

FLOOD MANAGEMENT VISIT TO SWITZERLAND¹

In September 2015 a flood management visit to Switzerland was organized for representatives of environmental authorities and organizations from Belarus, Moldova and Ukraine. The study visit focused on the use of ecosystem restoration and management for reducing flood risks.

Representatives of Swiss Federal Office for the Environment (FOEN) and experts in flood protection from the Cantons of Geneva and Valais (Hervé Fauvin, Etienne Monbaron, Marianne Gfeller-Quitian and Carolin Schärpf) shared their experience and knowledge with the participants. In particular, they presented the history of flood protection in Switzerland as well as the concept of “more space for rivers” which foresees partial restoration of floodplains and rivers to more natural conditions. Swiss colleagues also paid additional attention to financial, organisational, legal and social issues in applying this concept into practice, providing concrete examples of flood mitigation including the following:

- legislation, including treaties on transboundary cooperation;
- analysis and mapping of flood risk ;
- development of on-line tools for exchanging data on extreme events;
- awareness activities with local population including children;
- ecosystem restoration and management of river bank vegetation;
- engineering and technical activities;
- early warning emergency systems; and
- emergency insurance.

During field trips experts from Switzerland introduced examples of ecosystem and river restoration for flood risk reduction in the Cantons of Geneva and Valais whereas the participants from Eastern Europe described ecosystem restoration initiatives in Belarus, Moldova and Ukraine.

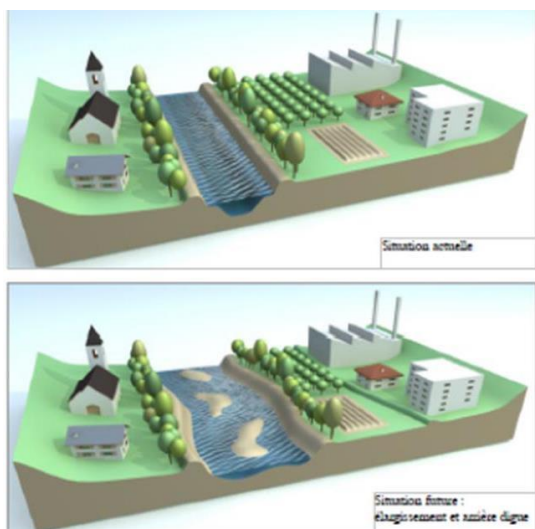
More details about the study visit are presented below as a photo report.



Representatives of international organizations and environmental authorities of Switzerland
(from left to right: Marianne Gfeller Quitian, Carolin Schärpf, Etienne Monbaron, Nina Saalismaa, Anna Kaplina, Leonid Kalashnyk and Hanna Plotnykova)

¹ Flood management visit was organized from 31 August to 4 September 2015 within the joint OSCE-UNEP project “Restoring Ecosystems to Mitigate Floods and Improve Cooperation between Countries in Transboundary River Basins in Eastern Europe” implemented under the auspices of the Environment and Security Initiative (ENVSEC) with financial support from the Government of Switzerland. The study visit was conducted in cooperation with Zoi Environment Network. In addition to the study visit, the project foresees pilot works on the Dniester river in restoring water exchange between the main water course and its floodplains.

EXAMPLES FROM THE CANTON OF VALAIS (THE RIVER RHONE)



Current profile of the river Rhone (top) and river profile after the widening of the river (down)

In the Canton of Valais the participants were introduced to activities on the Rhone river, one of the biggest projects in Switzerland focused on flood risk reduction by restoring the river to its more natural state.

As elsewhere in Europe, on the Rhone major engineering works were implemented since the 19th century to gain more agricultural land. That was so-called “2nd correction” of the Rhone, which included river channeling and establishment of dikes in 1960s. However, during the following decades local population were affected by high floods which gave a start for reconsidering the traditional approach to flood protection. This process led to the beginning of the “3rd correction” of the Rhone river, which includes widening of the river wherever sufficient space is available, combined with deepening of the river channel where urbanization or infrastructure limit the possibilities to widen the river.

The Chief of the Rhone Flood Protection Division, Mr. Tony Arborino told the participants that a lot of time was needed to plan the Rhone project and get it approved by all relevant stakeholders. Although the project planning began in 1995, it was approved only in 2012 through a cantonal referendum. Additional 15-20 years will be needed for project implementation. Mr. Arborino also showed visual materials including films and interactive presentations prepared for ensuring continuous communication with local population, land users and other stakeholders, which is one of the main prerequisites for project success. During the field trip in Visp the participants saw practical results of the activities implemented on the Rhone.



Tony Arborino, Head of Division for the Rhone Flood Protection, Canton of Valais, is presenting the project on flood risk reduction on the Rhone (2 September 2015, Martigny, field trip)





Presentation of the activities implemented in Visp within the flood risk reduction project on the Rhone river.
The field guide is Rudolf Pesch, Division for Rhone Food Protection, Canton of Valais
(2 September 2015, close to Visp, field trip)

EXAMPLES FROM THE CANTON OF GENEVA

In the Canton of Geneva field visits the participants learnt about other smaller but likewise interesting projects focused on river restoration for flood risk reduction.

The Aire River

The Aire river restoration project consists of four phases which include widening and restoring the natural meandering of the river and creation of retention ponds to reduce water flow and, consequently, mitigate flood risk. The project began in 2002 and will be finalized in 2015. In addition to flood protection, the project also foresees development of the recreational and agricultural areas as well as improvement of conditions for fish population and biodiversity in general. Recreational activities are not finalized yet; however, people already today have the opportunity for active recreation at the riverside close to the village Lully as witnessed by the participants of the study visit. During the field trip Mr. Francis Delavy from the Department of Environment, Transport and Agriculture of the Canton of Geneva explained the activities implemented at the river Aire to the participants.



Francis Delavy, Department of Environment, Transport and Agriculture, Canton of Geneva is introducing the participants to restoration activities at the Aire river (3 September 2015, close to the village Lully, field trip)



Restoration activities at the Aire river in the Canton of Geneva
(3 September 2015, close to the village Lully, field trip)

The Versoix River

Mr. Franck Pidoux from the Department of Environment, Transport and Agriculture of the Canton of Geneva introduced to the participants the restoration project at the Versoix river. His compelling story about the project impressed the participants a lot. In particular, rational and attentive use of locally available materials and conservation of biodiversity during project activities helped the team to find several creative and interesting solutions which in addition to flood protection made the area more attractive for people as well as for local fauna and flora. Natural conditions for fish habitats were restored on the river and special shelter for insects, amphibians and reptiles were created at the nearby areas. The project restored 900 meters of river. Riverbank protection was made by using wood logs which increased natural beauty of the river area. The participants were also impressed by the fact restoration activities were partly implemented on area that was previously used as parking for travel trailers.



Restoration of the river Versoix, Canton of Geneva (3 September 2015, field trip). Franck Pidoux is presenting the project, Department of Environment, Transport and Agriculture of the Canton of Geneva



Restoration of the river Versoix, Canton of Geneva (3 September 2015, field trip)
(from left to right: Hanna Plotnykova, Franck Pidoux, Vladimir Gubanov and Nina Saalismaa)

The Marquet River



Marianne Gfeller Quitian, Department of Environment, Transport and Agriculture, Canton of Geneva (3 September 2015)

The last field trip focused on transboundary cooperation between France and Switzerland in the Marquet river basin and flood risk reduction by creation of three retention ponds. Ms. Marianne Gfeller-Quitian from the Department of Environment, Transport and Agriculture of the Canton of Geneva presented a retention pond which protects cross-border areas from floods by storing runoff during high waters. Ms. Quitian also mentioned that during restoration activities special attention was paid to landscape design and creation of recreational areas.

CONCLUSION

In their feedback, flood tour participants from Belarus, Moldova and Ukraine concluded that the study visit was very useful for them. In particular, they acknowledged the professionalism of the lecturers and field experts, the attention and appreciation to ecosystems in Switzerland, the creative approach to restoration of the Versoix river, the large scale of the works at the Rhone river, as well as the level of detail and accuracy of Swiss flood risk maps. It was also mentioned that on condition of availability of financial resources similar projects could be implemented in Eastern Europe where their realization could be even easier due to natural and climatic conditions.



Participants of the study visit during field trip at the Marquet river (3 September 2015)

To conclude, all the projects introduced to the participants during the study visit were complex in nature. On the one hand, the idea of “more space for rivers” evolved as a tool for solving flood issues; however, on the other hand, this approach in addition to flood mitigation provides opportunities for conservation of local flora and fauna as well as for active recreation of local people. Obviously, river restoration activities are not simple since there are many financial, organizational and social obstacles. However, Swiss colleagues showed how they are able to make

special efforts and continue to do so to re-think the traditional approach to flood protection and to find a way for fostering nature and people together.

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