

## New ways of governance for water infrastructure management

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## Klima 2050

WP1

Climate exposure and moisture-resilient buildings

WP2

Stormwater management in small catchments

WP3

Landslides triggered by hydro-meterological processes

WP4

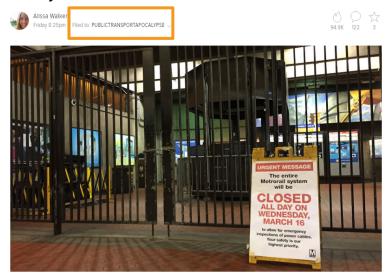
Decision-making processes and impact

Governance optimization for water infrastructure management





#### Riders of the DC and NYC Subway Systems Are Totally Screwed



DC Metro subway shutdown brings America's aging subway systems into focus

### The Washington Post

Metro sank into crisis despite decades of warnings

Metro's failure-prone subway — once considered a transportation jewel — is mired in disrepair because the transit agency neglected to heed warnings that its aging equipment and poor safety culture would someday lead to chronic breakdowns and calamities.

For nearly half a century, almost since construction of the subway system began, federal experts, civic and business groups, private transit organizations, and some Metro general managers and directors have raised red flags.









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- 3 TILSTANDSKARAKTER
- FREMTIDSSIKRING

## AVLØPSANLEGG

- 2 TILSTANDSKARAKTER
- FREMTIDSSIKRING

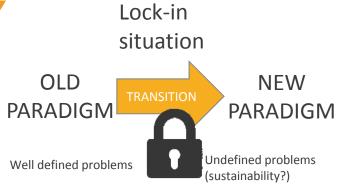




#### Stuck in some problems...

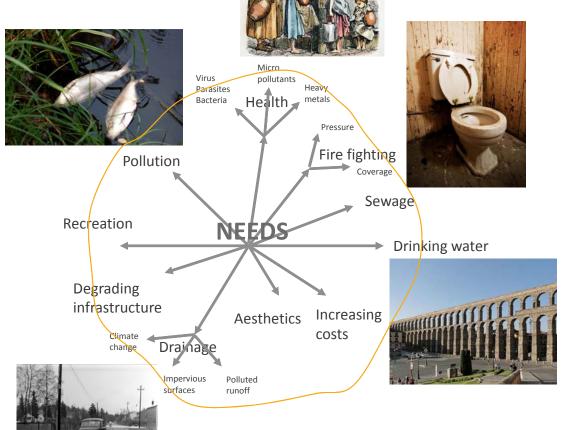
Climate adaptation?
Degrading infrastructures?
Little innovation?



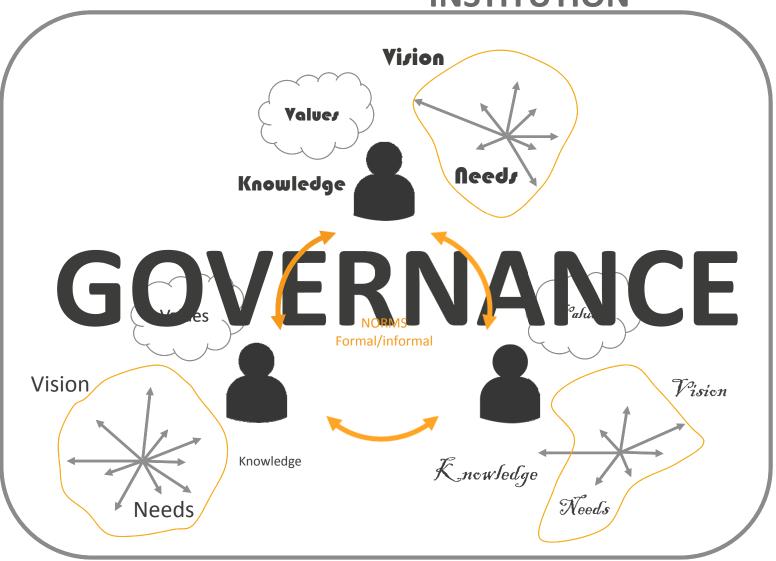


Few factors Low complexity	Many intertwined factors High complexity
All is known or knowable Fixed conditions	Emergent properties Accept uncertainty
Probabilistic Technical dimension	Social Economic Environmental dimensions
Assume fixed needs and values	Evolving needs and values
Hierarchical decision-making	Participatory decision-making Continuous learning
Objective: Control the system	Objective: <b>Adapt</b> to the system

**Influence** the system



### **INSTITUTION**



### Naturvernaksjon med gjennomslagskraft rundt Mjøsa





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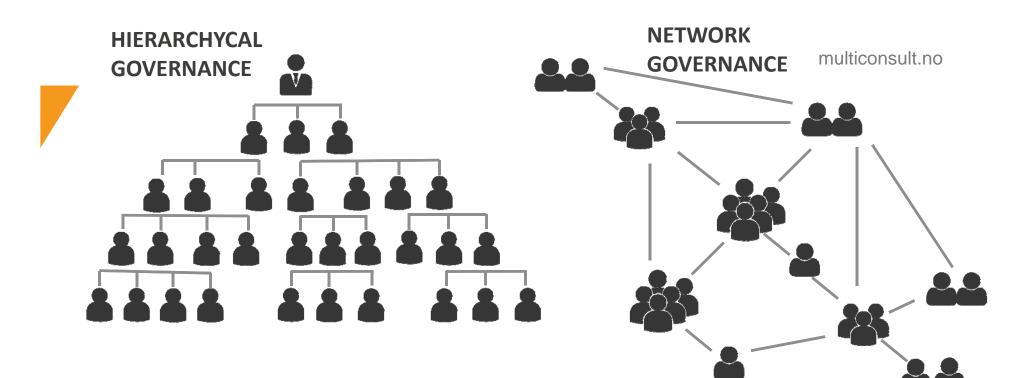
#### Adaptation depends on coordination of **individual** traits

Visions Motivation Time horizon Interest Influence...



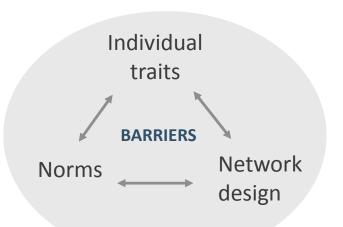






## Adaptation depends on coordination of individual traits

Visions
Motivation
Time horizon
Interest
Influence...



**CONTEXT** 

## Methodology



#### System analysis

- Context's characteristics
- Individual's characteristics
- Social network analysis

## Identify **barriers** of good governance

- Mismatch of visions
- Mismatch of motivations
- Lack of resources
- •





#### Design of **indicators**

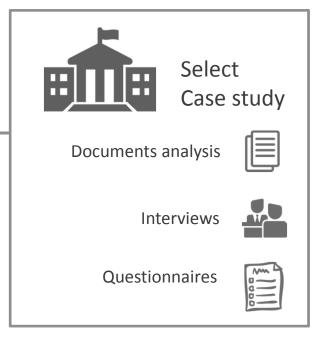
- Participation
- Information sharing
- Organizational structure
- ..

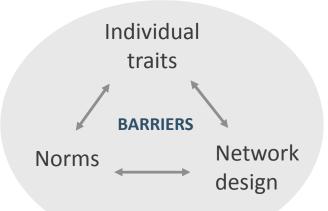
#### Road map for good

#### governance

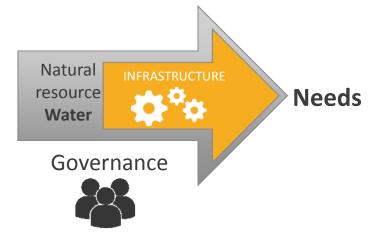
How to implement good governance in effective infrastructure asset management...







**CONTEXT** 



Thorsen, who says he hires staff as much for their flexibility as their design skills, compares it to how an orchestra might play each other's instruments, to understand their own part more clearly. "It puts us in a position where we can think more freely," he says. "People think they have to gain aspects of their personalities to be more effective, but often they have to lose these aspects to become more creative."

"It's related to our values," says

"We see ourselves in the
service of society. We give things back,
share ideas with others, and through
that create surroundings that enhance
everybody's lives."

his firm has the power to change people's lives



## Multiconsult

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Thank you for your attention

