

# Water Recycling Toolbox

## Water recycling strategy for

## Kurzeme Region / LV

Kurzeme Planning Region

Saldus Municipality





**Interreg**  
Baltic Sea Region



Co-funded by  
the European Union

 SUSTAINABLE WATERS  
**WaterMan**

# Saldus Municipality

**Kick – Off – Meeting**  
Kalmar & Västervik / SE

**Saldus**



Saldus is located in valley





Sometimes this happens...



Saldus

Thank you!

Eva Jekobsone

[eva.jekobsone@saldus.lv](mailto:eva.jekobsone@saldus.lv)

+371 20267729



## Initial exchange

# Water recycling strategy for Kurzeme Region / LV Kurzeme Planning Region Saldus Municipality

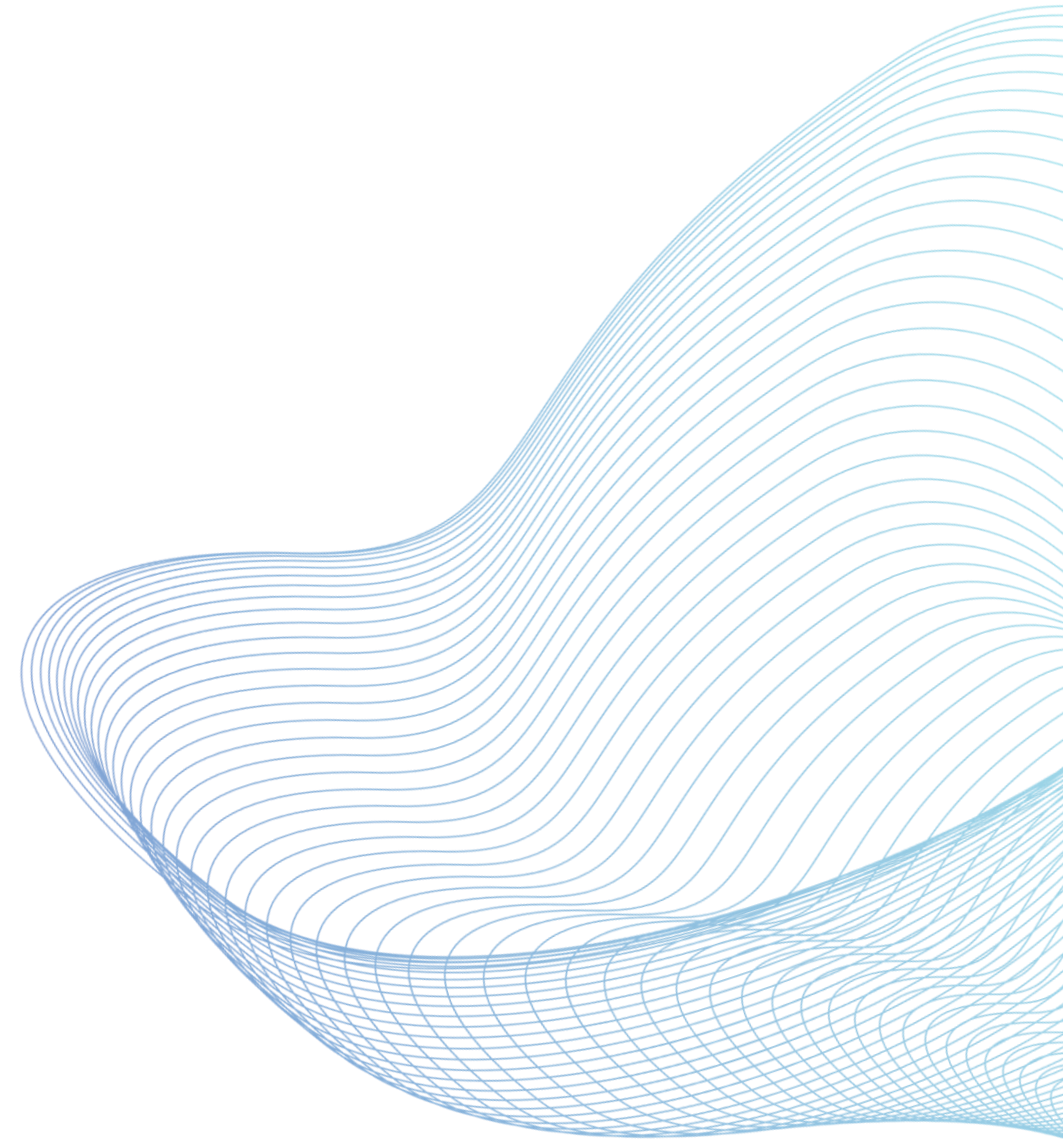
9 November 2023





KURZEME  
PLANNING  
REGION

# Kurzeme Planning region



November 9, 2023, Bornholm,  
Denmark



# WATER REUSE STRATEGY FOR KURZEME PLANNING REGION



**Area:** 16 000 sq.km

**Population:** 280 000 (2021)

**Population density:** 17 people per sq.km (2021)

29,7% of people live in rural areas

**8 Municipalities:**

2 cities - Liepāja and Ventspils

6 county municipalities, incl. 114 parishes and 16 small towns



# WORKS DONE/TO DO

- Contracting external expert (procurement)
- Contacted with RTU (Jurijs Kondratjenko)
- Description of procurement tasks (January)
- Procurement ( End of January)
- Procurement Results (End of February)

## Stages of a procurement process



Local strategies

Experts work/advices

Funds



KURZEME  
PLANNING  
REGION

THANK YOU !

Kurzeme Planning Region  
[www.kurzemesregions.lv](http://www.kurzemesregions.lv)



Projects Manager  
Aija Neilande

E-mail: [aija.neilande@kurzemesregions.lv](mailto:aija.neilande@kurzemesregions.lv)

+371 26147139

1st Peer-review session  
**Water recycling strategy for  
Kurzeme Region / LV**  
Kurzeme Planning Region  
Saldus Municipality

14 March 2024



KURZEME PLANING REGION

# WATER REUSE STRATEGY FOR KURZEME REGION

---

KLAIPEDA, LITHUANIA, 14 March

## Latvian Environment, Geology, and Meteorology

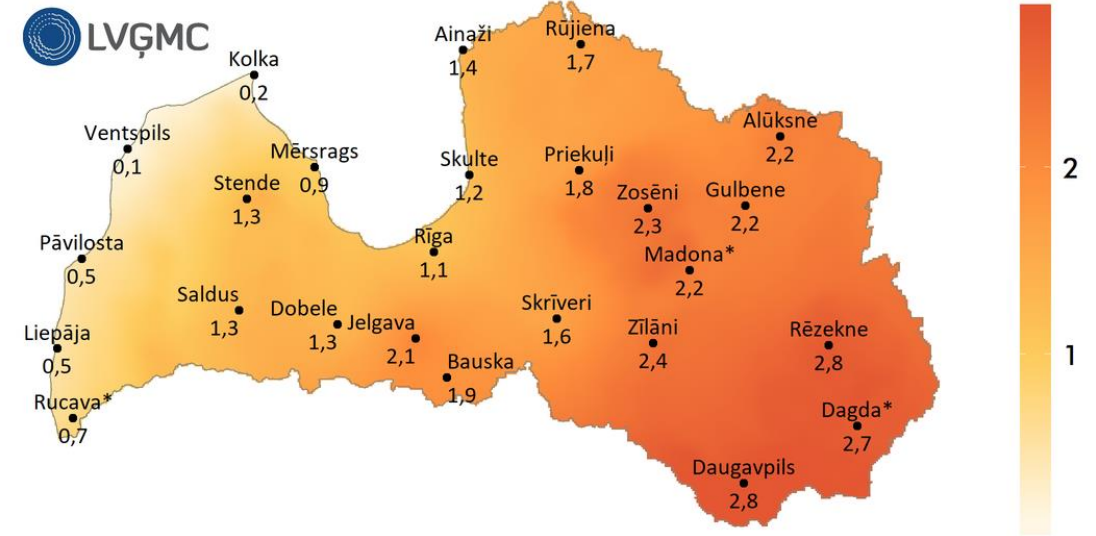
Centre data shows that In total, 1 minimum and 26

maximum temperature records were broken in

August, including the Latvian records of 16 and 17

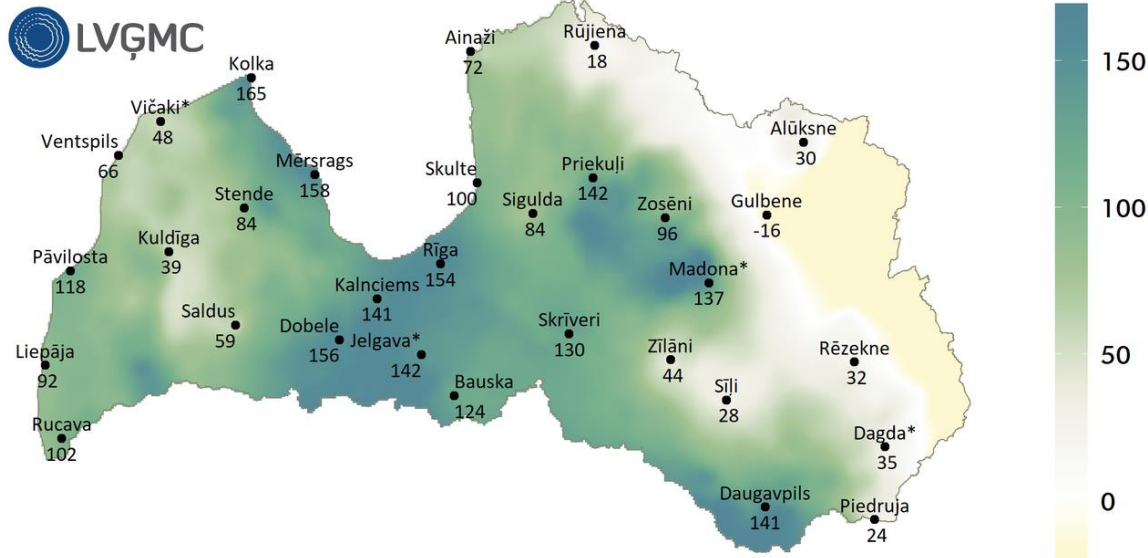
August, as well as 3 decadal records and 1 monthly

record. Daily and decadal records were also repeated.



Vidējās gaisa temperatūras novirze no normas (1991.-2020.g.)  
2023. gada augustā, °C

\* novirze no 1991.-2020. gada ilggadīgās vidējās vērtības



Nokrišņu daudzuma novirze no normas (1991.-2020.g.)  
2023. gada augustā, %

\* novirze no 1991.-2020. gada ilggadīgās vidējās vērtības

The total precipitation in Latvia in August was 144.7 mm, which is 88% above the monthly normal (76.8 mm).

August was the wettest in 13 years and the 4th wettest on record. The high rainfall had the effect of delaying harvesting for farmers. Rivers often experienced higher water levels.

# Kurzeme Planning Region

## Territory:

16,054 thousand km<sup>2</sup>

## Population:

280,4 thousand (CSP at 01.01.2021)

## Districts:

South Kurzeme district, Kuldīga district, Saldus district, Talsi district, Tukums district, Ventspils district.

## National cities:

Liepāja and Ventspils.

## Population density per km<sup>2</sup>:

17,5 inhabitants per km<sup>2</sup> (Calculated according to CSP data on 01.01.2021.)

## Rural population:

29.7% (Calculated according to CSP data on 01.01.2021)



# FURTHER ELABORATED APPROACH OF THE REGIONAL WATER REUSE STRATEGY FOR THE KURZEME REGION

- **Expert review session`s**

Results from the expert review session

- **Guidelines**

As one of the project outcomes

- **Procurement procedure**

Hope to start in April, with a aim to have a result in May.

After that, work with the experts on the strategy can begin.

- **Finalised Water reuse strategy of Kurzeme region**

Spring 2025

# WATER REUSE STRATEGY content

## 1. WATER NEEDS AND AVAILABILITY IN THE REGION

**1.1. Climate scenario depicting the country, local situation**

**1.2. Analysis of water demand (overall situation, most demanding months and water availability)**

1.2.1. Households

1.2.2. Stakeholder analysis (incl. mapping / needs / positions) & visualisation;

**1.3. Overview of potential water sources in the region**

1.3.1. ground water, surface water

1.3.2. alternative sources like recirculated storm water & reused waste water

## 2. REGULATIONS

**2.1. National**

**2.2. EU Water Reuse Regulation**

# water reuse strategy content

## 3. CONCRETE CASES FOR WATER REUSE

- 3.1. Saldus municipality fontaine
- 3.2. Project “Aquares” farmer example
- 3.3. Kandava / Riga city example
- 3.4. WaterMan pilot measures implemented in other model regions
- 3.5. Good practices in other parts of Europe that were explored within WaterMan project and others

## 4. INITIAL ASSESSMENT OF STORM WATER MANAGEMENT IN THE KURZEME REGION, MUNICIPALITIES

- 4.1. Brief description and condition of the infrastructure
- 4.2. Personnel and technical resources for water management

# water reuse strategy content

## 5. ANALYSIS OF MUNICIPAL PLANNING AND DEVELOPMENT DOCUMENTS

5.1. where a water reuse element can be added

5.2. what possible sources of funding could be used

## 6. FUNCTIONAL ASSESSMENT OF MUNICIPALITY STRUCTURE

6.1. Division of functions

6.2. Cooperation and necessary improvements

## 7. POSSIBLE SOLUTIONS TO THE KURZEME MUNICIPALITIES SELECTED CASES

7.1. Till 8 dried out territories

7.2. Till 8 flooding risk territories

## 8. RECOMMENDATIONS

8.1. for the improvement of Kurzeme municipalities' legislation

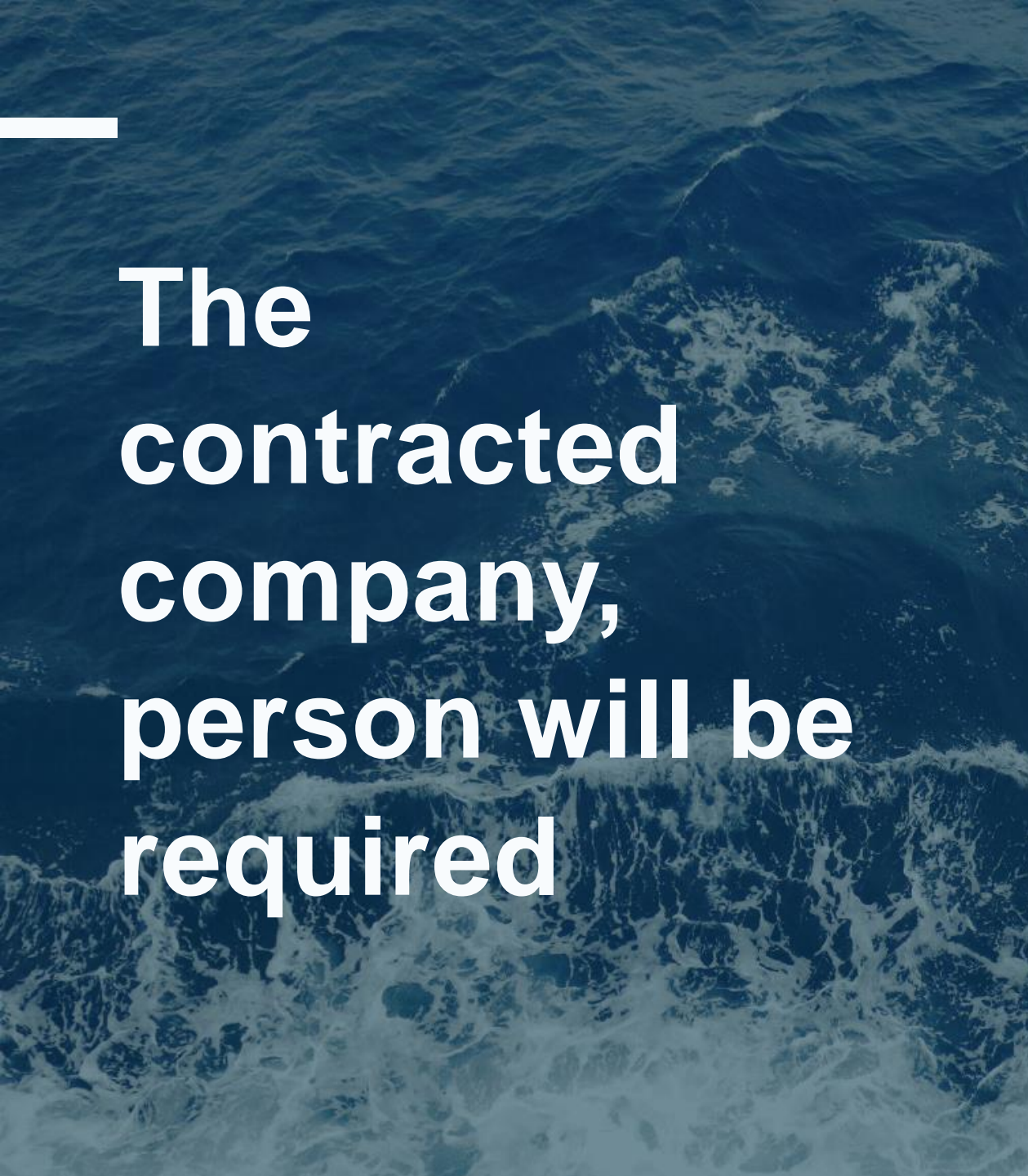
8.2. for the improvement of national legislation

# PLAN - WITH WHAT TO START?

---

IN THE CASE OF KURZEME - WITH PROCUREMENT





**The  
contracted  
company,  
person will be  
required**

**TO FIND OUT THE WATER CONSUMPTION  
HABITS, NEEDS, ATTITUDES TOWARDS  
WATER RECYCLING OF PEOPLE LIVING IN  
THE REGION**

Surveys, appraisals on local consumer acceptance, \*  
summer, paid

**INVOLVE THE LOCAL COMMUNITY,  
SPECIALISTS IN RELATED SECTORS**

Information days on water reuse, different solutions,  
examples

**PUBLIC AWARENESS RAISING CAMPAIGNS**

Create content for paid articles in local and national  
newspapers,

Make a interviews on TV programme such as "Vides  
fakti",

Influencer marketing campaigns such as Kristīne  
Garklāva

## TO BE INFORMED

- CITIZENS  
LANDOWNERS
- LOCAL WATERWORKS
- WATERMAN  
ASSOCIATED  
PARTNERS

## TO BE INVOLVED

- LOCAL  
MUNICIPALITY
- KPR TEAM
- WATERMAN TEAM
- ASSOCIATION  
FARMERS' UNION
- THE ASSOCIATION  
OF LATVIAN WATER  
SUPPLY AND  
WASTEWATER  
COMPANIES

## TO BE BRIEFED

- MEDIA
- OPINION LEADERS  
- INFLUENCERS
- NATURE,  
ENVIRONMENTAL  
ORGANIZATIONS

## TO BE HEARD

- MUNICIPAL BOARD
- UNION OF LOCAL  
AUTHORITIES
- MINISTRY OF  
ENVIRONMENTAL  
PROTECTION AND  
REGIONAL  
DEVELOPMENT OF  
LATVIA
- MINISTRY OF  
AGRICULTURE  
REPUBLIC OF  
LATVIA



KURZEME  
PLANNING  
REGION

AIJA NEILANDE

+371 26147139

AIJA.NEILANDE@KURZEMESREGIONS.LV

# 1<sup>st</sup> Peer & expert review session: Recommendations & conclusions

## Comments from the peer & expert review:

- Identify the biggest water consumers: where is the highest potential for saving? While farmers are very decentralized users, maybe there are other consumers that are located closer to the plants/stormwater collection facilities (e.g. industry, households). This can also determine the cleaning process & lower the costs.
- To identify the potential needs, further topics, validate the overall approach and the required scope of the strategy it could be very beneficial to approach and involve the end-users, and municipalities before commissioning of the development of the strategy.
- Maybe a more flexible / modular approach can be considered for the procurement, to include some possibilities to alter the scope of the strategy when commissioned.
- Work on environmental education could also be part of the strategy – so that water is a resource and should be saved where possible – as a first step, before it is proposed to use new water resources that need a lot of investments. In this context the strategy could include measures for water reuse in private households and industry (circular approach).

## Related project examples:

- AQUARES: <https://www.interregeurope.eu/find-policy-solutions/stories/aquares-the-potentials-of-water-reuse>
- Pilot action: Construction of a Sequential Sedimentation Biofiltration System for retention and pretreatment of stormwater: <https://www.interregeurope.eu/good-practices/ecohydrologic-rehabilitation-of-recreational-reservoirs-arturowek-lodz>
- Pilot: Water reuse at the building level: <https://www.interregeurope.eu/good-practices/water-reuse-at-the-building-level-condminio-di-via-sassetti>
- Pilot: Rainwater from the roof of the building is used: <https://www.interregeurope.eu/good-practices/use-of-rainwater-in-the-regional-fund-for-environmental-protection-and-water-management>
- CATCH - Water sensitive Cities: the Answer To Challenges of extreme weather events <https://northsearegion.eu/catch/>
- Pilot: Reduce pollutants from storm water events: <https://northsearegion.eu/catch/pilot-projects/arvika/>
- Berlin Rain Water Agency: <https://regenwasseragentur.berlin/>

## Status update

# Water recycling strategy for Kurzeme Region / LV Kurzeme Planning Region Saldus Municipality

18 September 2024



# KURZEME REGION MODEL STRATEGY

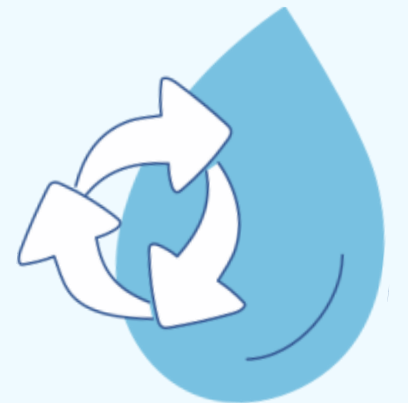


18 Sept 2024 – Hamburg

# Research on rainwater reuse in Kurzeme region municipalities



**Examine the reuse of rainwater in the municipalities of the Kurzeme planning region and to prepare recommendations, including the most significant trends to now and future projections, specific development recommendations and proposals for the region, municipalities and other stakeholders.**



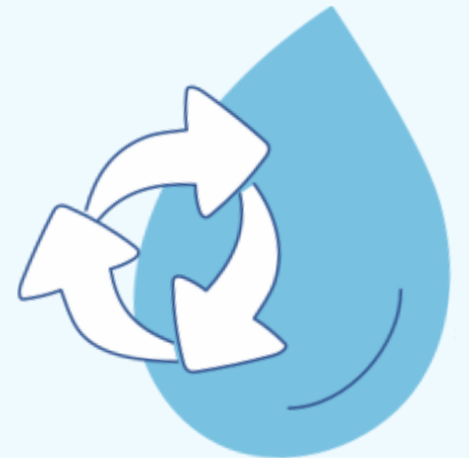
## 1. IDENTIFY AND DESCRIBE THE MOST IMPORTANT TRENDS AND FUTURE PROJECTIONS IN THE KURZEME PLANNING REGION: (INCLUDE INFORMATION IN THE EUROPEAN AND LATVIAN CONTEXT)

- Climate scenario showing the situation of the country and the Kurzeme planning region;
- Analysis of rainfall patterns and future projections (general situation, monthly patterns, etc.)
- Potential users and types of stormwater and requirements for stormwater quality for their use (public and economic sectors);
- Describe concrete examples of stormwater use in households to encourage people to conserve drinking water resources;
- Overview of potential water sources in the region (groundwater, surface water, alternative sources such as usable stormwater and treated wastewater)



## 2. SUMMARY OF DEVELOPMENT PLANNING DOCUMENTS AND LAWS, REGULATIONS AND A BRIEF DESCRIPTION OF WHAT ITS REGULATED IN TERMS OF STORM WATER USE

- National development planning documents and legislation;
- EU legislation.



3. COLLECT INFORMATION ON EXISTING AND PLANNED STORMWATER MANAGEMENT DEVELOPMENT PROGRAMMES AND/OR SUSTAINABLE DEVELOPMENT STRATEGIES, WORK PLANS, IMPLEMENTED STORMWATER MANAGEMENT PROJECTS, EXAMPLES IN THE MUNICIPALITIES OF THE KURZEME REGION, AS WELL AS TO PROVIDE PROPOSALS FOR MORE INCLUSIVE STORMWATER MANAGEMENT IN A GIVEN MUNICIPALITY.

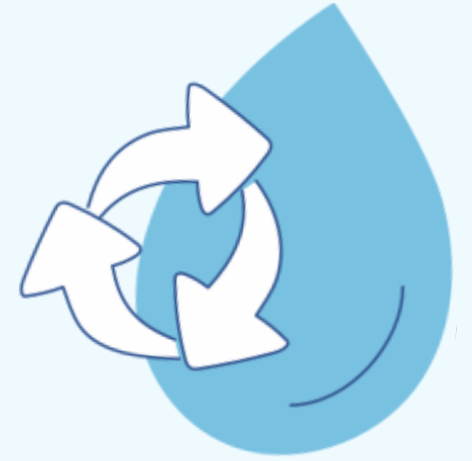
4. TO COLLECT INFORMATION ON WASTEWATER TREATMENT PLANTS IN KURZEME, THEIR CURRENT AND MAXIMUM FLOWS, IN ORDER TO IDENTIFY OPPORTUNITIES FOR STORMWATER DRAINAGE.

5. COLLECT INFORMATION ON THE AREAS OF THE KURZEME PLANNING REGION THAT SUFFER FROM SHORT-TERM FLOODING CAUSED BY HEAVY RAINFALL.



## 6. DESCRIBE SPECIFIC EXAMPLES OF WATER REUSE:

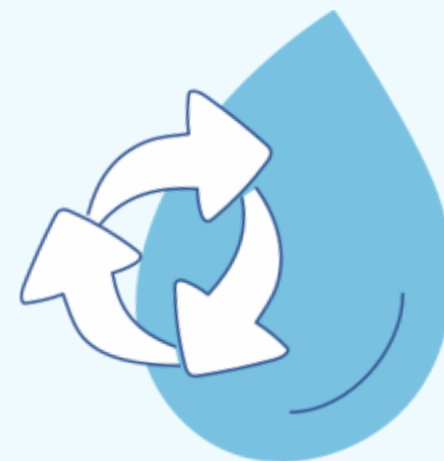
- SALDUS MUNICIPALITY;
- THREE TO FOUR DIFFERENT EXAMPLES IN LATVIA;
- AT LEAST 2 (TWO) PILOT ACTIVITIES IMPLEMENTED IN OTHER REGIONS OF THE WATERMAN PROJECT;
- AT LEAST 2 (TWO) GOOD PRACTICE EXAMPLES IN EUROPE.



## 7. Possible sources of funding and financial gains for addressing stormwater and treated wastewater management in municipalities.

8. 8 FACE-TO-FACE EVENTS (IN EACH OF THE KURZEME REGION'S MUNICIPALITIES - 2 NATIONAL CITIES AND 6 MUNICIPALITIES) AND 1 ONLINE EVENT. THE CONTENT OF THE EVENT IS DEVELOPED IN COOPERATION WITH THE CONTRACTING AUTHORITY, INVOLVING LOCAL AUTHORITIES AND EXPERTS IN THE FIELD.

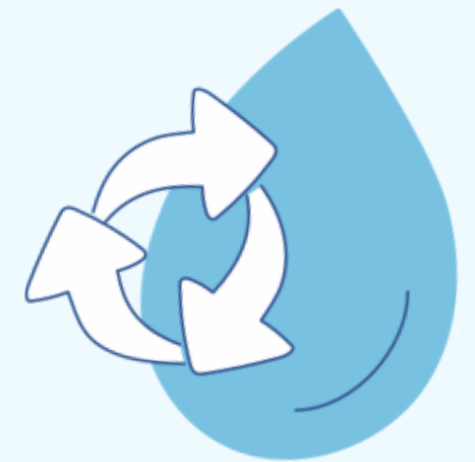
9. AFTER EACH EVENT, PREPARE AN ANALYTICAL PAPER ON THE WORKSHOP CONCLUSIONS. TO BE USED, SOCIAL MEDIA, NEWSPAPERS FOR PUBLIC INFORMATION.



**TECHNICAL SPECIFICATION DRAFTED**

**PROCUREMENT ANNOUNCED**

**IN POSITIVE CASE CONTRACT SIGNED IN  
NOVEMBER**



# 20%

Detailed work plan  
and timetable  
Research on  
rainwater reuse in  
Kurzeme Region  
municipalities

● 4 weeks

# 30%

Research  
and events

● 16 weeks

# 50%

Final version  
of the  
Research

● 44 weeks

AIJA NEILANDE

+371 26147139

AIJA.NEILANDE@KURZEMESREGIONS.LV



KURZEME  
PLANNING  
REGION

## 2nd Peer-review session

# Kurzeme: regional model strategy

Kurzeme Planning Region

Saldus Municipality

3 April 2025



KURZEME PLANING REGION

# WATER REUSE STRATEGY FOR KURZEME REGION

---

Liepāja, Latvia, 3.04.2025



**RESEARCH ON  
RAINWATER REUSE IN  
KURZEME REGION  
MUNICIPALITIES**

---

# What has been done

---

PROCUREMENT MADE (3 TIMES)

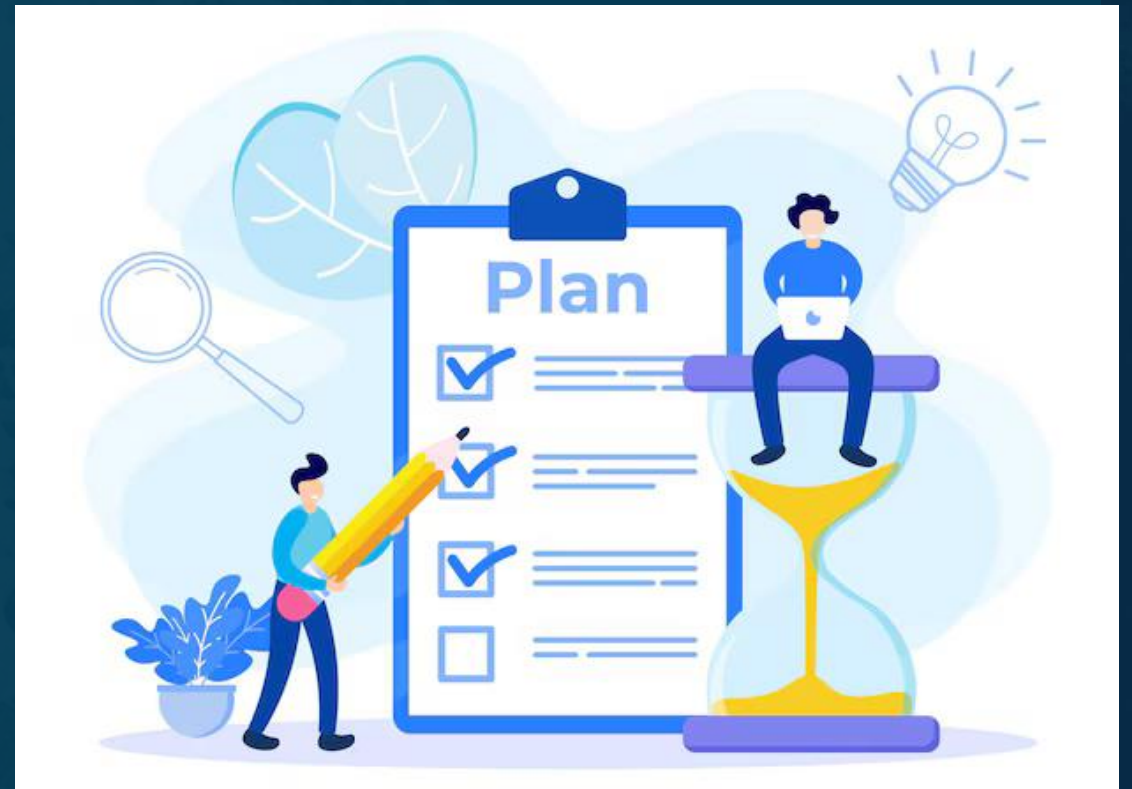
CONTRACT SIGNED - 6TH JANUARY 2025, SIA "D-0", J. KONDRATENKO

TIME SCHEDULE:

No.	Deliverable	Deadline for submission	Payment %
1	<b>Detailed work plan and timeline</b> of Research on rainwater reuse in Kurzeme region municipalities	Within 4 (four) weeks from the date of signing the contract <i>2.02.2024</i>	20%
2	<b>First draft</b> of the Research on rainwater reuse in Kurzeme region municipalities	Within 24 (twenty-four) weeks from the date of signing the contract <i>25.06.2024</i>	30%
3	<b>Final version</b> of Research on rainwater reuse in Kurzeme region municipalities	Within 44 (forty-four) weeks from the date of signing the contract <i>11/11.2024</i>	50%

# THE FIRST DELIVERABLE HAS BEEN RECEIVED AND THE PAYMENT HAS BEEN MADE( 3121,80€)

- Detailed work plan and timeline of Research on rainwater reuse in Kurzeme region municipalities



# RESEARCH ON RAINWATER REUSE IN KURZEME REGION MUNICIPALITIES

## content

### 1. INTRODUCTION

This section will describe the relevance, objective, focus, and content of the study.

It will include general information on sustainable rainwater management and rainwater reuse as part of it, identifying both passive and active rainwater reuse practices.

### 2. EXISTING DEVELOPMENTS AND FUTURE PROJECTIONS IN THE KURZEME PLANNING REGION

2.2.1 Climate Scenario for Latvia and the Kurzeme Planning Region

2.2.2 Rainfall precipitation Pattern Analysis and Future Projections

2.2.3 Quality Requirements for Rainwater Use in the Public and Economic Sectors

2.2.4 Examples of Sustainable Rainwater Management

# RESEARCH ON RAINwater reuse in Kurzeme region municipalities content

## 3. OVERVIEW OF SUSTAINABLE RAINWATER MANAGEMENT POLICY AND REGULATORY FRAMEWORK

3.1 Overview of National Development Planning Documents and Legislation

3.2 Overview of EU Legislation

## 4. OVERVIEW OF EXISTING AND PLANNED RAINWATER MANAGEMENT MEASURES

4.1 Dienvidkurzeme County Municipality; 4.2 Kuldīga County Municipality  
4.3 Liepāja City Municipality; 4.4 Ventspils City Municipality;  
4.5 Ventspils County Municipality ; 4.6 Saldus County Municipality  
4.7 Talsi County Municipality; 4.8 Tukums County Municipality

- Rainwater Management Measures in the **Sustainable Development Strategy**
- Rainwater Management Measures in the Sustainable Development **Programme**
- Rainwater Management Measures / **Projects in the Investment Plan**
- **Implemented Projects** Related to Rainwater Management

# RESEARCH ON RAINwater reuse in Kurzeme region municipalities content

## 5. AREAS IN THE KURZEME PLANNING REGION AFFECTED BY SHORT-TERM FLOODING CAUSED BY HEAVY RAINFALL

This section will summarise information on the areas in the Kurzeme Planning Region affected by flooding, based on publicly available information, studies carried out by municipalities, and collected data.

## 6. EXAMPLES OF RAINWATER USE

6.1 Examples of Rainwater Use in Saldus County Municipality

6.2 Examples of Rainwater Use in Latvia

6.3 Examples of Rainwater Use in Other WaterMan Project Model Regions

6.4 Examples of Rainwater Use in Europe

# Research on rainwater reuse in Kurzeme region municipalities content

## 7. POTENTIAL FUNDING SOURCES AND FINANCIAL BENEFITS FOR ADDRESSING RAINWATER AND TREATED WASTEWATER MANAGEMENT ISSUES IN MUNICIPALITIES REGARDING PASSIVE AND ACTIVE RAINWATER REUSE

This section will summarise national, EU, and non-governmental funding sources available during the 2021–2027 EU programming period, such as:

- Latvian Environmental Protection Fund;
- EU Structural Funds and Latvian Operational Programmes and funding for specific support objectives;
- Interreg Latvia–Estonia Cross-Border Cooperation Programme;
- Interreg Latvia–Lithuania Cross-Border Cooperation Programme;
- Interreg Baltic Sea Region Programme;
- Interreg Central Baltic Programme;
- Horizon Europe;
- European Bauhaus Initiative;
- and others.

TO FIND OUT THE WATER CONSUMPTION HABITS, NEEDS,  
ATTITUDES TOWARDS WATER RECYCLING OF PEOPLE LIVING IN THE  
REGION

# Additional Tasks for the Expert within the Framework of Awareness Raising

## **Organize Workshops to Raise Public Awareness on Rainwater Reuse in the Municipalities of the Kurzeme Region**

The workshops will provide information on the impact of climate change on the municipalities of the Kurzeme region, present good practice examples, and, in cooperation with participants, gather information on municipal planning documents and ideas for rainwater reuse.

- Tukums County Municipality, Ventspils City Municipality – **20 March**;
- Dienvidkurzeme County Municipality, Saldus County Municipality – 10 April;
- Kuldīga County Municipality, Talsi County Municipality – 8 May;
- Liepāja City Municipality, Ventspils County Municipality – 29 May.

**After each workshop, an analytical article will be prepared, summarising the main conclusions of the workshop.** The article will be used for informing the public via social media and newspapers.

In addition, one online seminar is planned, June 2025, prior to the submission of the first draft of the study.

IN PARALLEL, THE KURZEME PLANNING REGION TEAM IS WORKING ON

### **Communication strategy**

**Model strategy/awareness raising: PR & media support for campaign, design & production of materials, etc.**

**35 000€ - Procurement required**

### **Objective**

To increase public awareness and promote actions related to the reuse of rainwater and treated wastewater, highlighting the importance of water as a valuable and limited resource.

### **Tasks**

- To raise public awareness of the sustainable use of water and its significance;
- To promote attitude change and the development of long-term habits among various target groups;
- To encourage the application of water reuse solutions in everyday practice.

## COMMUNICATION STRATEGY

### **Target Audience**

The campaign may define and propose its own view of target audience segments; however, it must include the following mandatory groups:

- 1.Manufacturers and Businesses – industrial and service sectors in Kurzeme and throughout Latvia.
- 2.Farmers – agricultural enterprises and agro-industry representatives who use large amounts of water.
- 3.Households – private house owners and residents of multi-apartment buildings.
- 4.Latvian Population – the general public.

### **Territorial Coverage**

- Primary focus – Kurzeme, with special attention to the region's residents and sectors.
- General audience – the entire territory of Latvia, ensuring the dissemination of information to the wider public and promoting the sustainable use of water resources at the national level.

## COMMUNICATION STRATEGY

Within the framework of the campaign, detailed messages must be developed, covering the following key topics:

- **Water as a Valuable Resource** – why should it be conserved and what are the global trends?
- **Rainwater Collection and Use** – how to effectively use rainwater in daily life (for garden irrigation, cleaning, technical purposes)?
  - **Wastewater Treatment and Reuse** – what technologies and solutions are available?
  - **Economic and Environmental Benefits** – how does water conservation help reduce costs and promote sustainability?
  - **The Role and Opportunities of Municipalities** – how can local municipalities manage rainwater and wastewater more effectively?

### Campaign Implementation Period and Duration

- The campaign should be implemented during **the summer months of 2025**, when public interest in the responsible use of water is likely to be higher.

# COMMUNICATION STRATEGY

## Campaign Format and Channels

A detailed description of the campaign and a creative concept must be developed, outlining specific activities aimed at reaching the target audiences.

The campaign must ensure the **involvement of experts and industry specialists** to guarantee high-quality and reliable content.

**It is recommended to include the following elements:**

- **Social media** – informative and educational visual materials (videos, infographics, stories). The contractor will also have access to the Kurzeme Planning Region's social media channels – Facebook, Instagram, X, LinkedIn, and YouTube.
- **Media activities** – articles and features in Latvian media (online portals, TV, radio).
- **Digital advertising campaign** – social media ads, Google Ads, media banners.
- **Online and printed materials** – informative resources on rainwater and treated wastewater reuse.
- **Collaboration with influencers** – social media content creators who can reach a wide audience and increase the visibility of the campaign.
- **Collaboration with industry specialists** – experts providing reliable and professional information on the sustainable use of water resources.
- **Events and other creative activities** – formats ensuring effective engagement of the target audience.

A justification must be provided for the selected channels and formats, explaining their effectiveness in reaching the target audiences.

The campaign implementers will have access to all materials and the Toolbox developed within the WaterMan project, which may be useful for effective campaign planning and implementation.

-



KURZEME  
PLANNING  
REGION

AIJA NEILANDE

+371 26147139

AIJA.NEILANDE@KURZEMESREGIONS.LV



## 2<sup>nd</sup> Peer & expert review session: Recommendations & conclusions

- Specific framing: one way to look at it – “you have less water” – doesn’t work in Latvia. But the other way – demand goes up – because of the economic development, may work. So perhaps – reconsider if you don’t want to include industrial reuse in the strategy. Then you could have the meeting with the interested “concrete production” company and address them and find interesting action plan for them.
- Integrate the strategy with the PR campaign. If your campaign is broad, but the strategy is only touching some aspects (is narrow), then the stakeholders may be confused. Also – think on how you will measure the effectiveness of the PR campaign, and what impact do you want to achieve.
- Dialogue with municipalities: you need to ensure in the strategy that the feedback from the municipalities from the planned dialogue meetings is included and addressed. It is a good idea to describe use cases for specific municipalities – like you have it now. At the same time, keep the general parts of the strategy concise – so that the total length of the strategy is encouraging to read it in full.

## Final review

# Water recycling strategy for Kurzeme Region / LV Kurzeme Planning Region Saldus Municipality

26 September 2025



# Study overview

## Goal of the study:

- To promote the use of rainwater in the Kurzeme Planning Region by applying circular economy principles and reducing water pollution.

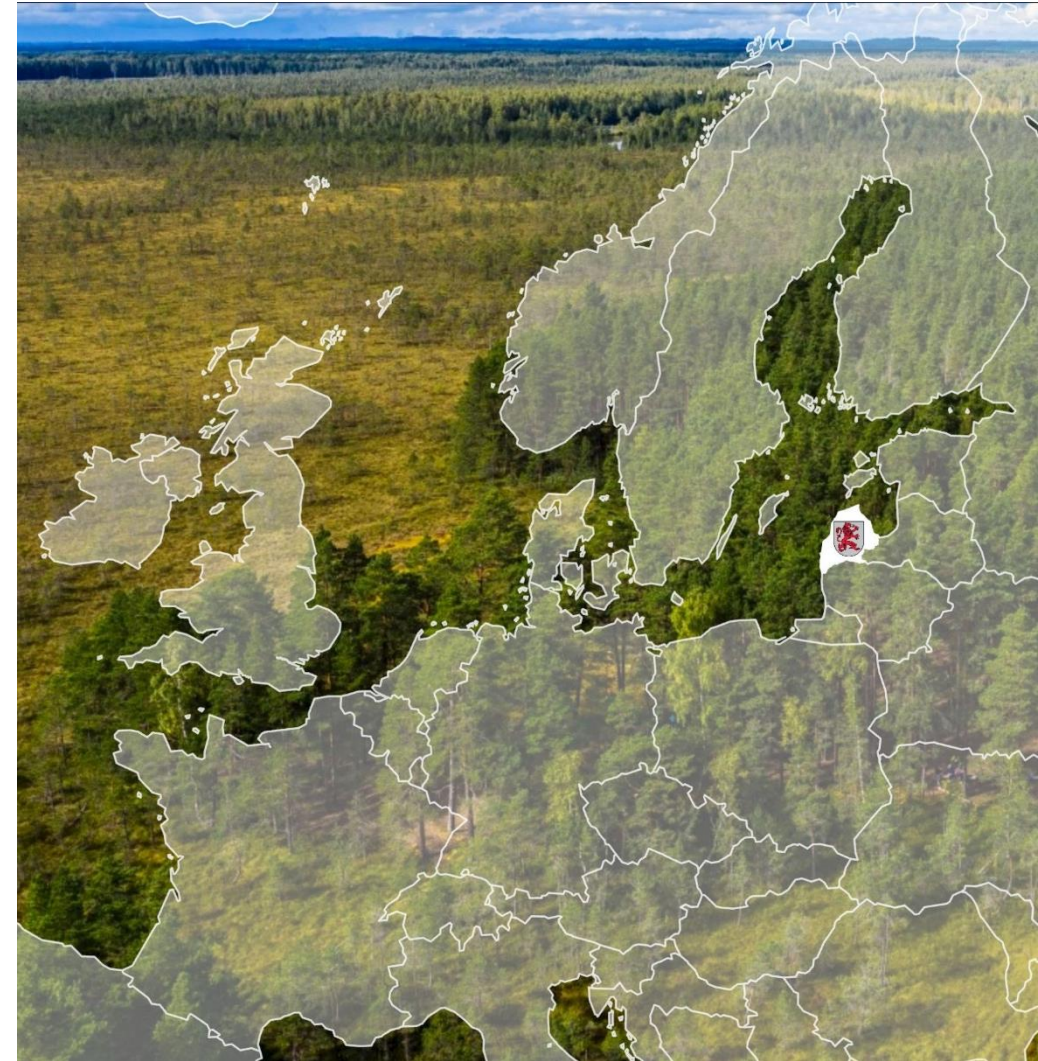
## Problem addressed:

- The average annual precipitation in Latvia has increased by 4.4% from 1961-1990 to 1991-2020; by the end of the century annual precipitation is expected to increase by over 18%.
- At present, rainwater management in the municipalities of Kurzeme is mainly focused on diverting it into combined sewer systems, while reuse has not yet been widely integrated into everyday practice.
- There is potential to improve infrastructure, legal regulations, and public awareness, so that rainwater becomes a valuable resource for both the public sector and the economy.



## Regional context and background

- The Kurzeme region is located in the western part of Latvia. It borders the Baltic Sea to the west and Lithuania to the south, while connecting with the Zemgale and Riga regions to the east.
- Kurzeme covers 24.85% of Latvia's territory and is home to more than 270,000 residents.
- The region comprises eight municipalities: six counties (Dienvidkurzeme, Kuldīga, Saldus, Talsi, Tukums, and Ventspils) as well as two state cities (Liepāja and Ventspils).



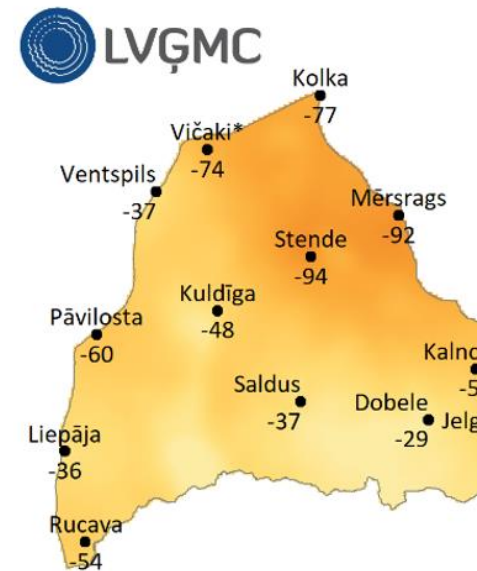
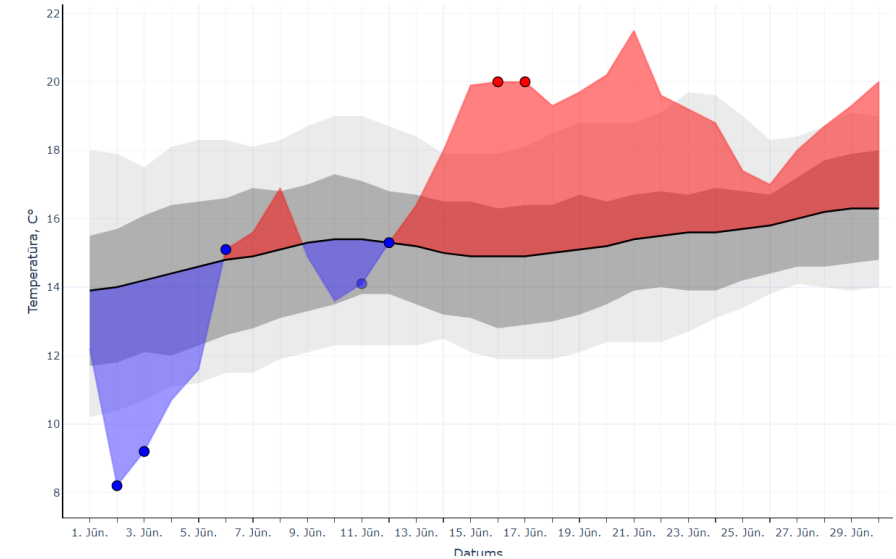
## Regional context and background

- The Kurzeme Planning Region is a subordinate public entity operating under the supervision of the Ministry of Smart Planning and Regional Development.
- The region's economy is driven by manufacturing, logistics, renewable energy, and tourism. Kurzeme's access to wind, solar, biomass, and geothermal resources supports the growth of green energy and innovation.
- Kurzeme is an active partner in international cooperation, particularly in the Baltic Sea region. Through diverse local and international projects, the Kurzeme Planning Region actively supports sustainable development, innovation, mobility, and social inclusion across the region.



## Regional context and background

- Pluvial flooding, drought instances in the recent decade and resulting policy measures
- Sustainable development and climate adaptation goals included in strategic regional and local development planning documents
  - Sustainable development strategies
  - Sustainable development programmes
  - Investment plans
  - Municipal climate and energy plans
- Climate adaptation objectives rather general than specific, a drawback addressed in the study



## Development process

- Lead by Kurzeme planning region
- Meetings with municipalities and stakeholders
- Communication campaign for water reuse
- January – November 2025



## Core components

- Most significant past climate trends and future forecasts in the Kurzeme Planning Region.
- Development planning documents and legal acts regulating sustainable rainwater management, including rainwater reuse in national and EU development planning documents and legislation.
- Best practice summary and inspiring examples
- Information on existing and planned rainwater management measures in strategic planning documents and investment plans
- Proposals for inclusion of specific rainwater reuse and nature-based solutions in specific projects
- Possible funding sources and financial benefits for addressing rainwater in municipalities



## Core components

### Event organisation and public awareness:

- Eight in-person events (one in each of the region's municipalities) and one online event. The specific content of each event is developed in cooperation with the municipalities and sector experts.
- After each event, analytical article prepared summarizing the conclusions of the workshop, spread in social media, newspapers, and for informing the public.



## Expected impact

### Policy goals:

- *Latvian Environmental Policy Guidelines 2021-2027* emphasize the need to shift from traditional grey infrastructure to sustainable, nature-based solutions, in order to reduce flood risk and ensure water quality.
- *Latvian National Plan for Adaptation to Climate Change until 2030* highlights the necessity of adapting urban areas to the increasing frequency and intensity of extreme precipitation. It foresees measures to develop and promote green infrastructure solutions for reducing flood risks and limiting surface runoff.

### Environmental impact:

- Decreased surface runoff and reduced flood risk, leading to improved climate resilience.
- Improved water quality via natural filtration systems.
- Resource conservation by reusing rainwater and conserving freshwater resources.



## Expected impact

### Economic impact:

- Less strain on traditional grey infrastructure drainage/sewer systems reduces maintenance and expansion costs for municipalities.
- Lower flood-related damages translates into avoided costs.
- New investment opportunities in green infrastructure engineering and construction.

### Social impact:

- Improved quality of life, health, and wellbeing, as a result of cleaner urban environments and greener public spaces.
- Public awareness and community involvement. Educational events and pilot projects increase public understanding of climate adaptation and foster collaboration between residents, municipalities, and sector experts.



# Implementation considerations – enabling conditions

## Institutional & governance:

- Clear regulatory framework, including national and municipal policies that define standards for rainwater reuse and green infrastructure.
- Integration of stormwater reuse principles into urban development, land-use planning, and municipal strategies.
- Inter-municipal cooperation through shared learning and joint initiatives.

## Technical & infrastructure:

- Reliable hydrological, climatic, and land-use data to guide design and prioritization.
- Coordination with existing grey systems to ensure efficient integration.

## Social & educational:

- Public awareness campaigns to build understanding of the value of rainwater as a resource.
- Involving communities, NGOs, schools, and businesses in the planning process.
- Training of municipal staff, engineers, and planners on nature-based and circular economy solutions.



## Implementation considerations – potential challenges

Strengths	Weaknesses	Opportunities	Threats
<ul style="list-style-type: none"> <li>• Alignment with EU and Latvian climate adaptation and environmental policy priorities.</li> <li>• Growing municipal interest in climate resilience and circular economy.</li> <li>• Potential for knowledge transfer from WaterMan and other EU-funded pilot projects.</li> </ul>	<ul style="list-style-type: none"> <li>• Limited existing experience with rainwater reuse in Latvian municipalities.</li> <li>• Infrastructure still focused on traditional grey drainage systems.</li> <li>• Gaps in technical capacity within local governments.</li> <li>• Short-term municipal budget planning not suited for long-term resilience measures.</li> <li>• Relatively expensive measures</li> </ul>	<ul style="list-style-type: none"> <li>• EU Green Deal, Cohesion Policy, and Climate Adaptation funds can support financing.</li> <li>• Increasing public awareness of climate change impacts and rising interest in green infrastructure.</li> <li>• Knowledge-sharing and replication from successful European best practices.</li> </ul>	<ul style="list-style-type: none"> <li>• Climate change impacts could outpace adaptation efforts.</li> <li>• Existing laws may favour traditional grey infrastructure and not incentivize reuse.</li> <li>• Competing municipal priorities may limit funding allocation.</li> <li>• Fragmented governance responsibilities may slow implementation.</li> </ul>

## Adaptability

- The study can be implemented in regional / local strategies, plans and regulation on custom basis
- Study update recommended in 3-5 years



# Relation to other strategic documents

## National level:

- Aligns with the *Climate Change Adaptation Plan until 2030*, which emphasizes adapting urban areas to extreme precipitation.
- Supports the *Environmental Policy Guidelines 2021-2027*, which call for a shift from grey to green infrastructure.

## Regional level:

- Aligns with the *Kurzeme Planning Region Development Programme 2021-2027* by promoting integrated management for sustainable regional development.
- Contributes to the *Kurzeme Sustainable Development Strategy 2030* priority on “Integrated Governance.”

## Municipal level:

- Provides actionable tools and recommendations that municipalities can integrate into development programmes, investment plans, and land-use strategies.
- Bridges the gap between policy ambitions (resilience, sustainability) and practical local measures (rain gardens, rainwater harvesting).



## Final reflections

- Rainwater use needs to be considered in a broader socio-economic context
- Solutions with multiple functions/benefits are the best
  - Recreation
  - Firefighting
  - Microclimate management
- Rainwater reservoirs need not be artificial, the use of groundwater
- How demanding do we want to be to water quality?



**Helpdesk / Contacts for further information:**

Jurijs Kondratenko

Aija Neilande

[yurikondratenko@inbox.lv](mailto:yurikondratenko@inbox.lv)

[aija.neilande@kurzemesregions.lv](mailto:aija.neilande@kurzemesregions.lv)

+371 28349594

+371 261 471 39

The „BSR Water Recycling Toolbox” was elaborated as part of the WaterMan project, which 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](http://eurobalt.org/WaterRecyclingToolbox)

[interreg-baltic.eu/project/waterman](http://interreg-baltic.eu/project/waterman)

WaterMan promotes a Baltic Sea Region-specific approach to water recycling, which makes use of the alternation of too much and too little water that has become typical for humid areas in the EU to strengthen the resilience of local water supply. Building on this approach, the project supports municipalities and water companies in adapting their water supply strategies.

*The contents of „BSR Water Recycling Toolbox” are the sole responsibility of the authors and can in no way be taken to reflect the views of the European Union, the Managing Authority or the Joint Secretariat of the Interreg Baltic Sea Region Programme.*

