Interreg Baltic Sea Region

Co-funded by the European Union

SUSTAINABLE WATERS WaterMan

Overview of the pilot status

Stormwater recycling for fountain operation and greenery irrigation

Saldus Municipality

30 April 2025

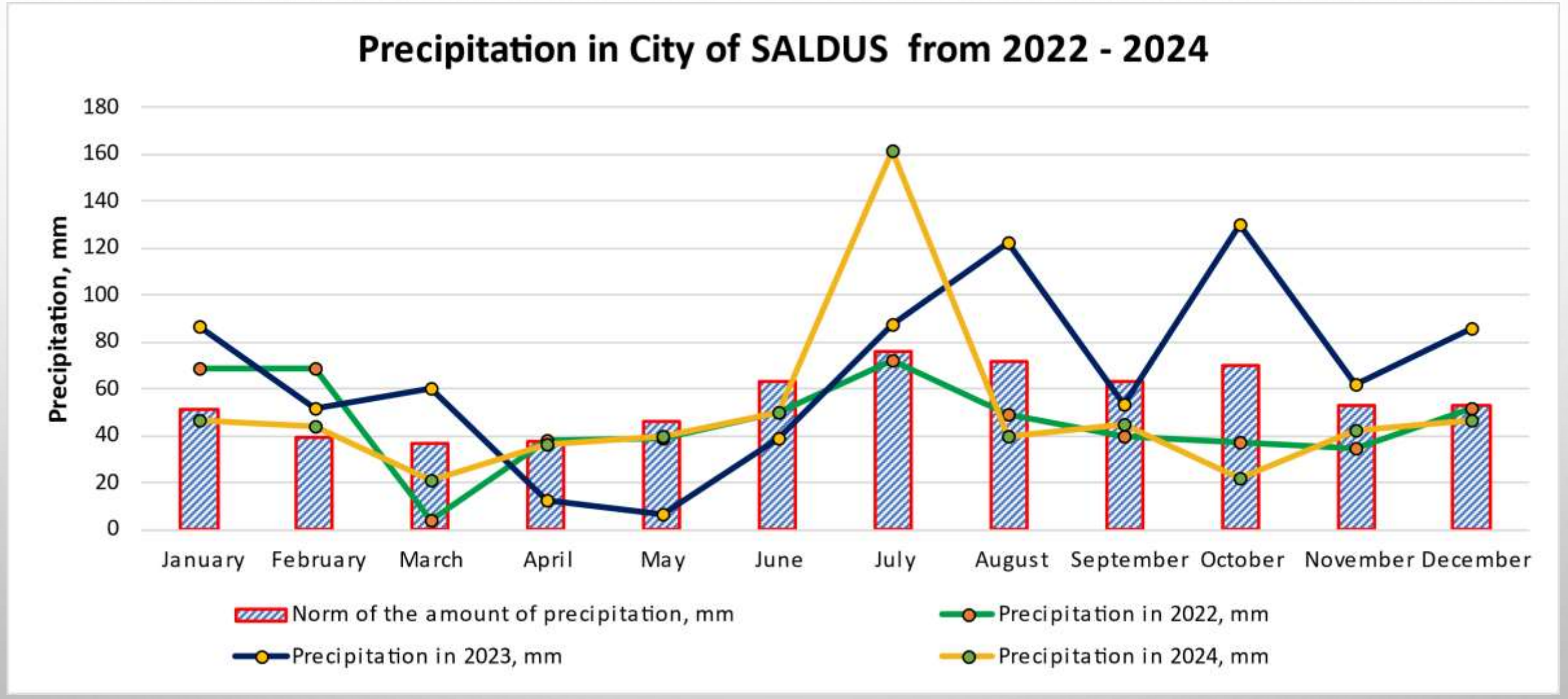
Saldus Municipality

WaterMan

Saldus piepilda

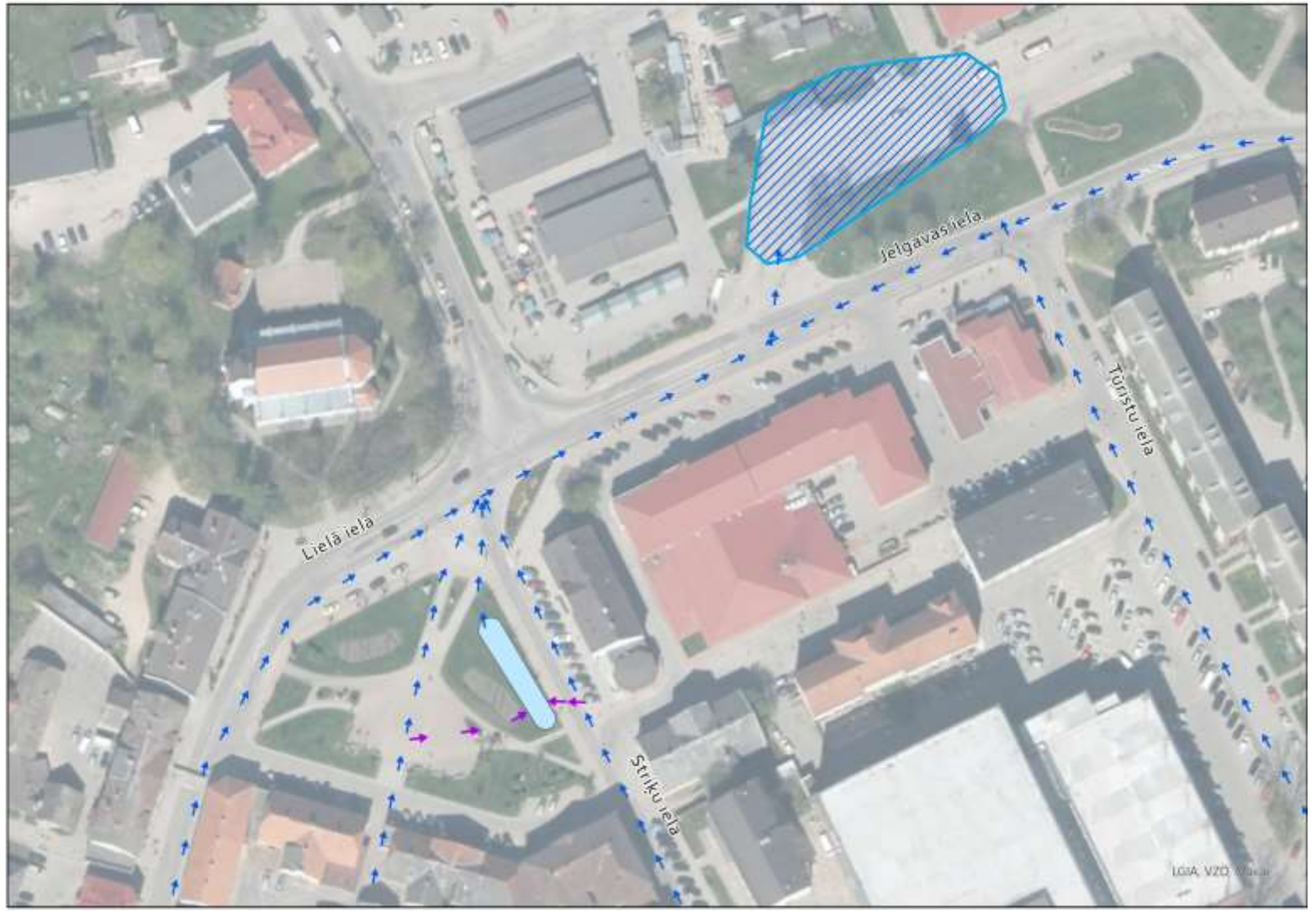
THE CIECERE RIVER FLOWS THROUGH THE SALDUS AND IS ITS MAIN DRAINAGE POINT. SALDUS IS FACING BOTH PERIODS OF DROUGHT AND REGULAR FLOODS, IN PARTICULAR IN SALDUS TOWN CENTER THAT IS LOCATED LOWER THAN THE SURROUNDING AREAS AND LACKS WATER RESERVOIRS TO ABSORB WATER FROM HEAVY RAINFALL OR RAPID SNOWMELT. SALDUS IS ARRANGED LIKE A « BOWL «.

To address this issue, the Saldus Municipality has joined the WaterMan project, which aims to provide a solution that combines both the sustainable development of the city and the desires of its residents. In the case of heavy rainfall, the situation in the city center can also be as follows:


Precipitation in City of SALDUS from 2022 - 2024
Precipitation, mm
180
160
140
120
100
80
60
40
20
0
January
February
March
April
May
June
July
August
September
October
November
December
Norm of the amount of precipitation, mm
Precipitation in 2022, mm
Precipitation in 2023, mm
Precipitation in 2024, mm

Actions Implemented in the project: a Path to Sustainable Development

- Geological research
- Rainwater analysis
- Development of the project vision
- Preparation of technical documentation
- Communication and public education

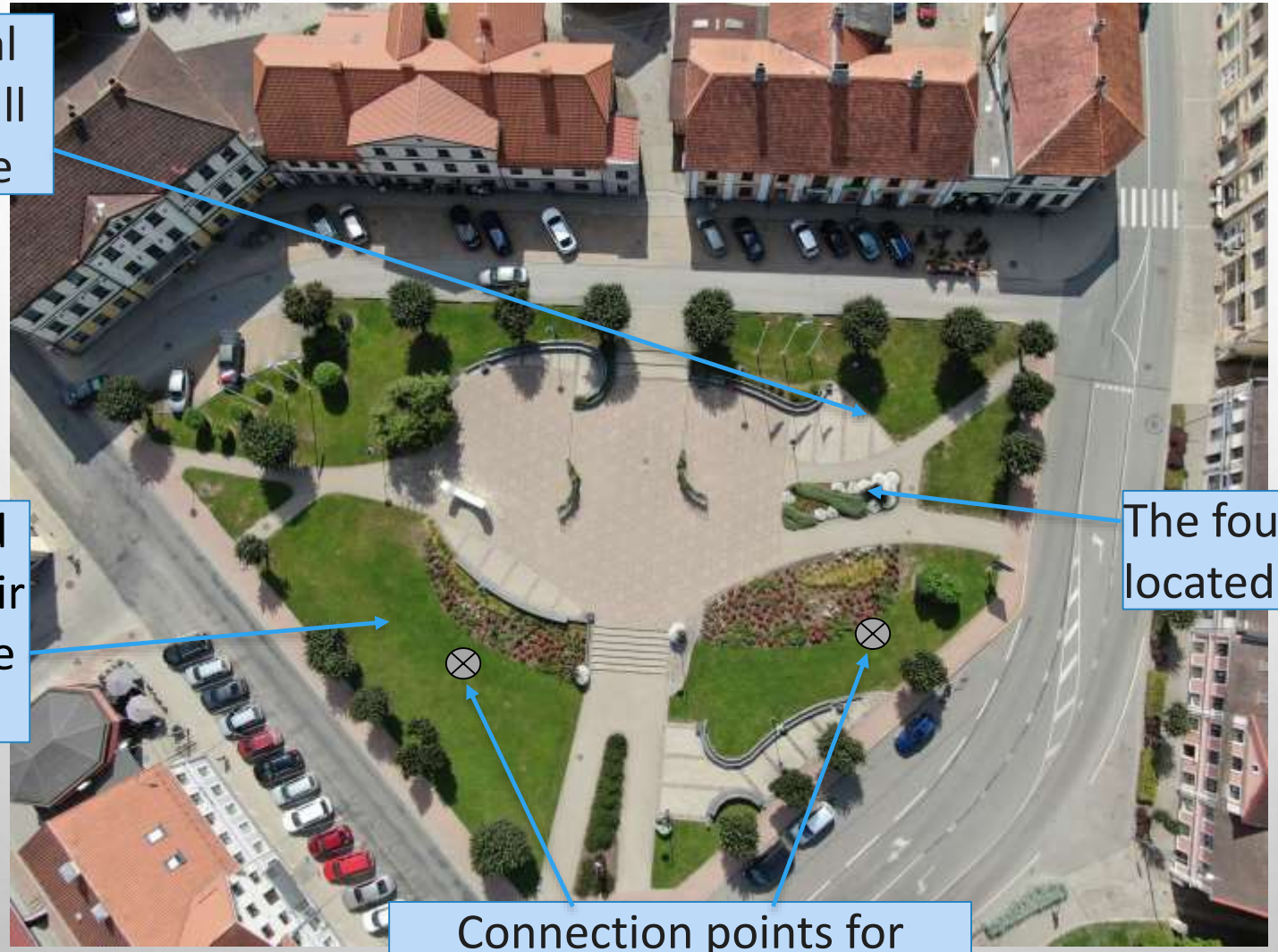

Jelgavas iela
Lielā iela
Strīķu iela
Tūristu iela

2023/2024

Results of the Analyses of Rainwater in Kalpaka Squere

- **Total suspended solids:** 16.2-182 mg/l
- **Conductivity**:74.9- 130 µS/cm
- **Total Microorganism Count (MAFAM)**:
  - Total Microorganism Count at 22°C: 2.2-3 x 10^4 CFU/1ml
  - Total Microorganism Count at 37°C: 4.2 x 10^2 CFU/1ml
- **Escherichia coli** (CFU/100 ml): 1.1*1000
- **Intestinal enterococci** (CFU/100 ml): 3.8*1000
- **Petroleum Products**: not detected
- **pH**: 6.6-8.1
- **P total**: < 0.10
- **N total**: 1-2.8
- **COD** (Chemical Oxygen Demand): < 30

Technical Documentation -Multifunkcional Use of the Fountain



The educational touch screen will be located here

The underground rainwater reservoir (90+10 m³) will be located here

The fountain will be located here

Connection points for greenery watering (located in wells)

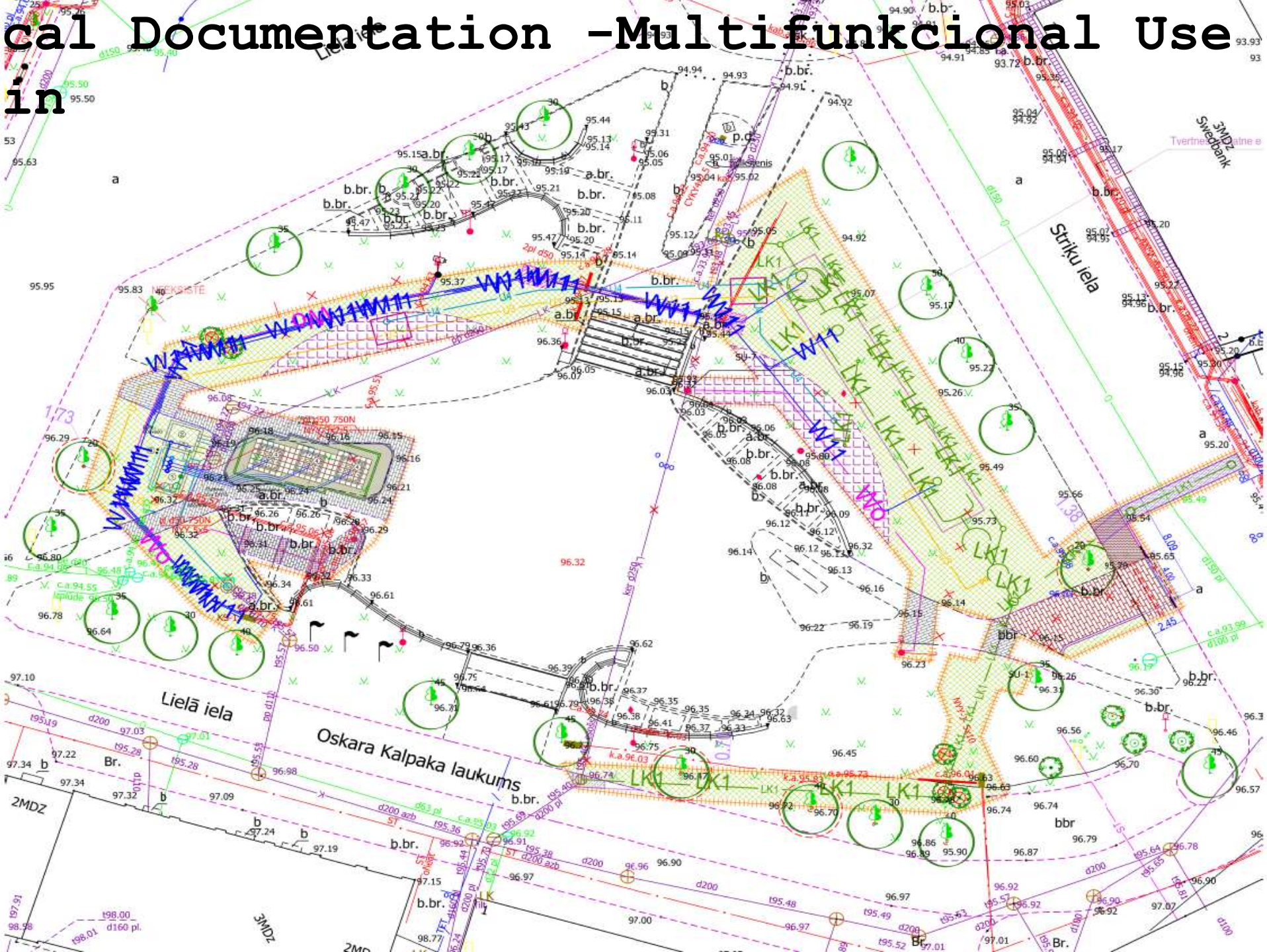
90 m³ rainwater reservoir

Fountain operation

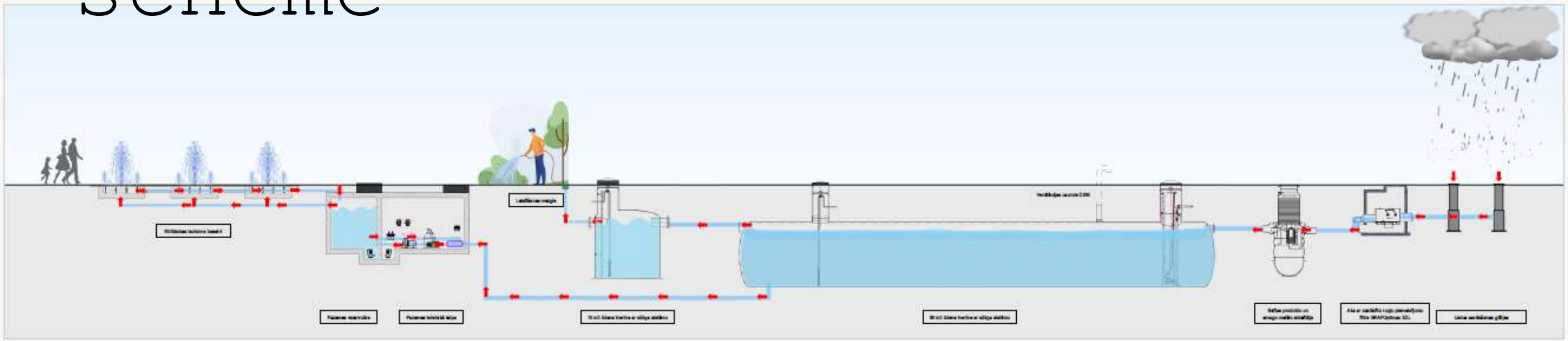
Watering of greenery

Street watering (in spring)

Technical Documentation -Multifunkcional Use of the Fountain



Rainwater circulation scheme



Collected rainwater treatment

Water Quality Requirements:
- **pH level:** 7.2 to 7.6
- **Total water hardness:** 8° to 15° dH (1.4 – 2.3 mmol/L)
- **Chloride content:** max 250 mg/L

→ Cleaned from coarse impurities

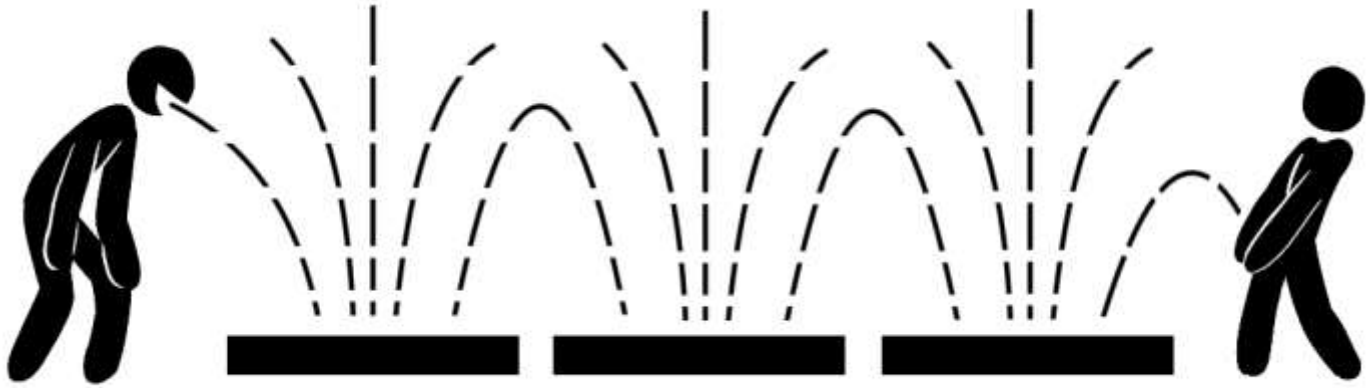
→ Separator for Sand and Oil Products

→ Water Preparation Equipment Unit

↓

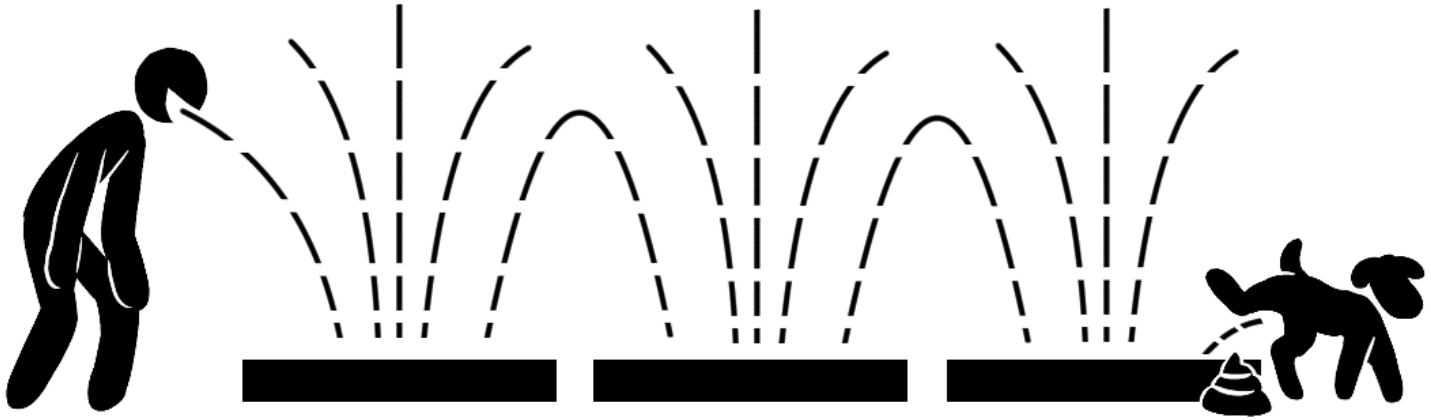
2 UV radiation lamps have been installed in the water treatment unit to prevent bacterial contamination

Done if construction works are carried out

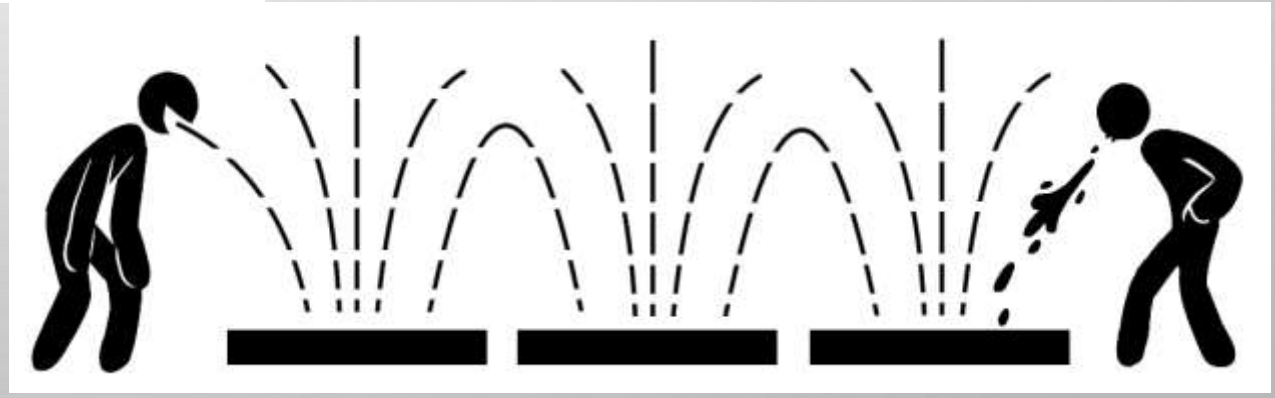


Installed if construction works are carried out

Planned Informative signs at the fountain



Attention! The water may be contaminated!
DO NOT DRINK!



Planned Fountain Monitoring in the Technical Documentation

Installed if construction works are carried out

Damage Signal: Alerts in case of damage or malfunction.

Water Metering Devices: Ultrasonic water meter with data transmission capability. Reflects seasonal water consumption (data updated daily and stored in the database). Water used for irrigation will be recorded separately.

Tank Level Sensors: Informative graphics display level changes over time. Level measurement device.

Data will be displayed on a unified platform with options for transmission to tablets and third-party systems.

Educated and Informed Society

May 14, 2024

EDUCATIONAL AND INFORMATIONAL ACTIVITIES IN SALDUS

Thematic meeting with students

Two of the largest schools in Saldus:

Topics Covered: *Climate change, Water reuse practices, Planned activities within the project*

Saldus Elementary School participants: 93
Saldus Secondary School participants : 84

Educated and Informed Society

September 27, 2024

EDUCATIONAL AND INFORMATIONAL ACTIVITIES IN SALDUS

Thematic meeting with Saldus residents

Informative event about four projects implemented in Saldus Municipality.
One of them is WaterMan.

Local press representatives were invited

Future Plans for Rainwater and Wastewater Management in Saldus Municipality

- Implement the developed innovative project idea, attracting investments.
- Collaboration with entrepreneurs in realizing new, innovative ideas in Saldus - reuse treated wastewater for business needs.

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Interreg Baltic Sea Region

Co-funded by the European Union

SUSTAINABLE WATERS
WaterMan

Access the „BSR Water Recycling Toolbox" here.
https://www.eurobalt.org/waterrecyclingtoolbox/

The „BSR Water Recycling Toolbox" was elaborated as part of the project "WaterMan - Promoting water reuse in the Baltic Sea Region through capacity building at local level", The project is co-financed by the European Union (European Regional Development Fund) and implemented within the Interreg Baltic Sea Region Programme. More information:

eurobalt.org/WaterRecyclingToolbox
interreg-baltic.eu/project/waterman

WaterMan promotes a region-specific approach to water recycling, which intends to use the alternation of too much and too little water that has become typical in the Baltic Sea Region to make the local water supply more resilient, and supports municipalities & water companies in adapting their strategies.