# LIFE UrbanStorm

Strategic approach and financial mechanism for storm water management system – experience of Viimsi Municipality

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#### Main facts

- Located in Viimsi peninsula, next to capital city Tallinn, by the Baltic Sea
- Population: ca 22 000

# Key climate challenges

- floods in urban areas caused by heavy rainfall
- floods in coastal areas due to storms
- heat islands



### Legal framework

- <u>Viimsi Municipality storm water development plan</u>
  2016-2027
  - maps problem areas
  - sets the objectives and measures/ technical solutions
  - provides investment plan
- Regulation for the use of storm water systems in Viimsi Municipality
  - requirements and conditions + procedure for providing and using the service
  - NB! when planning, preference should be given to nature-based storm water solutions!



#### Technical framework

- Management team of specialists at Department of Civil Engineering
- Infrastructure combining both "traditional" and nature-based solutions and materials
- E-monitoring system smart infrastructure, information from weather stations, flowmeters, quality sensors, etc



#### Financial framework

- closely linked to <u>Strategy for Adaptation to</u> <u>Climate Change of Viimsi Municipality</u> <u>2021-2031</u>
- finances from municipal budget and national & EU funds, incl.
  - LIFE UrbanStorm
  - LIFE LATESTadapt
  - Interreg CB CleanStormWater
  - Interreg CB MUSTBE

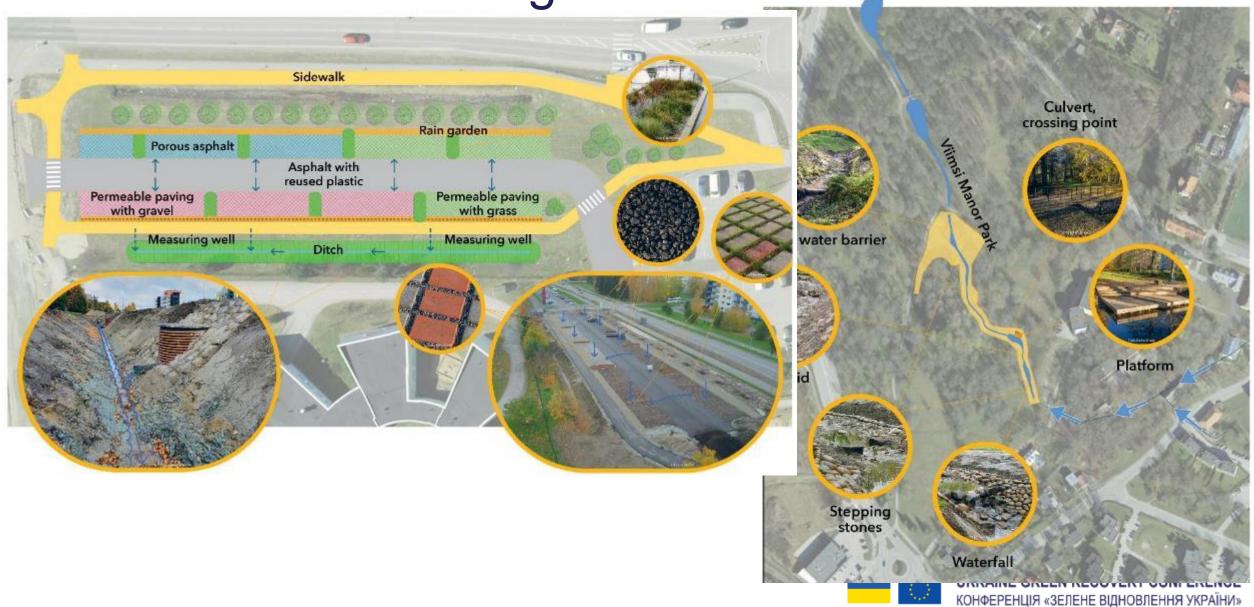


#### Constructed nature-based solutions

- Water-permeable coverings, grass coverings
- Ponds, reservoirs
- Delay ponds, delay ditches
- Rain beds, slopes
- Green roofs, flower meadows

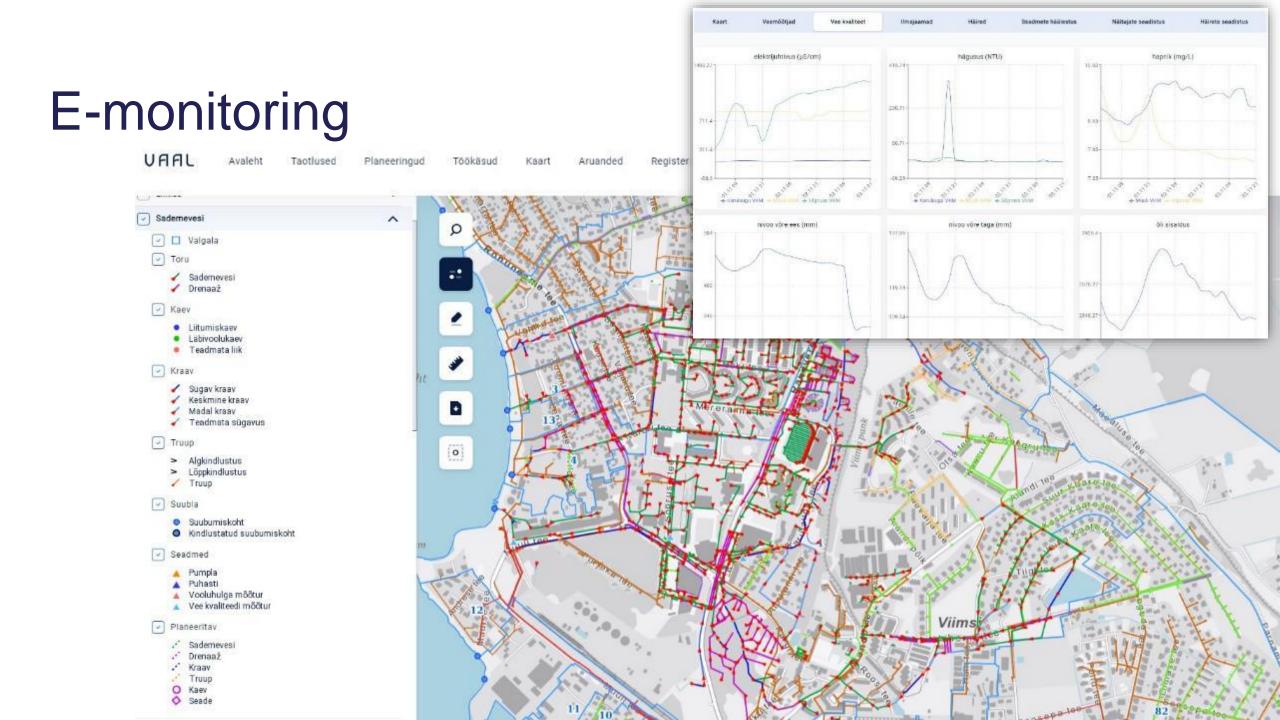


Demo sites: Parking lot & Manor Park



Porous asphalt vs standard asphalt





## What has changed in last 5 years in Viimsi

- innovation in 2017 NBS relatively unknown; now 3 pilot sites constructed, more is coming
- **project teams** projects have become a natural part of everyday work the municipal government specialists themselves are the best experts!
- snowball effect one successful project leads to the next because
  - network of cooperation partners expands
  - learning by doing with each project you get smarter, esp. from the mistakes made ©

When reconstructing municipal storm water infrastructure, look at solutions of the future such as NBS, not "the traditional" anymore

# Thank you

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