

Finland-Russia cooperation: Balancing hydropower, flood protection and environmental needs

Workshop on the Convention on the Protection and Use of Transboundary Watercourses and International Lakes

Kathmandu 26th July 2018

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10.8.2018



Finnish – Russian Transboundary Water Cooperation

- Agreement signed by Finland and the Soviet Union in 1964
- Joint Commission meets annually: each Party appoints members, experts, secretary



River basins of transboundary waters between Finland and Russia

-
- Suomen ja Venäjän rajavesistöjen valuma-alueet**
- 1 Paatsjoki
 2 Tuulomajoki
 3 Kemijoki
 4 Koutajoki
 5 Vienan Kemi
 6 Oulujoki
 7 Vuoksi
 8 Jänisjoki
 9 Tohmajoki
 10 Hiitolanjoki
 11 Kilpeenjoki
 12 Soskuanjoki
 13 Saimaan kanava
 14 Rakkolanjoki
 15 Tervajoki
 16 Vilajoki
 17 Santajoki
 18 Urpalanjoki
 19 Vaalimaanjoki
- 0 200 400 600 km

An aerial photograph of a wide, blue river flowing through a lush green forested landscape. In the foreground, a large, rectangular timber raft made of many small logs is being pushed down the river. A small boat with a person on board is visible further downstream. The background shows more forested islands and the river winding through the landscape.

FINNISH - RUSSIAN AGREEMENT ON THE UTILISATION OF TRANSBOUNDARY WATERCOURSES (1964)

- Regulations on :
 - Water flow and structural measures
 - Floods and water scarcity
 - Timber floating and navigation
 - Fisheries and fish migration
 - Pollution and water quality
 - Public health and economic considerations
- Information exchange and consultation on planned measures.

UNECE Convention (1992) and Finnish-Russian Agreement

- Finnish-Russian Agreement and Commission - one of the models which led to the UNECE Water Convention
- Finland and Russia signed the UNECE Water Convention in 1992
- UNECE Water Convention, all the documents and examples have been useful tools for deepening the bilateral cooperation:
 - Transboundary flood risk management: Action program for risk management in extreme hydrological events in river Vuoksi 2017
 - Monitoring and data exchange
 - Flood mapping
 - Flood risk categories
 - Flood prevention, land use
 - Exchange of information: regular workshops



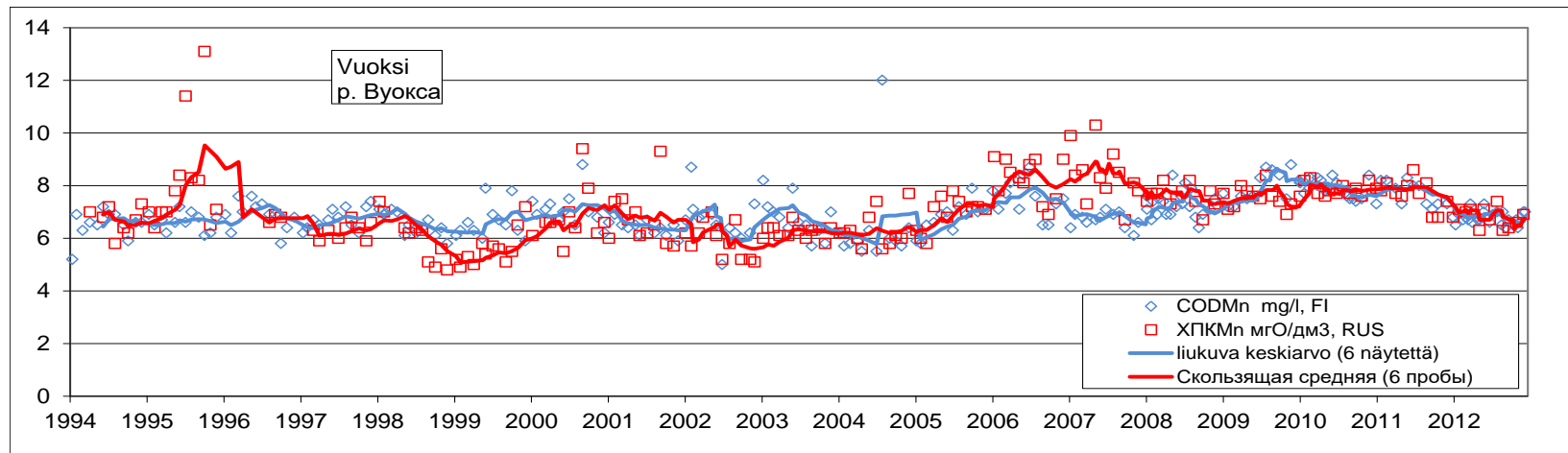
UNECE Convention (1992) and Finnish-Russian Agreement: Monitoring

- Revision of monitoring programme in 1993 on the basis of recommendations of UNECE Convention
 - Increasing sampling frequency
 - Modernising the list of variables
 - Adding some variables
- Latest update of monitoring programme for water quality and hydrology in 2015



Water quality cooperation

- Water Protection group of the Commission
- Water quality monitoring on both sides of the border
- Common reports on water quality



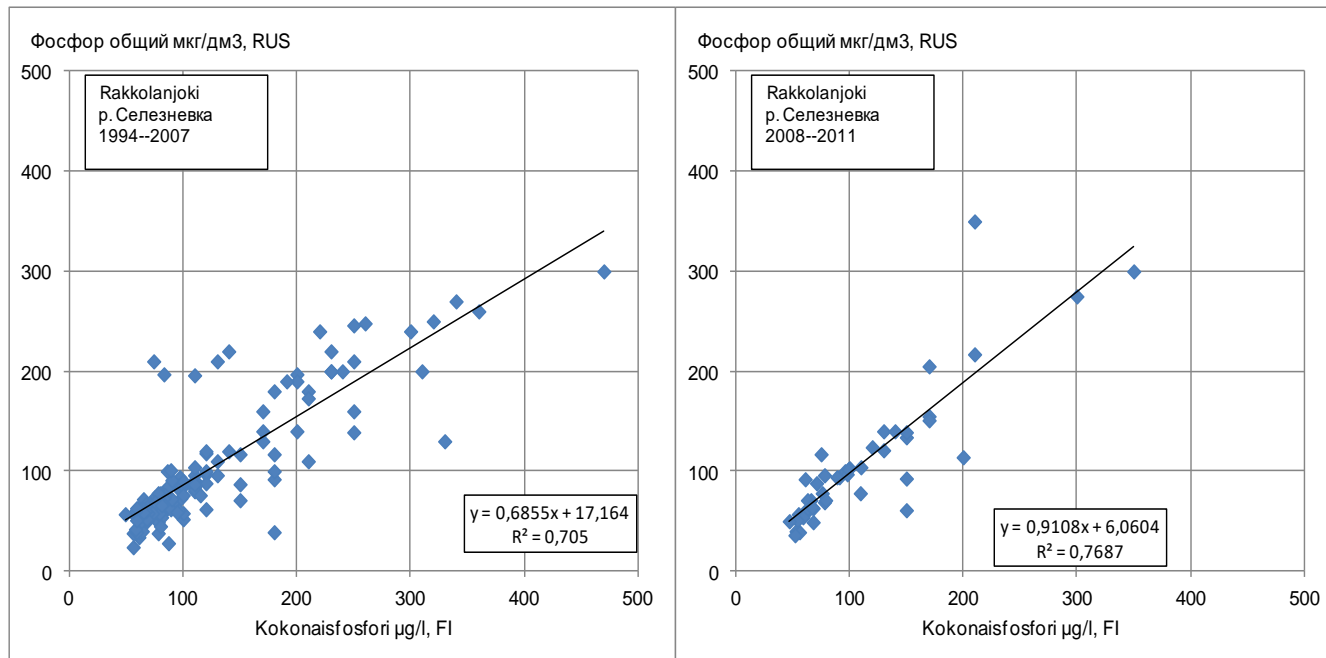
- Blue line and dots – Finnish results
- Red line and red dots – Russian results

Joint sampling by Russian and Finnish experts
at the transboundary river Vuoksi



Information and data exchange – Intercalibration of chemical analysis

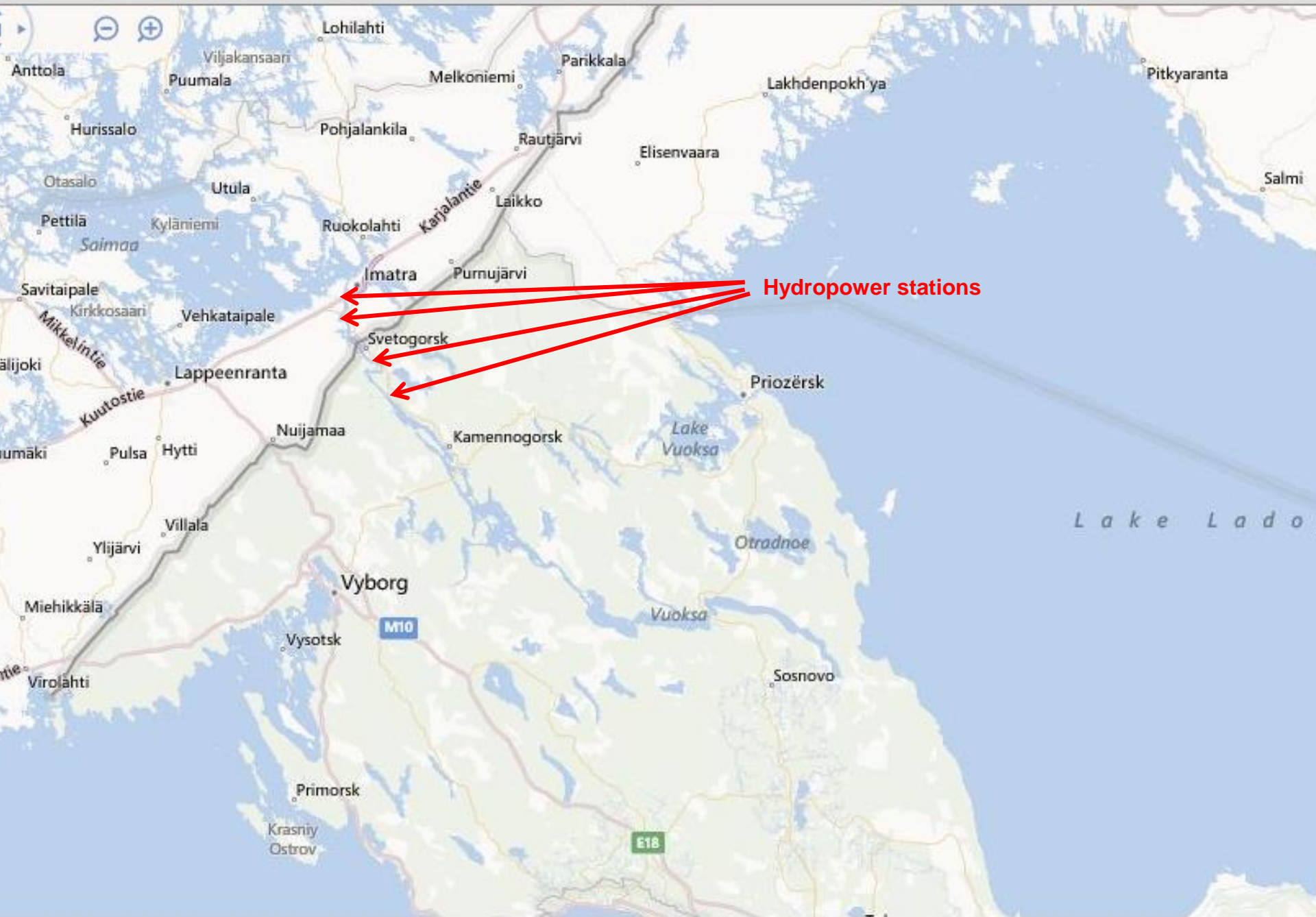
- Concentrations of phosphorus in The River Rakkolanjoki
- Two periods: 1994-2007 and 2008-2011
- Clear improvement of the comparability



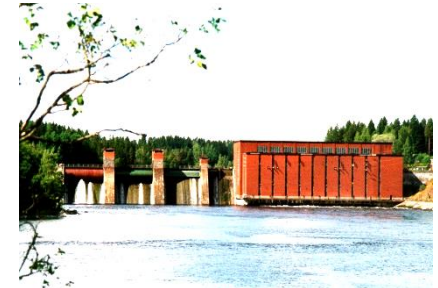
Integrated Water Resources Management: case The River Vuoksi – Lake Saimaa system



- Catchment 70 000 km²
 - Finland 77 %, Russia 23 %
- Lake Saimaa
 - surface 4 460 km²
 - precipitation ~ 600 mm/a
- River Vuoksi natural discharge
 - mean 600 m³/s
 - max 1170 m³/s
 - min 220 m³/s



The profile and power plants of the River Vuoksi

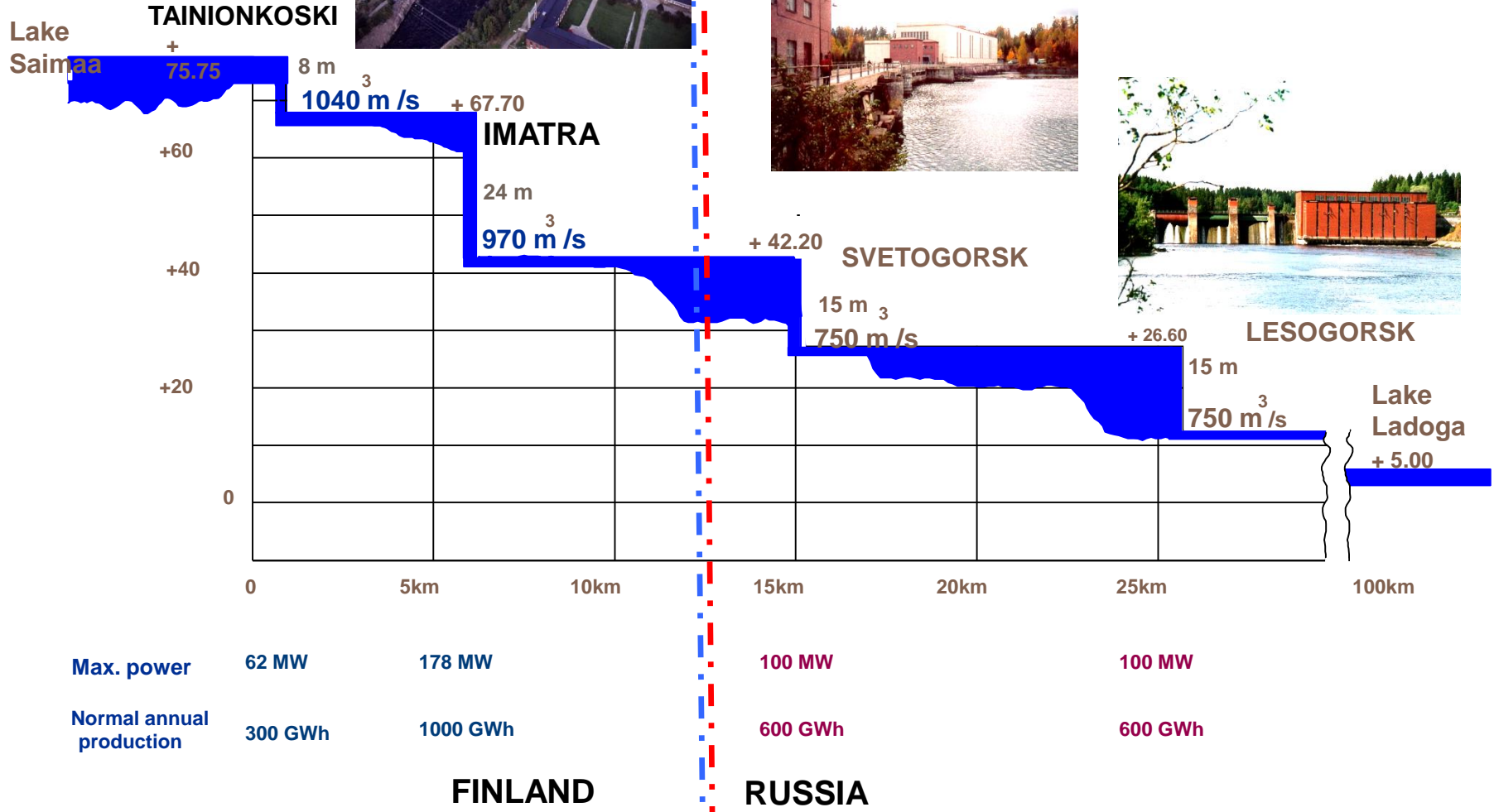


VUOKSI

Total head (utilized) = 63 m

Installed power = 440 MW

Normal annual production = 2500 GWh



Lake Saimaa and River Vuoksi

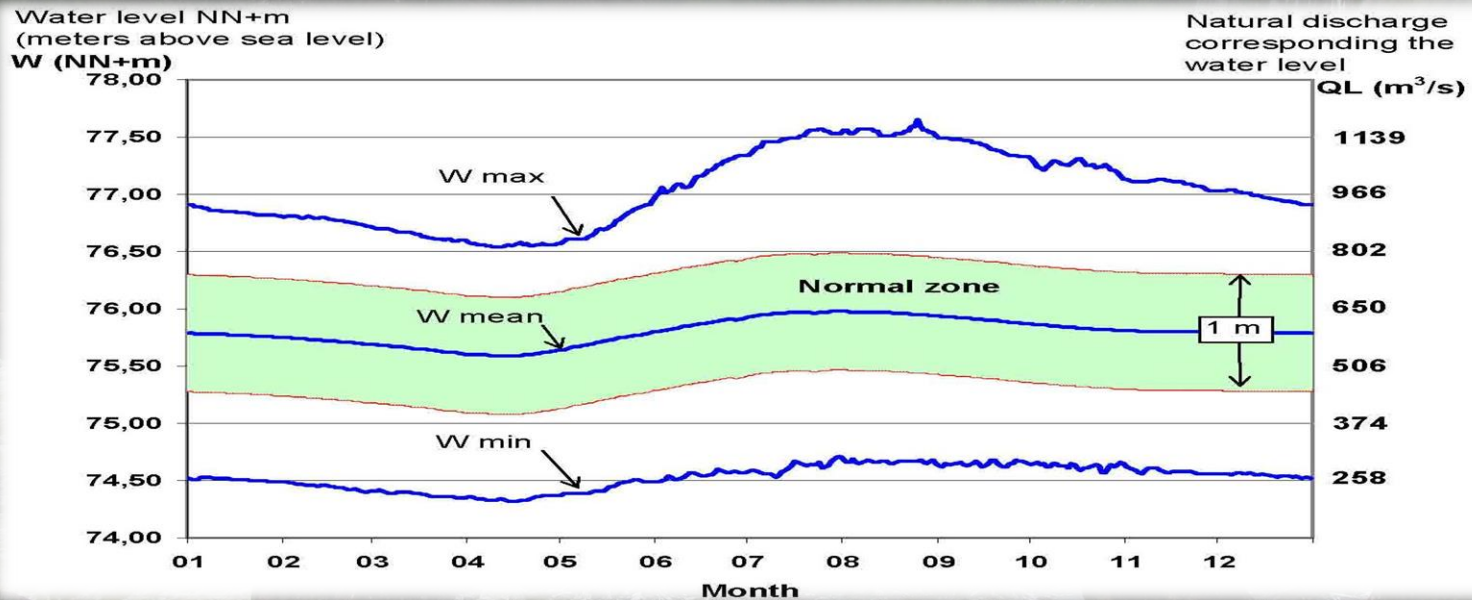
Discharge Rule

- Hydropower and flood risks main challenges at the starting point in 1970s
- Initiative of the Russian Party at the Joint Transboundary Commission 1973
- Development targets at the outset
 - Increase winter discharge and minimum flows in River Vuoksi
 - Prevent exceptionally high and low water levels in Lake Saimaa
 - Prevent exceptionally high and low flows in River Vuoksi
- First plan 1979 accepted by Joint Commission
- Jointly accepted 1989, implemented 1991



The Discharge Rule

- Natural water level and discharge in normal circumstances
- When water level forecast goes beyond normal zone discharge may be increased or reduced
- Natural discharge resumed when flood or drought threat ceases



A case of transboundary IWRM

- Main aim: to minimise adverse consequences in the river system as a whole
- Common understanding of risks, benefits and costs in the broad sense
- Knowledge and understanding of the neighbours' situation
- Participatory approach during planning and implementation: involve stakeholders to identify their needs, problems and priorities
- Management of flood and drought risks in both countries
- Also other interests such as water traffic and habitats of fish and endangered Saimaa seal being addressed

Working with different stakeholders casestudy: Finnish-Swedish Transboundary River Commission

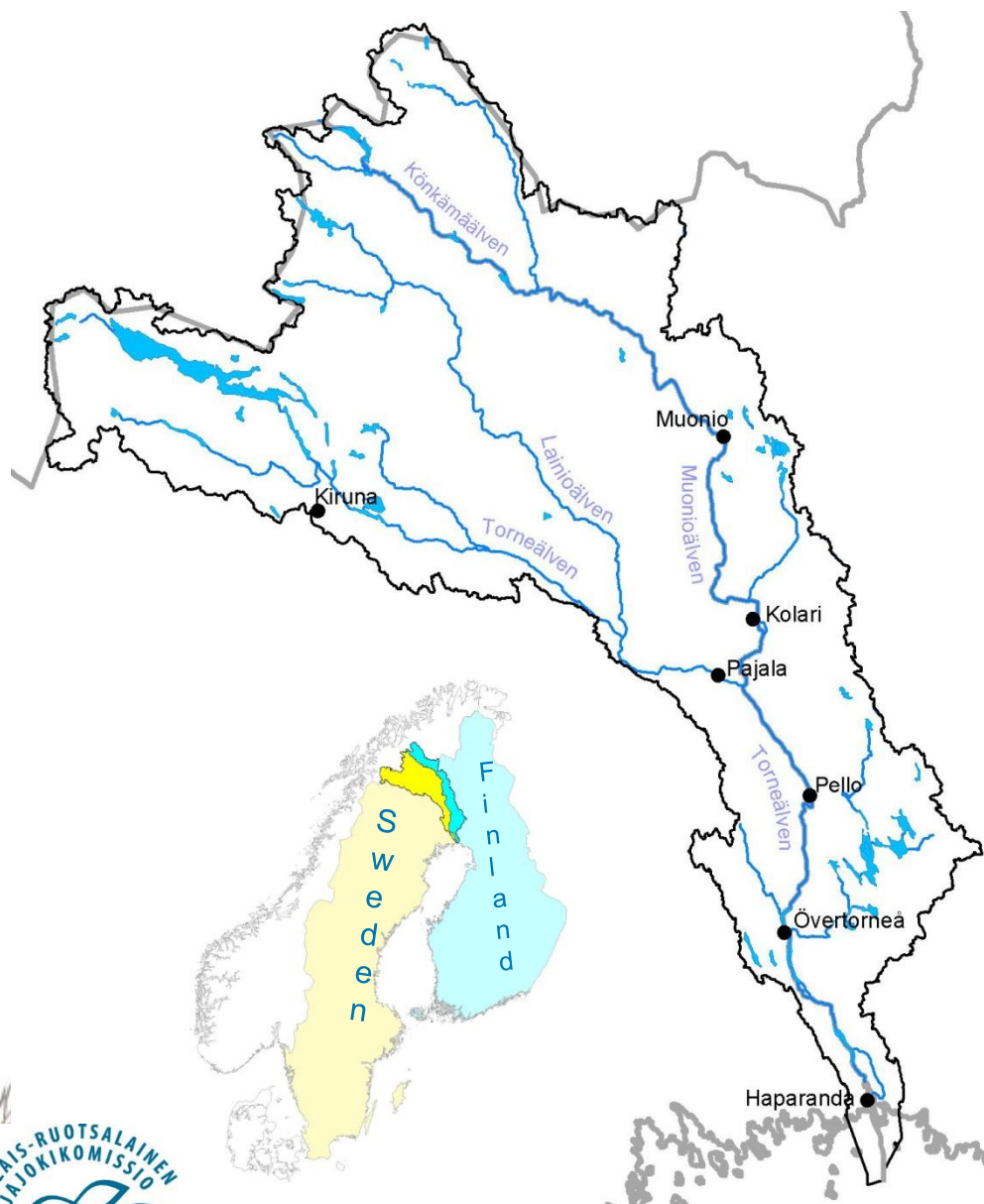
Minna Hanski
Kathmandu 26.7.2018



SUOMALAIS-RUOTSALAINEN
RAJAJOKIKOMISSIO



FINSK-SVENSKA
GRÄNSÄLVSKOMMISSIONEN



Torne River Watershed

- Area 40 000 km²
- 60% in Sweden, the rest in Finland
- Unregulated, no significant structures in the main channel
- Flooding normally in two stages (May, Midsummer)
- Average flow 380 m³/s
- Natural habitat for wild Atlantic salmon and sea trout





Flag of Tornedalians

Torne River Watershed

- Home to 77 000 people
- Local population has a long common history
- Partly common language so called "our language"
- Strong identity based on the river Torne valley



Historical background

- Agreement on timber floating 1917 and 1949
- Agreement on salmon fishing 1927
- First transboundary water agreement and Transboundary River Commission 1970
- Finland and Sweden members of the EU 1996
- Second transboundary water agreement and Transboundary River Commission 2010



New transboundary water agreement 2010

- Very long process:
 - National working group 1999-2002
 - Bilateral negotiations 2002-2004 and 2007-2009
- New agreement and Transboundary River Commission 1.10.2010
- Strong local and regional input



UNECE Convention (1992) as a background document to the new agreement

- Art 2: The purpose of the Agreement is to
 - a) **secure equal opportunities** for both Parties to use the transboundary rivers in the water management area in a way that promotes the interests of the frontier region;
 - b) **prevent flood and environmental damages;**
- Art 10: In accordance with the regulations of this Agreement the Commission shall:
 - c) **promote the coordination of planning work by authorities and municipalities** of the Parties to prevent flood and environmental damages in the transboundary rivers;



Special features of the agreement

- River Commission members 3/country: One from the regional water authority, one from municipality and one non specified local representative.
- No members from the ministries. Commission is totally "regionalized"
- Permanent secretariat
- Commission can appeal against environmental court decisions
- Main cooperation partners: municipalities, local and regional authorities, NGOs, local associations, ministries
- Acting as a harmonizing body for the EU water framework and flood directives
- Main focus is in promoting cross-border cooperation and ensure equal opportunities to use transboundary waters for the benefit of the region and population



Some results

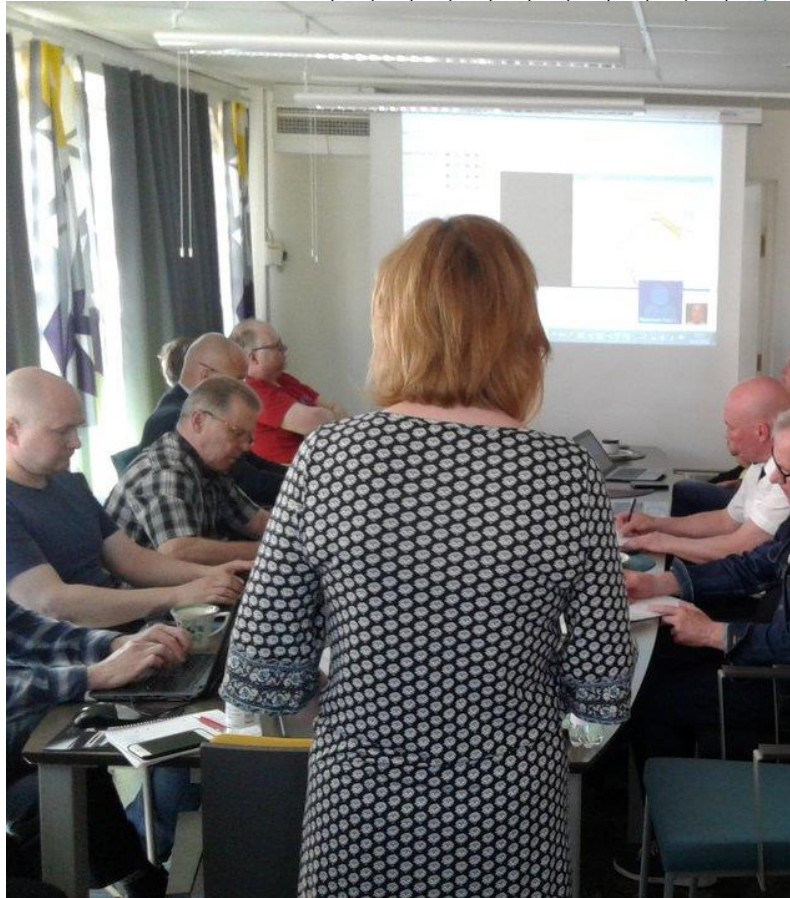
- Joint river basin management planning
- Common flood maps and flood protection activities
- Increased cooperation between national authorities
- Joint regulation on fishing in the 500 km long border river, joint fish stock and fishery data gathering and analysis
- Active monitoring of national water permissions
- Shared infrastructure in sewage water treatment
- Information in four languages (FIN; SWED; SAMI; OUR)
- Yearly open information meeting (Water Parliament)



Practical cooperation

5.0 6702520 Tornion kaupunki (Tornionjoki) N60

Ennusteen alku
Ennustettu ka huippu
Ennust. maksimihiippu
Ennust. alkuhiippu



Summary: tools needed for transboundary cooperation

- Agreements between riparian countries
- Cooperation on the basis of IWRM
- Strong institutional arrangements: joint bodies (e.g. river commissions)
- Engagement of the authorities (local, regional, national)
- Knowledge sharing, joint monitoring and information systems
- Joint objectives: management plans and implementation



Summary: lessons learned

- Building trust at every encounter
- Finding both opposing and shared interests and goals
- Finding key issues & developing joint strategies and actions, with stakeholders
- Executing jointly agreed actions and informing of the results
- Overcoming cultural and language barriers is done step by step
- Opening up paths to other areas of activities is possible, but not automatic



Additional information

- Finnish-Swedish Transboundary River Commission:
<http://fsgk.se/>
- Finnish-Russian Transboundary Water Commission:
<http://rajavesistokomissio.fi/>
- minna.hanski@mmm.fi



Kiitos
Спасибо
Tack
Thank you

