

Estonia-Latvia-Russia cross border cooperation Programme within European Neighbourhood and Partnership instrument 2007-2013

Project "Water management Project of Peipsi, Pihkva, Lämmijärve, Saadjärve and Veskijärve Lakes" (ESTLATRUS/2.1/ELRI-013/2011/18)

# "Emajõe-Pskov WMP successfully crossed the finish line on September 2014"



An overview of project activities 2012 - 2014

# **Beneficiary**

AS Emajõe Veevärk (Estonia)

#### **Partners**

Mustvee Municipality (Estonia)
Lohusuu Municipality (Estonia)
Kasepää Municipality (Estonia)
Municipal enterprise of Pskov city "Gorvodokanal" (Russia)











#### **Contacts**

AS Emajõe Veevärk, Sõbra 56, 51013 Tartu

Mustvee Municipality, Tartu tn 28, 49603 Mustvee

Lohusuu Municipality, Avinurme tee 39, 42001 Lohusuu alevik, Ida-Virumaa

Kasepää Municipality, Sõpruse 90, 49509 Kasepää küla, Jõgevamaa

Municipal enterprise of Pskov city "Gorvodokanal", 180004, Russia, Pskov city, Sovetskoy Armii st., 49 a

# Short summary of the project

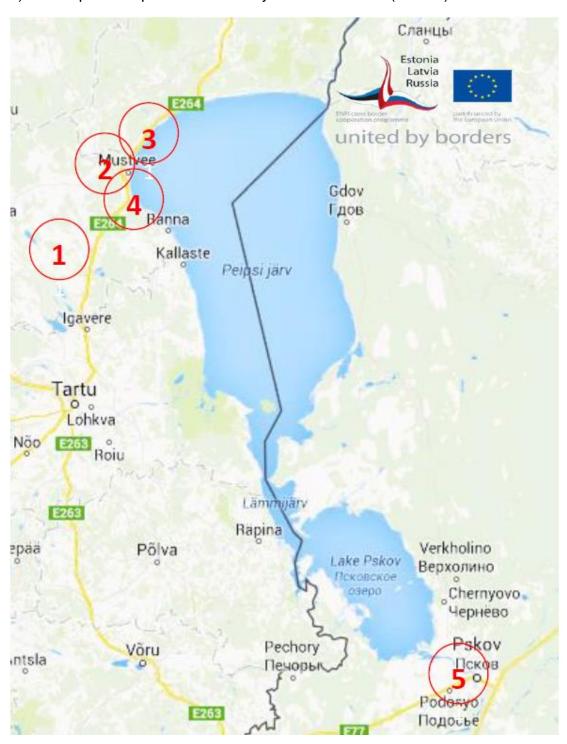
Emajõe Veevärk is operating on the territory of Tartu and Palamuse municipalities. In Palamuse, there are national park and conservation area. Lohusuu and Kasepää together with town Mustvee are all situating side by side on the north-west side of Lake Peipsi as well on the side of Natura 2000 area.

From the Russian part town Pskov may be one of the biggest polluters to Peipsi water basin.

The overall aim of this project is to reduce pollution, since all these settlements are situating by the different lakes; all of these lakes are in the area of Lake Peipsi water basin. Investments will be made under this project to the renovation of Mustvee and Pskov wastewater treatment plants, as well as construction of new water and wastewater pipelines in Palamuse and water treatment facilities in Kasepää. There is a need to make designs for proper public water supply to ensure water quality. Additionally there will be made feasibility studies, environmental impact assessments, and water and wastewater designs for Tartu, Lohusuu, Mustvee and Kasepää municipalities.

# Partners locations at the Lake Peipsi

- 1) AS Emajõe Veevärk (Estonia)
- 2) Mustvee Municipality (Estonia)
- 3) Lohusuu Municipality (Estonia)
- 4) Kasepää Municipality (Estonia)
- 5) Municipal enterprise of Pskov city "Gorvodokanal" (Russia)



Map 1. Partners location around Lake Peipsi

# Project activities and results

#### PARTNER 1, AS EMAJÕE VEEVÄRK

# - <u>Designing works for Saadjärve ja Salu village water and wastewater</u> <u>pipelines</u>

On January 2013 a contract was signed by Emajõe Veevärk AS and Keskkond & Partnerid OÜ for designing works of Saadjärve and Salu village water and wastewater pipelines. Contract price was 21 650 euros (without VAT).

Contract included geodetic measurements and geotechnical site investigations, designs for water supply and sewer pipelines including sewage pumping stations. Altogether there were over 60 supply points for properties in Saadjärve and Salu village.

#### - Geographic Information Systems (GIS) and tablets

On the 28th of May the contract for the Geographic Information Systems development works was signed by AS Emajõe Veevärk and AS Regio. GIS solutions are usable to manage utility network mainly water and sewer networks. The system enables to display, administer, store and print out all areas in Emajõe Veevärk network area. Contract price was 81 289 EUR and time of delivery was January 2014.

In addition to GIS software Emajõe Veevärk purchased 9 tablets for technical specialist to increse mobility and efficiency. With last 8 months have shown that tablets and GIS usability is great and over expectations. It is clear that GIS gives efficient maintenance of water and wastewater utilities in Emajõe Veevärk and Partners operating areas and keeps low maintenance and operating costs in future.

#### - Water and wastewater pipelines in Palamuse

On April 2013 a contract was signed by Emajõe Veevärk AS and consortium of OÜ Trassiehitus OÜ and Rehe Ehitus. Contract price was 409 352 euros out of which 387 225 euros from project budget and additionally 22 127 euros from Palamuse Municipality (cost without VAT).

Works included 2175 meters of water and 2140 meters wastewater pipelines in Palamuse.

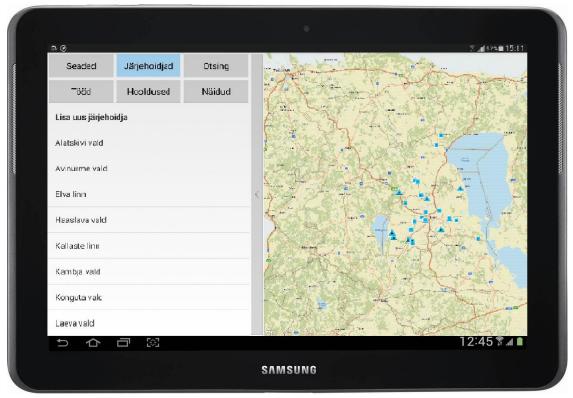


Photo 1. Emajõe Veevärk AS projects in GIS view



Photo 2. Emajõe Veevärk AS project in more detail GIS view

#### **PARTNER 2, MUSTVEE MUNICIPALITY**

#### Mustvee water and wastewater designing

On the 9<sup>th</sup> of February 2014 a contract was signed by Mustvee city and AS EA Reng for Mustvee water and wastewater designing. Contract price was 31 365 euros (without VAT).

Contract included Feasibility Study, Environmental Impact Assessment, geodetic measurements and geotechnical site investigations and designs for water supply and sewer pipelines including sewage pumping stations.

Second contract for designing was signed on 9<sup>th</sup> of February 2014 with KESKKOND & PARTNERID OÜ for designs wastewater sludge composting field to WWTP. Contract price was 3000 euros and designing period 4 months.

#### Renovation of Wastewater treatment plant

Mustvee city and AS Viimsi Keevitus signed a contract on 10<sup>th</sup> of June 2014 for renovation works of Mustvee wastewater treatment plant. Wastewater plant got new instalment for process utilities, automation and electricity. During 3 months it was secured that automated wastewater treatment process gives normative outcomes and secure reduction of cross – border pollution for Lake Peipsi.



Photo 3. Mustvee wastewater treatment plant

On 12<sup>th</sup> of September there was a ceremonial opening of newly constructed wastewater treatment plant in Mustvee.



Photo 4. Partner representative Pavel Kostromin and project co-ordination Riina Vaap at the ceremonial opening in Mustvee



Photo 5 and Photo 6. Mustvee WWTP new sludge pump and tanks in process

#### **PARTNER 3, LOHUSUU MUNICIPALITY**

#### Vilusi water and wastewater designing

On the 11th of February 2014 a contract was signed by Lohusuu municipality and OÜ Entec Eesti for designing works of Vilusi village water and wastewater pipelines. Contract price was 18 500 euros (without VAT).

Contract included Feasibility Study, Environmental Impact Assessment, geodetic measurements and geotechnical site investigations and designs for water supply and sewer pipelines including sewage pumping stations. According to results of feasibility study a vacuum sewage system was designed for connecting Vilusi village with wastewater treatment plant in Mustvee.

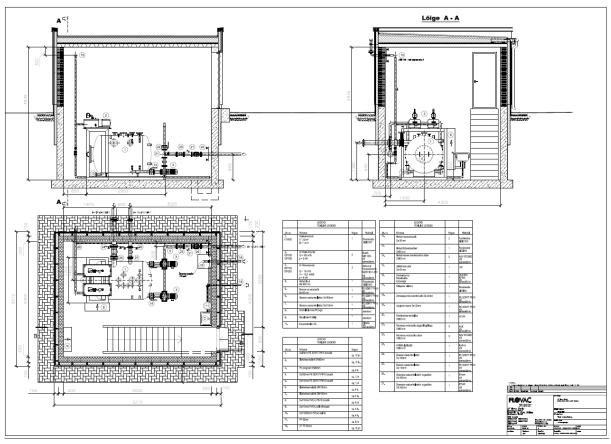


Photo 7. Scheme for vacuum pumping unit in Vilusi

#### PARTNER 4, KASEPÄÄ MUNICIPALITY

#### - Kasepää water treatment plants - Kükita and Tiheda

#### A) Tiheda water treatment plant

Kasepää municipality and AS Viimsi Keevitus signed a contract on 1<sup>st</sup> of November 2014 for constructions works of Tiheda water treatment plant.



Photo 8. Jaak Ritso from Viimsi Keevitus AS and Jüri Vooder from Kasepää municipality signing the contract (from left)

New water treatment plant provides solution for cleaning iron-reach groundwater and will now supply the region with high quality drinking water. Results of laboratory water tests showed that the water of newly established facilities responds to the set standards of drinking water. During the ceremony samples of cleaned water were presented to the participants.

On the 3th of April ceremonial opening of newly constructed water treatment plant in Tiheda village, Kasepää Municipality, Estonia took place. The opening ceremony was attended by Jõgeva county governor Mr Viktor Svjatõšev.



Photo 9. Ceremonial opening of newly constructed water treatment plant in Tiheda village, Kasepää Municipality

Construction works with the total cost EUR 86 796,12 were carried out by "AS Viimsi Keevitus".



Photo 10. Constructed water treatment plant in Tiheda village, Kasepää Municipality

#### B) Kükita water treatment plant

On June 2014 Kasepää municipality and Miridon OÜ signed a contract for reconstructions works of Kükita water treatment plant.

During 3 months a rinsing pump, iron removal filters, compressor, control board, electricity and pneumatic storage tank were replaced. New water treatment plant supplies the region with high quality drinking water. Results of laboratory water tests showed that the water of newly established facilities responds to the set standards of drinking water.



Photo 10 and photo 11. Constructed water treatment plant in Kükita village

# Raja, Kükita, Tiheda, Kasepää water and wastewater designing

On the 5<sup>th</sup> of February 2014 a contract was signed by Kasepää municipality and OÜ Keskkonnaprojekt. Contract included Feasibility Study, Environmental Impact Assessment, geodetic measurements and geotechnical site investigations and designs for water supply and sewer pipelines including sewage pumping stations. Contract price was 41 350 euros.

Second contract for public water and wastewater development plan was signed on 7<sup>th</sup> of February 2014 with AS EA Reng. Contract price was 4 350 euros and designing period 4 months.

# PARTNER 5, MUNICIPAL ENTERPRISE OF PSKOV CITY "GORVODOKANAL"

#### - Construction works of secondary settlement tank in Pskov

Construction works of secondary settlement tank included soil works, bottom concreting works, construction of sludge settling well and walls from prefabricated concrete elements. During construction period installation works for electric and automatic devices was accomplished. Total price was 556 284 euros.



Photo 12. Settlement tank in Pskov

# **Budget**

	Planned	Final
Total cost	1 869 912 EUR	1 779 658 EUR
Diference		90 254 EUR
Grant, 90%	1 682 921 EUR	1 601 692 EUR
Diference		81 228 EUR
Partner's co-financing,	186 991 EUR	177 965 EUR
Diference		9 025 EUR

<sup>&</sup>quot;Estonia – Latvia – Russia Cross Border Cooperation Programme within the European Neighbourhood and Partnership Instrument 2007-2013 financially supports joint cross border development activities for the improvement of the region's competitiveness by utilising its potential and beneficial location on the crossroads between the EU and Russian Federation. The Programme web-site is <a href="https://www.estlatrus.eu">www.estlatrus.eu</a>."