention projects, visit: mobiliar.ch/praevention

#### Mobile flood protection systems

Not every place can be sufficiently protected by structural prevention measures. Mobile measures that can be quickly set up to provide additional protection against flooding are also needed. For this reason, la Mobilière is providing 15 regions at high risk of flooding with one container each comprising modular mobile dyke elements with a length of over 400 metres. Five such systems were handed over in 2019 and another five in 2022, with a third instalment set to follow in the second quarter of 2023.

# La Mobilière's commitment to society

We firmly believe that sustainable development can only take place if a range of different components are brought together. Our understanding of sustainability as a mutually structured company not only comprises the economy, environment and society, but also – through active dialogue – creativity, culture and science as a driving force. We promote prevention projects against natural hazards in various regions of the country, strengthen the innovative power of Swiss SMEs with the Mobiliar Forum and support projects in the field of the effects of climate change at the University of Bern and data analysis at ETH Zurich. mobiliar.ch/engagement