

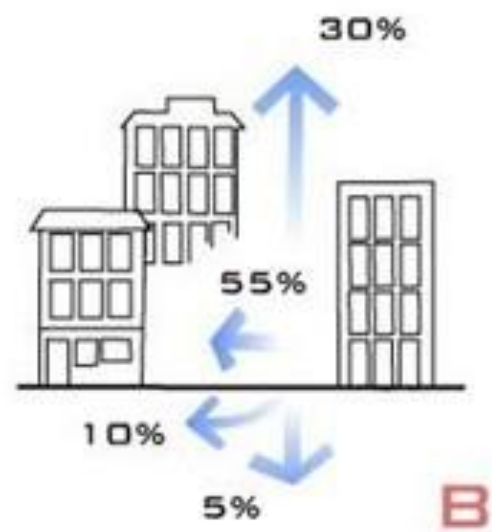
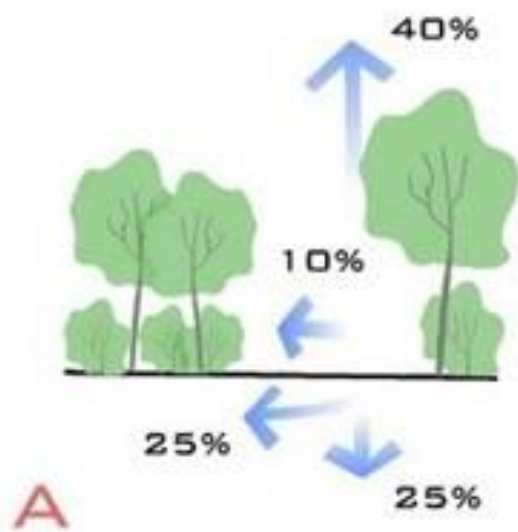
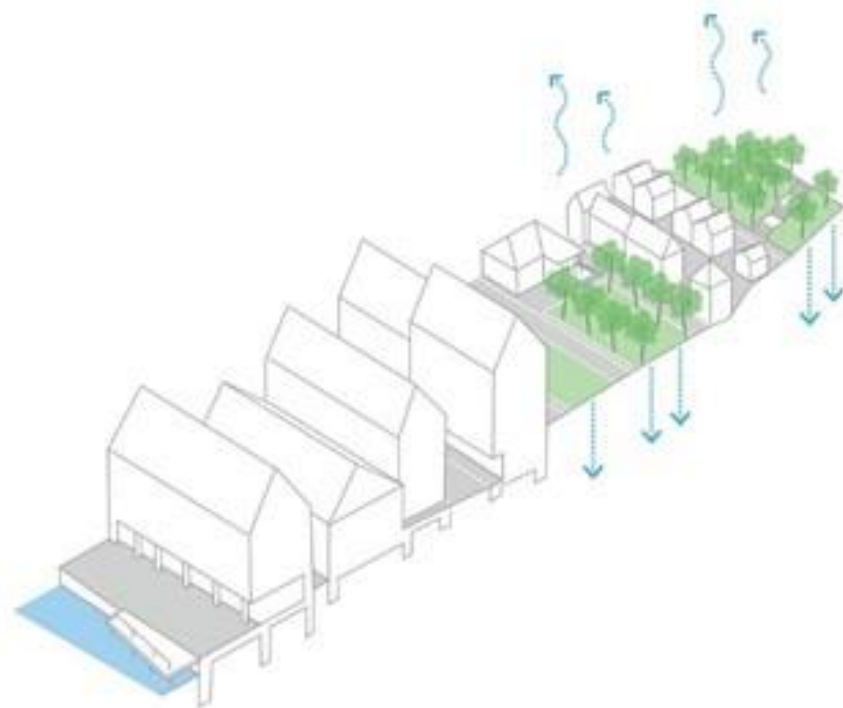
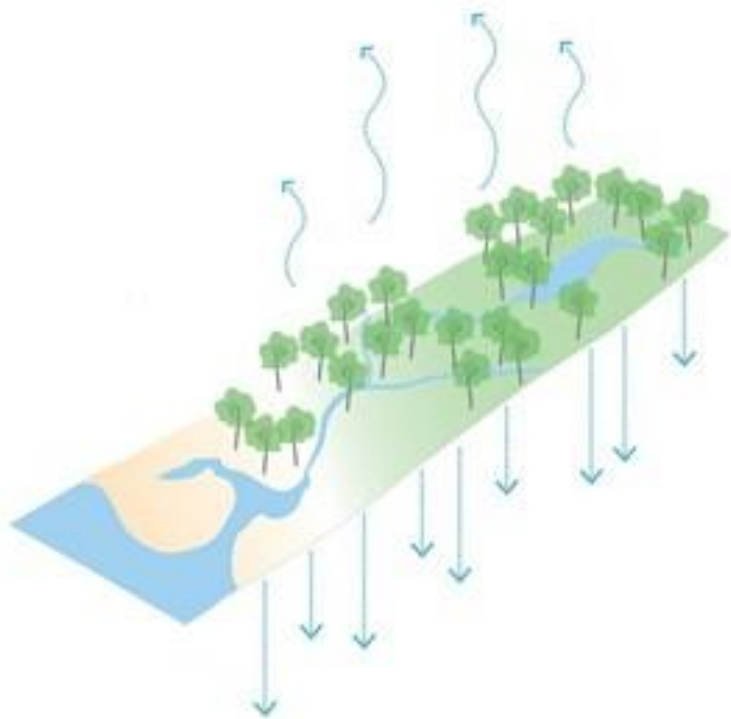
VIIMSI
VALLAVALITSUS

Rannarahva kodu



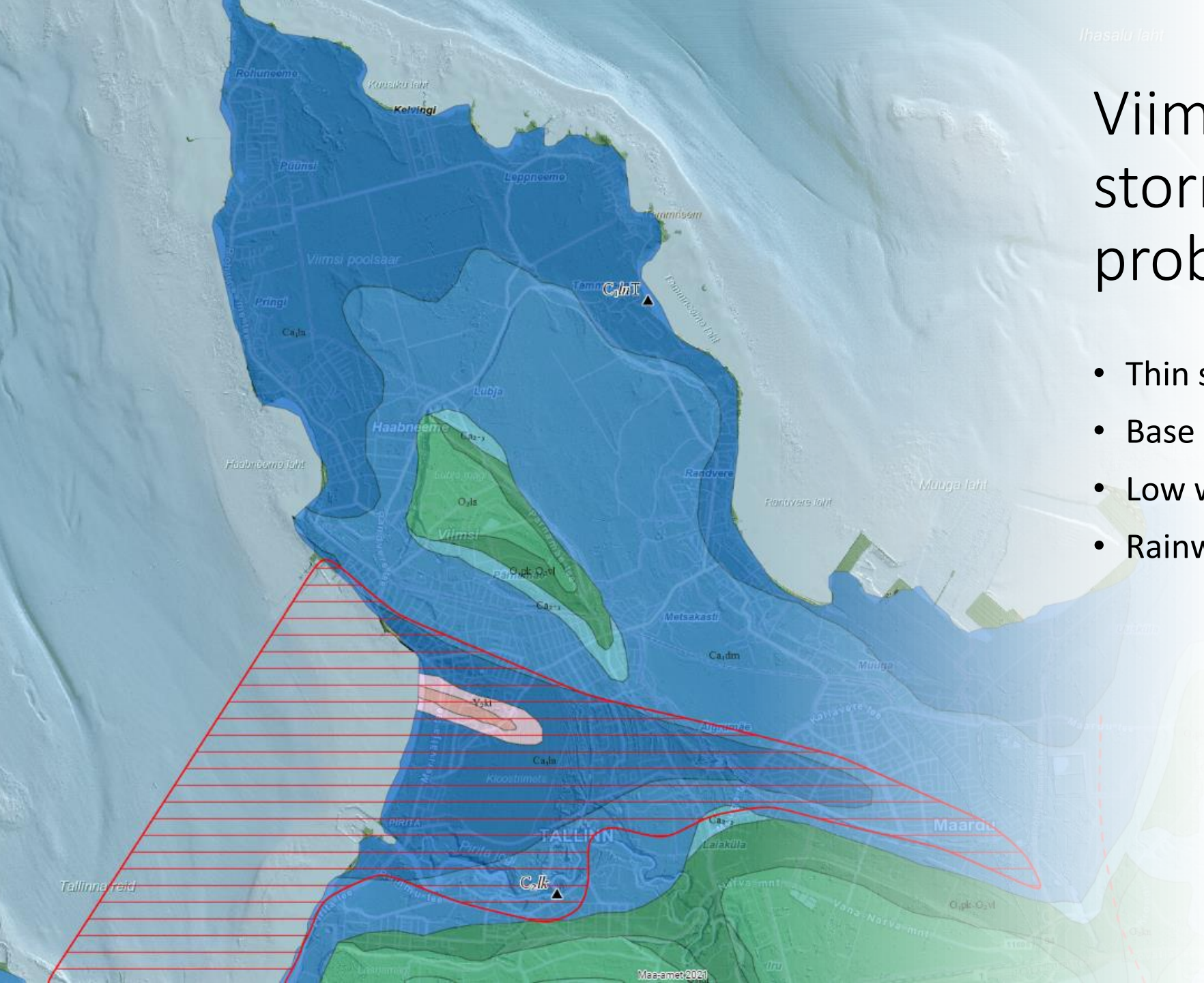
LIFE UrbanStorm





Viimsi municipality stormwater problem

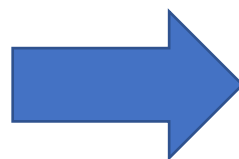
- Thin soil layer
- Base blue clay layer
- Low water filtration module
- Rainwater has no natural path



About LIFE UrbanStorm

Challenge

Insufficient skills-knowledge and technical preparedness to face significant changes in terms of temperature, wind and rainfall



Objective

To increase climate resilience of Estonian municipalities, especially their resilience to flash flooding caused by heavy rainfall

Lead Partner: Viimsi Rural Municipality Government

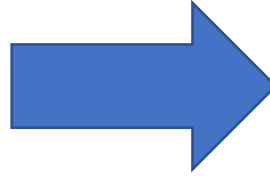
Partners: Estonian University of Life Sciences, Baltic Environmental Forum Estonia, Department of Environment and Municipal Engineering Services of Tallinn

Total budget: EUR 1 957 843, incl. LIFE programme contribution EUR 1 011 654

Period of implementation: September 2018 – February 2023

Analysis/Mapping

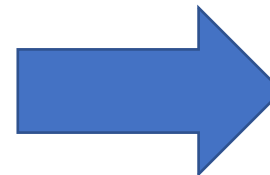
- Analysis of existing national and local level legislation and standards related to climate resilient urban flood management
- Assessment of existing experience and best practices in implementing integrated and climate resilient urban drainage systems



- Report of legislation and standards
- Financial model of storm water fee for municipalities

Building policy framework & know-how

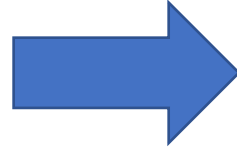
- Developing a strategy and action plan for climate change adaptation
- Training of Estonian municipal water management specialists, engineers, designers



- Strategy and Action Plan for climate change adaptation for Tallinn and Viimsi
- Four 2-day training sessions for altogether 60-80 persons on storm water management systems & SuDS

Transfer and Dissemination

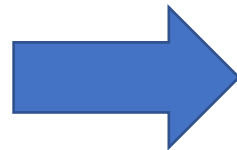
- Transfer and replication of project's results
- Experience exchange and stakeholder involvement
- Overall project visibility and dissemination of results



- Increased number of inhabitants of Viimsi Municipality and Tallinn City who will consider alternatives to conventional storm water management solutions
- 100 persons from interest groups and 100 individuals visit Viimsi demo sites annually to learn from the storm water management system, SuDS solutions and other Project outcomes

Innovation

- designing and setting up a comprehensive and innovative complex storm water management system
- testing the use of nature-based measures to mitigate floods caused by heavy rain



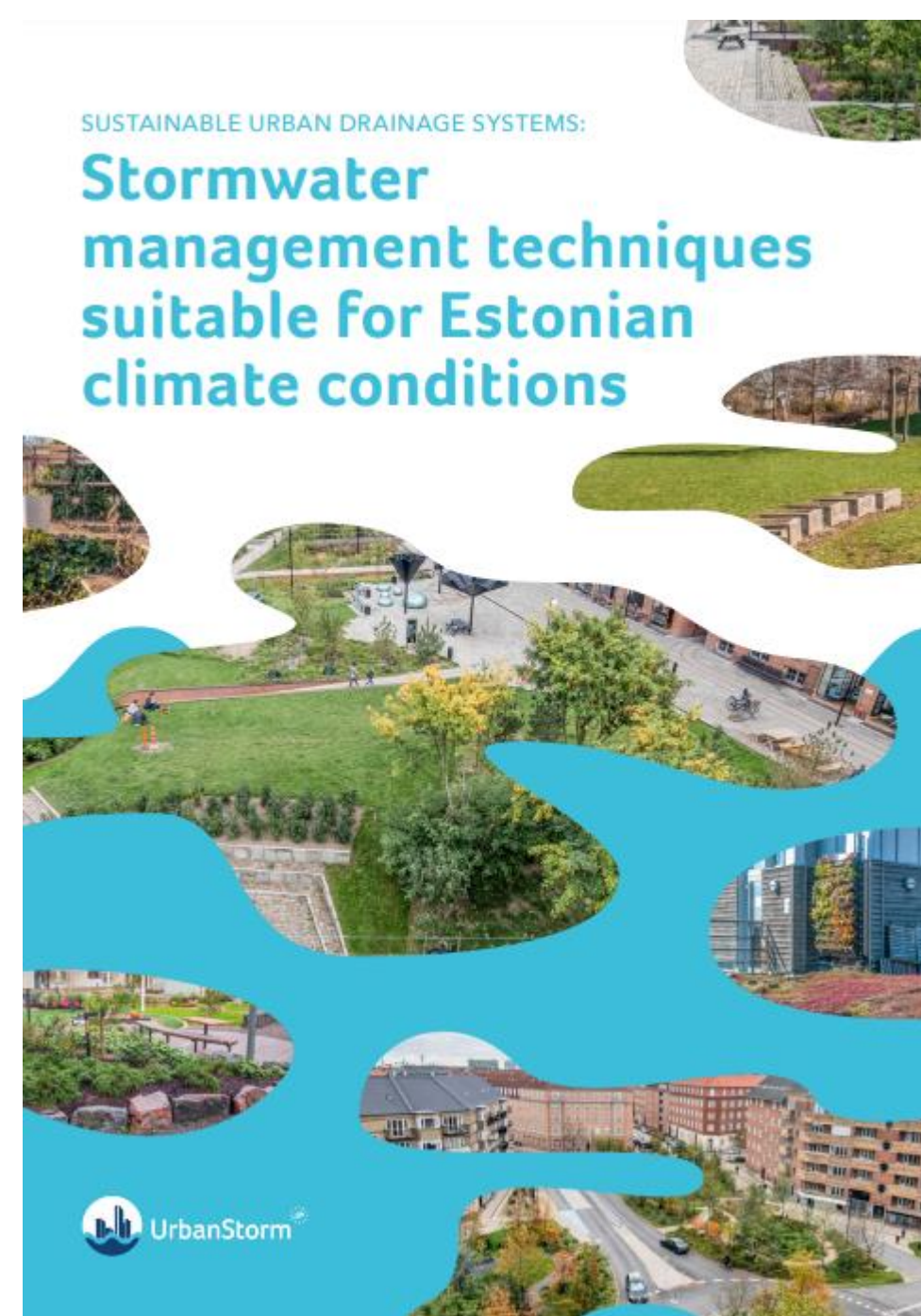
- Storm water management system launched in Viimsi
- ca 15 hectares of land have improved resilience to flooding as a result of development of Viimsi SuDS solutions in 2 pilot areas - Viimsi Manor Park & Randvere street parking lot
- Number of storm water emergencies decreased in Viimsi and in Tallinn Trummi area

Publications

Sharing knowledge gained and created
within LIFE UrbanStorm project



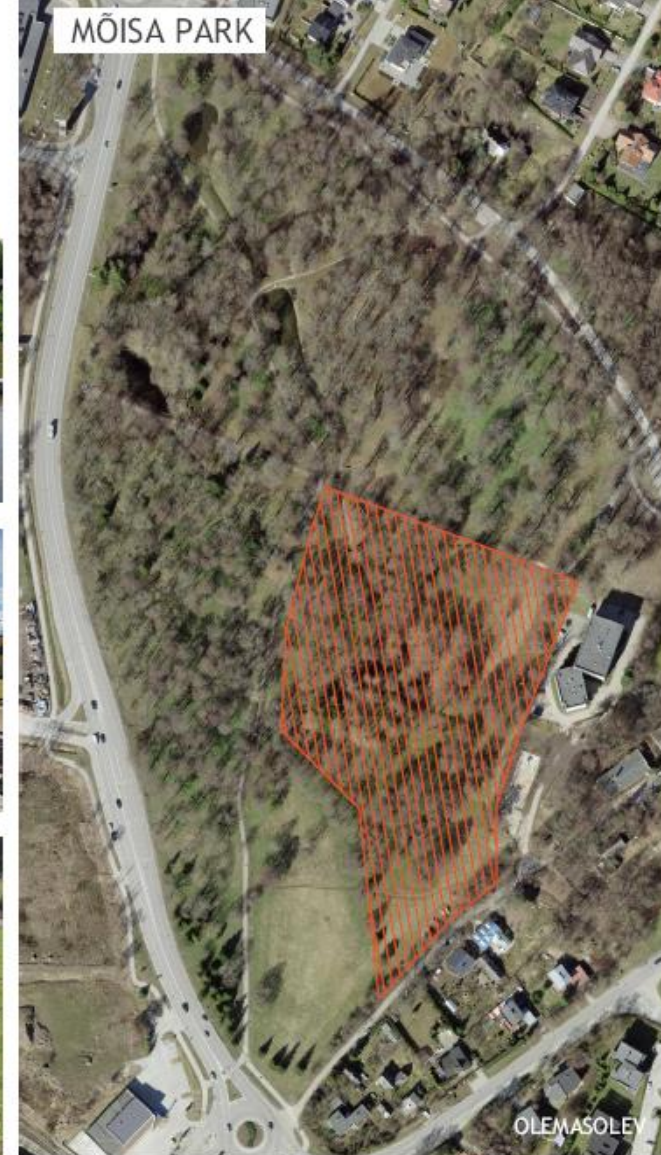
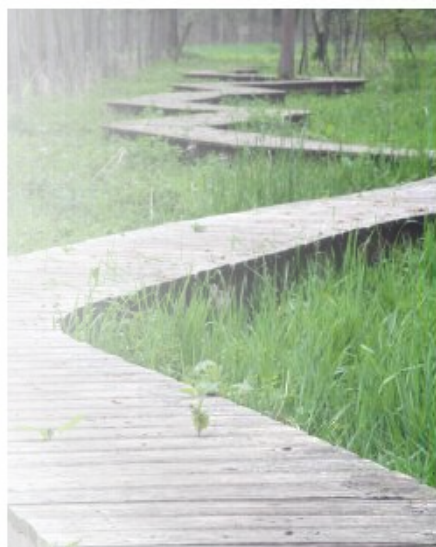
- Leaflet
- booklet
- handbook



Viimsi Manor park

VÕIMALIKUD SOBIVAD LAHENDUSED ANTUD PARKI

- Delaying waterflow
- Detention bond
- Creating more biodiversity
- Using existing ditches, bonds and drainage pipes
- Taking account heritage protection and other limitations



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Töö nimi Viimsi valla valgala nr. 8 analüüs
Asukoht Viimsi vald
Jätkumise nimi Mõisa park / A3

Töö autor Gen Mandre
Jätkumise autor Gen Mandre
Tellijä Gravitat Consult OÜ
Mõistlaja

Stadium Analüüs
Kuspilev 22.08.2017
Töö nr 17FP_projekt3
Jätkumise nr 8

Rapids and waterfall



Detention bond and dam



An aerial photograph of a winter forest. The ground is covered in a thick layer of white snow. Numerous bare, brown tree trunks and branches are scattered across the landscape, some standing upright and others fallen. A single, dark green evergreen tree stands out in the upper-middle section. A prominent, dark, fallen tree trunk lies horizontally across the middle of the frame. A white rectangular box with a blue border is positioned in the lower-middle part of the image, containing the text "Slow flowing section" in blue font.

Slow flowing section

Randvere street parking lot

- From stormwater perspective parking lots are problem – large non permeable surface

SuDS parking lot:

- Permeable surfaces
- Mimicking natural water movement

In Randvere street parking lot we compare 3 different permeable surfaces







Stormwater management system

UAAAL

Avaleht

Taotlused

Planeeringud

Töökäsed

Kaart

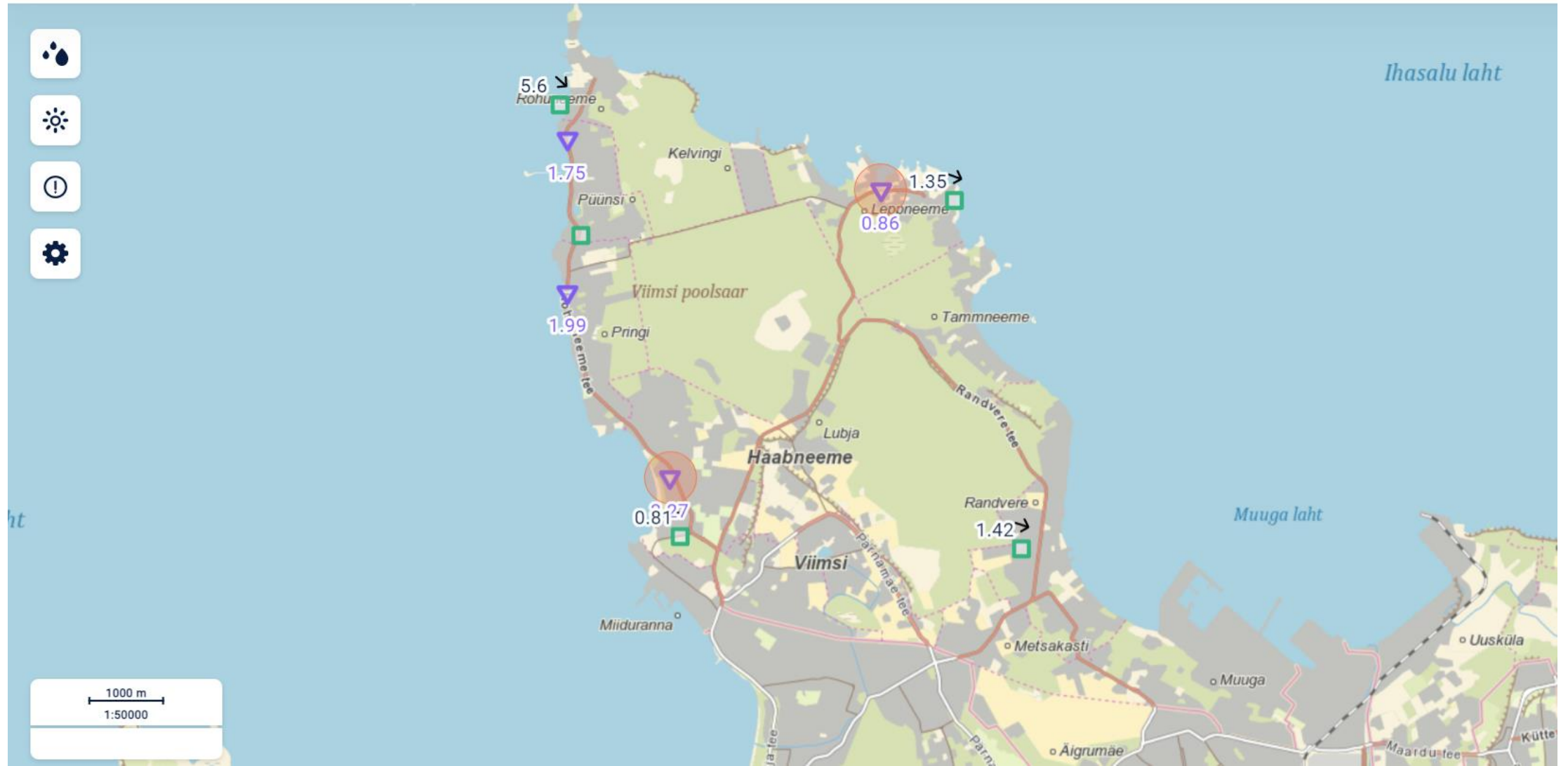
Aruanded

Register

Otsing

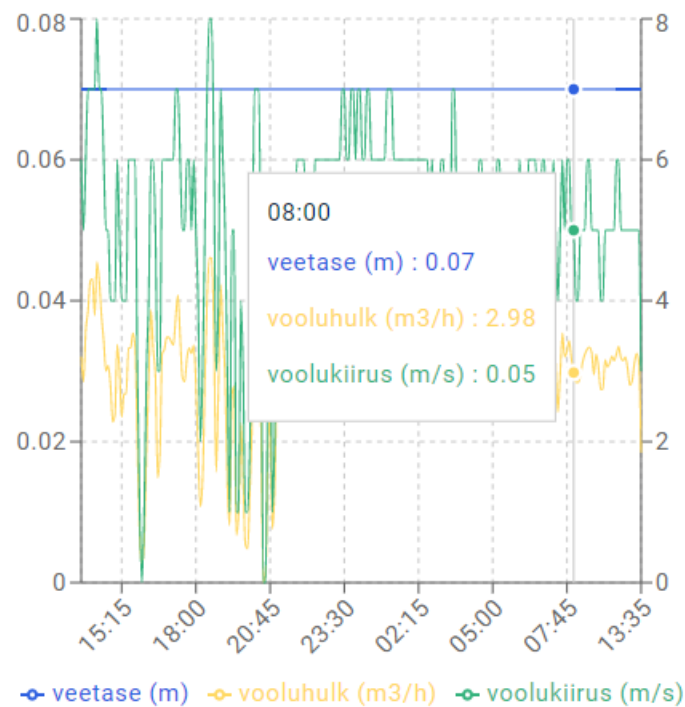
Admin

Monitooring

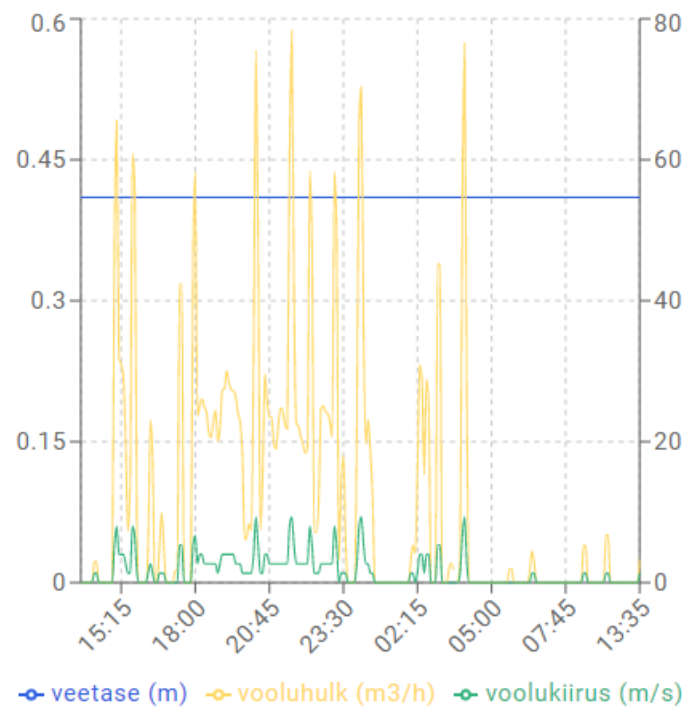


[Kaart](#)[Veemõõdjad](#)[Ilmajaamad](#)[Häired](#)[Seadmete häälestus](#)[Näitajate seadistus](#)[Häirete seadistus](#)[Logid](#)

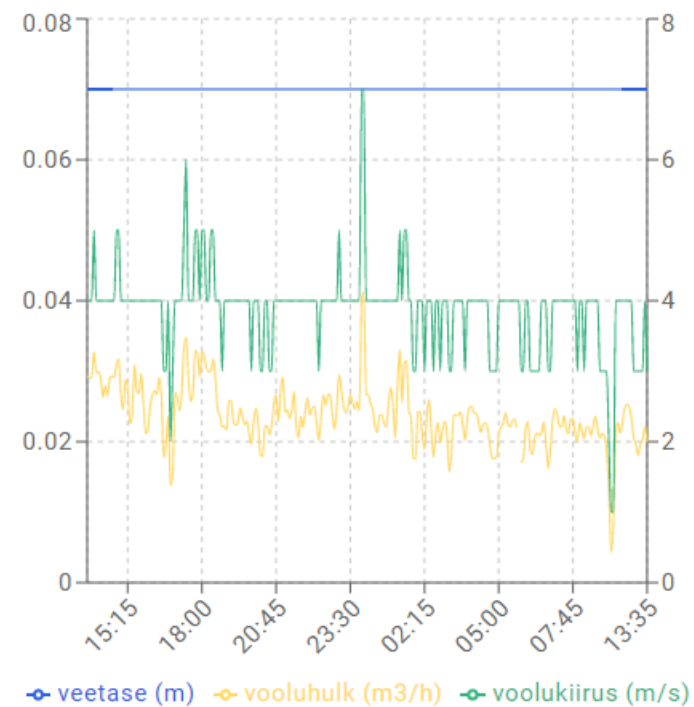
Karikakra tee



Männi tee



Rummu tee

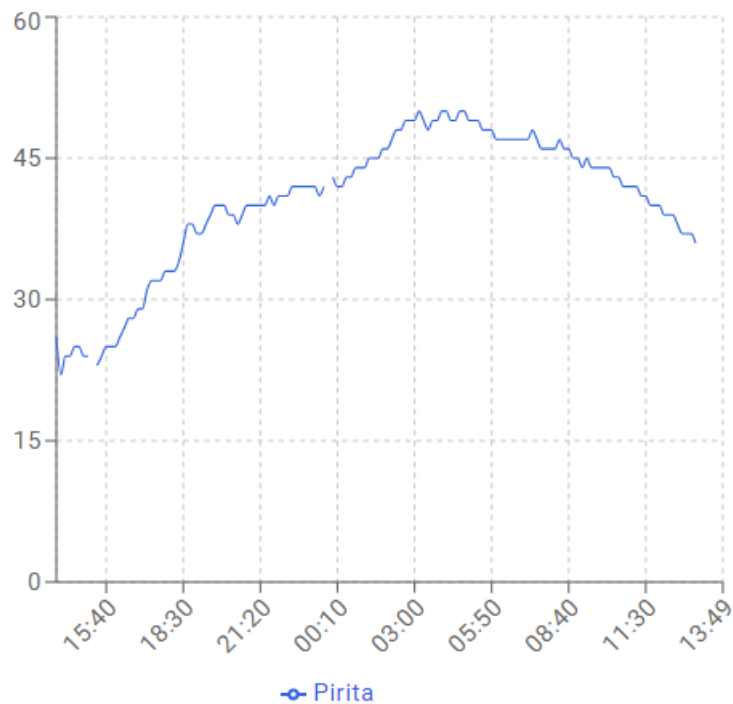


Võrkoja tee

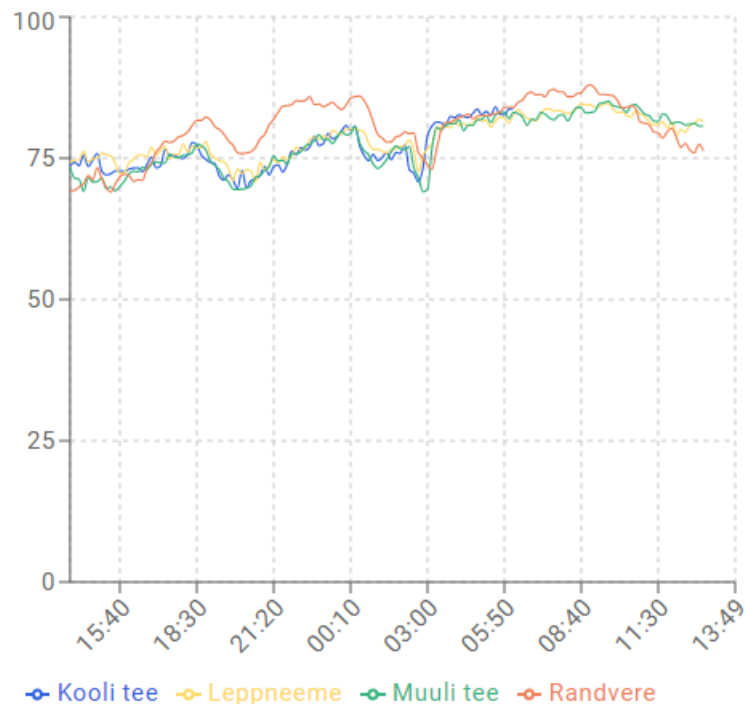


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merevee tase (cm)



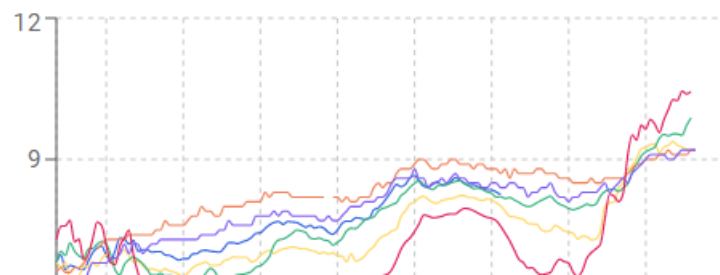
õhuniiskus (%)



õhurõhk (mmHg)

Andmeid ei ole

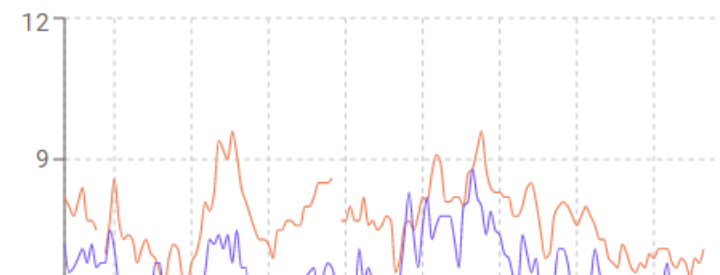
õhutemperatuur (°C)



sademete hulk (mm)



tuule kiirus (m/s)



Häired

Aktiivsed häired

Lahendatud häired

Laadi alla CSV

Häire aeg	Häire liik	Seade	Väärtus	Tase	%	Lahendamise aeg	Märkus
18.10.2022 16:16	Ületäitumine	Vörkoja tee	0,52	2	86		✓ TK
13.09.2022 20:36	Mittelaekumine	Männi tee	3			13.09.2022 20:41	Andmete laekumine taastus
13.09.2022 20:36	Mittelaekumine	Karikakra tee	3			13.09.2022 20:41	Andmete laekumine taastus
13.09.2022 20:36	Mittelaekumine	Vörkoja tee	3			13.09.2022 20:41	Andmete laekumine taastus
13.09.2022 20:36	Mittelaekumine	Rummu tee	3			13.09.2022 20:41	Andmete laekumine taastus
28.08.2022 16:16	Ületäitumine	Männi tee	0,76	2	76		✓ TK
24.08.2022 16:21	Ületäitumine	Männi tee	0,52	3	52	28.08.2022 16:16	Registreeriti kõrgema tasemega häire

Upcoming LIFE UrbanStorm project events

- 9-10.11.2022 – joint LIFE UrbanStorm and Interreg CleanStormWater conference in Viimsi.
- January 2023 – Final national conference
- Further news at <https://urbanstorm.viimsivald.ee/>



Thank you!

Project website -

<https://urbanstorm.viimsivald.ee/>

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VIIMSI VALD



Tallinn
Urban Environment and
Public Works Department



Eesti Maaülikool
Estonian University of Life Sciences