



Resilience and stormwater management

5th Annual Seminar of the UNESCO Chair in
Sustainable Water Services
“Resilience in Water Services”

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Introduction

- The effects of climate change combined with urbanization will increase the flood risk in urban areas.
- Interest for resilient stormwater management has increased in Finland.





Legislation

- Stormwater 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
 - Legislation determines the liability distribution concerning stormwater management
 - Municipalities can introduce a new stormwater management fee
- EU Flood Directive



Guidance

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



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 !