NOAH project pilot site

OGRE LATVIA

BSR NOAH: January 2019 - December 2021





NOAH ACTIONS

A Stormwater Management Model (SWMM) of the Ogre pilot area was created to estimate the amount of urban run-off. In addition, water flow measurements and sampling were carried out.

Automatic Hydrological Stations (AHS) were installed in three different locations in Ogre. The stations consist of:

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

The data gathered about the Ogre river through the automatic hydrological stations can be used as an **alarm system** that alerts about flood threats. With the help of the AHS, e.g. water level and water flow in the river can be monitored in real-time.

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

ABOUT THE PILOT SITE

- Ogre is a town located in central Latvia, about 50km from the Baltic Sea coastline
- Separate sewage and stormwater systems

CHALLENGES

- The pilot area has been selected due to its major river flood problem and estimated future challenges caused by climate change.
- ◆ The Loka street area's surface water run-off drains into the Ogre river through open ditches. When the river's water level rises e.g. due to ice blockages in the spring, the stormwater outlet gets blocked, resulting in flooding.



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.











