

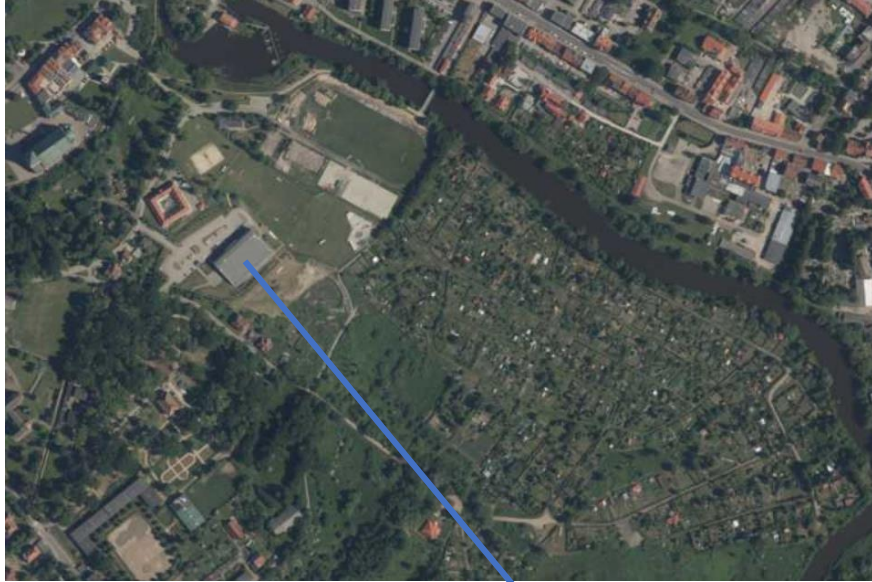
The WaterMan project

Reuse of public swimming pool water

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Braniewo Municipality





[Source: geoportai.gov.pl]

Location:

Łąkowa 1 Street, **Braniewo**, Poland



Municipal Sports Center „Zatoka”

Recreation & Rehabilitation Complex
„Healthy Braniewo”

Infrastructure:

• **Indoor pool complex:**

- sport swimming pool
- leisure pool with wading pool
- SPA bath

• **Wellness facilities:**

- sauna rooms (x2)
- gym
- massage parlour
- rest zone
- tanning beds



2.3 Pilot measure / reuse of treated water: Reuse of public swimming pool water



30 m³/d

water supply
from the municipal network



[Source: Braniewo Municipal Waterworks Ltd.]

*Before implementation of
the WaterMan pilot solution:*

1. **Wastewater** from showers and toilets and pool water **overflow** are combined within the Basin and discharged through a **common sewage system** - *directing the pool water overflow to the pilot requires reconstruction of the sewage system in the swimming pool building*
2. **Filter rinsing wastewater** is discharged from the swimming pool building by a **separate sanitary collector** - *it can be easily directed to the pilot*

wastewater
from showers and toilets



15 m³/d

pool water
overflow



4÷5 m³/d

filter rinsing wastewater



10÷11 m³/d



[Source: Braniewo Municipal Waterworks Ltd.]

discharge into the sewage system (100%):
30 m³/d

2.3 Pilot measure / reuse of treated water: Reuse of public swimming pool water



30 m³/d

water supply
from the municipal network



*After implementation of
the WaterMan pilot solution:*

Reuse of treated wastewater:

- flushing the sewer system in Braniewo: ap. 3 m³/d (all year round)
- watering urban greenery (vegetation period)
- watering of plants by residents (vegetation period)
- (in the process of arrangements)

wastewater
from showers and toilets



15 m³/d

pool water
overflow



4÷5 m³/d

filter rinsing wastewater



4÷5 m³/d

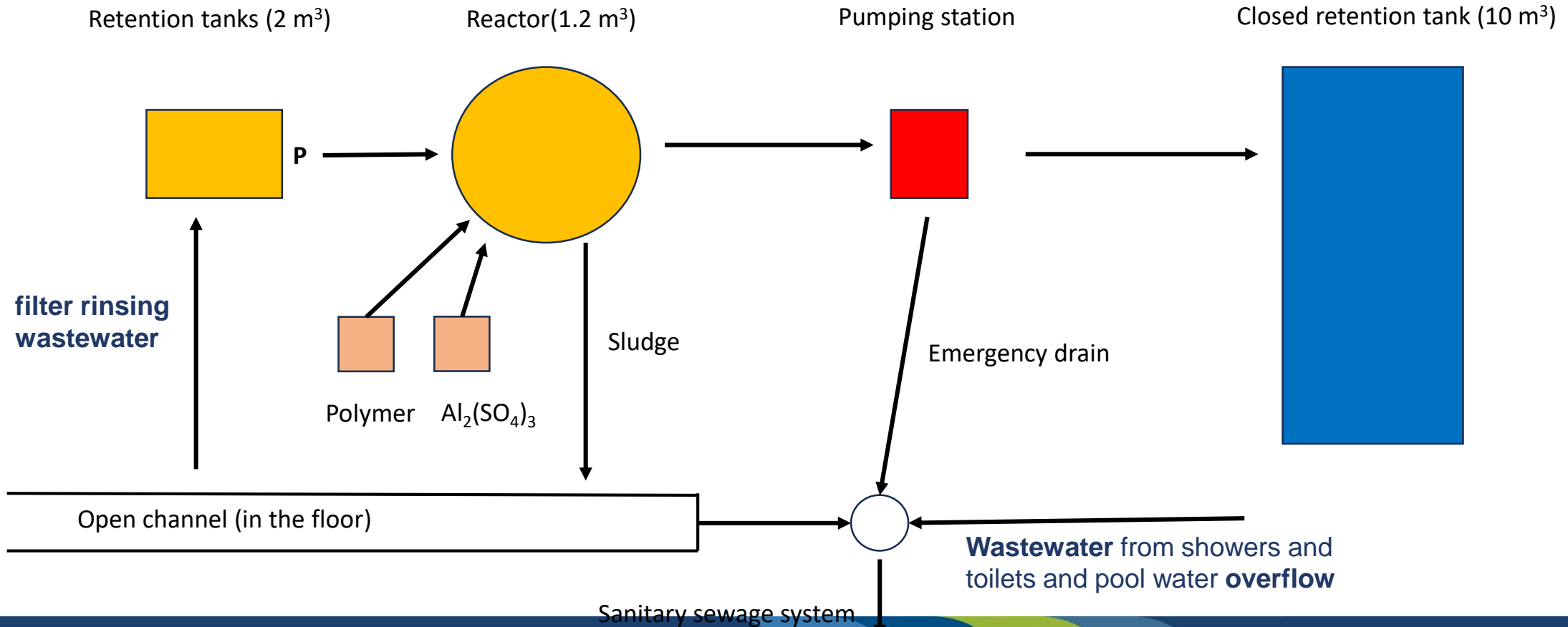


discharge into the sewage system

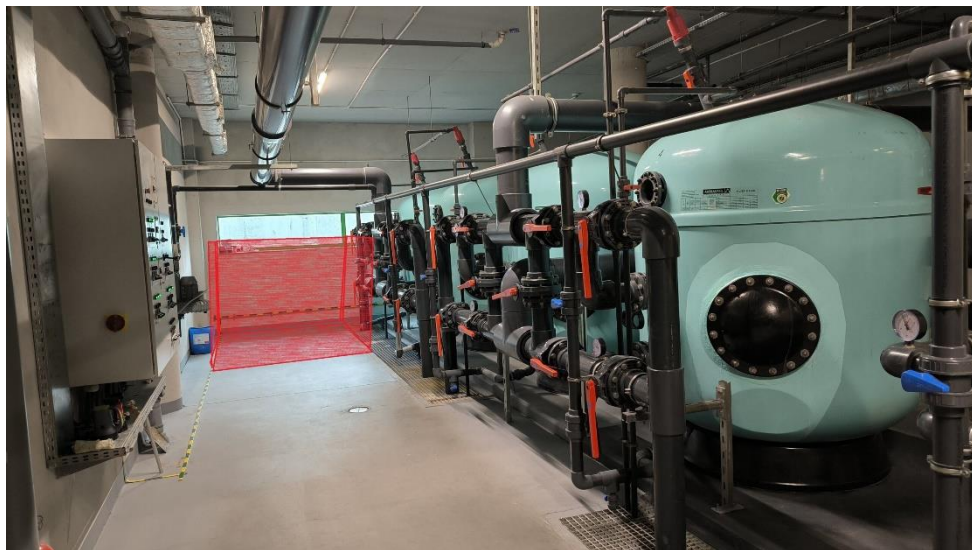
- ✓ 40-50% reduction in filter rinsing wastewater
- ✓ 15% reduction in sewage discharge
- ✓ 15% savings on tap water

2.3 Pilot measure / reuse of treated water: Reuse of public swimming pool water

Swimming pool water reuse technology – Proposed wastewater treatment system

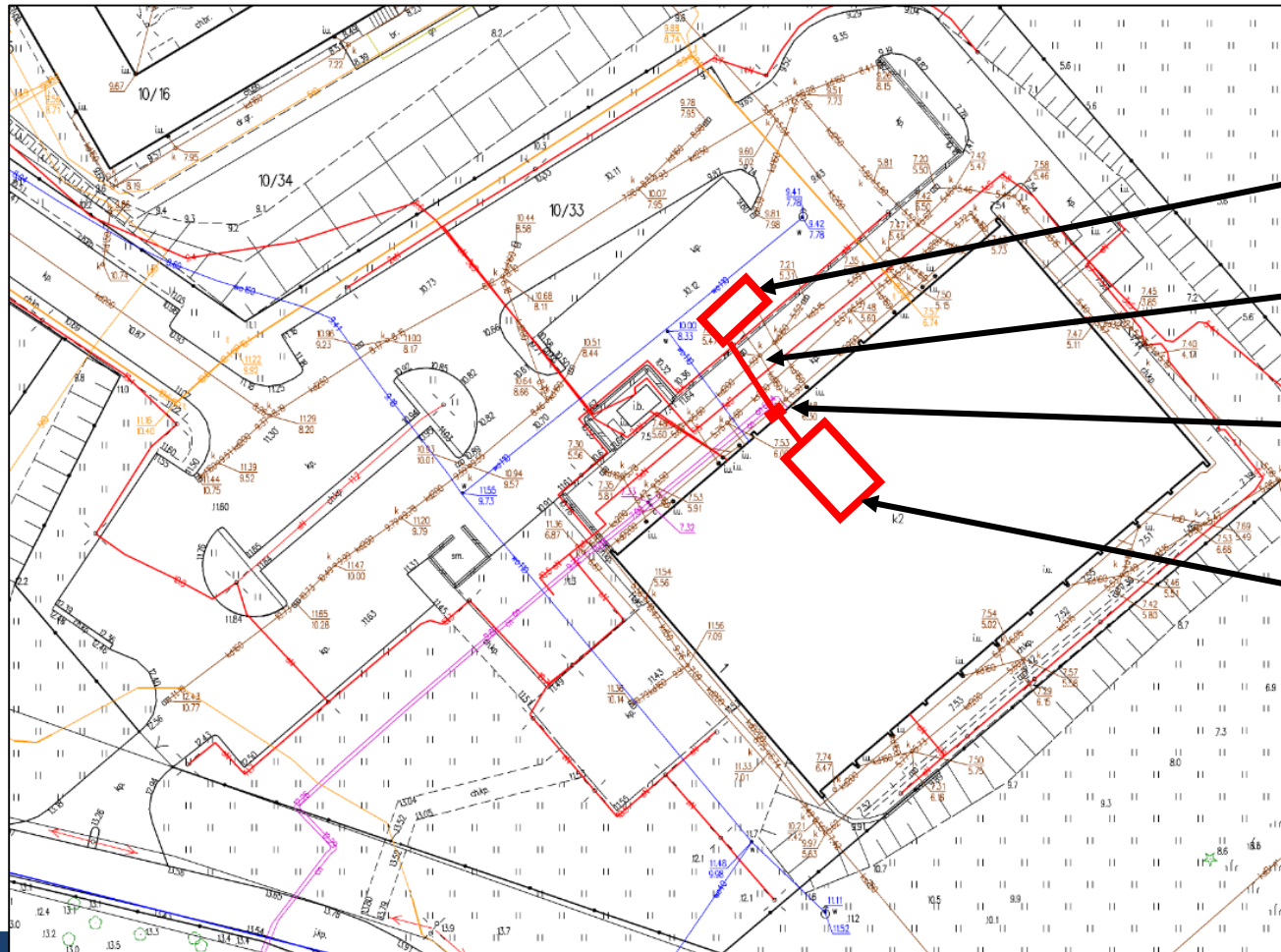


2.3 Pilot measure / reuse of treated water: Reuse of public swimming pool water



2.3 Pilot measure / reuse of treated water: Reuse of public swimming pool water

Swimming pool water reuse technology – pilot location



Closed retention tank (in the parking)

New section of sanitary sewage system

Pumping station

Pilot instalation (in the filter room)

[source: geopot.al.gov.pl]

Design documentation for the pilot



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PROJEKT ZAGOSPODAROWANIA TERENU

BUDOWA ZBIORNIKA ŚCIEKÓW OCZYSZCZONYCH Z NIEZBEDNĄ INFRASTRUKTURĄ

PODZIEMNĄ DLA POTRZEB BASENU MIEJSKIEGO

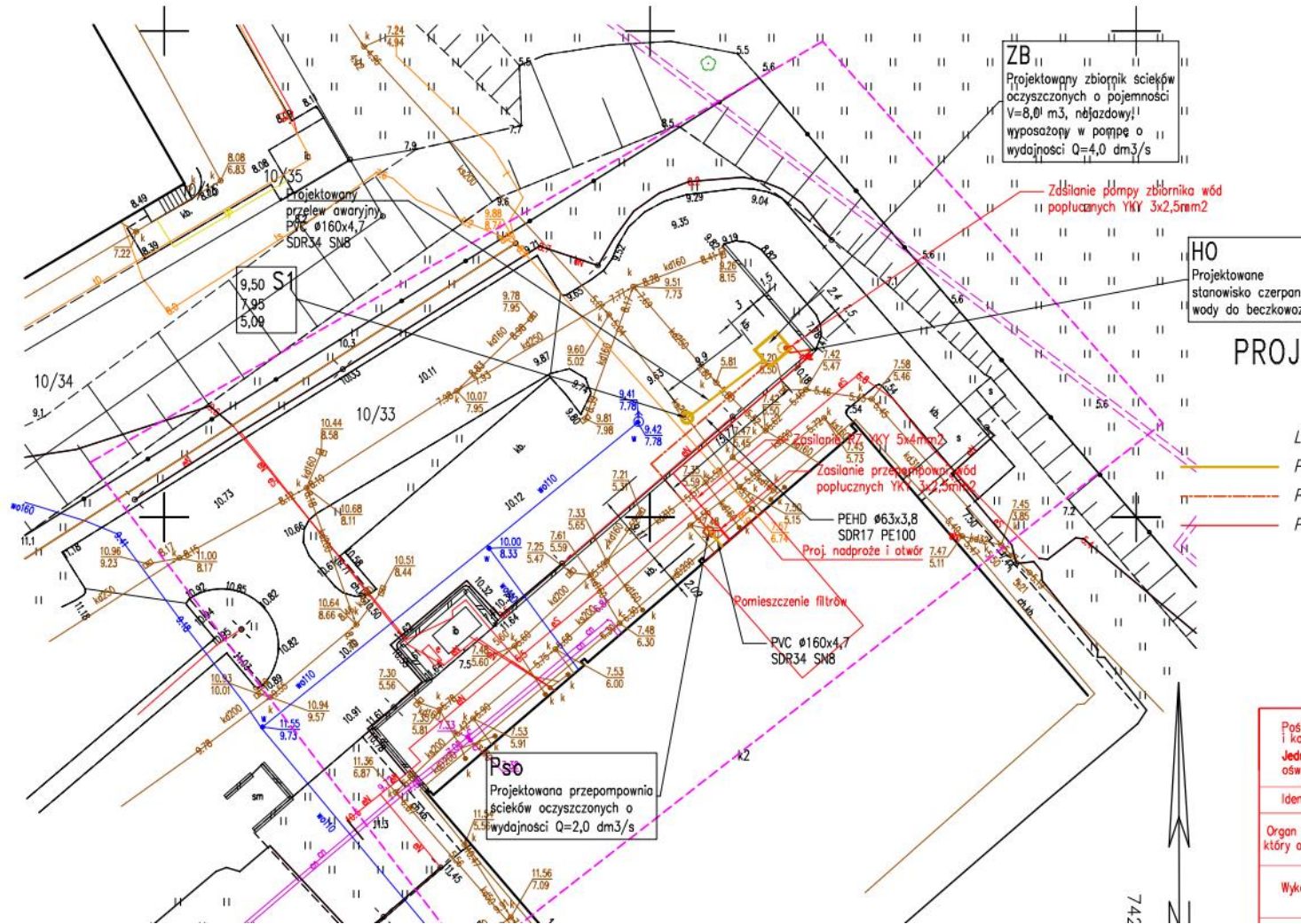
OBIEKT	Budynek użyteczności publicznej Basen Miejski
ADRES INWESTYCJI	ul. Łąkowa 1, 14-500 Braniewo
NUMER DZIAŁKI, OBRĘB	dz. nr 10/33, obręb 8, Braniewo
JEDNOSTKA EWIDENCYJNA	280201_1.0008.10/33
INWESTOR	Urząd Miasta Braniewa
ADRES INWESTORA	ul. Kościuszki 111, 14-500 Braniewo
KATEGORIA OBIEKTU	XXVI - sieci, jak: elektroenergetyczne, telekomunikacyjne, gazowe, ciepłownicze, wodociągowe, kanalizacyjne oraz rurociągi przesyłowe
DATA OPRACOWANIA	Styczeń 2025

In early 2025, a comprehensive pilot project was prepared.

It covered the following sectors:

- construction,
- sanitary,
- electrical.

Design documentation for the pilot



BRANŻA:	SANITARNA		
FAZA:	PROJEKT BUDOWLANY		
TEMAT:	PROJEKT ZAGOSPODAROWANIA TERENU		
AUTORZY OPRACOWANIA		PODPIS	Data sprawdzeni
PROJEKTOWAŁ: NUMER UPR.:	mgr inż. Paweł Lewandowski WAM/0148/PWOS/14		Sycczen 2025 r
SPRAWDZIŁ: NUMER UPR.:	mgr inż. Jacek Zielinski POM/0039/POOS/14		Sycczen 2025 r
Data sporządzenia: Sycczen 2025 r.	Skala: 1:500	Rys. nr.:	1

PROJEKT ZAGOSPODAROWANIA TERENU SKALA 1:500

Legenda

- Projektowane zewnętrzna instalacja grawitacyjna ścieków oczyszczonych
- Projektowana zewnętrzna instalacja ciśnieniowa ścieków oczyszczonych
- Projektowane kable energetyczne

Poświadczam, że niniejszy dokument został opracowany w wyniku prac geodezyjnych i kartograficznych, których rezultaty zawiera operat techniczny pozytywnie zweryfikowany. Jednocześnie informuję, że jestem świadomy odpowiedzialności karnej za złożenie fałszywego oświadczenia.	
Identyfikator zgłoszenia prac geodezyjnych	GKO.6640.733.2024
Organ Służby Geodezyjnej i Kartograficznej, który otrzymał zgłoszenie prac geodezyjnych	STAROSTA BRANIEWSKI
Wykonawca prac geodezyjnych	Przedsiębiorstwo Usług Geodezyjno- Kartograficznych "GEOMIERZ"

The assumed location of the elements constituting the pilot has been confirmed

Pilot - photos from the production



**Raw material storage
(filter rinsing wastewater)**

Design documentation for the pilot



Reaction tank



Design documentation for the pilot

Control system



Methods for evaluating water usage

- a) Water consumption meter reading;** "A flow meter on the tank and readings, e.g., once a week, showing how many cubic meters were taken for private use by external recipients. Readings are taken from valves and pump operating time
- b) Water usage log;**
- c) Contractor register (assessment of demand trends and volumes)."**



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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.

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.

