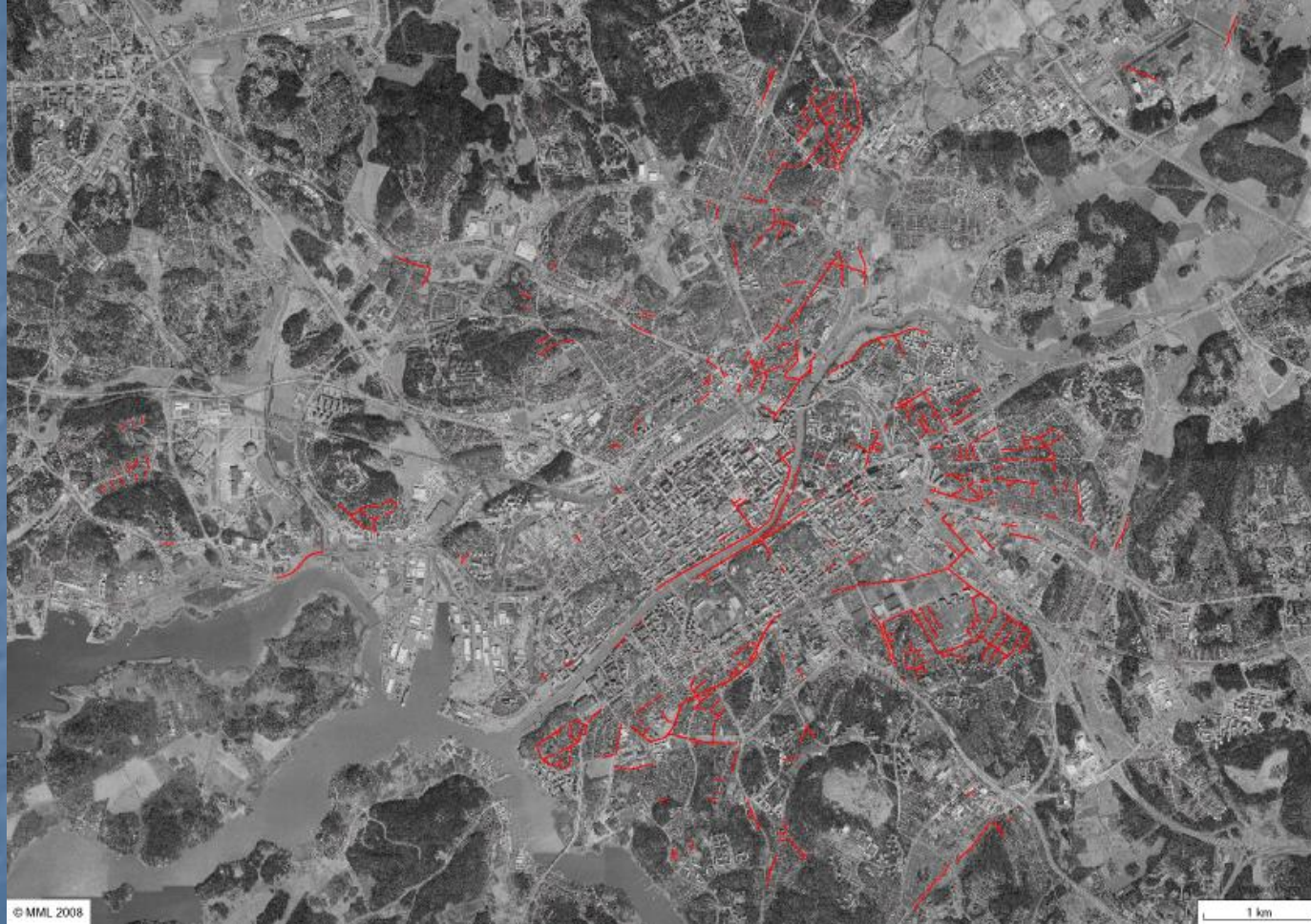


- **“Stormwaters in focus – how to handle them in Turku”**
- Mikko Jokinen- UBC EnvCom meeting- Gdynia
- 18th of March 2010

Sewage network with mixed pipelines (sewage and storm waters in the same pipeline)- Turku 2009



SW management programme for the city of Turku

- In city planning
 - Storm water management will be included to all levels of city planning, starting from General plan.
 - Catchment approach will be used in planning.
 - Storm waters are seen as a resource in landscape and green area planning
 - Instructions and orders of storm water management will be included in all relevant municipal permits.

Priority order in Storm water management in the city of Turku

- I) Storm waters will be infiltrated on the spot when possible
- II) SW will be led to natural systems, which are slowing flowing and facilitate infiltration
- III) Stormwaters are led by swpipelines into the natural green areas before dischargeing into water bodies.
- IV) SW are led in swpipelines directly to the receiving water body.

Storm water (SW) management programme for the city of Turku

- Principles in Management of SW flowing and treatment
- Decreasing the amount of storm waters flowing by infiltration on the spot. At important ground water areas this is the main goal for swm.
- Increase the flowing and treatment of storm waters in sites important for landscapes (ditches, sedimentation pools, ponds etc).
- Defining potential sites already in city planning process

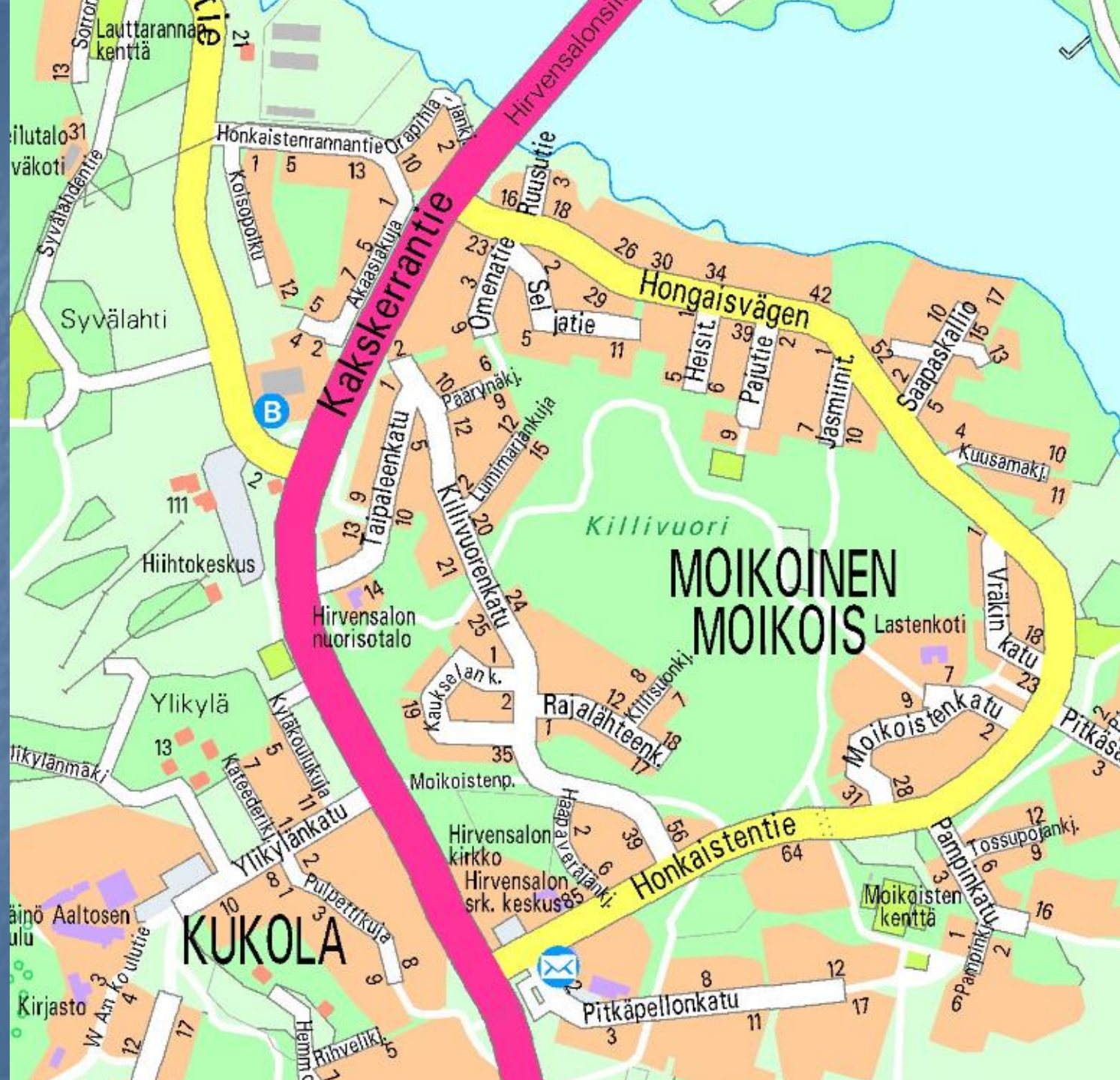
SW management programme for the city of Turku

Principles in Management of SW flowing and treatment (continue)

- Slow down SW flowing by different measures.
- Plan and build areas for controlled temporary flooding of storm waters.
- Dig and formulate new and existing water courses for better sw flowing and improve capacity of existing open water courses in city structures as much as possible
- Improve also the multi-use status of all existing small creeks, ditches and other waterbodies (recreation, biodiversity).

Storm water management programme for the city of Turku

- Principles in Management of SW flowing and treatment (continue)
- If in the city area exists a separate SW network, storm waters from houses are supposed to be led into the network.
- Dirty or polluted SW will be cleaned only if SW quality is poor compared to water quality of receiving water body
- Monitoring of storm water quality is now under planning



Kakkerrantie

**MOIKOINEN
MOIKOIS**

KUKOLA

Lauttarannan
kenttä

Syvälahti

Syvälahti

Hiihtokeskus

Hirvensalon
nuorisotalo

Ylikylä

Ylikylänmäki

Aaltosen
kylä

Kirjasto

Hirvensalon
kirkko

Hirvensalon
srk. keskus

Moikoisten
kenttä

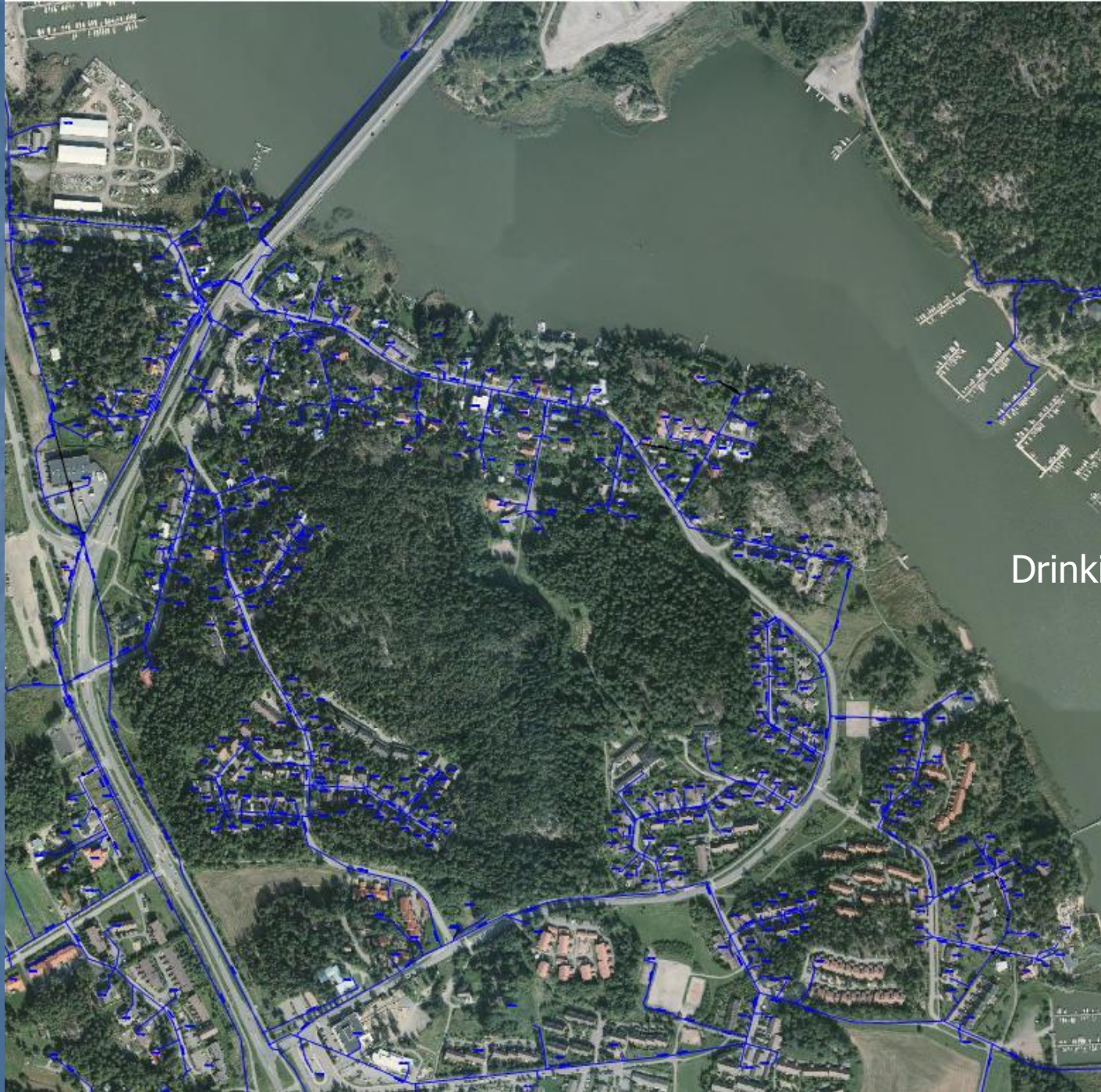
Killivuori

Lastenkoti

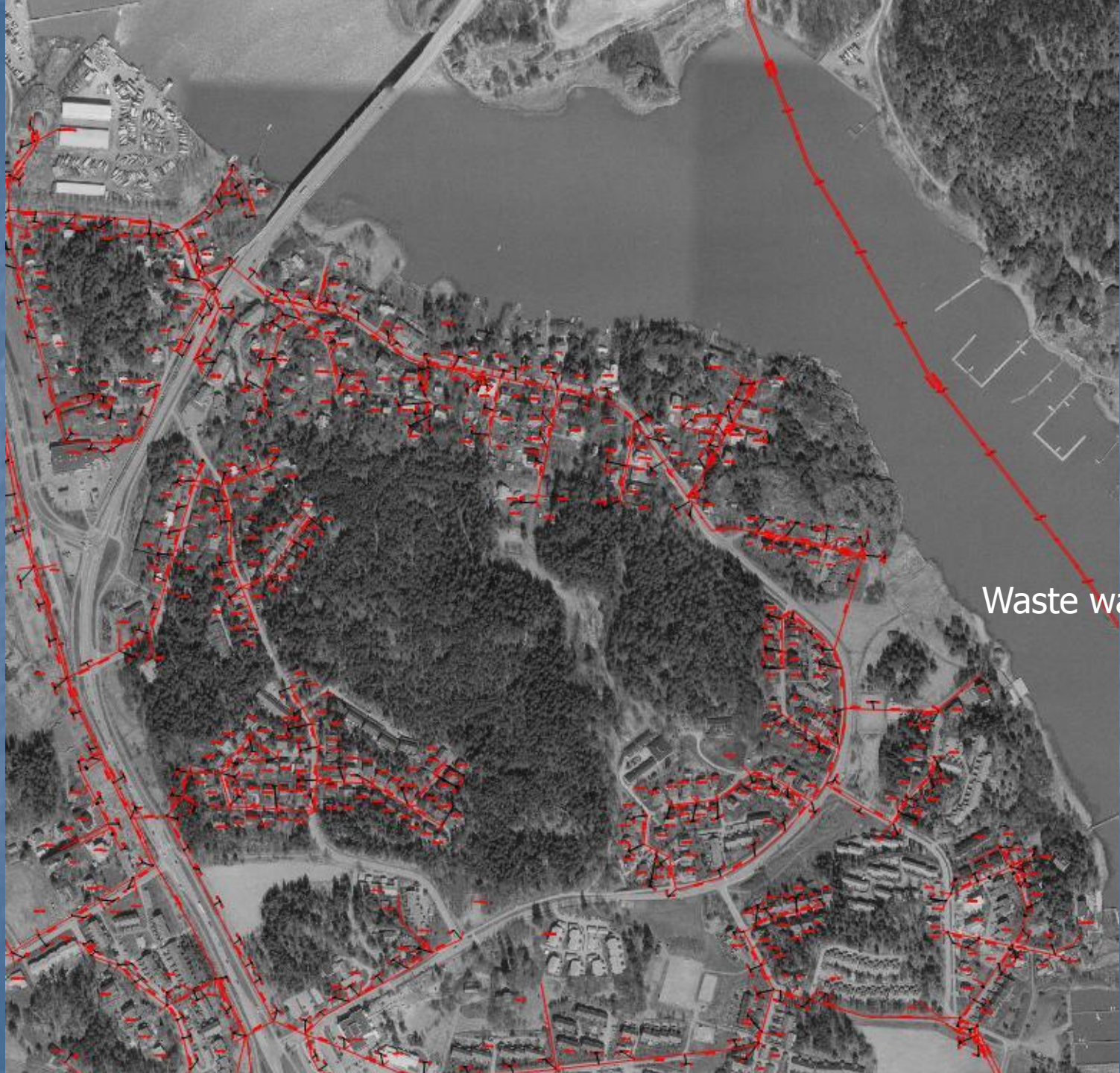
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Drinking water



Waste water



Storm water



Storm waters and ponds



New ideas to be seen at the end of the pipeline!

Thanks for your attention!