## **NOAH** project pilot site

# LIEPAJA LATVIA

BSR NOAH: January 2019 - December 2021





#### **NOAH ACTIONS**

A Storm Water Management Model (SWMM) of the Liepaja pilot area was created to estimate the amount of urban run-off and to examine the possibility of adding new connections to the basin in the future. In addition, water flow measurements and sampling were carried out.

An automatic Hydrological Station (AHS) was installed in Liepaja. The station consists of:

- mobile multiparameter probes
- water flow meters
- water level sensors

The automatic hydrological station enables water flow measurement and the collection and monitoring of the Cietokšņa canal's water level data, helping with flood risk mitigation.

The Extreme Weather Layer (EWL) is a new tool created in the NOAH project and is used for planning in the city of Liepaja. The tool assists in spatial planning and flood risk prediction in urban areas.

### **ABOUT THE PILOT SITE**

- Liepaja is a city in western Latvia, located between the lake of Liepaja and the Baltic Sea
- Total area of 60.4 km², mostly occupied by lowrise residential buildings
- Separate sewage and stormwater systems

#### **CHALLENGES**

- If the Cietokšņa canal outlet into the Baltic Sea is clogged, the adjacent areas get flooded.
- There is also no automated control system for urban drainage system operation and no storage facilities (tanks) built for stormwater detention in the city.



#### **NOAH IMPACT**

- With NOAH actions, financial damages can be reduced, and flood risks mitigated.
- Consequently, wastewater spillages and overflows are reduced, resulting in less pollutants and excessive nutrients flowing to the Baltic Sea.











