











Restoring Europe's Rivers

RESTORE Events: Reporting

Sector specific engagement event on Agriculture and Hydropower in Southern Sweden

29 Oct – 2 Nov 2012

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Event Details

The North Region's sector specific engagement event number 1, round 2 was focused on agriculture and hydro power and was held in Southern Sweden in autumn 2012. The event consisted of a seminar at the premises of Swedish National Water Authority, Hav och Vatten, at Gothenburg on 29 October and numerous RR site excursions and discussions among Swedish key RR persons. The event is action C3 in the bid.



The event started with a seminar held in Gothenburg on 29 Oct 2012.

Key Issues from the Event

The key issue of the event was to discuss and find solutions to common RR problems in all North Region's member countries. These include both environmentally sound land drainage in agricultural areas and methods to combine hydro power production and fish populations.

In terms of RESTORE, our key issues were:

- To find out more about Swedish river restoration cases, with an aim for these to be uploaded on to the River Wiki.
- To deepen the Finnish-Swedish RR conversations started in round 1 event in Finland in May 2011.
- To clarify the situation of hydro power and its mitigation measures in Sweden, Norway, Estonia and Poland.
- To get key RR persons from all member countries acquainted with each other to enable future post-RESTORE cooperation.
- To promote the RESTORE products, such as www-pages, wiki-database and contacts database.

Key Outcomes

River restoration know how in Sweden proved to be very high, as expected, and they have many good examples of newly completed RR case studies addressing hydro power impacts and environmentally sound drainage.

The Swedish national RR network has helped to contribute to the level of understanding of the key measures and good restoration practices. Even though the municipality level authorities are not members of the national network, the cooperation between the regional and municipality level authorities is good enough to spread the best RR practices from regional authorities onward to local level. This approach is something other countries, such as Finland, could learn from.

It was especially impressive how the Swedes have been able to realize these RR projects despite the resistance from hydro power companies. Having legislation and adequate public money that support this work was an important factor. The resistance of hydro power companies to create fishways can be tackled if legislation supports the water authorities' opinion. The excursion, illustrated the rapid legislative process in Sweden. Their court can instruct the hydro power company to build a fishway. This process can be quite lengthy in other countries e.g. Finland.

When the court decides to order the power company to build a fishway, they also dictate which type of fishway needs to build. The greatness of this system is that the technical knowhow comes from the water authorities. In this way it ensures that all environmental benefits from the fishway are acheived. Partly because of the functional national RR network, regional authorities are well aware of the present best RR practices and favour nature-like by-pass channels instead of traditional and purely technical solutions.

The third difference between Finland and Sweden is the environmental flow in the fishway. This means that the power company and the regional authority are also able to agree conditions to ensure a constant water flow in the new fishway. The normal practise in Sweden is for the regional authority to pay a one of compensation to allow for this low water flow within the fishway. This compensation is necessary as the power companies already hold the environment permit to abstract the whole water flow to use for power production.. The payment ensures a change to the power company's licence commiting them to an agreed flow of water into the fishway. In addition, the flow is usually agreed to change with the seasons. Because this arrangement costs a lot of money for the state instead of the power company, which financially benefits from the power plant, there are ongoing discussions in Sweden to change this arrangement. In future they would like the court's to make the power company to pay for the environmental flow as well.

Key outcomes for RESTORE:

Most important observation was that the Swedish National Hydro-morphological Network is a functional tool for transferring best river restoration practices among regional and national level authorities. The members of the network are well aware of the present RR techniques and their adjustability.

During the event participants learnt new restoration methods and techniques and saw their implementation in practice. For environmentally sound drainage the most interesting solution was 2-stage cross section (pictures below).



On the top a picture of a traditional agricultural ditch. Below a picture of a restored ditch which is actually an agricultural stream. A flood terrace has been built on the left-hand site. Both pictures © Finnish Environment Institute.



Building of a 2-stage cross section at visited site Brook Ramlösa, Helsingborg, Sweden.

The role of fishways and especially nature like by-pass channels is significant in Southern Sweden these days. We saw numerous good case studies sites during the event, since there are many newly finished sites now. In nature the by-pass channels have many advantages compared to technical fishways: besides up-migrating fish, they are suitable for bottom fauna, eels and down-migrating fish as well. Also nature like by-pass channels are more valuable for landscape.





On left hand side a photo of Ålgårda by-pass channel at River Rolfsån. On right hand side a photo of Skårhul by-pass channel at River Knipån.



Building of a nature like by-pass channel at Hedefors power plant in River Säveån in October 2012.



Restored site with submerged weirs at River Tabergsån.

Attendance

27 people attended the one-week event. Participants were from all member countries of RESTORE North Region: Poland, Estonia, Finland, Sweden and Norway. The sectors represented by the participants were: water managers, river basin planners and practitioners (universities, research institutes and NGO's) and stakeholders.



Participants at the last site on Friday 2 November 2012.

Support for Restoration Practices

We were able to sum up the most common river restoration problems in all the member countries and these were the ones discussed during the event: hydropower and (agricultural) land drainage. During the event the participants saw examples of how to tackle these problems i.e. how different river restoration practices can be realised and also what do these solutions look like in practice.

Building on Network Capacity

During the event Polish, Swedish, Norwegian, Estonian and Finnish river restoration experts were able to get acquainted and networked with each other. A post-event cooperation has been agreed between Poland and Sweden.

Promoting Effective Knowledge Transfer

The event was a great advertisement of River Wiki, RESTORE Project and the 5th European River Restoration Conference. We gained many good case studies from Sweden and Norway for the River Wiki.

Dissemination of Event Outcomes

We wrote an article about the event focusing on Ålgårda by-pass channel for the RESTORE Bulletin (November) and a Finnish magazine called Suomen Kalastuslehti (Finnish Fishing Magazine). The first

one was published in November 2012 and the latter one has been sent and will be published in January 2013.

All the sites visited during the event were described and suitable ones were written as RR case studies and uploaded onto the River Wiki (altogether 12 case studies).

Follow Up

A questionnaire of the event was taken on the last day of the event. We received 10 responses. According to the answers all the participants enjoyed the event and the numerous site visits. Each participant learned something new about river restoration and got ideas how to make RR solutions in their own countries as well.

The follow up will be continued via personal contacts. The event was advertised by e-mail to key organisations in all member countries of the North Region before the event and afterwards a description was written to the RESTORE Newsletter.

Attached

- 1. Lists of participants
- 2. Event Program
- 3. Scanned Questionnaires about the event