

## **River Basin Management Approaches in Russian Part of the Baltic Sea Region**

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In Russia, basin management is subject to the authority of Neva-Ladoga Basin Water Administration. This administration is a territorial body of the Federal Water Resources Agency, operation on the interregional level, and exercises functions involving rendering of State services and administration of State property in the field of water resources, in basins of rivers that discharge into the Baltic Sea, and the constituents of the Russian Federation, such as: St.Petersburg and Leningrad region, Kaliningrad, Novgorod and Pskov regions and republic of Karelia. In each of the constituents there are departments of water resources, that are structural subdivisions of Neva-Ladoga Basin Water Administration.

The Baltic Sea watershed, with its square area of around 1.7 mln square km (which is four times the area of its aquatic zone) is inhabited by over 85 mln people, of which 15 mln live in its coastal area, a 10-km wide strip. Intensive human activities impose a threat to the extremely vulnerable Baltic Sea ecosystem. In order to protect the environment of the Baltic Sea region, the Helsinki Convention was adopted. It became the first international agreement covering all sources of pollution, from land, sea and from the atmosphere.

In 2009 for the sake of environmental safety and water protection in the Baltic Sea basin an arrangement of Integrated Utilization and Conservation of Water Resources (IUCWR/SKIOVO) of the Baltic Sea basin in Russia's territory is being developed on order from Neva-Ladoga Basin Water Administration.

SKIOVO is the main document addressing water resources use and protection management. Basin-related territorial target programmes of all areas of water economy will be worked out based on the document. The main objective of SKIOVO is an integrated analysis of main issues and top-priority tasks of water objects' use and protection. Its goals are: to estimate the magnitude of water resources and the evaluation of retrospective and present water quality.

Basin management issues are annually discussed at Scientific and Technical Council (STC). The STC of Neva-Ladoga Basin Water Administration consists of 40 members, of 29 scientific, educational, nature protection, supervisory, legislative, executive, public, media and other organizations, that take part in the shaping of water policy in areas under jurisdiction of Neva-Ladoga basin water administration.

In 2008 the STC debated such issues, as: "ecological situation in the Russian sector of the Baltic Sea", "development of admissible impact limits draft related to Narva and Neva river basins", "Integrated water use and protection" during the round-table at Nevsky international environmental congress, "Surface sources of potable water supplies in Russian Federation: state-of-the-art, problems and perspectives", "Clean water – health of the nation" as part of the International water day 2008 (academic and research youth conference).

In Russian Federation there are organizations, similar to Public Consultation Councils (EC Water Framework Directive), where public participation plays an important role in discussing water streams and water bodies water quality issues. As part of their activities, Neva-Ladoga Basin Water Administration have developed a Regulation for basin management and drafted out list of members of Basin Councils, which are currently pending approval of the Federal water resources agency. Over the long term Basin Councils should develop recommendations concerning rational use and protection of water objects within basin districts.

According to the Water Code of Russian Federation (Article 74), Basin Councils should include members of federal executive authorities, State government bodies of a constituent entity of the Russian Federation, local municipal authorities as well as representatives of water consumers and public associations. Formation and operating procedures of Basin Councils are established by the Government of the Russian federation.

In Neva-Ladoga Basin Water Administration area untreated surface stormwater run-off plays a special role in the pollution of water objects. Among the most wide-spread pollutants (of predominantly technogenic origin) that flow into water objects mostly with surface run-off are: petrochemicals, phenols, synthetic surfactants, copper, cadmium and manganese. Current structure of human impact is characterized by poly-component structure and distinct spatial nonuniformity.

Sewage mainly goes to the treatment plants of St.Petersburg and its suburbs through the combined sewer system of Vodokanal. The treatment plants use the classical technological scheme, including 3 stages: mechanic treatment, biological treatment and disinfection.

Treatment facilities of St.Petersburg began to be built in the 1970-s. Currently there are 4 main aeration plants operated in the city:

- 1) Central aeration plant
- 2) Northern aeration plant
- 3) Krasnoselskaya aeration plant
- 4) South-West aeration plant

Actual productivity of the city's treatment facilities make up for over 2.5 mln cubic meters daily. Despite the availability of the largest treatment facilities in Europe, only 75% of all sewage, coming into the sewage system of the city, have been treated until recently. The remainder 25% (800 thousand cubic meters daily) have been discharged untreated into Neva river through 179 direct outlets, owned by Vodokanal. By 2010 99% of all sewage will be treated in St.Petersburg.

Nowadays all Vodokanal treatment plants comply with Helcom recommendations regarding the treated waste waters: total phosphorus at 1.0 mg/l, total nitrogen at 10 mg/l. By 2010 after the completion of the implementation of chemical phosphorus sedimentation technology all treatment facilities should be fully in agreement with Helcom requirements (total phosphorus in treated waste waters not higher than 0.5 mg/l, total nitrogen not higher than 10 mg/l). In 2010 St.petersburg will be excluded from the list of Baltic Sea polluters.

In 2007 2 new sewage sludge incineration plants started operating in the city.

Among the plans of Neva-Ladoga basin water administration are such measures to avoid the negative impacts on rivers as: reconstruction of coastal emergency areas, definition of flooded zones on the territories of constituents of the Russian federation within the Administration's operating area.

Along with that, Neva-Ladoga Basin Water Administration performs:

1. Measures to protect storage reservoirs with water used for public water supply in 2 or more constituents of the Russian Federation in accordance with the list of such reservoirs, established by the Government.
2. Measures of protecting seas and separate parts thereof, to avoid the pollution and water depletion, along with measures to eliminate the consequences of said things.
3. Conduct of the State water register, of the Russian register of hydrotechnical constructions; organization and conduct of state monitoring of water objects as established by the Government.

**The information above was provided by Neva-Ladoga Basin Water Administration**

**From NGO point of view**, the River Basin management principles in Russia are only under discussion. First practical steps were made within international pilot projects, implemented by NGOs in cooperation with local governments: Russian-Estonian project on the of Lake Peipus and Narva River basin management, Russian-Belarus-Lithuanian project on the Western Dvina/Daugava river basin. Within these projects the examples of RBM plans were drafted, but in Russia they were not applied in practice, in state documents and regional plans.

NGOs initiated discussions on the basin management of the small rivers of the Gulf of Finland drainage area, belonging to the different administrative territories (for example - St.Petersburg and Leningrad oblast, or Leningrad oblast and Karelia). Friends of the Baltic RW network often meet a situation, when the environmental problem connected to river pollution can not be solved because of absence of instruments, and non understanding, that river basin is an integral area, needed complex management.

Now the dialogue between Neva-Ladoga Basin Water Administration and regional NGOs (Friends of the Baltic, Center for Transboundary Cooperation, Nature School "Island") is established.

As it was discussed with NLBWA authorities, the above mentioned NGOs should be involved to the Basin Council of the Russian part of the Baltic Sea drainage area, which must be established according to the Regulation for basin management (which is currently pending approval of the Federal water resources agency).