



Elinkeino-, liikenne- ja ympäristökeskus  
Närings-, trafik- och miljöcentralen  
Centre for Economic Development, Transport and the Environment



**CADWES**  
Capacity Development in Water and Environmental Services  
Research Team at TUT

# Development of storm water management in Finland

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## Introduction

- The effects of climate change combined with urbanization will increase the flood risk in urban areas.
- Storm water has traditionally drained from the source as fast as possible to receiving waters using underground pipe network.
- Interest in sustainable development, has influenced the Finnish storm water management.



Picture: Vuores, Tampere (FCG, Bossmann)



## Legislation

- Storm water management was little noticed in Finnish legislation...
  - There was a need for clarification of the duties and responsibilities
  - Municipalities lacked a comprehensive view of stormwater management
- Finnish legislations was changed 2014. The purpose was to...
  - Promote use of sustainable stormwater management
  - Reduct the amount of stormwater lead to waste water sewers
  - Develop systematic management in areas covered in the city plan and prevent environmental damages while considering changing climate
  - Municipalities can introduce a new stormwater management fee
- EU Flood Directive



## Guidance

- The guide for storm water management (2012)
  - facilitate practical planning, give technical guidance and examples of good practices.
- Storm water strategies
  - Ensure comprehensive planning of stormwater management in co-operation between various actors that integrates different viewpoints and methods
- Research projects



Picture: Vuores, Tampere (FCG, Bossmann)



## The main questions that should be debated in Finland

- Lack of requirements on qualitative measures regarding stormwater
- More experimental studies on urban hydrology
  - The four seasons climate including a cold winter period have to be taken into account
- Urban planners and practitioners in municipalities have difficulties adopting more sustainable stormwater technologies and systems due to the lack of knowledge and guidance.
- Stormwater strategies are needed at different decision levels → clear understanding of the possibilities and main consequences of each decision.
- How legislation is going to be implemented in practise?
  - only few municipalities have introduced a new stormwater fee.





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Thank you !

