

## **Integrated Storm Water Management (iWater)**

Programme Priority: P2 Sustainable use of common resources

Programme Specific Objective: 2.3. Better urban planning in the Central Baltic region

Sub-programme: Central Baltic

Duration: 01.12.2015 - 31.08.2018

Total funding: 2.347.930 EUR

ERDF funding: 1.829.115 EUR ERDF

Project Summary:

The project iWater aims at improving urban planning by developing integrated storm water management in Central Baltic cities. As the Baltic Sea region is estimated to face more frequent and heavier rainfalls, the current planning and management practices have proven to be weak in meeting these challenges. Thus, the project idea is to create higher quality, cleaner and safer urban environment and increase urban sustainability.

To reach its goals, the project develops guidelines and tools for an Integrated Storm Water Management and introduces the practices into urban planning process. For example, the project provides a platform for science-practice collaboration, aiming to find and develop common management methods, guidelines, tools and solutions for an Integrated Storm Water Management. The project establishes local support groups within all partner cities enabling municipalities to develop their solutions in close collaboration with local stakeholders and various community interest groups.

Consequently, local management practices are developed into an Integrated Storm Water Management approach which will link all the urban planning processes and stakeholders. In practice, the project partner cities adopt new programmes and approximately 35 other cities are trained to use developed methods in the region. In addition, a student competition is organised to find and develop new and innovative solutions for 7 partner cities, which result in construction or investment plans. Thus, urban planning is taken to a higher level by developing, localizing and piloting new tools in the Central Baltic region.

## **Map of Partners**

### **Partners**

Lead Partner

### **R?gas dome**

Country: LV

[www.rdpad.lv/en/](http://www.rdpad.lv/en/) [1]

**Partner budget:** 323.871 EUR

**Amount of ERDF funding:** 275.291 EUR ERDF

Project Partners

## **Jelgavas pils?tas dome**

**Country:** LV

<http://www.jelgava.lv> [2]

**Partner budget:** 110.500 EUR

**Amount of ERDF funding:** 93.925 EUR ERDF

## **Söderhamns kommun**

**Country:** SE

[www.soderhamn.se](http://www.soderhamn.se) [3]

**Partner budget:** 309.950 EUR

**Amount of ERDF funding:** 232.463 EUR ERDF

## **Gävle kommun**

**Country:** SE

[www.gavle.se](http://www.gavle.se) [4]

**Partner budget:** 329.885 EUR

**Amount of ERDF funding:** 247.414 EUR ERDF

## **Tartu Linnavalitsus**

**Country:** EE

[www.tartu.ee](http://www.tartu.ee) [5]

**Partner budget:** 247.300 EUR

**Amount of ERDF funding:** 210.205 EUR ERDF

## **Helsingin kaupunki**

**Country:** FI

<http://www.hel.fi/www/ymk/en> [6]

**Partner budget:** 278.363 EUR

**Amount of ERDF funding:** 208.772 EUR ERDF

## **Turun kaupunki**

**Country:** FI

[www.turku.fi](http://www.turku.fi) [7]

**Partner budget:** 292.550 EUR

**Amount of ERDF funding:** 219.413 EUR ERDF

## **Itämeren kaupunkien liiton ympäristösihteeristö c/o Turun kaupunki**

**Country:** FI

<http://www.ubc-environment.net/> [8]

**Partner budget:** 262.042 EUR

**Amount of ERDF funding:** 196.531 EUR ERDF

## **Aalto-korkeakoulusäätiö**

**Country:** FI

<http://www.aalto.fi/en/> [9]

**Partner budget:** 193.469 EUR

**Amount of ERDF funding:** 145.102 EUR ERDF

## **Results**

### **Expected results**

### **Achieved results**

Project result in category - Urban area covered with integrated urban management

## **iWater developed a city-specific integrated stormwater management strategy**

Integrated Stormwater Management (iWater) project improves the urban planning in the cities of the Baltic Sea region through development of comprehensive stormwater management system which is integrated into the urban development processes of the city at all levels.

In result, each of 7 partner cities (Helsinki, Turku, Tartu, Jelgava, Riga, Söderhamn and Gävle) developed its own tailor-made solution – a city-specific stormwater management strategy. Each city also established an institutional model for stormwater management.

Project was implemented applying *science-practice* collaboration model developed by the Aalto University. The university helped to ensure the close cooperation between academic field and the practitioners when the project outputs were being prepared, when actions/strategies were planned in the pilot sites.

Since integrated storm management is relatively new subject in some BSR cities and knowledge, experience level are quite different, capacity **building activities** played an important role in the project. International, national capacity building workshops other events were organised where knowledge was presented, exchanged, project outputs were discussed and shared. 3 iWater summer schools (61 students from 17 countries/16 universities) were organised. In result 19 creative, innovative and multi-functional stormwater management solutions for 7 pilot sites of 7 iWater partner cities.

The project developed the following practical tools and guidelines which can be useful for the municipalities, urban planners, architects etc. outside iWater partnership:

### **Integrated Storm Water Management System Guidelines**

The main purpose of the guidelines is to help other cities establish a comprehensive storm-water management approach and integrate it into the urban development processes at all levels. The guidelines provide very concrete tips, tools how to plan and implement the integrated storm water management in the municipality from scratch through cycle (planning, implementation and monitoring).

### **Green Area Factor excel tool**

Green Factor is a practical and user-friendly excel-based tool for urban planning. It ensures sufficient green infrastructure when building new lots in a dense urban environment. The Green Factor is calculated as the ratio of the scored green area to lot area. The target level for the lot can be achieved flexibly by the garden designer by selecting some of the 39 green elements, such as planted and maintained vegetation or various run-off water solutions, when designing the lot.

This tool was developed for the first time in 1997 in Berlin - "Biotope Area Factor1". Later on similar tools were created/adapted based on Berlin also in other cities, for example Stockholm, Malm, Seattle and Toronto. Similar tool was developed also in Helsinki as a part of the EU-funded "Climate-proof city – tools for planning" (ILKKA) project in 2014. Based on the experiences with the tool's usage and due to the increasing importance of stormwater management, an updated version of this tool was to be developed within the iWater project.

The Tool has been adopted and piloted in partner cities during the project: Riga, Jelgava, Tartu (Jaamamõisa area), Gävle, Söderhamn and Turku, and finally incorporated in the land-use planning process

### **Integrated Stormwater Management Toolbox**

This toolbox introduces the most commonly used approaches and concrete tools for urban stormwater management. It gathers useful information for those interested in, or working with, the design, planning or management of urban water, in particular, landscape architects, architects, as well as urban planners and designers. The information is in an easily adaptable form, including further reading for those who wish to dive deeper. Furthermore, the toolbox focuses on approaches that are applicable or developed for northern climate conditions.

## At a glance

- The iWater project designed stormwater planning tools and approaches and developed Integrated Stormwater Management concept that supports sustainable urban planning and create higher quality and more resilient urban environments in the Baltic Sea region.

## Files



[Integrated Storm Water Management dissemination material](#) [11]



[Helsinki Green Area Factor Tool - User manual for the Excel-based tool](#) [12]

## Tags

[Urban Development](#) [14]

[Water management](#) [15]

[Institutional cooperation and cooperation networks](#) [16]

## Project Visibility

### Social media links

[Webpage](#) [13]

[Lead partner webpage \(rdpad.lv - description, news, In Latvian\)](#) [17]

**Source URL:**<https://database.centralbaltic.eu/printview/26>

#### Links

[1] <http://www.rdpad.lv/en/> [2] <http://www.jelgava.lv> [3] <http://www.soderhamn.se> [4] <http://www.gavle.se> [5] <http://www.tartu.ee> [6] <http://www.hel.fi/www/ymk/en> [7] <http://www.turku.fi> [8] <http://www.ubc-environment.net/> [9] <http://www.aalto.fi/en/> [10] <https://database.centralbaltic.eu/project/26> [11] [https://database.centralbaltic.eu/sites/default/files/ISWM\\_Dissemination\\_material\\_English\\_0.pdf](https://database.centralbaltic.eu/sites/default/files/ISWM_Dissemination_material_English_0.pdf) [12] [https://database.centralbaltic.eu/sites/default/files/helsinki\\_green\\_factor\\_tool\\_-\\_user\\_manual\\_final.pdf](https://database.centralbaltic.eu/sites/default/files/helsinki_green_factor_tool_-_user_manual_final.pdf) [13] <http://www.integratedstormwater.eu/> [14] <https://database.centralbaltic.eu/tags/urban-development> [15] <https://database.centralbaltic.eu/tags/water-management> [16] <https://database.centralbaltic.eu/tags/institutional-cooperation-and-cooperation-networks> [17] <https://www.rdpad.lv/portfolio/integreta-lietusudens-parvaldiba-iwater/>