Interreg Baltic Sea Region

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KURZEME PLANNING REGION

SUSTAINABLE WATERS WaterMan

The WaterMan project

Final draft of the regional water recycling strategy for Kurzeme Region (**Study for rain water reuse**)

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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

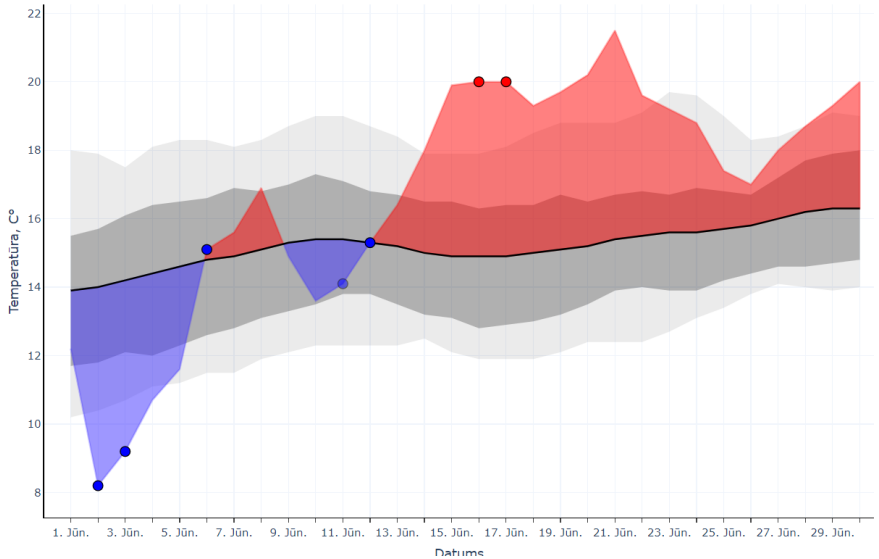
- The Kurzeme region is located in the western part of Latvia. It borders the Baltic Sea to the west and Lithuania to the south, while connecting with the Zemgale and Riga regions to the east.
- Kurzeme covers 24.85% of Latvia's territory and is home to more than 270,000 residents.
- The region comprises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

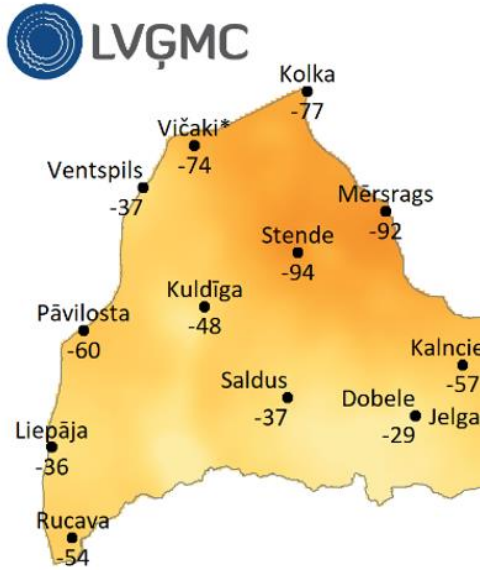
Regional context and background

- 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.

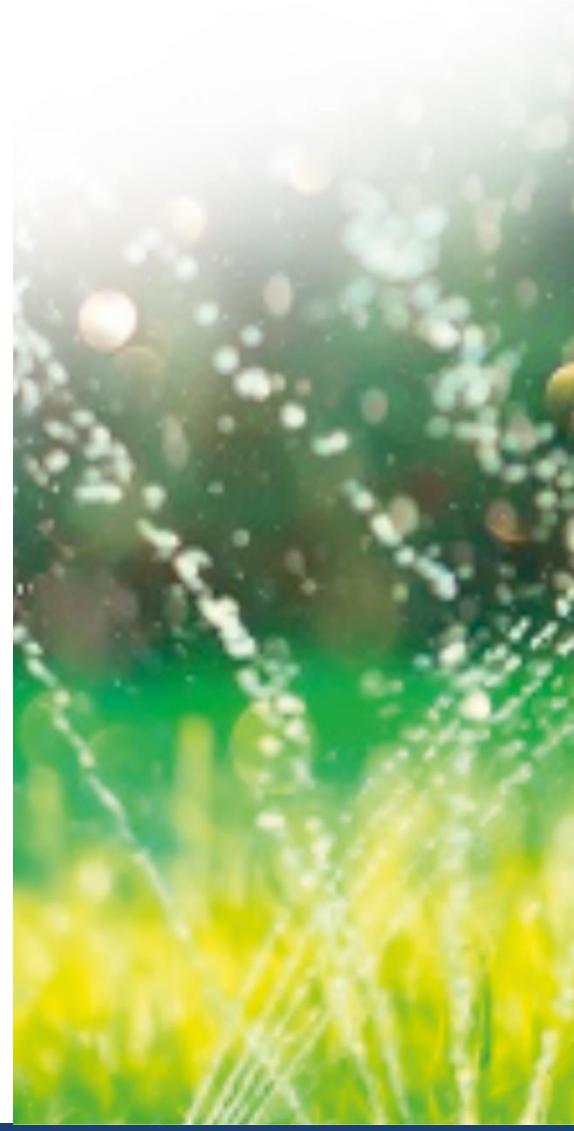
Expected impact

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
• Alignment with EU and Latvian climate adaptation and environmental policy priorities. • Growing municipal interest in climate resilience and circular economy. • Potential for knowledge transfer from WaterMan and other EU-funded pilot projects.	• Limited existing experience with rainwater reuse in Latvian municipalities. • Infrastructure still focused on traditional grey drainage systems. • Gaps in technical capacity within local governments. • Short-term municipal budget planning not suited for long-term resilience measures. • Relatively expensive measures	• EU Green Deal, Cohesion Policy, and Climate Adaptation funds can support financing. • Increasing public awareness of climate change impacts and rising interest in green infrastructure. • Knowledge-sharing and replication from successful European best practices.	• Climate change impacts could outpace adaptation efforts. • Existing laws may favour traditional grey infrastructure and not incentivize reuse. • Competing municipal priorities may limit funding allocation. • Fragmented governance responsibilities may slow implementation.

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?

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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
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.