









Port of Copenhagen in the 90's

- More than 100 outlets from combined sewer
- Great potential for urban development along the waterfront
- Great potential for recreational use of the water area



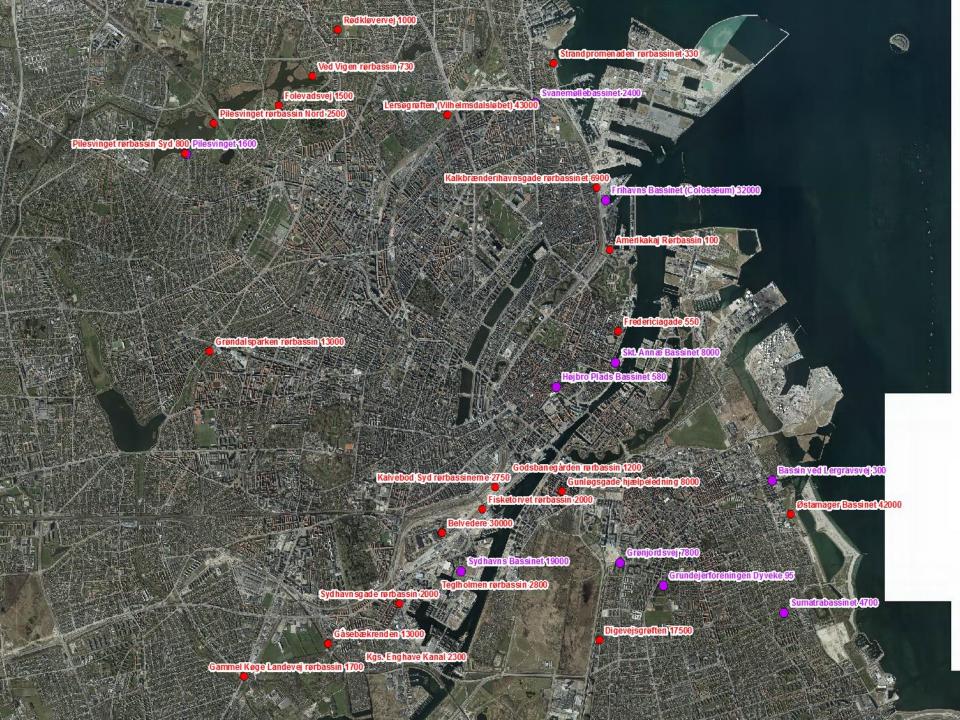
Handling of stormwater

- Tools
- Retention bassins



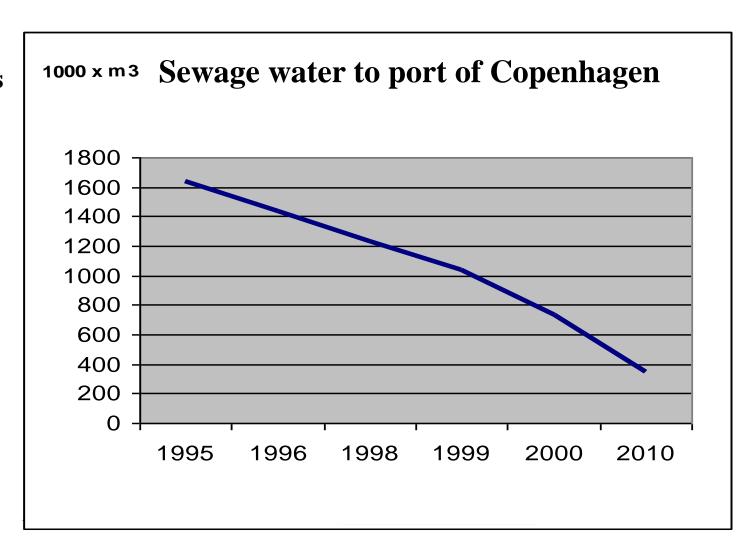




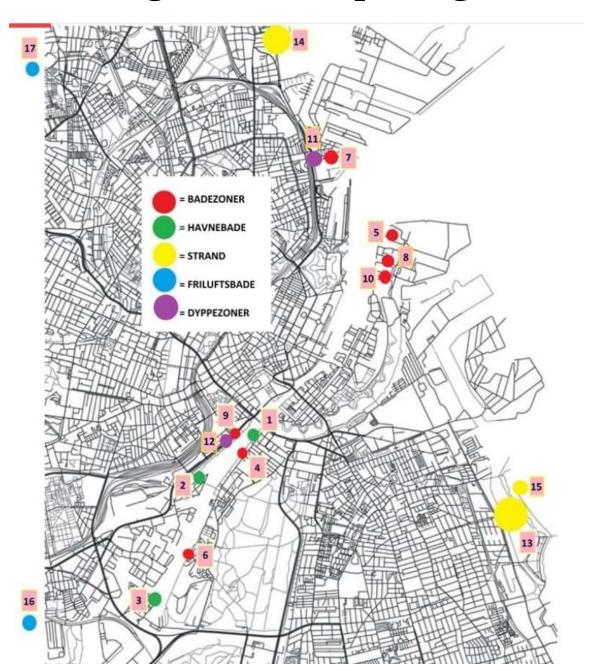


Reduction of sewage discharges 1990-2010

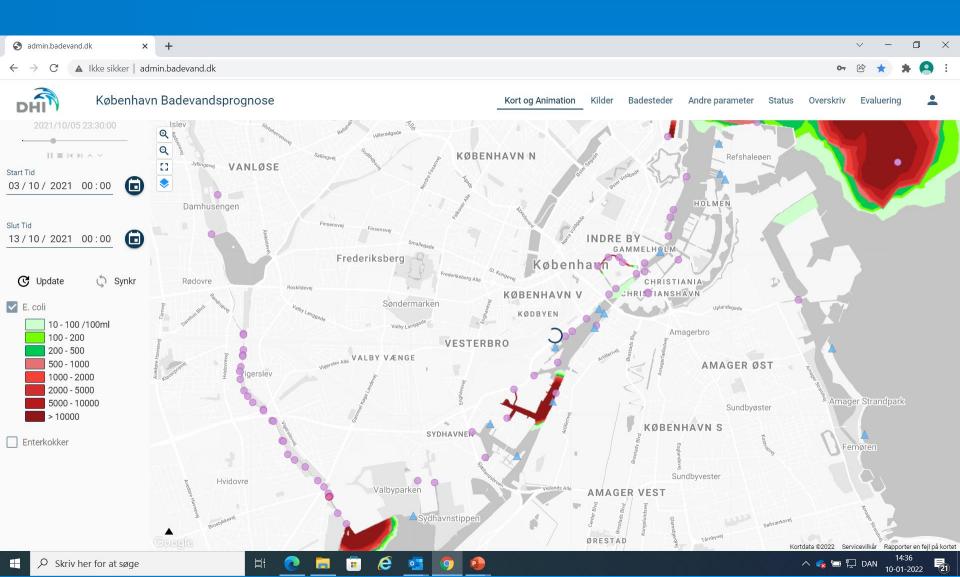
From> 100 overflow points in the 1990s to 34 locations in 2013.



Swimming areas in Copenhagen



Page 1: Input to the water quality model is hydrographic data on the flow of water in the port, as well as measurement and calculation of overflow from the sewer during heavy rain. The plot below shows a situation with overflow approx. 4 hours inside an incident, showing the concentration of e-coli. The violet points are places where overflows can occur, the blue triangles are bathing places

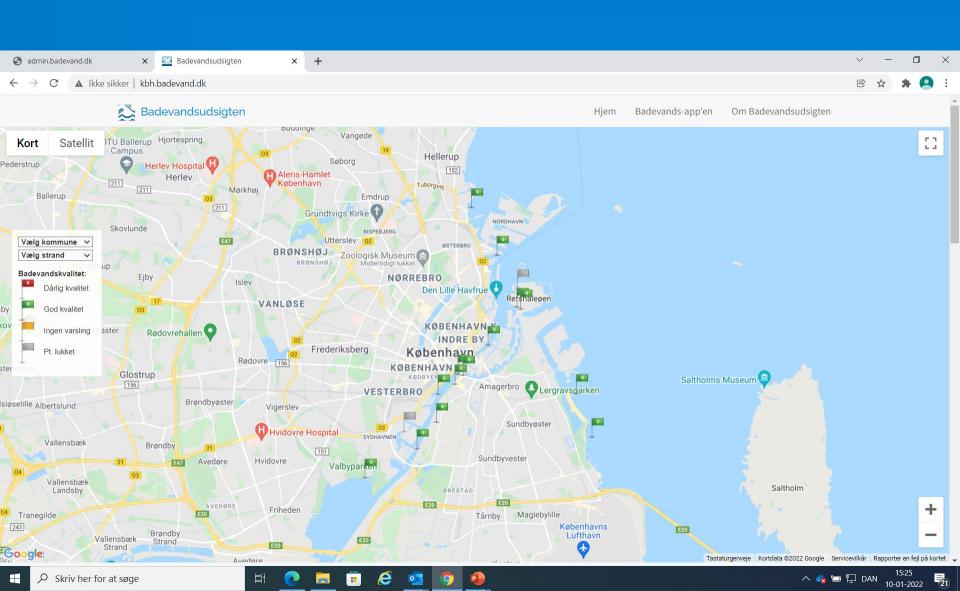


Bathing signals

Sign showing the water quality at a bathing site in Copenhagen



Water forecast from city of Copenhagens website.



Experiences

(some of them)

• Exploiting the recreational potential requires cross-sectorial planning (city planning, sewage planning, city development, environmental goals)

 Climate change, environment and sewage water handling is closely related

It takes a long time and ongoing political commitment



