Municipality Söderhamn Sustainable storm water strategy

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# August 2014

















August 2017

September 2017































Adopted by the city council 2018-04-23









# objectives

### Improved water quality in the municipality's water

Water treatment will contribute to an improvement in the surface- and groundwater quality of the municipality so that good water status or equivalent water quality can be achieved in the municipality's entire water areas.

### Robust and climate safe water treatment

Daily water management should be adapted to changing climatic conditions with intensive precipitation and elevated water levels in lakes, coastal waters and streams.

## Create values in the municipality

Stormwater is part of the water cycle in the municipality and will be used as a resource for creating attractive and functional elements in planned urban environments.

## Environmental benefits and costeffectiveness in implementation

In order to achieve the goal of sustainable water management, the issue needs to be considered in all stages of the community building process in parallel with a systematic action plan. Other conditions are coordination and a well-defined division of responsibilities between the municipality and its water and sewage company.









# **Strategies**

**Increase infiltration** (The water penetrates the ground instead of draining on the surface)

**Increase interception** (Precipitation is caught by vegetation and evaporates instead of flowing of the ground)

Keep infiltrated rainfall on site and reduce runoff rate .(retention)

Minimize impermeable surfaces (and their interconnection)

Take advantage of natural runways for the water

Restore and improve the natural hydrological water cycle









## Improved water quality in our water

#### Areas in focus

In order to limit the release of hazardous substances via water, special attention shall be paid to places that are expected to generate water at higher concentrations of pollutants:

- Larger local traffic routes and roads
- Parking areas, especially larger
- Surfaces near surface water recipients
- Where the runoff is fast
- Snow storage locations
- Industrial properties with environmentally hazardous activities











#### Ytor i sarskilt lokus

För att begränsa utsläpp av miljöfarliga ämnen via dagvatten ska särskilt fokus läggas på platser som förväntas alstra dagvatten med högre föroreningskoncentrationer.

# Robust and climate adopted water treatment

Principles for achieving the objective

- Maximize the proportion of permeable surfaces and seek infiltration.
- Delay and handle storm water locally and on public land
- Be sure that dimension and elevation is enough for expected climate change
- Identify natural runways























# **Create values for the municipality**

#### Principles for achieving the objective

- Simple solutions for storm water management on land owned by the municiplity.
- Increase green area (take into account the green area factor (GAF))
- Use water for irrigation.
- Integrate open solutions in parks and in green spaces
- Create attractive climate-proofing elements in the urban environment

#### Areas in focus

Public owned land Large proportion of hard surfaces Parks and green spaces













Environmental benefits and costeffectiveness in implementation

#### Principles for achieving the goal

- The water issue needs to include a larger area than just the planned project area.
- The environmental benefits of the storm water solutions will be described and characterized by multifunctionality and assessed from an operational and maintenance perspective before the management phase.
- The objectives and principles of the daily water strategy should be reflected in the requirements that the municipality places on different actors in both planning and supervision.









