



THE SAUFLAZ RIVER

HYDROLOGY

The Sauflaz*, a tributary of the Vièze River, has its source in the Susanfe Valley. It is fed by two main streams; the west branch, which flows from the scree below the Dent de Barne, and the east branch, fed by the Ruan and the Grande Pente glaciers at the foot of the Susanfe Pass. All these waters meet in the centre of the valley, where they are captured and exploited for hydroelectric production.

From the lowest point in the Susanfe valley (about 1,800 m) the Sauflaz enters a deep, rugged, 600 metre-long gorge (1, 2 et 3). At its exit point, near 1,200 m, the river flattens out in an area called Grand Paradis. At the end of the last ice age, about 15,000 years ago, it is likely that this area was actually a lake. The alluvial sediments gradually filled in the lakebed, leaving the wide plain that exists today. The old name in local dialect for this area is «Etrivoué», which means «beyond the water».

FLOODS

On September 21, 1968, following an extraordinarily rainy period, the Sauflaz reached a tipping point as the torrential waters churned up an unprecedented amount of debris. Carried down the mountain by the rapidly flowing water, but slowing once the river reached the Grand Paradis plateau, the debris settled and the river overflowed. The ensuing flood destroyed two roads, a chalet and the Grand Paradis Bridge (5). 100 hectares of meadows and forests were covered with river debris; the flow of the Sauflaz was estimated at 60 m³/s (Canton du Valais, 1969). Following this event, the riverbed through Grand Paradis was entirely re-engineered into a straight channel with high, rock-lined embankments on either side. Despite these precautions, the banks were partially destroyed during a new flood in 1999, only to be rebuilt in 2000.

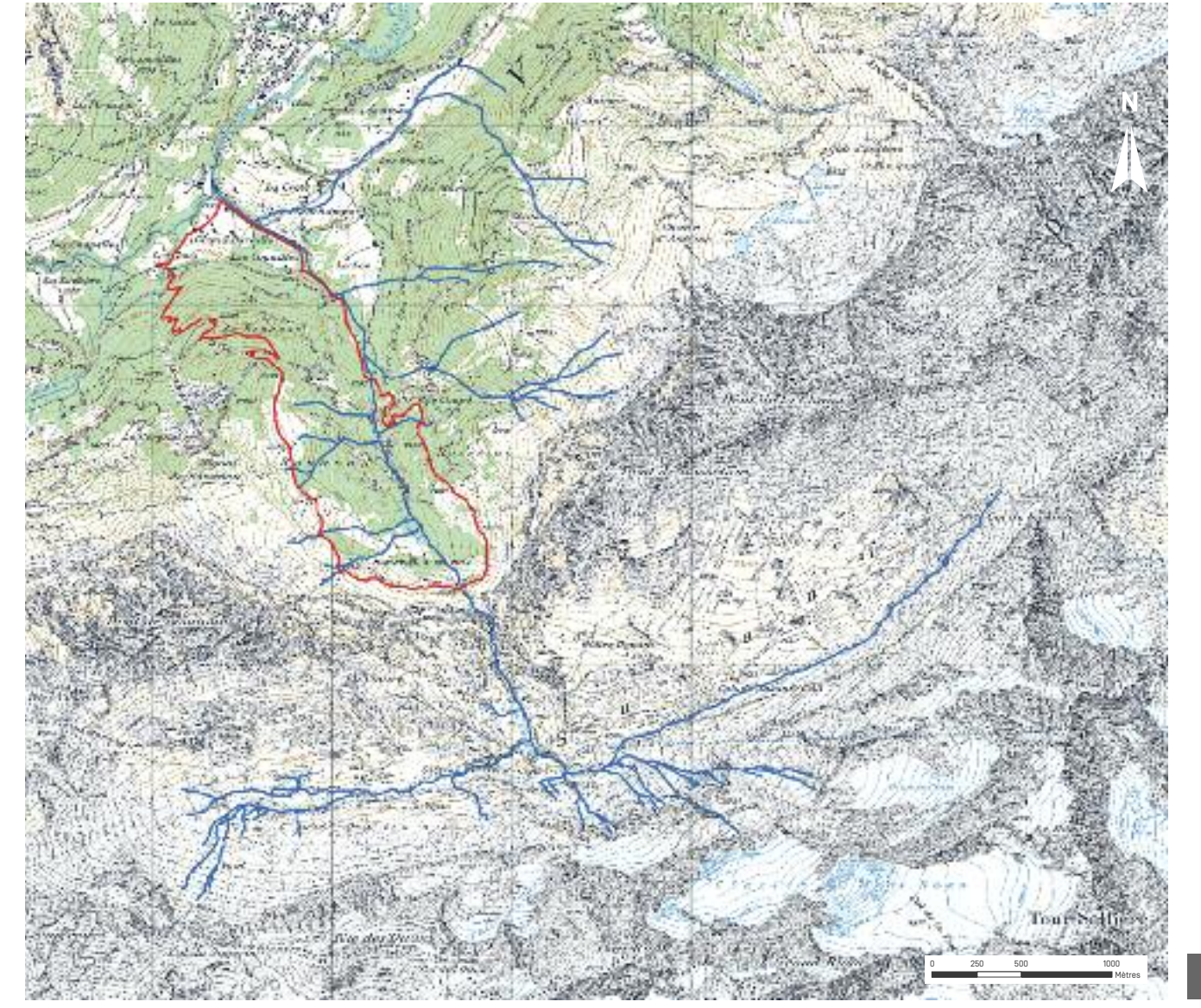
*Sauflaz: a word in the local dialect, meaning «breath», refers to the constant breeze created by the torrential eddies of the river as it flows down the valley.

DRAINAGE BASIN AND SEDIMENT TRANSPORT

The Sauflaz watershed covers an area of about 22 km², with a hydrographic network 35 km long. Glaciers occupy 10% of the drainage basin and are responsible for a good part of the river's sediment displacement, estimated at an average of 2,000-3,000 m³. The «glacial flour» and sediment gives the river a brownish colour. (6).

PASSERELLE BELLE-ÉTOILE

The 55 metre-long suspension bridge is situated at an altitude of 1,494 metres, 25 metres above the Sauflaz River. It was built in 2016, to replace an old aluminium footbridge, which spanned the riverbanks. Installed in the 1990's (6), this bridge had to be disassembled before winter and reassembled each spring, and was continually at risk of being damaged by floods. The name Belle-Étoile refers to the Evening Star, which appears in the night sky just above this valley throughout most of the summer season.



The Sauflaz River and its tributaries Educational Trail



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- 1-3 The Sauflaz Gorge, upstream from the Belle-Étoile Bridge.
4 The Sauflaz Waterfall, downstream from the Belle-Étoile Bridge.
5 The Sauflaz Flood in September 1968.
6 The Sauflaz Flood in October 2011.
7 Map of the Bonnavau - Susanfe region.

If you can't think, walk;
if you think too much, walk; if your thoughts
are gloomy, walk some more.

Jean Giono

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