

Excursion of the Swiss Young Geomorphologists (SGmS)

## The 3<sup>rd</sup> Rhone correction: river management in a complex socio-environmental context

Friday 24 March 2023, Sion



Photo: © Jonathan Bussard, 2022

**The Young Geomorphologists' 2023 winter excursion** took place on the banks of the Rhone River (Valais), which is the object of Switzerland's largest flood protection project: the 3<sup>rd</sup> Rhone correction. It was jointly organised by the FNS-funded project *FluidGov - Towards a "fluid" governance: hydrosocial analysis of flood paradigms and management practices in Rhone and Ganges basins*, supervised by René Véron (UNIL), and by the Swiss Geomorphological Society (SGmS). During the excursion, several questions and results related to the project *FluidGov* were addressed. The *FluidGov* budget covered the expenses for the excursion, while the network of the SGmS was used to communicate the excursion. The excursion, conducted by Jonathan Bussard (UNIL, project *FluidGov* and SGmS), Rudolf Pesch (head of the office Rhone and Léman of the Canton du Valais) and Didier Tille (coordinator of Rhone 3 in Central Valais), was attended by 14 participants (bachelor and master students, PhD candidates) from the universities of Fribourg, Basel and Lausanne and the University of Applied Sciences and Arts of Southern Switzerland.

In the event of a major flood in the Rhone floodplain, the damage is estimated at around CHF 15 billion and about 100,000 people live and work in the danger zone. After major floods that occurred in 1987, 1993 and 2000, the Governments of Vaud and Valais adopted in 2016 the 3<sup>rd</sup> Rhone correction development plan, which aims to reinforce the safety of the plain through three types of measures: reinforcement of the dykes, lowering and widening of the river bed. While anticipatory measures have already been implemented in Visp, further construction work is now being prepared in several sectors of the floodplain. This is the case of the “Mesure prioritaire Sion”, where cantonal authorities are currently preparing different kinds of measures. During this excursion along the Rhone in the central Valais, we visited the actual state of the Rhone between its confluence with the Lizerne (an alpine stream flowing from Derborence) and the leisure area of Les Iles (Sion). The construction works planned in this sector were presented by the representatives of the cantonal office and discussed with the participants.



The Sion-Riddes canal, crossing the Lizerne River: an enlargement of the tunnel is planned to avoid the accumulation of water against the Lizerne dam in the event of the Rhone overflowing its bed. Photo: J. Bussard, 24 March 2023

The visit showed that the 3<sup>rd</sup> Rhone correction project has to deal with numerous issues related to natural factors (sediment transfer, erosion, discharge in extreme events, relations between the river and groundwater, etc.), possible conflicts between different uses of the waterscape (safety, leisure, nature protection, transport infrastructure, etc.) and administrative or legislative factors (compliance with several laws which may be contradictory, coordination between different administrative levels, negotiations with private stakeholders, etc.). As the 3<sup>rd</sup> Rhone correction is a long-term project, the cantonal authorities are trying to anticipate as much as possible the search for solutions that can be acceptable to all stakeholders. Each case has its own peculiarities, which makes the project very complex in terms of coordination and provides interesting case studies for the question of “fluid governance”.

Organisers

Jonathan Bussard, Julie Wee, Chantal Del Siro

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