

## Water Management of the Narva River: harmonization and sustention ER25 NarvaWatMan

## Short Summary for IV PERIOD (15.09.2020-14.03.2021)

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## Short Summary, 4th period

The duration of the project was extended to 14.03.2022 (according to the Major Change, approved on 28.09.2020). TalTech organized the 2nd Steering Committee meeting (online) on the 19th of November 2020. The selection of a new Chairman for SC was proposed and voting was arranged online. Jelena Hannus from the Estonian Ministry of Environment was selected as the Chairperson of the SC. The extension of the project and delay of the SC meeting were caused by the COVID-19 restrictions. Management and Communication plans as well as the plans of activities were changed prior because some activities were moved to a later period due to prolongation of the project. All changes were approved by the SC.

The interim report for the third period was submitted in time and approved by JTS and MA. Consolidated Report for the third period was prepared and approved by the JTS and MA. "SHI" and "SC" Mineral participated in the SC meeting and prepared their proposals for the Minor and Major changes requests. They provided invitations of Russian experts and water-related professionals for the SC meeting and all other online meetings and Workshops. New SC members were proposed from Mineral, voting was organized by TalTech. "SC" Mineral submitted its report with some delay (eMS).

TalTech and FSBI "SHI" provided two sets of water discharge measurements (23.09.2020, 23.10.2020) simultaneously from both sides. Due to COVID-19 restrictions, some field measurements were moved to a later time. A set of measured water discharges will be completed in summer 2021.

SHI additionally measured 4 discharges in the headrace canal and 3 in the Narva river cross-sections. SHI concluded that differences between water discharges provided by the Narva Hydropower Plant are almost 9% less than measured within the project in Narva city. This difference is systematic. Development of harmonized method(s) for the Narva river runoff estimation reached its final phase. The best results showed the relation of water discharge and water level at AHC installed by SHI and also the method when water surface slope from Narva-Jõesuu to Narva city hydrometrical station was taken into discharge curve relation.

SHI organized an online Workshop "Development of a harmonized method for Narva river water runoff estimation" on 02.03.2021. 22 experts attended the Workshop together with TalTech experts. The preliminary decision was made, that the two above mentioned methods can be used for the harmonized method.

Harmonized water quality standards and common indicators were elaborated. 16 chemical parameters were proposed. Before the Workshop work meeting was organized by Taltech to discuss the agenda, presentations, and results (08.12.2020). TalTech organized Workshop (online) on a set of chemical parameters and limits on 14.12.2020. On the Workshop results of the questionnaire were completed. On January-March 2021 together with FSBI " SHI " different approaches for the Joint water quality index (WQI) were discussed in a few work meetings. The method of the British Columbia Ministry of Environment was tested at the beginning with some more modifications later on. After the detailed analysis, some parameters and their limits were corrected. Finally, 10 parameters were used for WQI calculations. Hard metals were also discussed and 4 of them will be considered later. Test calculations of WQI for different rivers not only in the Narva river basin but also in Lake Peipsi catchment area for 2017-2019 were done by both partners (TalTech and SHI). Results were comparable, however, the final decision about the modified method that will be applied will be done later. SC Mineral presented the first results of the WP2 and 4 activities at the HELCOM PLC-8 meeting on 14.12.2020.

Basin-wise load calculations took more time than it was expected. Subsequent detailed calculations for the Narva river sub-catchments are time-consuming and should be carefully checked by the partners. In addition, more data were needed to ensure better comparability of the data used in Russia and Estonia, especially in case of point sources data. The load calculations should be compared with the monitoring data and data measured within the project (water samples), which were moved to summer 2021.

TalTech has continued the coordination of all project activities/tasks among the partners, ensuring proper communication with partners and JTS of the Est-Rus Programme, updating the project website and ensuring proper financial management. "SHI" and "SC" Mineral continued their day-to-day management together with financial management. "SC" Mineral organized 2 work meetings with target groups to involve more participants in eco-events. Two to four work meetings in a month were held with partners, mainly via WhatsApp, ZOOM, and Skype. Communication was also done by e-mails.

"SC" Mineral has continued activities connected to finalizing of the 3rd EcoMarathon, on September 22, 2020, the winners of the event were determined, the list of the winners is posted on the Narvariver.pro. When the winners of the 3rd EcoMarathon were determined, the border between Russia and Estonia was closed, thus the deadline for the selection of special prize of the project for winners was postponed. All winners are on narvariver.pro.

Mineral participated in a jury of EcoArt line of the event "Living Banks". Results of the contest were summed up on 30.01.2020. Pp3 also participated in the Organizing Committee of the Baltic Sea Day Forum 2021 and they organized a round table, where current results of the project activities were presented by all partners. In December 2020 Mineral started to organize the 4th EcoMarathon "Teachers excellency", which started in February 2021. Mineral together with teachers of school No. 1 from Ivangorod organized a webinar on 17.02.2021. The dates of the 4th EcoMaraton were changed and the format is hybrid now.

TalTech participated:

- on 21.09.2020 in the awards ceremony "Cross-border cooperation without borders" within "European Cooperation Day 2020" with a presentation about ER25 NarvaWatMan project and awarded the best participants from the project; on 17.02.2021 in the webinar "Formation of functional literacy in the classroom and extracurricular activities" organized by Pp3 with a presentation about ER25 NarvaWatMan project. Narva Soldino Gymnasium was invited to the event from Estonia;
- on 3.03.2021 in the online conference "Sustainable regional development within the framework of cross-border cooperation", that was organized by the Russian Ecological Society in Pskov, with a presentation about the ER25 NarvaWatMan project and its current results.

FSBI "SHI" organized the Workshop "Development of a harmonized method for the Narva river water runoff estimation" and informed about it on the SHI website.