River Narva basin: Narva reservoir and Lake Peipsi

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• River Narva basin is situated in Baltic Sea (Gulf of Finland) basin on the eastern part of Republic of Estonia and on the northwest part of Russian Federation and extends from north to south 370 km.
• It is boundary area between European Union and Russian Federation.
• Total area of the basin is 
~57 000 km²
Land use (%) in Narva River Basin

- Wetlands: 33.8%
- Waterbodies: 11.4%
- Urban/industrial areas: 12.1%
- Grassland: 0.5%
- Forests: 40.5%

MINISTRY OF THE ENVIRONMENT
Important transboundary water bodies in River Narva basin are:

Lake Peipsi
River Narva
Narva reservoir
Lake Peipsi

- Lake Peipsi is fourth largest lake in Europe and at the same time it is largest transboundary lake in Europe
- Total area of Lake Peipsi on its average water level is 3,555 km², 44% of the lake is situated in Republic of Estonia and 56% in Russian Federation
River Narva and Narva reservoir

- On Narva River there is Narva reservoir which has energetic importance: on the river there is Narva hydroenergy plant which belongs to Russian Federation with total power 125 MW. Reservoir water is used for its purposes. On the Republic of Estonia there are two energy plants with total power 2400 MW, reservoir water is used for their cooling purposes
- Water uptake from river is used for drinking water purposes in Narva (population is 70 000)
- The dam on river to hold up Narva reservoir has significant impact on the river flow and the ecological status: several smaller waterfalls disappeared, some areas were flooded when it was build and the migration of salmon is no longer possible.
Main documents, that regulate activities on transboundary waters between Estonia and Russia, are:

1992 Convention on the Protection and Use of Transboundary Watercourses and International Lakes


1997 Agreement Between Republic of Estonia and Russian Federation on the Protection and Sustainable Use of Transboundary Watercourses

1994 Agreement Between Republic of Estonia and Russian Federation on the Conservation and Use of Fish Resources in Lake Peipsi, Lake Lämmijärv and Lake Pihkva
Joint commission between Republic of Estonia and Russian Federation

- Joint commission between Republic of Estonia and Russian Federation on the protection and sustainable use of transboundary water courses
- was formed in 1997 based on the 1997 agreement between Republic of Estonia and Russian Federation on the same subject
Joint commission between Republic of Estonia and Russian Federation

- **Two working groups**
  - On integrated water resources management
  - On monitoring, assessment and research
Working group on integrated water resources management

• Questions about organisation of water management, elaboration and implementation of water management and water protection programs
• Analyse and assessment of situation in water management
• Questions related to hydrotechnical installations
• Inventory of water pollution sources
• Elaboration of action plan for extraordinary situations and liquidation results of accidents
• Exchange of information
• Ensure public participation
Working group on monitoring, assessment and research

- Elaboration of joint monitoring programmes and co-ordination of joint monitoring works
- Elaboration of agreed standpoints for transboundary waters load, water quality and situation assessment
- Analyse and assessment of water quality
- Harmonisation of monitoring programs and methods for water users
- Organisation of scientific studies
- Elaboration of joint databases
- Information of public and counties about status of transboundary waters
- Organising parallel sampling of laboratories
Main achievements

- Organisation of comprehensive co-operation, the same understanding of problems and the same targets
- Systematical exchange of information about situation in water management and water quality
- Approaching of principles and criteria about situation of water bodies
- Joint monitoring on Lake Peipsi and on Narva reservoir based on agreed monitoring programme
- Elaboration of water management plans in both side
Problems and questions to be solved

• Achievement of good quality of water bodies
• Number of scientific studies is quite low
• Harmonisation of monitoring programmes with international guidelines
• Implementation of water management plan
• Accord assessment criteria of the situation of water bodies
• Ensure comparability of laboratories
• Elaboration of regulation for Narva reservoir
Thank you for your attention!