Interreg Baltic Sea Region

Co-funded by the European Union

SUSTAINABLE WATERS WaterMan

Overview of the pilot status

Utilisation of stormwater with the aid of “multi-dams”

Västervik Municipality

30 April 2025

WaterMan

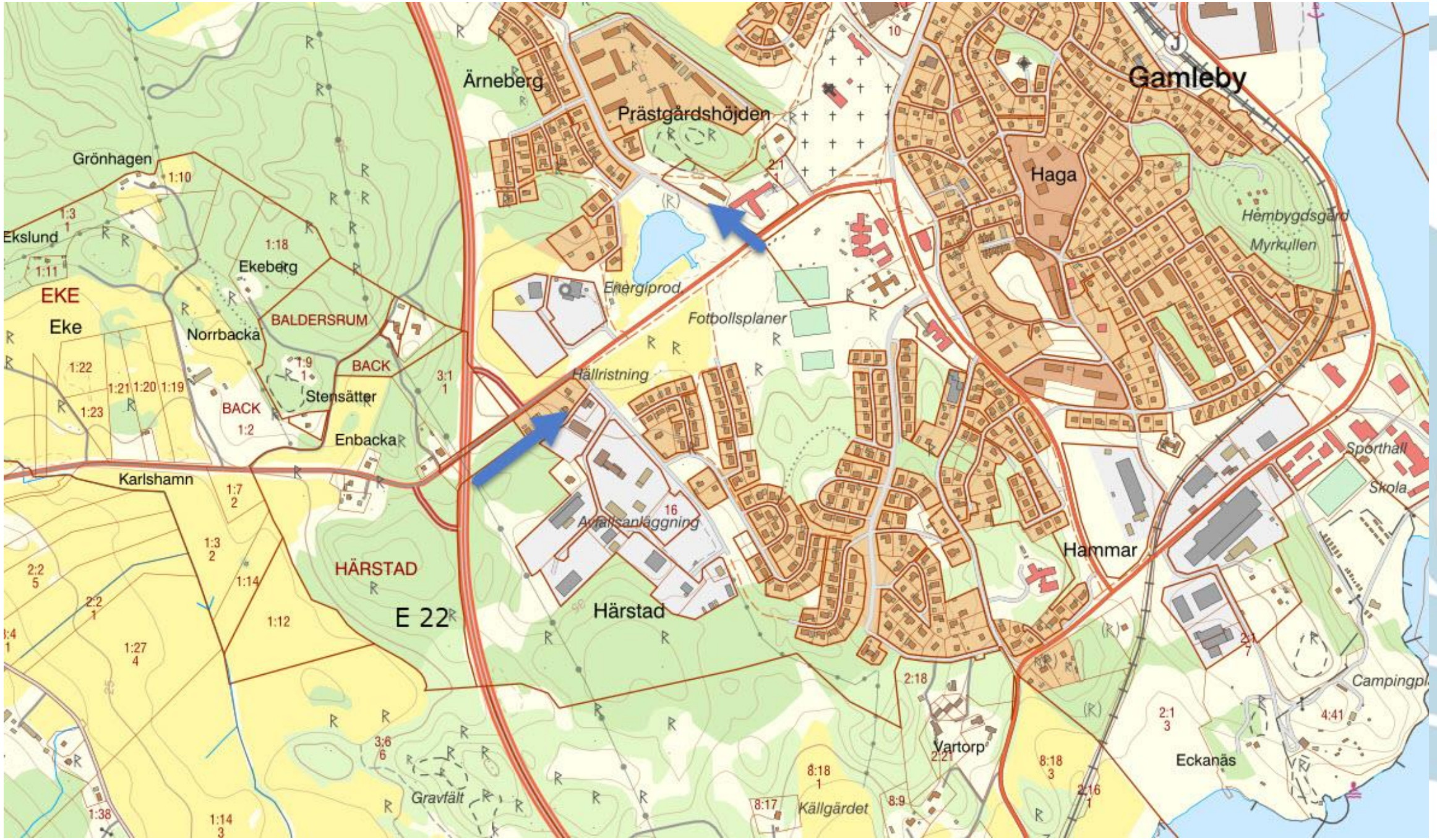
VÄSTERVIKS KOMMUN

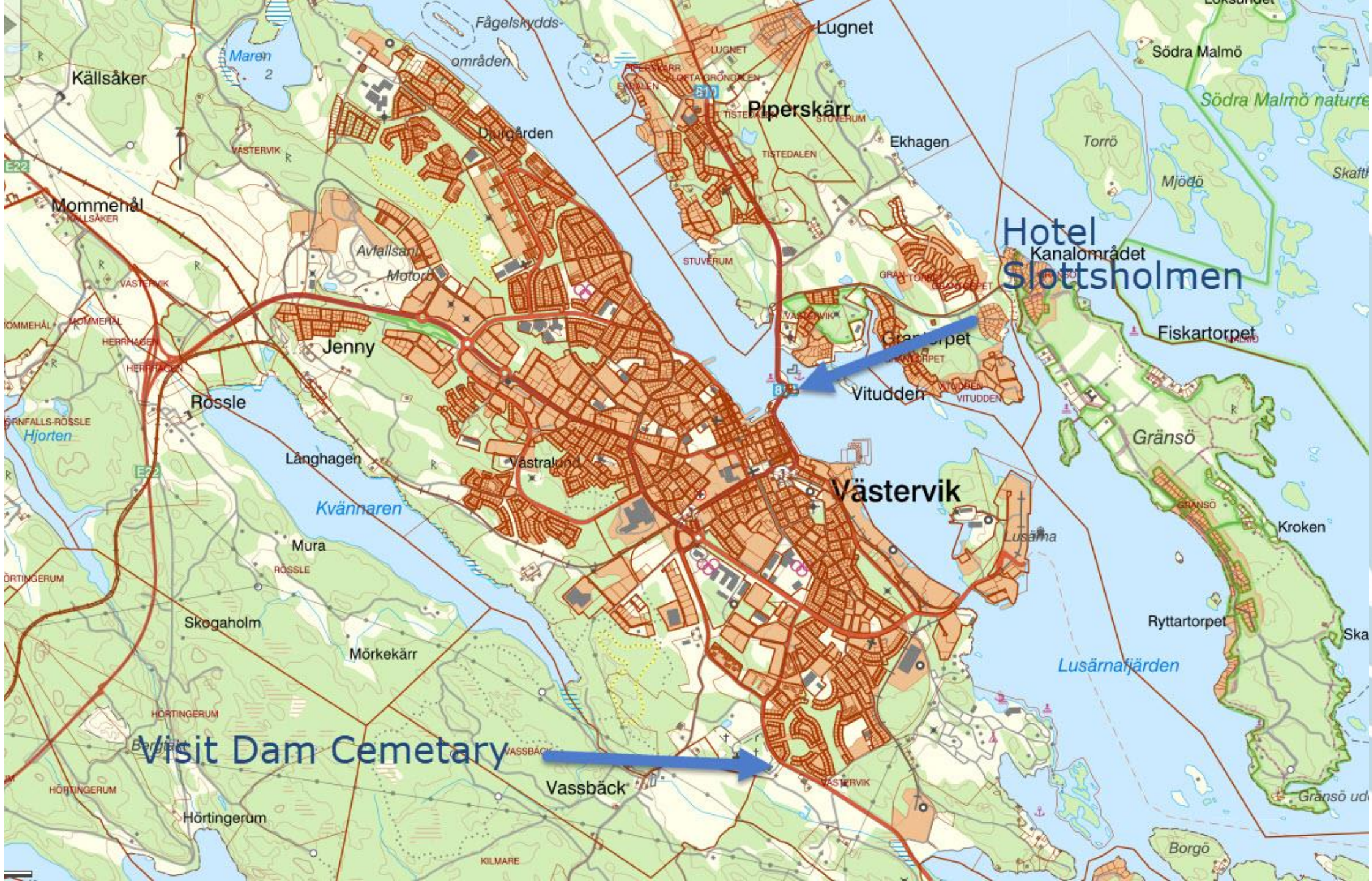
Västervik Municipality

Livskvalitet varje dag

Pilot area(s)


N
Yxnerum
Gusum
Berg
Valdemarsvik
Åtvidaberg
Gryt
Tryserum
Falerum
Ukna
Östra Ed
Kvädöfjärden
Edsbruk
Dalhem
Överum
St Åskö
Tyrn
Syrsan
Löftahammar
Gamleby
Storkläppen
Hallingeberg
Almvik
Knöldjupet
Lockneri
Törnsfall
Piperskärr
Västervik
Gunnebo
Spårö
Kungsgrundet
Ankarsrum
Västrum
Helgerum
Hjorted
Blankaholm
Tuna
Vena
Misterhult
Simpevarp
Stockholm
Uppsala
Västerås
Karlstad
Örebro
Nyköping
Linköping
Visby
Göteborg
Jönköping
Växjö
Kalmar
Halmstad
Karlskrona
Köpenhamn
Östersjön
1:500 000
0 5 10 20 Km


Ärneberg
Prästgårdshöjden
Gamleby
Haga
Hembygdsgård
Myrkullen
Grönhagen
Ekslund
Ekeberg
EKE
Eke
BALDERSRUM
Norrbacka
BACK
Stensätter
Enbacka
Energiprod
Fotbollsplaner
Hällristning
Karlshamn
HÄRSTAD
E 22
Avfallsanläggning
Härstad
Hammar
Sporthall
Skola
Vartorp
Eckanäs
Gravfält
Källgärdet


Hotel
Slottsholmen
Visit Dam Cemetary
Lugnet
Piperskärr
Ekhagen
Djurgården
Fågelskydds-
områden
Källsåker
Mommehål
Jenny
Rössle
Hjorten
Långhagen
Västralund
Kvännaren
Mura
Skogaholm
Mörkekärr
Hörtingerum
Vassbäck
Vitudden
Västervik
Kanalområdet
Fiskartorpet
Gränsö
Kroken
Lusärnafjärden
Ryttartorpet
Södra Malmö
Torrö
Mjödö
Borgö

Challenges in the pilot area

Climate changes

>>>>>>> Floods and droughts

- Nutrient leakage
- Sensitive archipelago environment
- Quality and quantity of drinking water

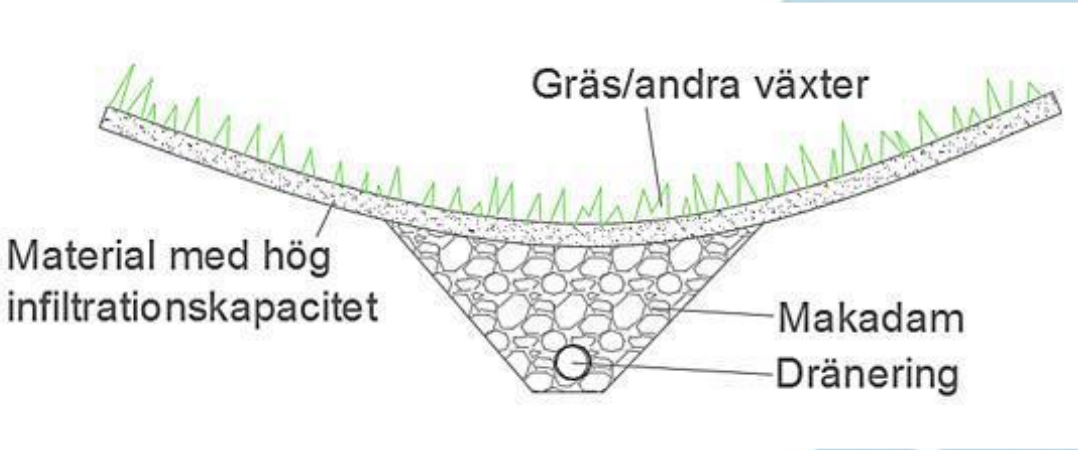
Solutions

>>> Climate Change Adaptations

Win- Win

Need for pretreatment

Open stormwater treatment
Ditches, vegetation, filter



Biochar

Biochar filters, pretreatment
- water purification,
- carbon storage
- Water delaying

Installation of biochar filter diches and use of in parks (tree planting) and recreation areas.

The multi-dam in Gamleby

Since 2020

- For water retention
- Reduces Stormwater problems
- For reducing nutrients
- Recirculation in football fields,
  For artificial snow
- Recreation for citizens

- No further treatment

Actions planned in Gamleby

Complementary measures to develop the multi-dam in Gamleby for water recirculation

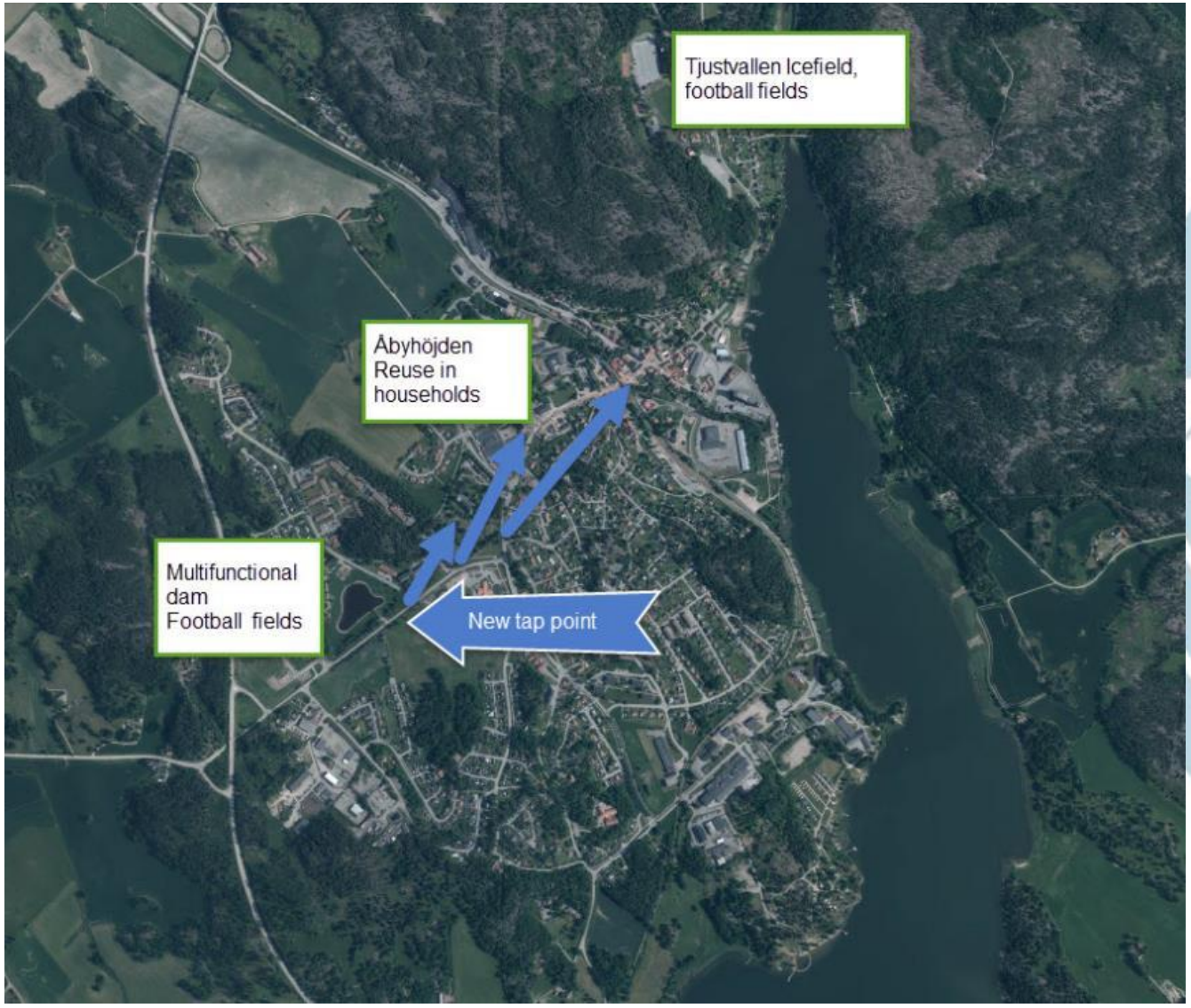
- Use for irrigation in a wider area
- Use in cemetery
- Station for technical water

Actions 2023-2024 in Gamleby

- Plan for maintenance
- Pump for circulation
- Use for irrigation in a larger area
- Plantations and trees in city, plantations cemetery

Gamleby

Complementary measures to develop the multi-dam in Gamleby



- Tap point for technical water

Actions in Västervik

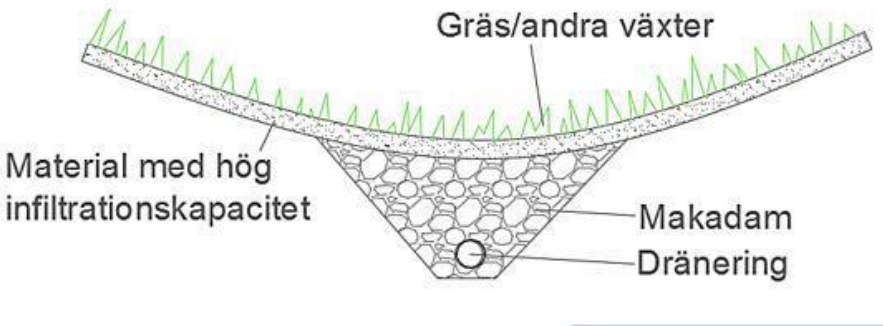
- Analyses to find the right places for multifunctional dam level 2.
- Prestudy

Development of existing dam (Örserum)

- Tap point (station for technical water)
- Stormwater to the irrigation system at the football fields
- Pre treatment Open stormwater treatment

Actions in Västervik

Pretreatment



From the construction

- Retention of 1500 kbm

Use of contained stormwater

- Not for private cultivation or agriculture
- Not from heavy polluted areas
- We are monitoring pollutants
- If business are interested it should be possible to use for cleaning etc.

Water reuse scheme

- Stormwater to multi-dam
- Natural treatment, sedimentation etc
- Level 1 for irrigation (and snow)
- Level 2 Business for cleaning etc

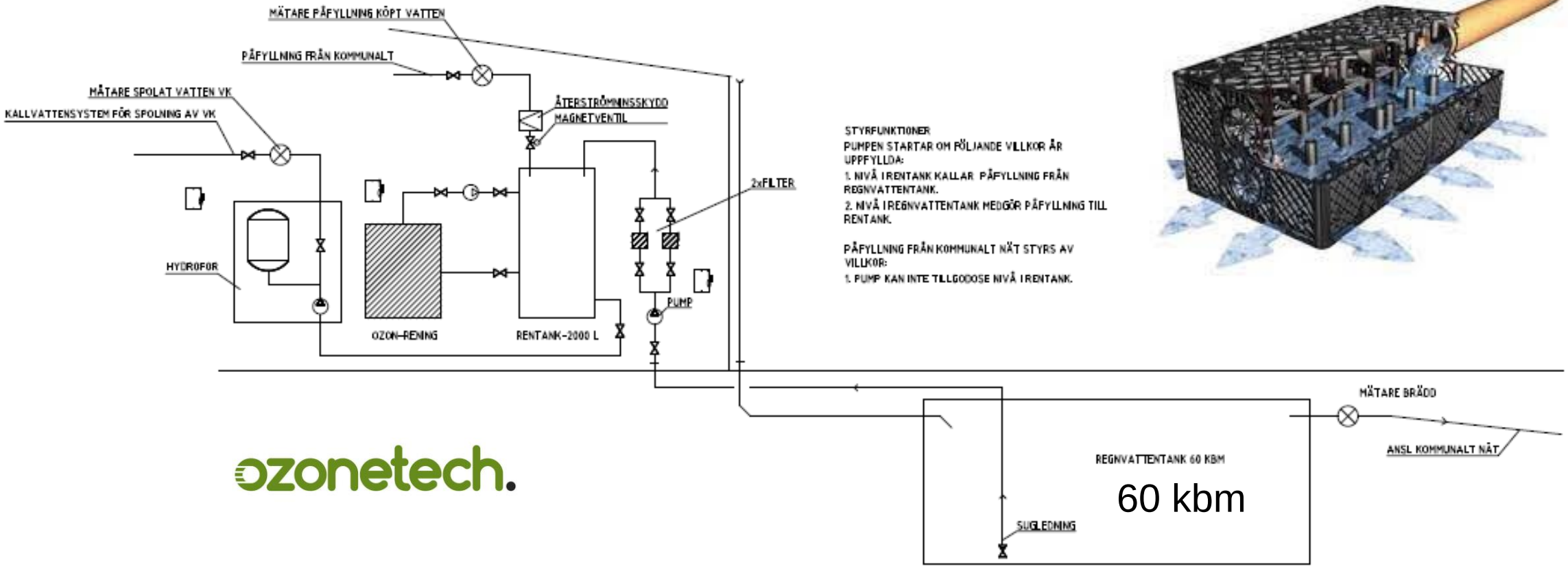
Users today

- Irrigation sportfields (and artificiell snow)
  Municipality, VBAB, Associations (sport) >10000 kbm

- Irrigation in parks - trees, plantations
  Municipality, Entrepreneurs, Cemeteries 1000 kbm

- Privat houses
- Use of collected water for toilet flushing
  Public housing company

Reuse of rainwater for flushing Åbyhöjden



ozonetech.

Methods for involving the users

- Contact with the users
  Motivation, Show appreciation
- Interviews
- Advice
- Evaluation
  Follow-up document

Meet the users on site

Focus group Irrigation sportfields and parks

- Mostly individuel contact
- Spreads information i the group
  Municipality, Maintenance parks, public housing company, involved associations (sports)

Potential users

- Use for fire water
  Municipality
- Housing companies
  Mostly irrigation but also rough cleaning
- Entrepreneurs
  Rough cleaning,in/outside, streets, roof, pipes
- Industries? District heating plants?
  Process water

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Access the „BSR Water Recycling Toolbox" here.
https://www.eurobalt.org/waterrecyclingtoolbox/

SUSTAINABLE WATERS
WaterMan

The „BSR Water Recycling Toolbox" was elaborated as part of the project "WaterMan - Promoting water reuse in the Baltic Sea Region through capacity building at local level", The project 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 region-specific approach to water recycling, which intends to use the alternation of too much and too little water that has become typical in the Baltic Sea Region to make the local water supply more resilient, and supports municipalities & water companies in adapting their strategies.