

Slussen and a new water regulation plan for Lake Mälaren

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Slussen

- Openness and space
- A main hub for Stockholmers
- Vital public functions
- Lock for boats and ships
- Water regulation of Mälaren
- High cultural values
- High risk of flooding

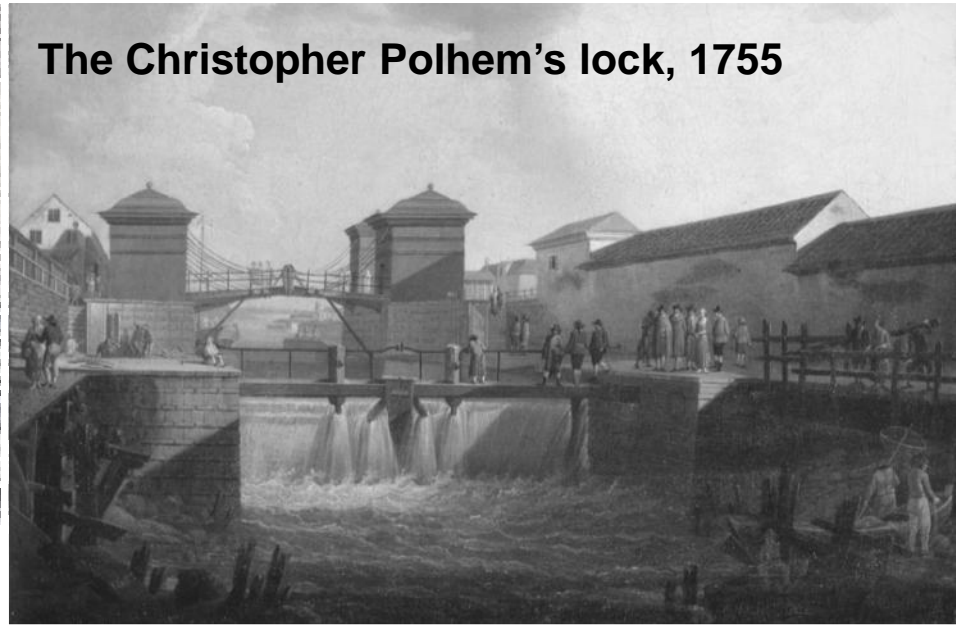


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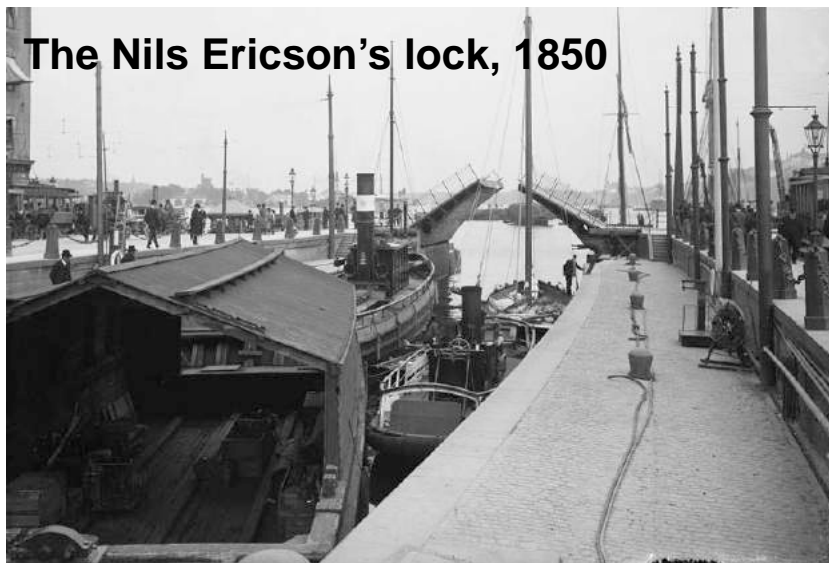
The Queen Kristina's lock, 1642



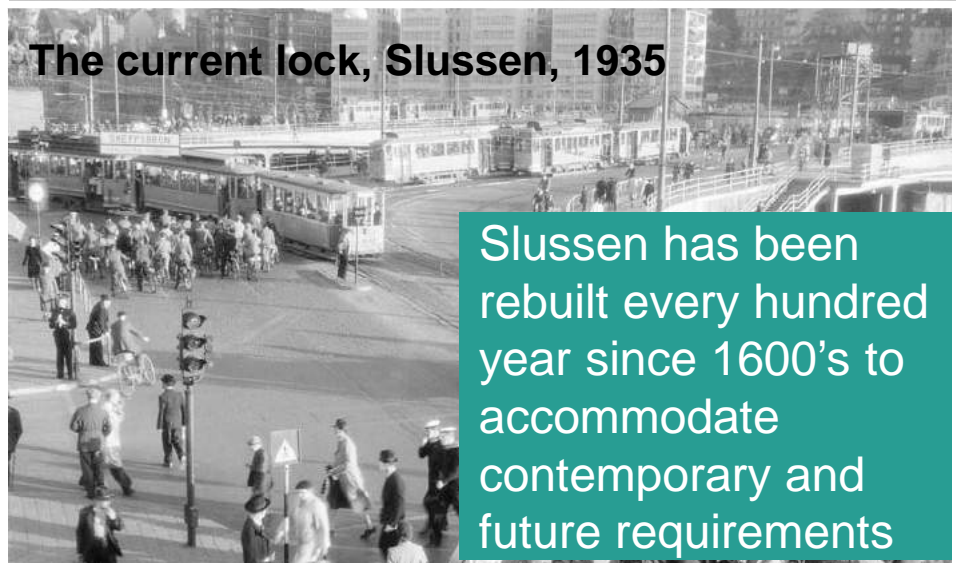
The Christopher Polhem's lock, 1755



The Nils Ericson's lock, 1850

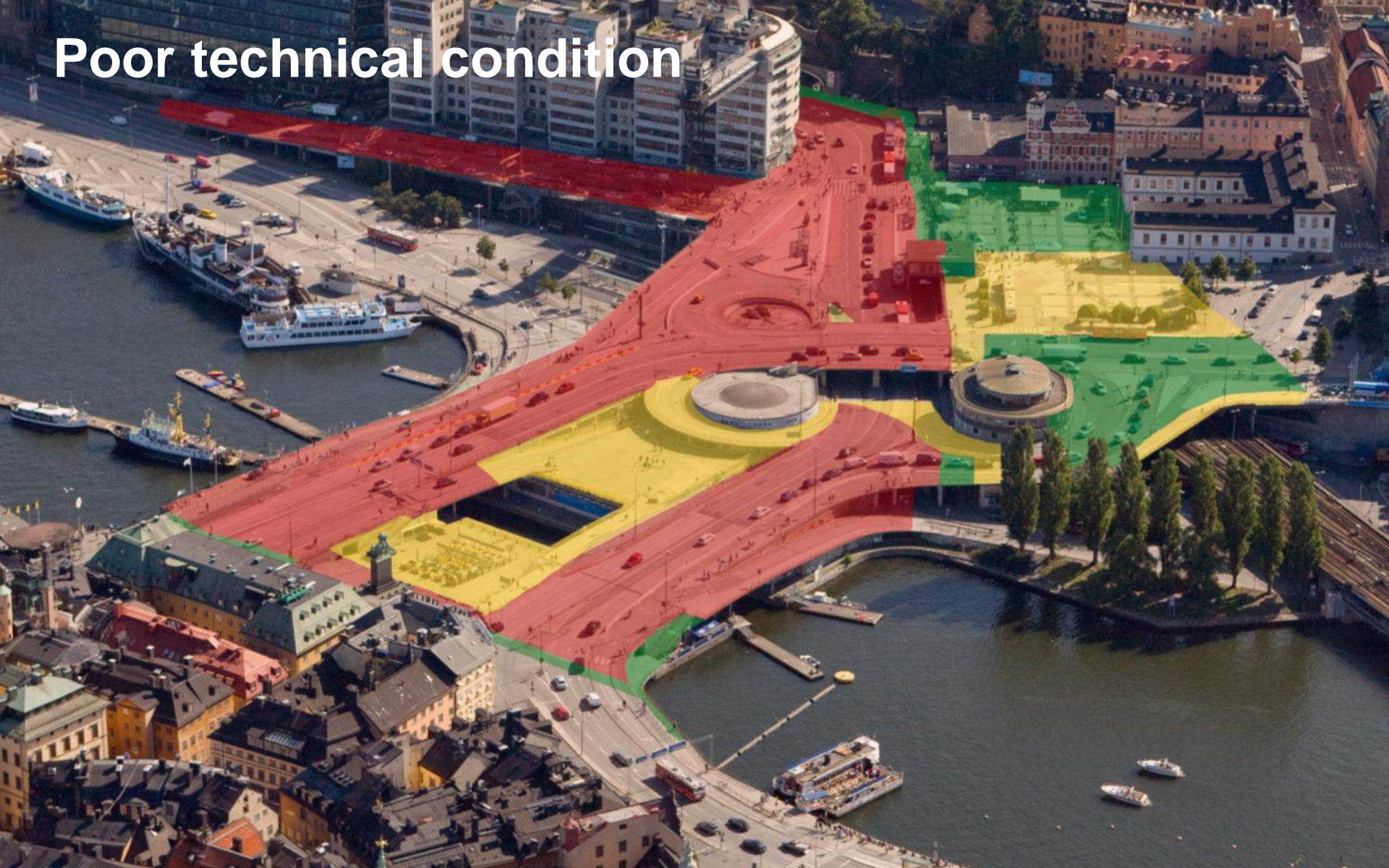


The current lock, Slussen, 1935



Slussen has been rebuilt every hundred year since 1600's to accommodate contemporary and future requirements

Poor technical condition



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High risk of flooding around Lake Mälaren

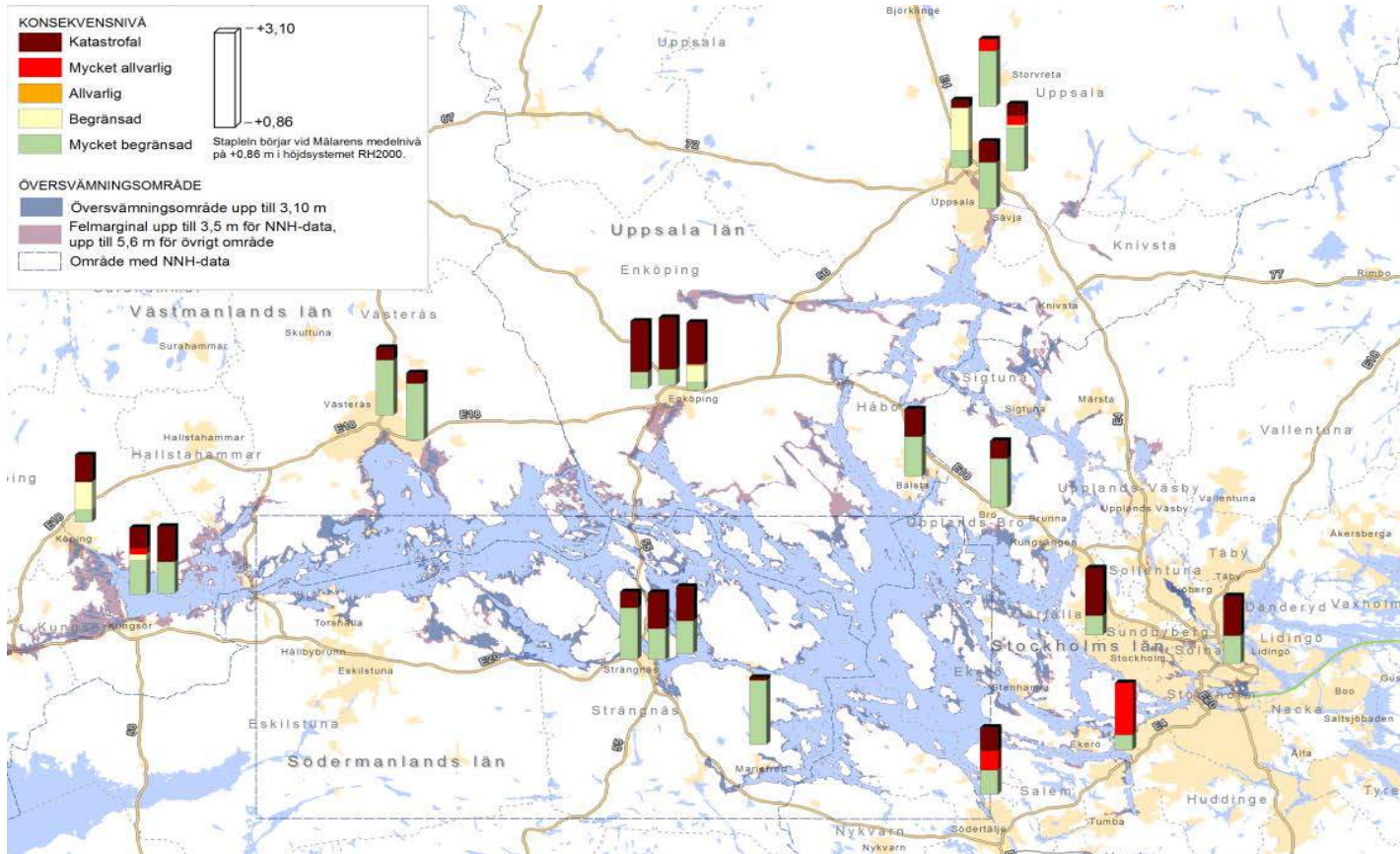
Water levels in Lake Mälaren, fall of 2000



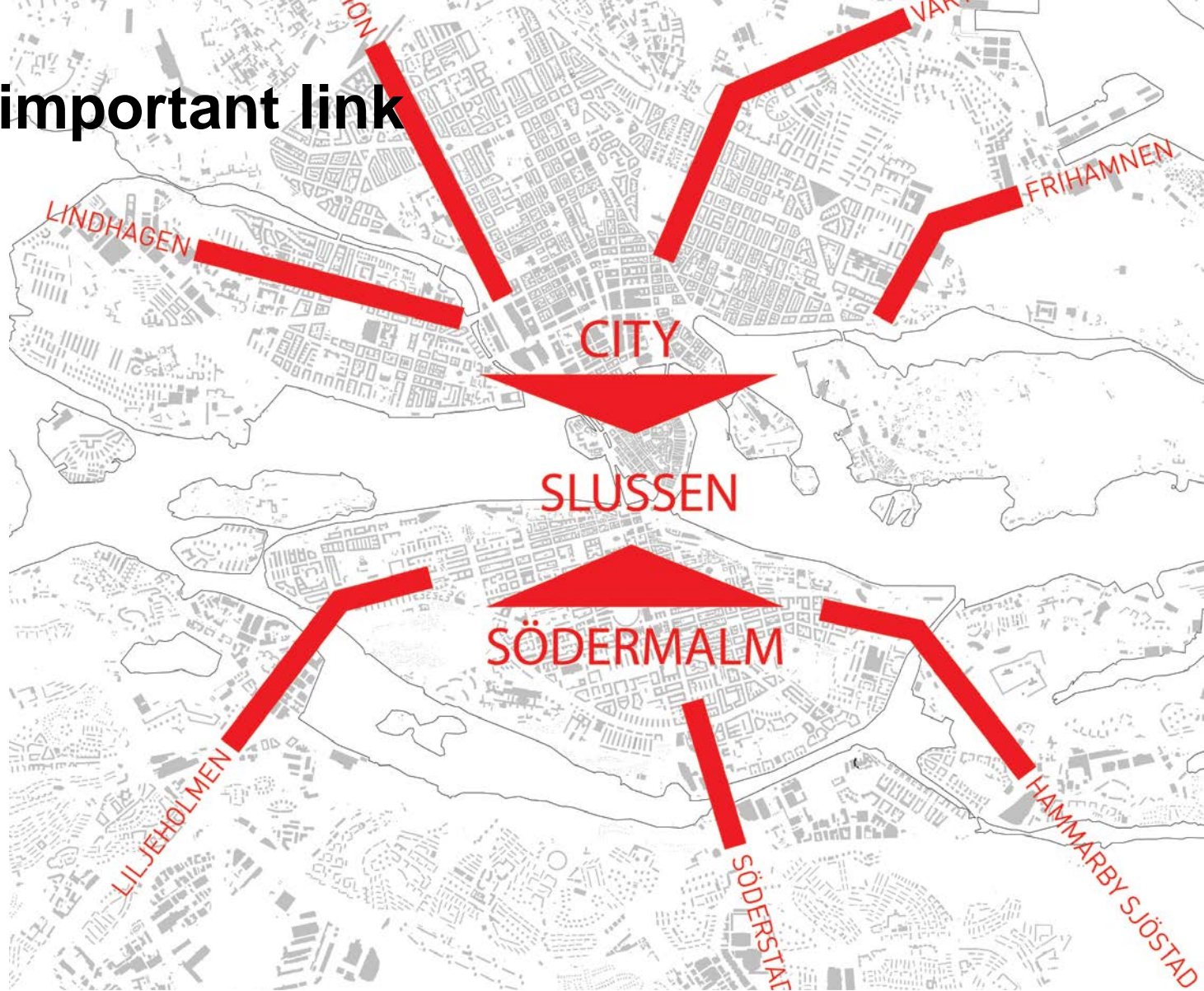
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Severe consequences around the lake

Impact on important public functions

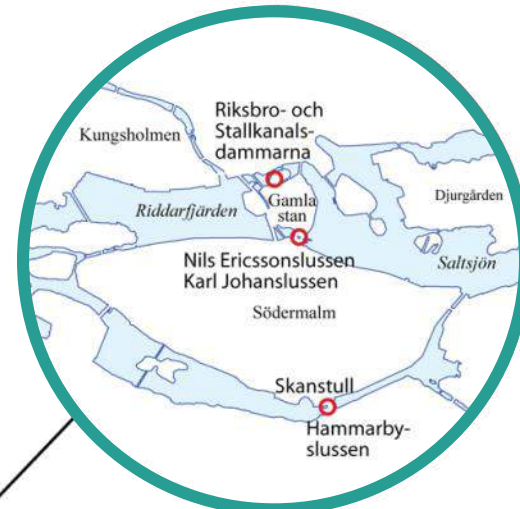
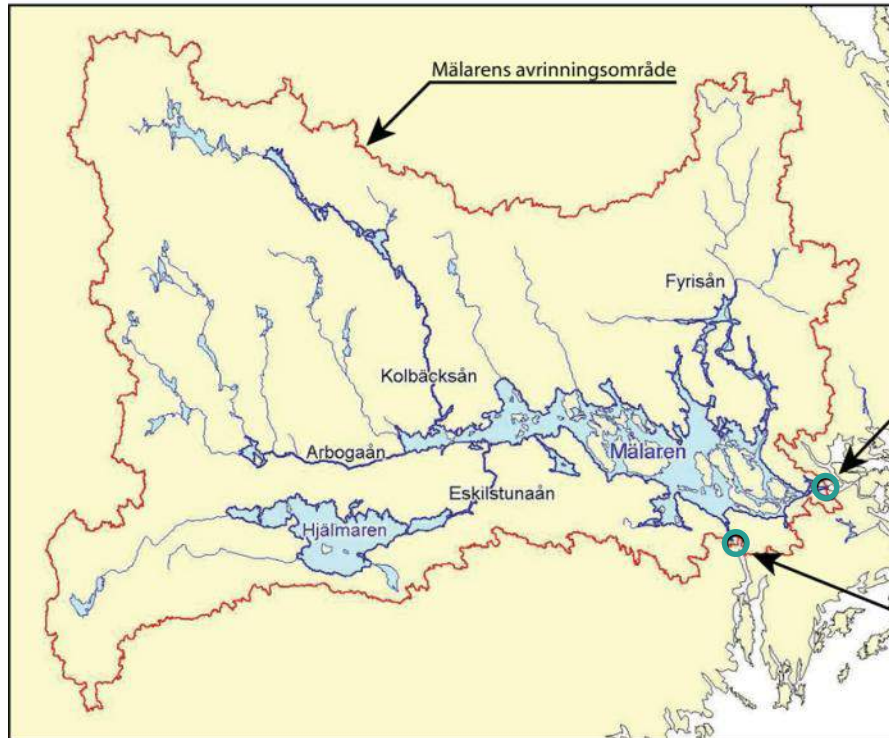


An important link



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A regulated lake since the 1940's



Mälaren is the 3rd largest lake in Sweden with 5 percent of the area of Sweden within the watershed

Provides vital ecosystem services and other values

6 counties, 40 municipalities within the watershed



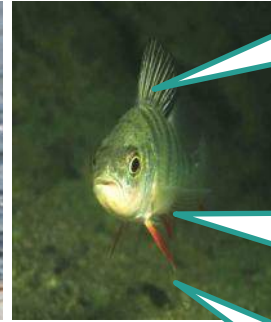
Source of drinking water for more than 2 million people



Waterfront cities, cultural sites, industries and infrastructure



Fertile agricultural land and commercial fishing



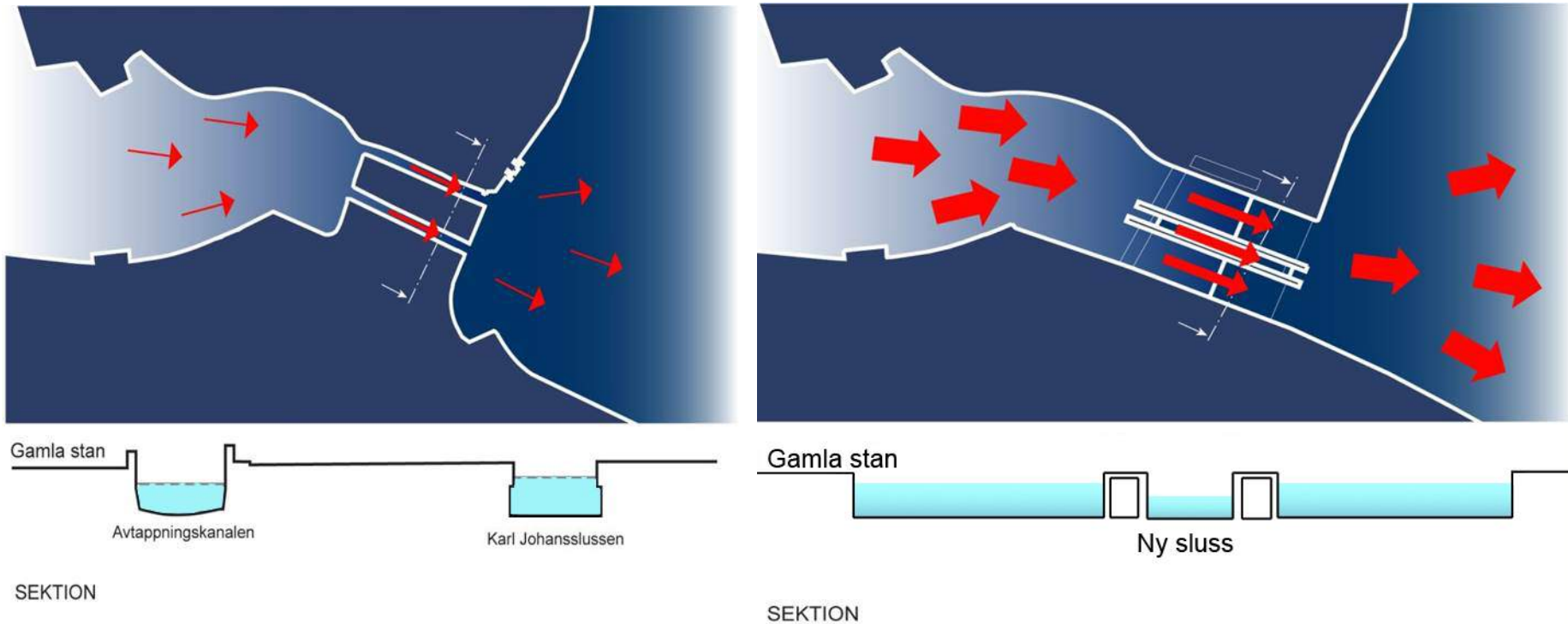
Wetlands of national importance and high recreational value

About 70 Natura-2000 areas, of which 20 are in shoreline locations

Waterway and harbors of national interest

Increased ability to regulate the water level

The new Slussen has 5 times the discharge capacity



... and in the Hammarby Channel capacity will double

A new water regulation plan



Improved conditions for the natural environment

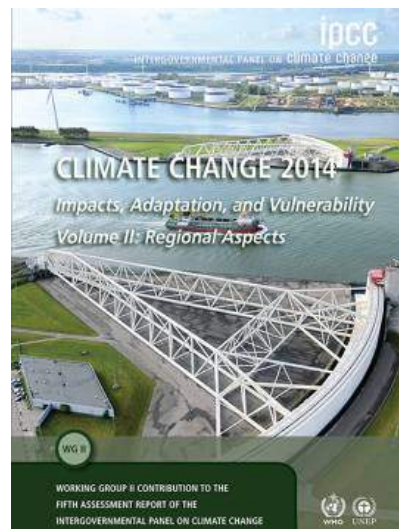
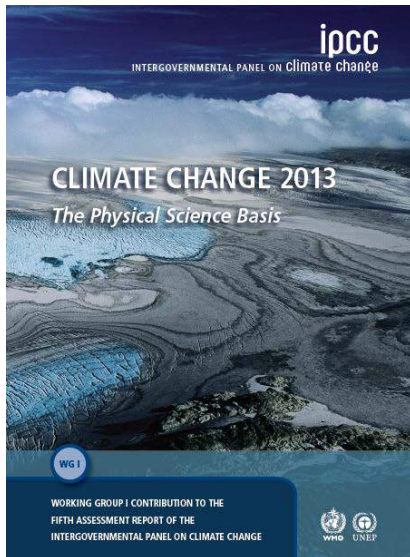


Photographer: Sune Karlsson

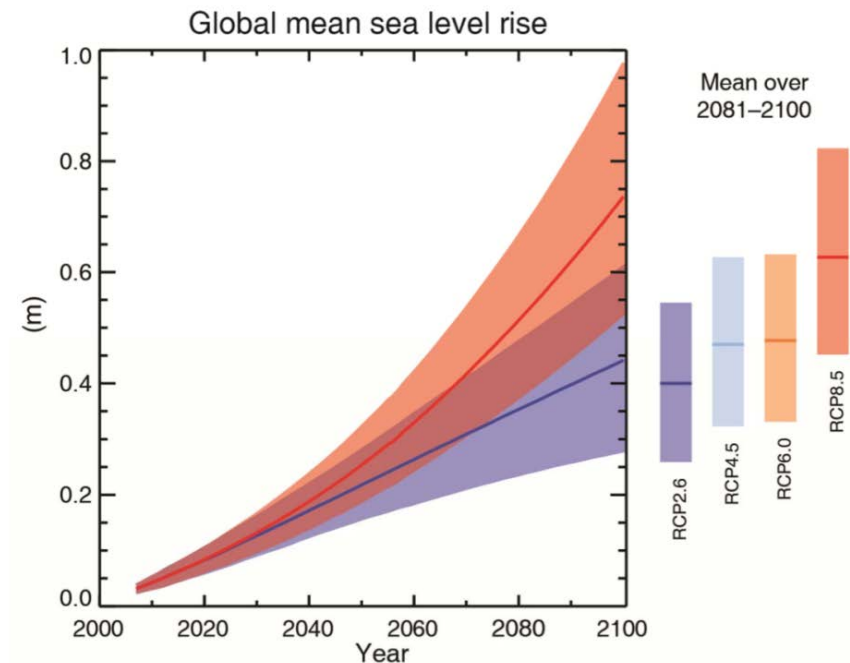


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A changing climate



- Changing inflow to Lake Mälaren
 - Temperature
 - Percipitation
- Rising sea level in the Baltic Sea

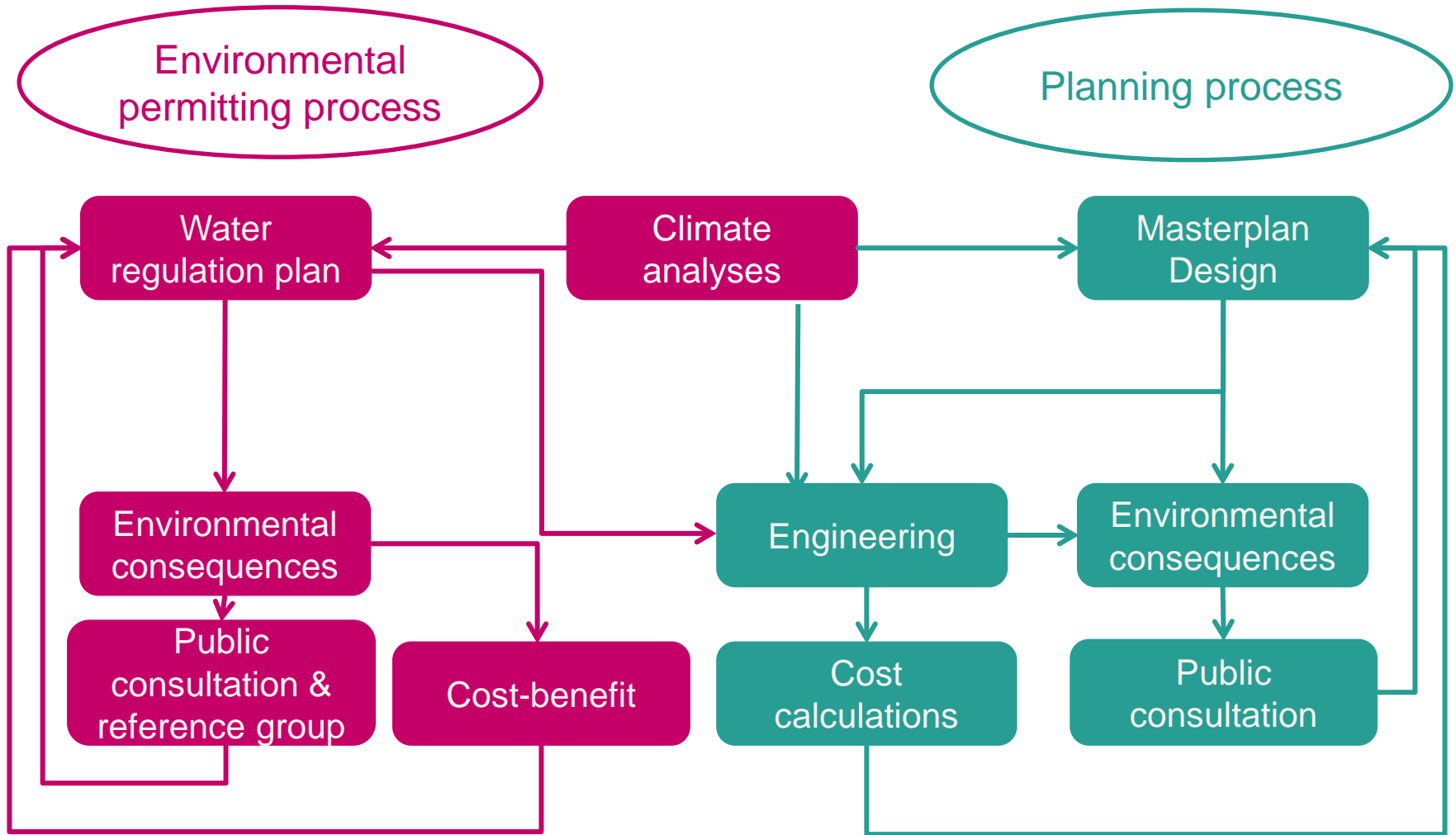


Designed for climate adaption

- New Slussen facility adapted for higher water levels
- Increased discharge capacity of Lake Mälaren
- Dynamic and more ecologically minded water regulation plan for Lake Mälaren

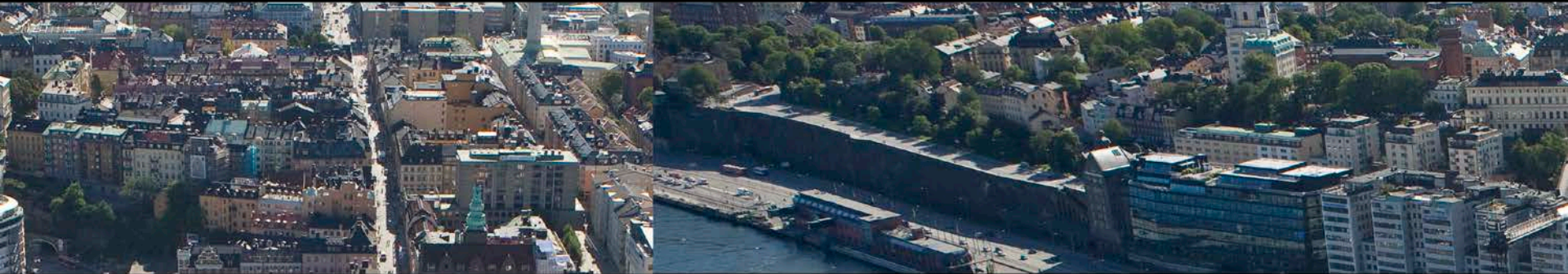


A working process in several phases



The current facility is replaced by...

Aerial photograph, view towards the southeast



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The new Slussen

Model photo, view towards
the southeast



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The Water Plaza

Overlooking the Water Plaza and the Old Town from the south



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