

Toward a climate adapted stormwater management regime in Oslo ?

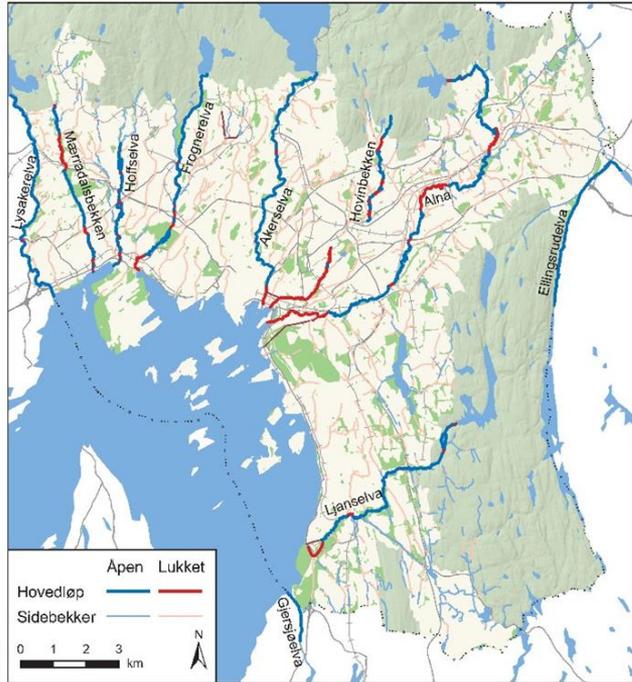
A study of what different urban stakeholders understand as critical factors to achieve the goals in Oslo's stormwater strategy

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Panel 1A: Policy, planning and implementation: critical concerns and approaches for climate-proof urban areas

Stormwater: complex, dynamic and interlinked systems



Source: Oslo Elveforum/ Oslo municipalw3ity 2015



Photo from: http://www.klosterenga-park.no/?page_id=2

1887 -1990



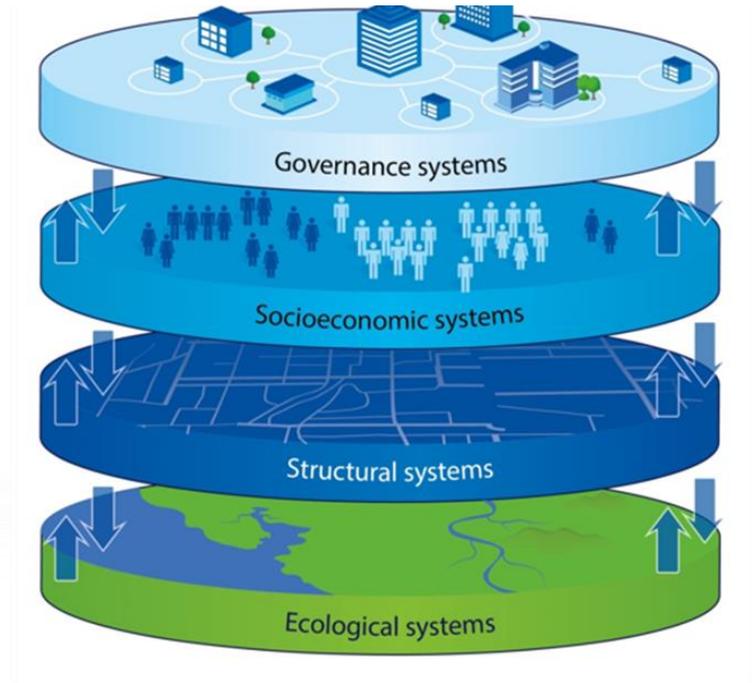
Photo: Per Øystein Eriksen/www.ensjo.org

2000 and onward

Approach

Inspired by urban resilience and integrated systems thinking, and what shapes the stormwater management system in Oslo's adaptive and transformative capacities, we ask:

What factors do stakeholders engaged in urban development view as critical to achieve the goals in Oslo's storm water strategy?



'Systems and Urban Resilience
Framework' DNV-GL



Methods

- Workshop December 2017 (14 participants)
- Semi-structured interviews 13 informants: (municipal agencies, consultants, Insurance business Group, landscape architect)
- Work in progress- ongoing data collection

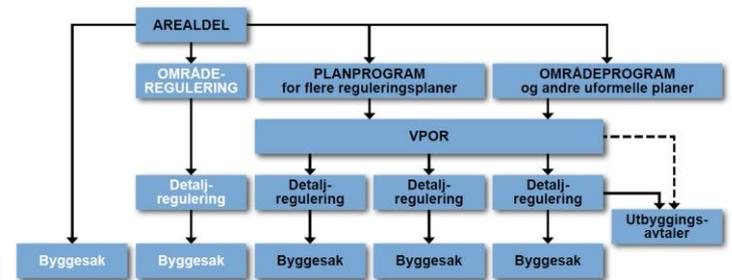
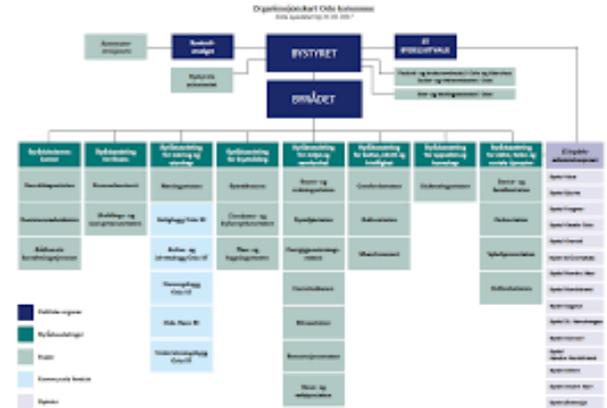
Leadership –common objectives and values

- + Political focus on a green and climate friendly Oslo
- + Strict regulations and a clear direction for stormwater management
- + Shared vision of that nature and its associated benefits should be ‘brought back to the city’
- ÷ The action plan is not yet approved politically
- ÷ Several overlapping storm water regulations and strategies, at times conflicting
- ÷ Competing visions for urban development



Planning – coordination and integration

- + Transparent and coordinated plan process ‘Oslo model’
- ÷ Resources need to be allocated
- ÷ Challenges with cross-coordination across municipal agencies
- ÷ Challenging to plan holistically under rapid urban development



Citizen engagement and support

- + The municipality is engaging local neighbourhoods in stormwater management, use economic incentives to motivate householders to implement blue-green solutions
- + Public meetings and information to slowly anchor decisions regarding blue-green solutions locally
- ÷ The citizens may not know why these measures are needed
- ÷ Different preferences for how urban areas should be used



Innovation – creation of new resources and processes

- + Goal for Oslo municipality to be a frontrunner, pilot and demonstration projects, experiments and ‘learning by doing’
- ÷ Knowledge gaps on the performance, capacity, cost and maintenance of different solutions in specific locations, seasons and weather conditions



Model project: rainbeds in Deichmann gate Oslo. Photo: Asplan Viak

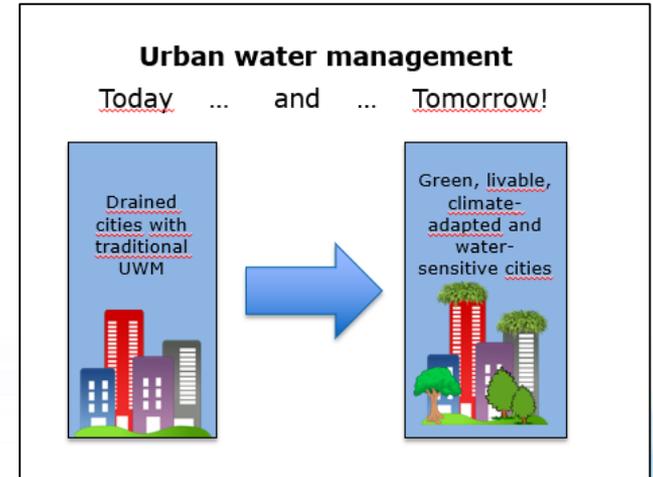
Social learning – capacity to build, gather and retain knowledge

- + Knowledge exchange: seminar series, participation in strategies and plans, in research projects, with insurance sector and businesses, study tours and conferences, model and learn from extreme events in Oslo and beyond e.g. Copenhagen
- + Exchange of staff between consultancy firms and municipality
- ÷ Lack of knowledge exchange and information flow between leaders, case officers, on the ground practitioners (gardeners, constructors)



Concluding thoughts

- Understanding of what nature mimic solutions in cities is and look like may go against conventional knowledge, rules and norms
- Importance of factors vary between kinds of solutions and areas, competition for space
- Main focus on stormwater as a potential source of damage rather than a resource
- Ambitious goals in Oslo that over time are likely contribute to an increasing proportion of blue-green solutions
- Research, knowledge and experience with different solutions in ongoing



Thank you

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New Water Ways - Towards Water-sensitive and Climate Adapted Nordic Cities

