



Towards a collaborative learning in river restoration in Switzerland

Vers un apprentissage concerté pour la mise en œuvre des revitalisations de cours d'eau en Suisse

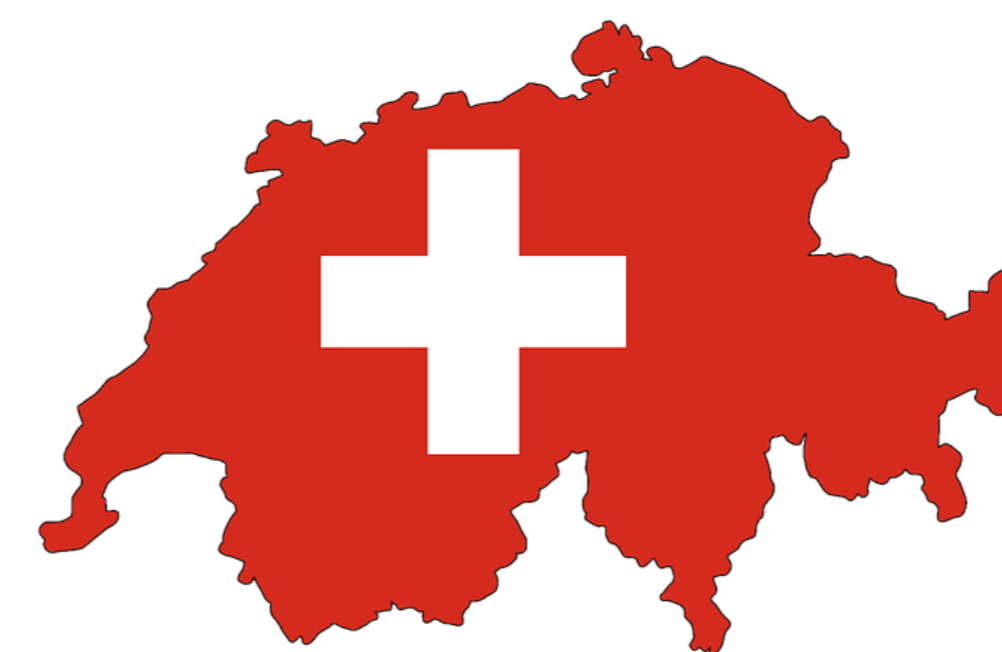
The Task



In 2011, the Swiss Water Protection Act was revised, with the following alterations:

- Degraded rivers and streams should get restored within 80 years (approx. 4'000 out of 16'000 km degraded)
- A river corridor of sufficient width has to be defined along the entire river network to prevent future degradation
- Measures mitigating negative effects from hydropower production need to get implemented until 2030 (hydropeaking, bedload regime, fish migration).

The Players



Responsible for implementing restoration projects are the cantons and / or the municipalities (depending on the cantonal law)

1	federal government
26	cantons
2'255	municipalities

The Strategy



All 26 cantons performed a strategic planning for river restoration in 2014 to identify priority stream reaches to be restored from an ecological, conservational and landscape perspective. The planning will be updated every 12 years.

The Funding



Projects get federal money accounting for 35-80% of the project costs. Results from the strategic planning will guide funding. Contracts are negotiated with each canton for 4 year-periods.

The Process

1. Implementation

State-of-the-art

- Information on restoration project characteristics are available on cantonal level only

New (2018 ff.):

- Data on projects completed will be reported via a standardized protocol (excel based) to the FOEN (Federal Office for the Environment) by the cantons
- 4 different project types are differentiated: stream restoration, lakeshore restoration, restoration of longitudinal connectivity, restoration of bed load regime
- Data reported comprises the following aspects: location, stream characteristics, measures implemented, costs, funding
- Data are entered via a selection menu which allows a simplification of data analysis

3. Learning

State-of-the-art

- No systematic approach in learning is applied so far
- Learning takes place on the project-level (i.e. no exchange across projects)

Planned (2020 ff.)

- Information gained from project characteristics («implementation») and standardized M&E («effects») combined will be the base for a national learning programme with the aim to make restoration more efficient
- Analysing the data on a national level will allow deriving applied recommendations for a more efficient restoration practice
- The timing on providing recommendations for future restoration will be linked to the schedule of updating the strategic planning
- Federal funding might possibly be adjusted to support those projects with the highest potential for ecological recovery

2. Monitoring and Evaluation (M&E)

State-of-the-art

- Abiotic and biotic M&E is designed individually for each project.
- Efforts for M&E and intensity vary considerably across projects.
- Data are available on cantonal level only and not comparable across projects.

Planned (2020 ff)

- Abiotic and biotic M&E should follow a standardized protocol using a common set of indicators and standardized field methods, leaving flexibility depending on project goals
- Intensity of M&E should depend on project costs or ecological potential of the project, with a minimum M&E for each project (e.g. abiotic indicators only)
- M&E should take place before and after implementation, leaving enough time to let the system respond.
- Data on project outcome need to get reported centrally.

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