



City of Oslo



The Storm water Project in Oslo

From strategy to action

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The City of Oslo, Water and Sewerage Works

Agenda

1. The Storm water Strategy

- 2012-2014

2. The Action-plan

- 2014-2016



The Storm water Project

THE STORM WATER STRATEGY



Storm water Strategy

Organizing the work

Steering Committee
Management level

Participating agencies

- The Water and Sewerage Works (chair)
- The Agency for Urban Environment
- The Agency for Real Estate and Urban Renewal
- The Agency for Planning and Building Services

Working group
Executive worker level

Content

Part 1 – Survey

What is today's situation within the agencies?

What are their:

Responsibilities, goals, tools and needs regarding storm-water management

Part 2 – Discussion

- What should be our common goals and working-path

- Who should have the responsibility to ensure that the goals are met

Storm water Strategy

Our goals

Storm water management in Oslo shall use open and local solutions to:

- Meet climate change and minimize damage and disadvantages for people, buildings, property and infrastructure
- Safeguards the environment and good ecological and chemical state in water-bodies
- Utilize storm water as a resource in the city-landscape

Damage due to storm water and urban flooding shall be

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re

Storm water should be infiltrated, retained and utilized locally where it is possible, by using open and multifunctional retentions systems



Photo: Cecilie Bråthen, The Water and Sewerage Works

Storm water Strategy

Tool to reach our goals

Storm-Water management in three steps

1. **Small rain** – catch and infiltrate
2. **Medium rain** - collect and retain
3. **Large rain/cloudburst** – safe floodways



Storm water Strategy

Working method

Storm water shall be a natural
part of the city-planning

Co-operation across sectors

In new development:

- Implement storm water management at an early stage in the planning-process

be distinct

- Consider, of open areas

- Make sure a part of the public places

In built up areas:

- Determine what the challenges are in the different areas

- Consider what measures are best suited in the different areas and how they can be implemented

- Plan, prioritize and implement the chosen measures



Storm water Strategy

Responsibility

The Water and Sewerage Works shall have

the coordinating sector-responsibility

for holistic storm water management

The responsibility entails:

- To coordinate the municipality in its work
- To ensure that a holistic approach is met
- To guide and inform
- To ensure that decisions are made at the right level
- To ensure that the municipality has the right and necessary means to carry out the intentions in the strategy



The Storm water Project

THE ACTION-PLAN

 Oslo kommune

Prosjektbeskrivelse

For eksempel på grunn av...

For eksempel parker, plasser etc

For eksempel åpne

Tung og infiltrerer

Mer enn 20mm

Tynnk og fordreng

Mer enn 40mm

Slått bygge flomveier

- åpne tekk
- regnet
- trær
- grøfter
- permeable flater og dekker

- regnet
- grøfter
- areal som taker miljøhøyt overvannsmåte
- åpne fordrøyningsbasseng

- åpne bekker
- planlagte vannløp for ekspansiv

Strategi for overvannshåndtering i Oslo, 3-tommerseddel

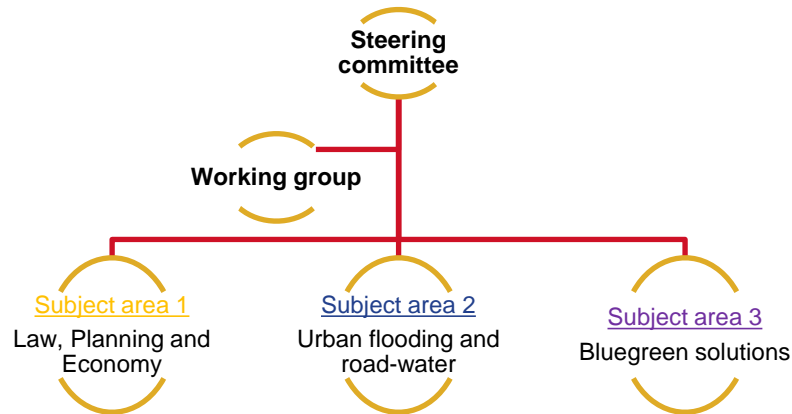
Prosjektplan for
Hovedprosjekt Overvann - Handlingsplan for overvannshåndtering i Oslo

Date: 30.06.2014
Versjon: Endelig



The Action-plan

Organizing the work



Participating agencies

- The Water and Sewerage Works (chair)
- The Agency for Urban Environment
- The Agency for Real Estate and Urban Renewal
- The Agency for Planning and Building Services
- The Emergency Planning Agency
- The cultural Heritage Management Office

The Action-plan

Subject area 1; Law-Planning-Economy



1. Analysis

- How to exploit our existing framework; possibilities and challenges
- How to exploit the planning system; the process from the municipal master plan to building applications

2. Suggested measures can be:

- Future co-operative organization
- A change in the municipality's administration of storm water in planning and building processes

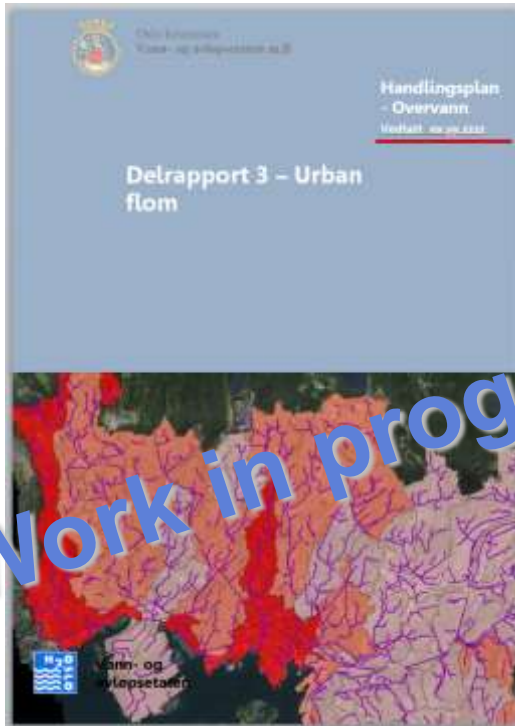
3. Tools under development

- Routines, rules and regulations



The Action-plan

Subject area 2, Urban flooding



1. Analysis

- Determine floodways
 - “Wanted” floodways
 - Critical areas
 - Methods for mapping

2. Suggested measures can be:

- Building floodways – areas to prioritize
- Rules and regulations to safeguard the floodways in the future

3. Tools under development

- Map
- Method for mapping

Work in progress



The Action-plan

Subject area 3, Blue green storm water solutions (SUDS)



1. Analysis

- Determine areas for infiltration
- Collect knowledge on SUDS used under Nordic conditions

2. Suggested measures can be:

- Digitalize data on soil quality
- Build SUDS on municipal property and stimulating tools for private developers
- Collaboration in municipal projects

3. Tools under development

- Collection on SUDS-facts and inspiration
- Organizing collaboration

The Action-plan

Subject area 1 and 3, The Pilot-project of Deichmanns gate

Starts building in the fall 2015



Photo by: Hanna Storemyr, The Agency for Urban Environment

- Building SUDS in a built-up area in the city-center with challenging soil conditions
- Measuring precipitation, how the SUDS work, ground water levels
- Gain and evaluate the experiences from collaboration and building

The Action-plan

End product



- A action-document with suggested measures and supporting tools
- Prioritized implementation
- Determined implementation responsibility
- Suggested collaborative organization

Draft by 01.01.2016



City of Oslo

A dark blue silhouette of the Oslo city skyline, including various buildings and a prominent church spire, set against a light background with a gradient.

Thank you for your attention!

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