Policy recommendations for implementing the integrated stormwater management in the Baltic Sea Region

City of Riga
City Development Department of the Riga City Council

NIKA KOTOVIČA, URBAN PLANNING EXPERT









... managing stormwater runoff and quality is a growing challenge for any city in the Baltic Sea Region

Solution – a holistic, comprehensive, and knowledge-based approach to stormwater management



Platform on Integrated Water Cooperation



Duration:

1 October 2018 to 30 September 2021



19



Associated partners

Funding:
Interreg BSR
Programme
2014–2020



Budget:

EUR 1,1 million

Countries from Baltic Sea Region

www.bsrwater.eu

BSR WATER Contributing Project – iWater



Read more: iWater project

New Approach to Stormwater Management





Integrated: alternative solutions combined, stakeholders working together

Tailored: "case-by-case" multidisciplinary solutions

Integrated Stormwater Management

The Integrated Stormwater Management (ISWM) is a comprehensive approach to stormwater management:

- Instead of a narrow focus on a single problem, the ISWM undertakes a holistic stormwater management approach: studying the characteristics of specific sites and areas, understanding the relevant impacts, and tailoring a comprehensive array of tools to individual situations
- Success requires the integration of the ISWM into the urban development processes of the city at all levels, from urban planning to operation and maintenance

Integrated Stormwater Management

With an ISWM system a city can:

- achieve its goals of water quality protection and flood mitigation
- design for not just the worst-case scenario, but also for average and minimal events to minimize the impact of stormwater on neighbouring lands
- determine what solutions and infrastructure together with their interconnections are required to manage different stormwater runoff
- ensure that stormwater is treated as a resource that enhances our cities

Read more: <u>iWater project</u>





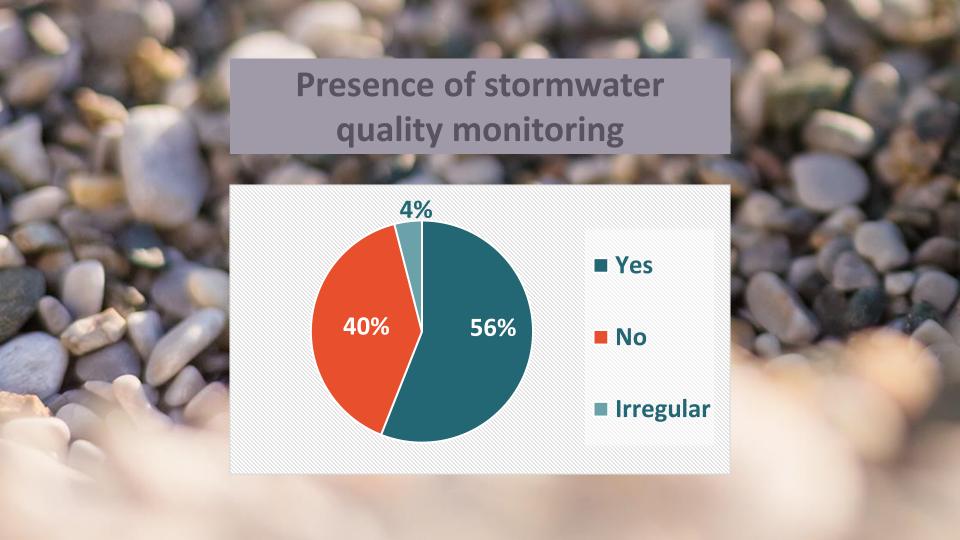


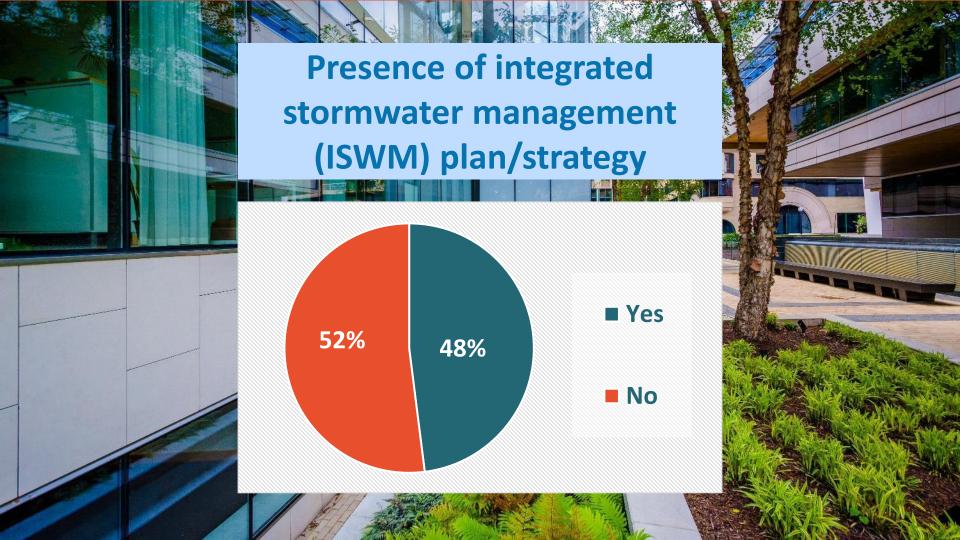


Survey on Stormwater Governance and Practices: Key Findings

Presence of climate change adaptation plan **15** 14 12 10 10 Yes No







Main Challenges and Barriers

Cities have indicated the following main problems with the existing stormwater system and barriers concerning improving it:

- lack of capacity in existing systems and poor technical conditions
- retrofitting challenging in densely built areas
- stormwater treatment insufficient, presence of foul connections
- absence of regular water quality monitoring
- lack of collaboration among responsible city structures
- low priority of the stormwater management on political agenda
- lack of knowledge, financing, human resources...



Recommendations at the EU and BSR levels

Guidance, requirements and recommendations should be prepared to strive for a common regional approach

- Guidance documents prepared on planning and creation of multi-functional and multibenefit urban spaces
- Specified criteria for transport and urban revitalisation projects under EU funds to include multi-functional and integrated green infrastructure
- Outlined incentives' approach emphasising the benefits of the ISWM
- Dedicated policy area for integrated solutions in the EU Strategy for the Baltic Sea Region

NATIONAL

Recommendations at the national level

General principles and priorities of sustainable stormwater management, including the integrated approach to it, should be defined and included into the legislation

- Specified integrated approach to stormwater management, ISWM principles included in the regulation on spatial planning
- Stormwater treatment mandated in legislation related to environmental permitting, spatial planning and planning and design of stormwater systems
- Specified treatment and water quality requirements based on local specifics
- National level guidance documents developed for the local implementation



Recommendations at the local level

Local stormwater management programme, plan and guidance need to be developed for taking into use by the city, developers, landowners

- Regulation (roles, responsibilities, decision making procedure etc.) for the ISWM and the local task force present
- Local requirements for emission limit values and monitoring of stormwater quality, based on the water status of the receiving water
- Local financial incentives and building control tools



Conclusions

In most cities of the BSR, there is awareness of and work on the ISWM concepts:

- many cities are applying catchment basin planning principles concerning stormwater and have developed catchment plans for at least some of the catchment basins in their territory
- many cities have stormwater management programmes/plans and guidelines for sustainable stormwater management
- in most cities there is a fee for stormwater management
- in most cities stormwater quality is monitored, however, frequency varies

Only in several cities ISWM is an overarching strategic approach!

Conclusions

- New policies, binding targets, and generous incentives are needed for transition to sustainable stormwater management
- Further promotion and prioritization of on-site stormwater treatment approaches that improve urban environment, contribute to urban ecosystem services, and thus, have crucial role in increasing cities' resilience in the context of the climate change









