

# WFD-progress 2010-2014



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Water Management Coordinator

The Bothnian Sea Water District Authority

- Agriculture
- Urbanisation
- Hydropower
- Industrial dev.

**Driving Forces**

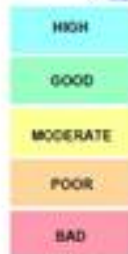
**Responses**

- Urban Waste Water Treatment Directive
- Nitrates Directive
- Industrial Emissions Directive
- WFD basic measures (regulation of abstraction, discharge, modification)
- RBMP planning process

**Pressures**

- Water abstraction
- Wastewater discharges
- Diffuse pollution
- Physical alteration of water bodies

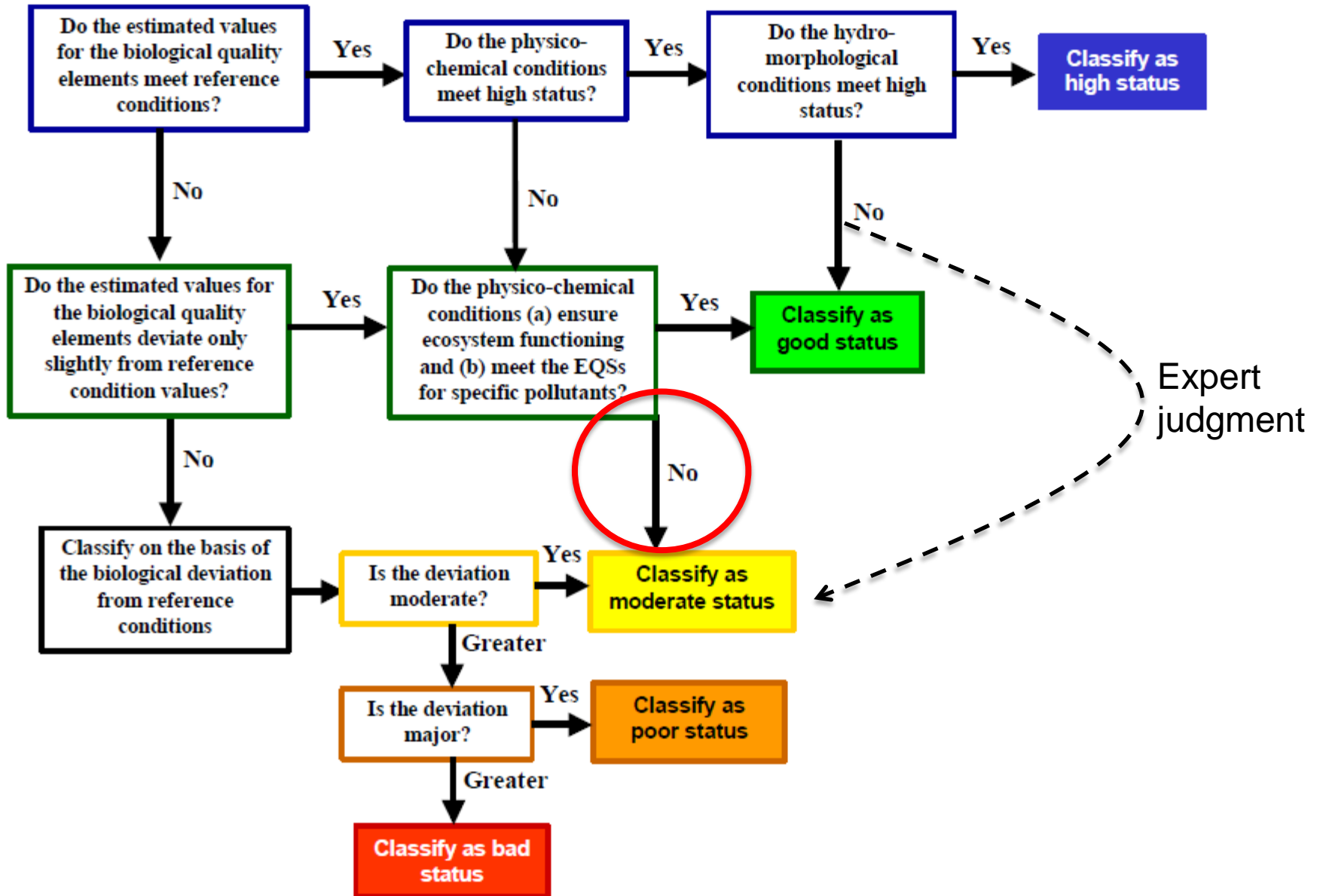
**State**

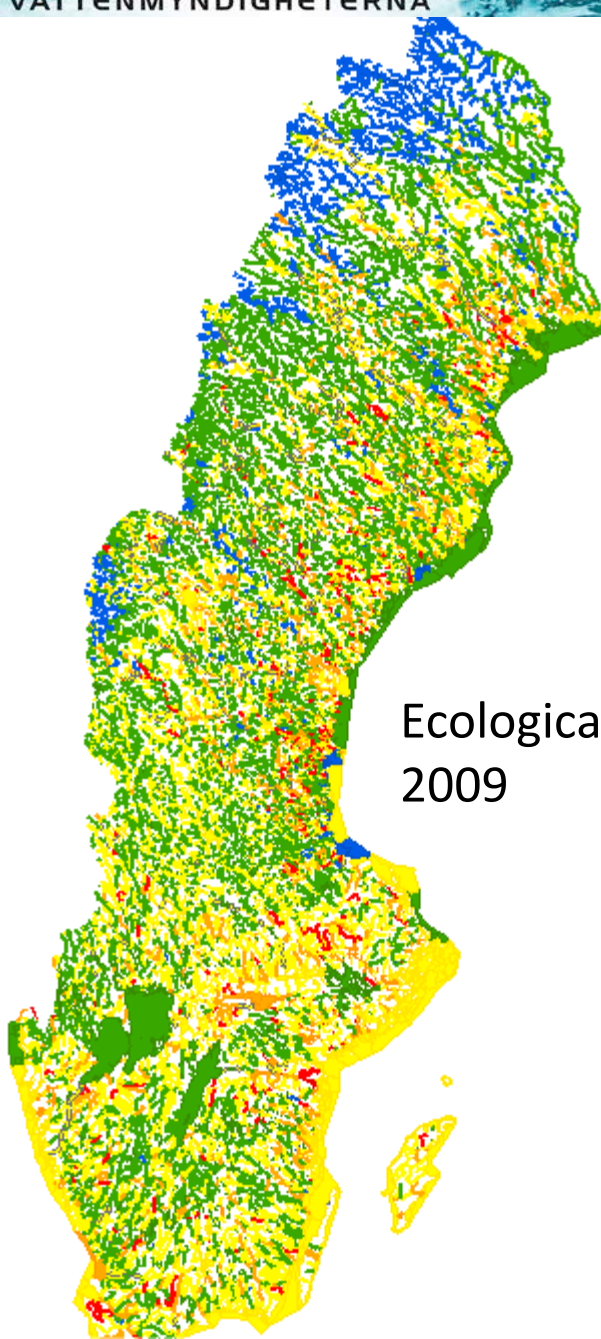


**Impacts**

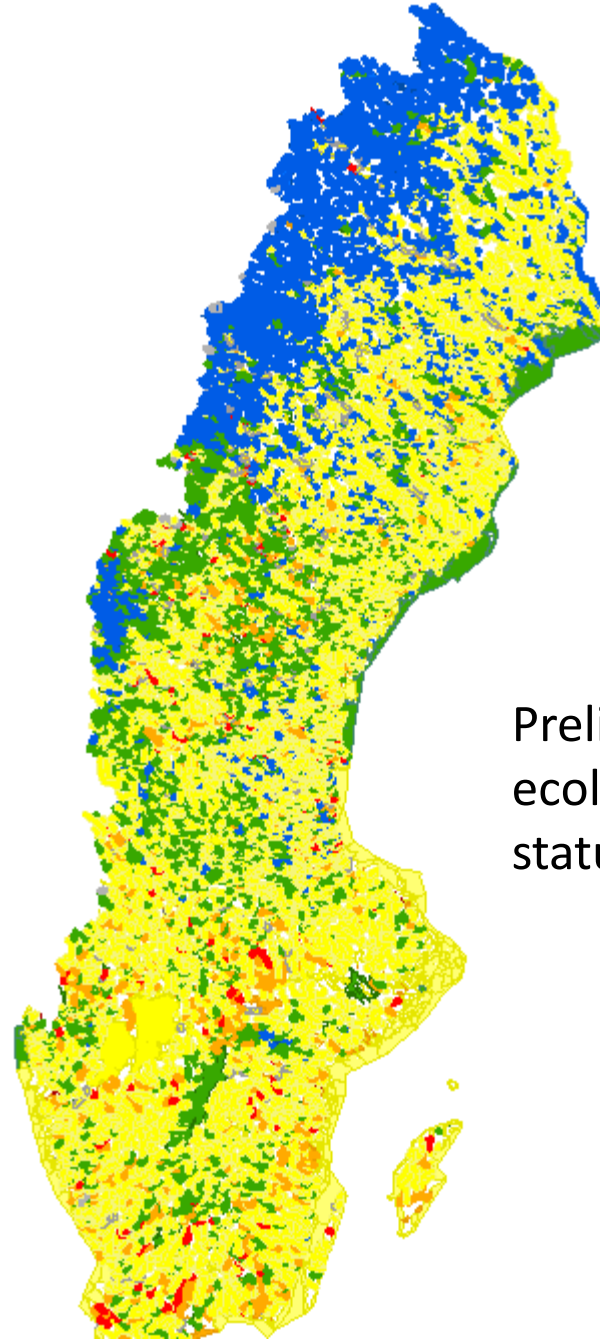
- Organic enrichment
- Eutrophication
- Altered habitats
- Reduced connectivity
- Loss of ecosystem services
- Socio-economic impacts







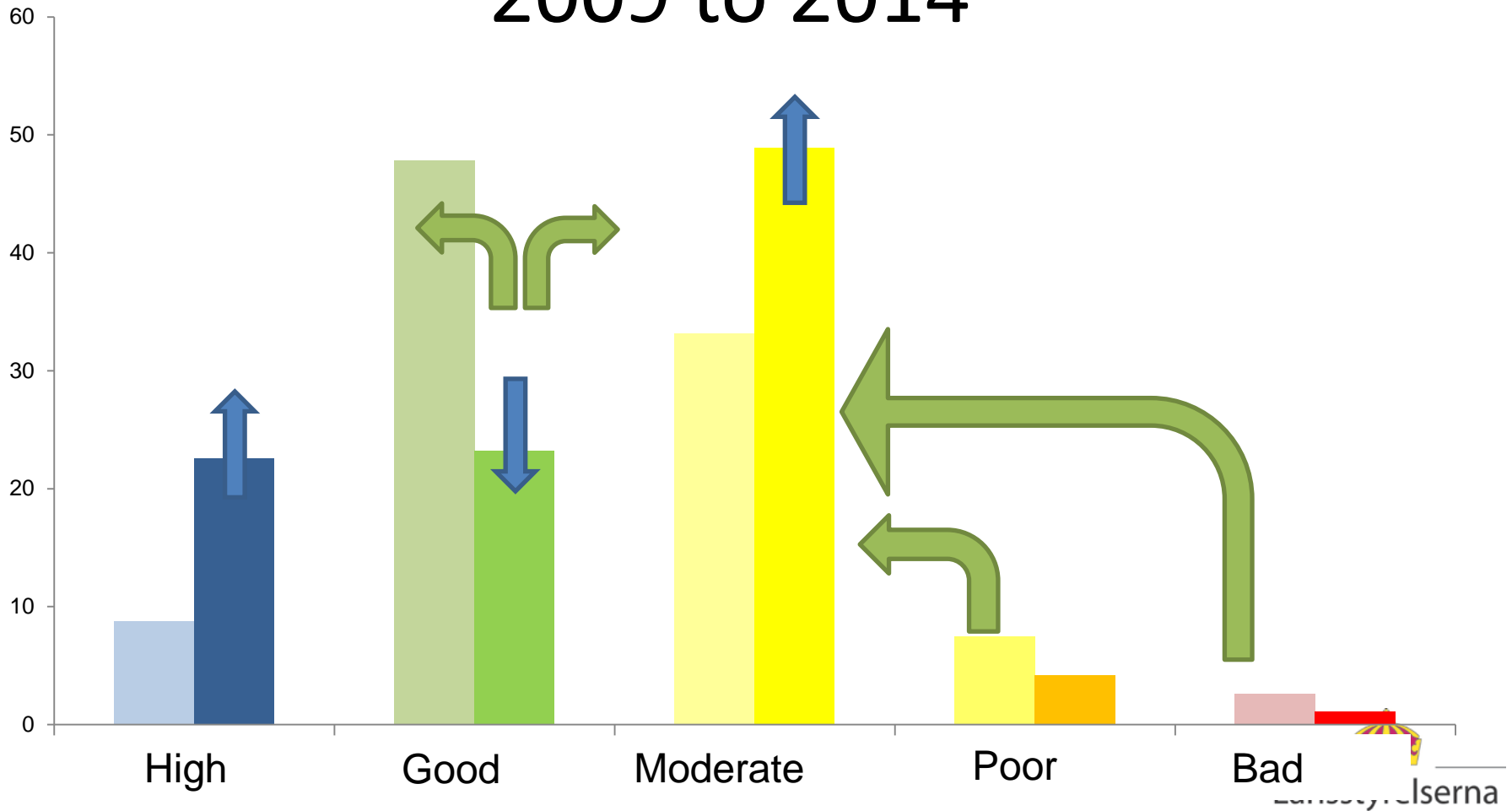
Ecological status  
2009



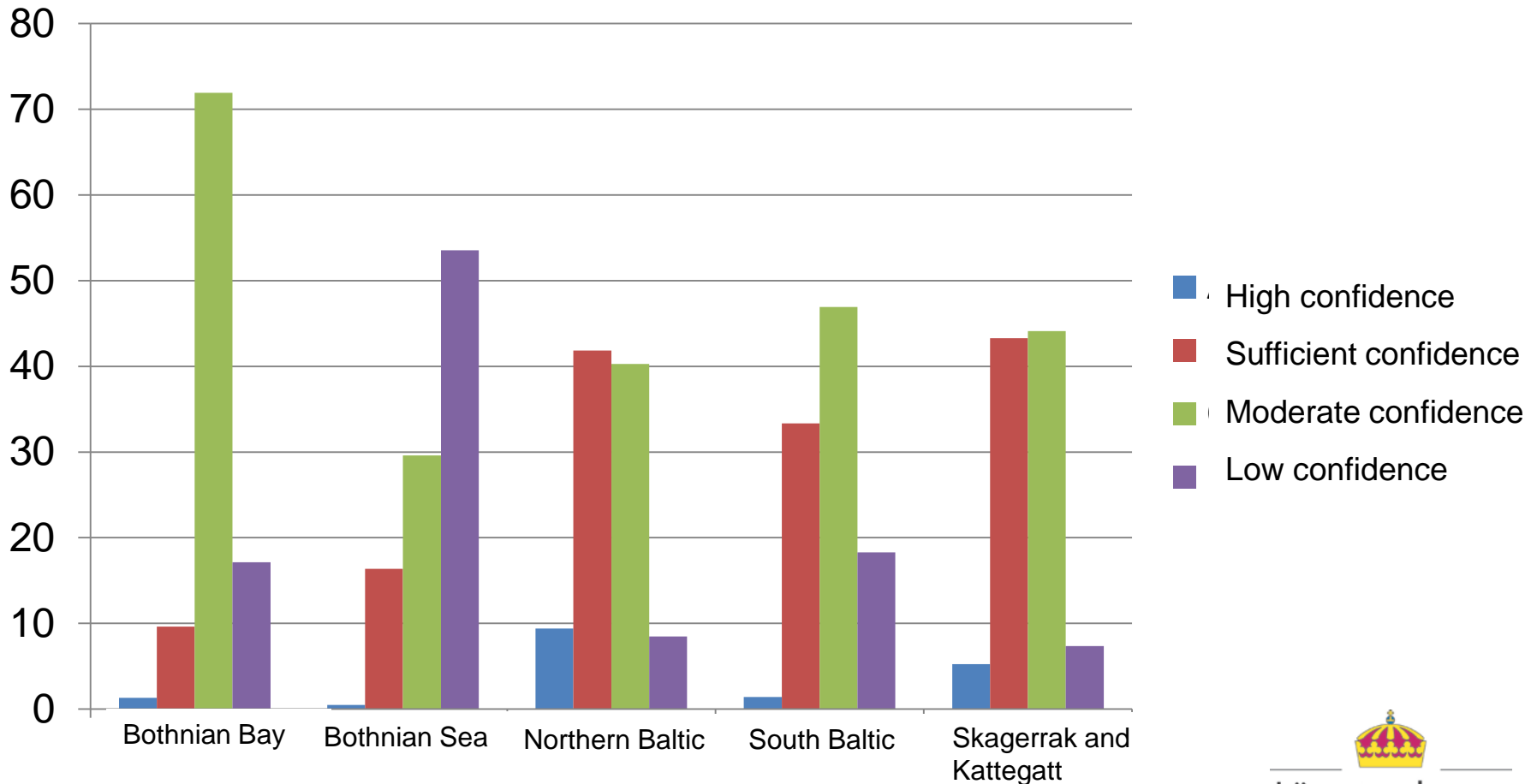
Preliminary  
ecological  
status 2014



# Changes in ecological status from 2009 to 2014



# Estimation of confidence - Ecological status



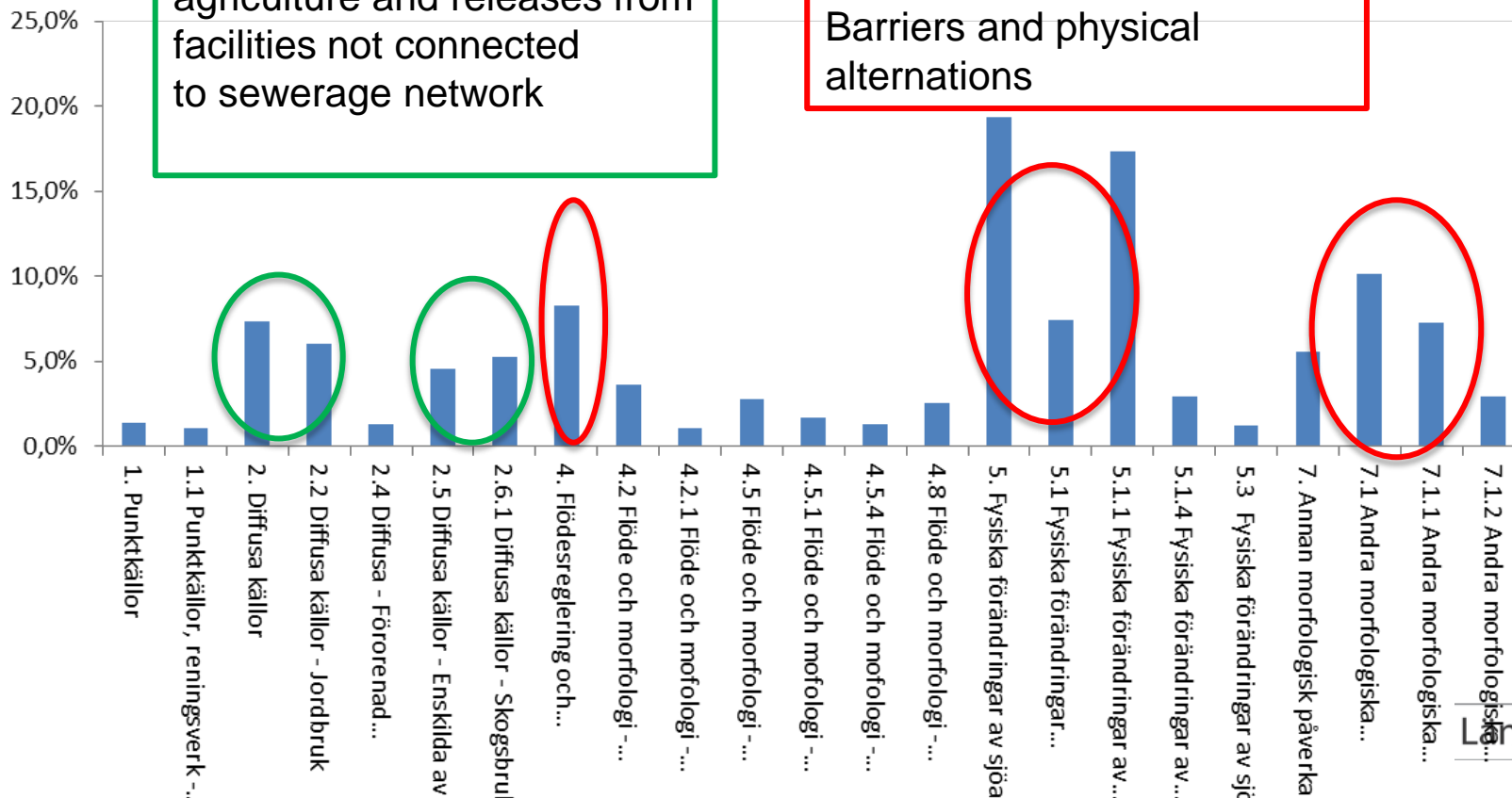
# Pressures in rivers (and lakes)

Pressures contributing with less than 1 % are excluded from the figure.

Atmospheric deposition (acidification and mercury)  $\approx$  70-80 % is also excluded.

Diffuse sources – forestry, agriculture and releases from facilities not connected to sewerage network

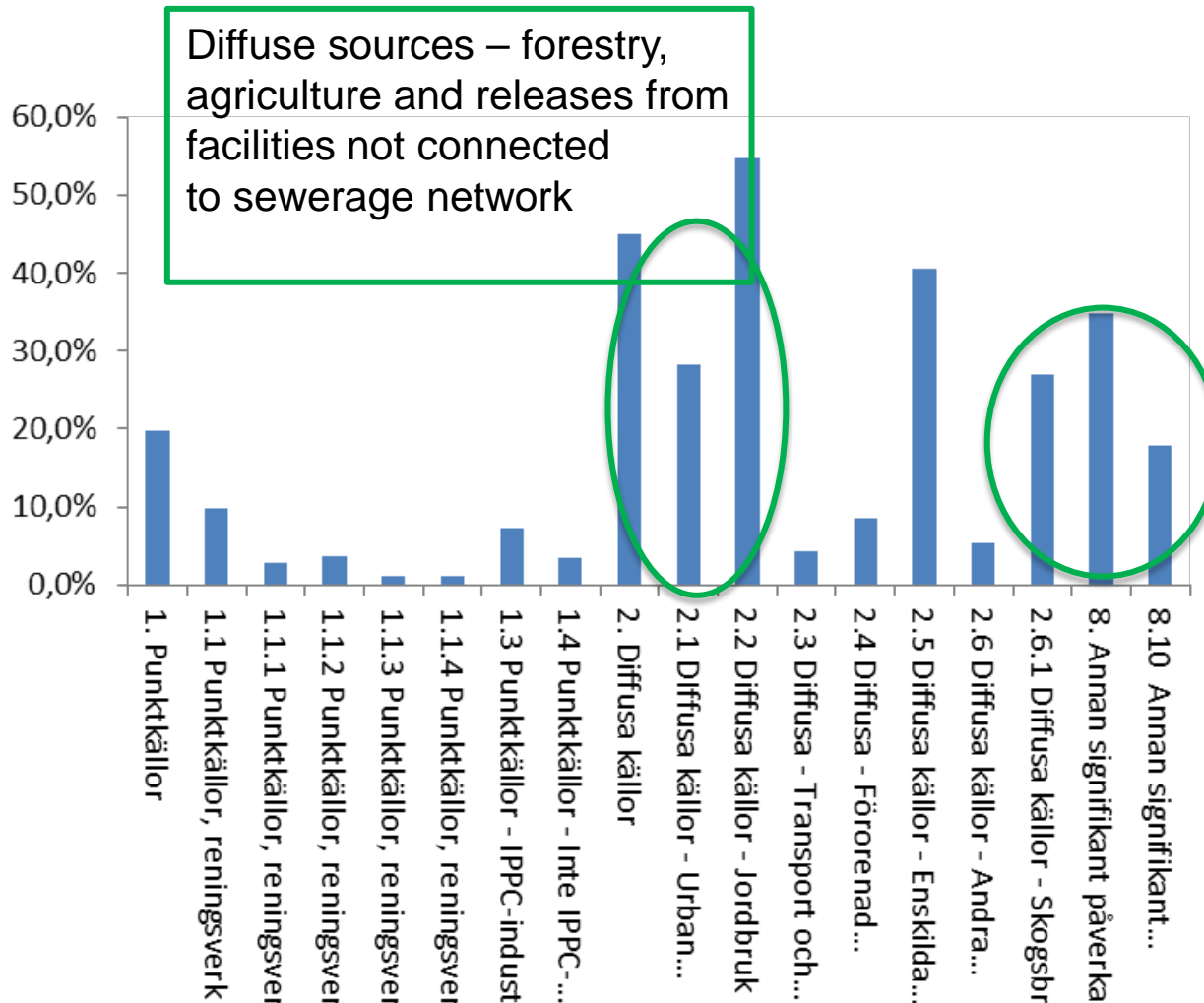
Barriers and physical alternations



# Pressures in coastal waters

Pressures contributing with less than 1 % are excluded from the figure.

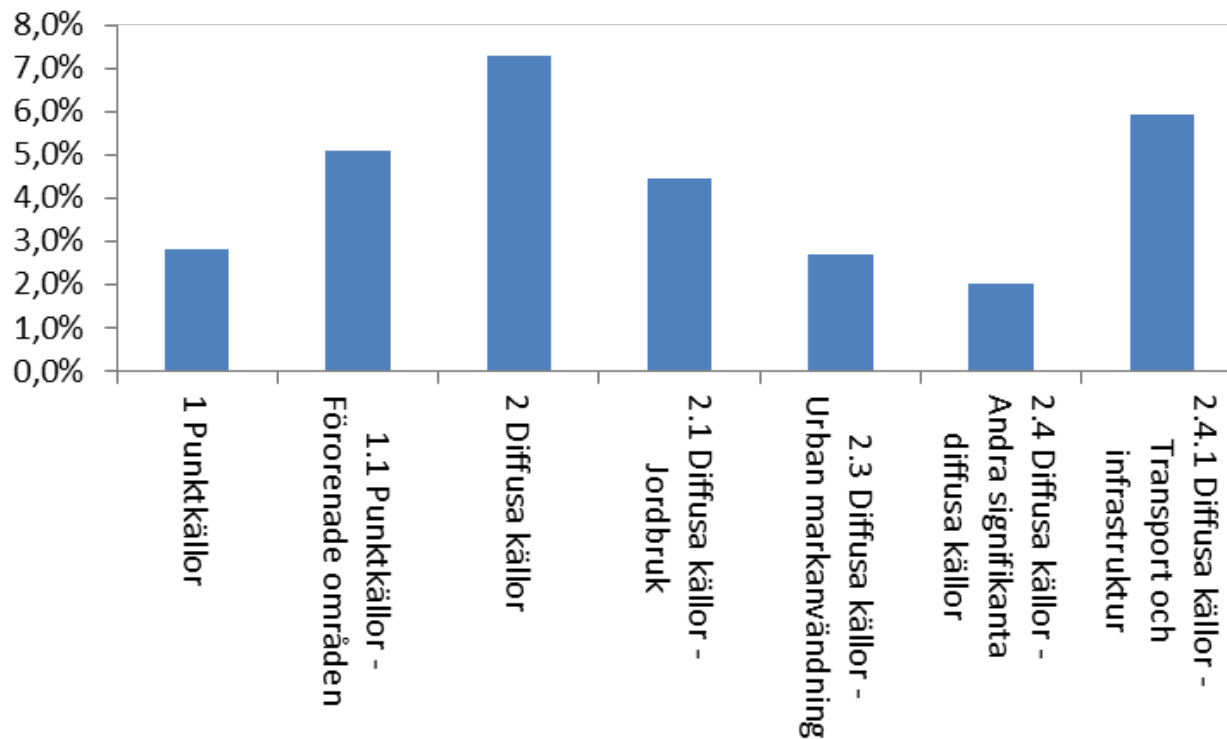
Atmospheric deposition (mercury)  $\approx$  70-80 % is also excluded.



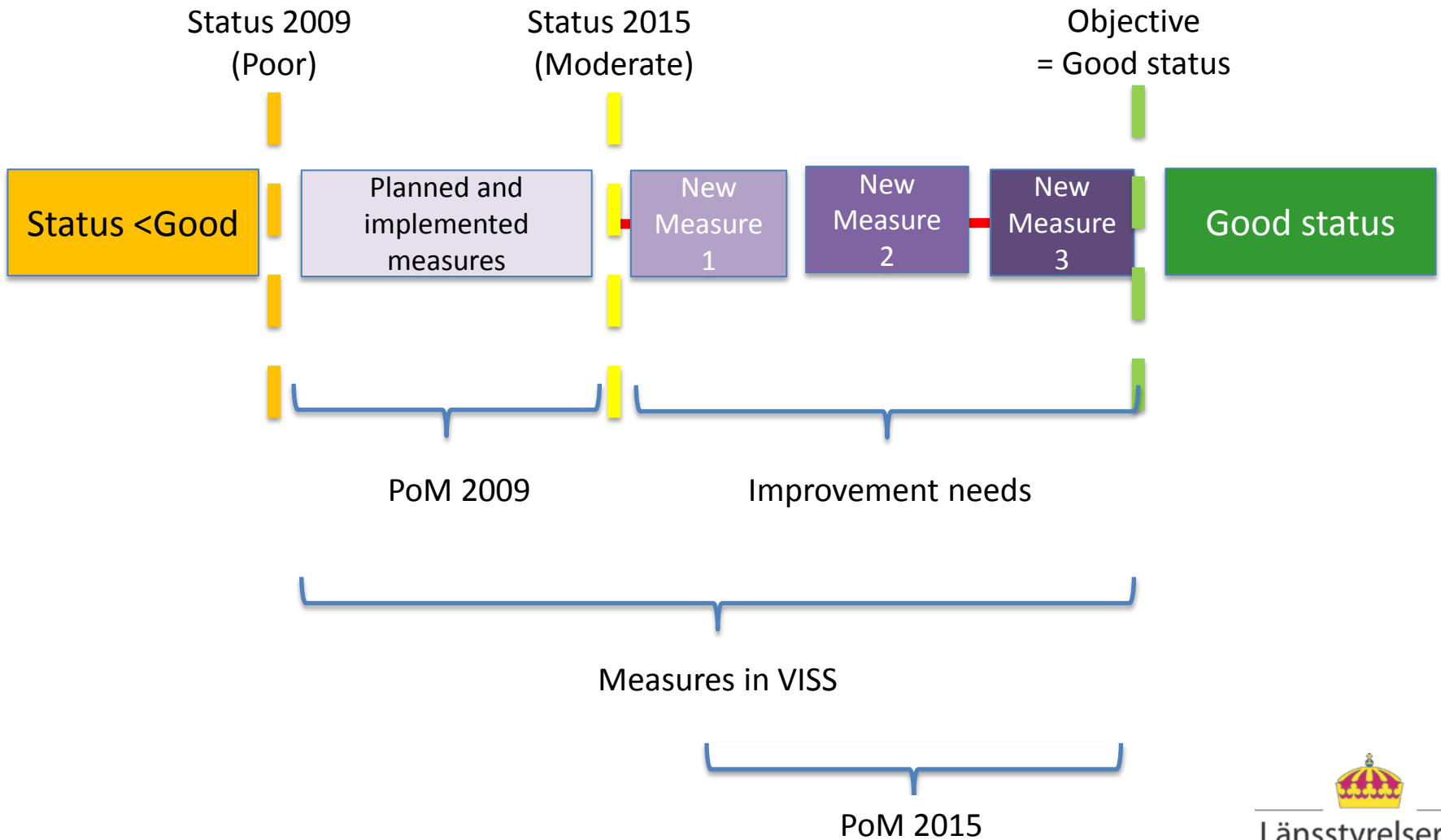


# Pressures in ground water

Pressures contributing with less than 1 % are excluded from the figure.

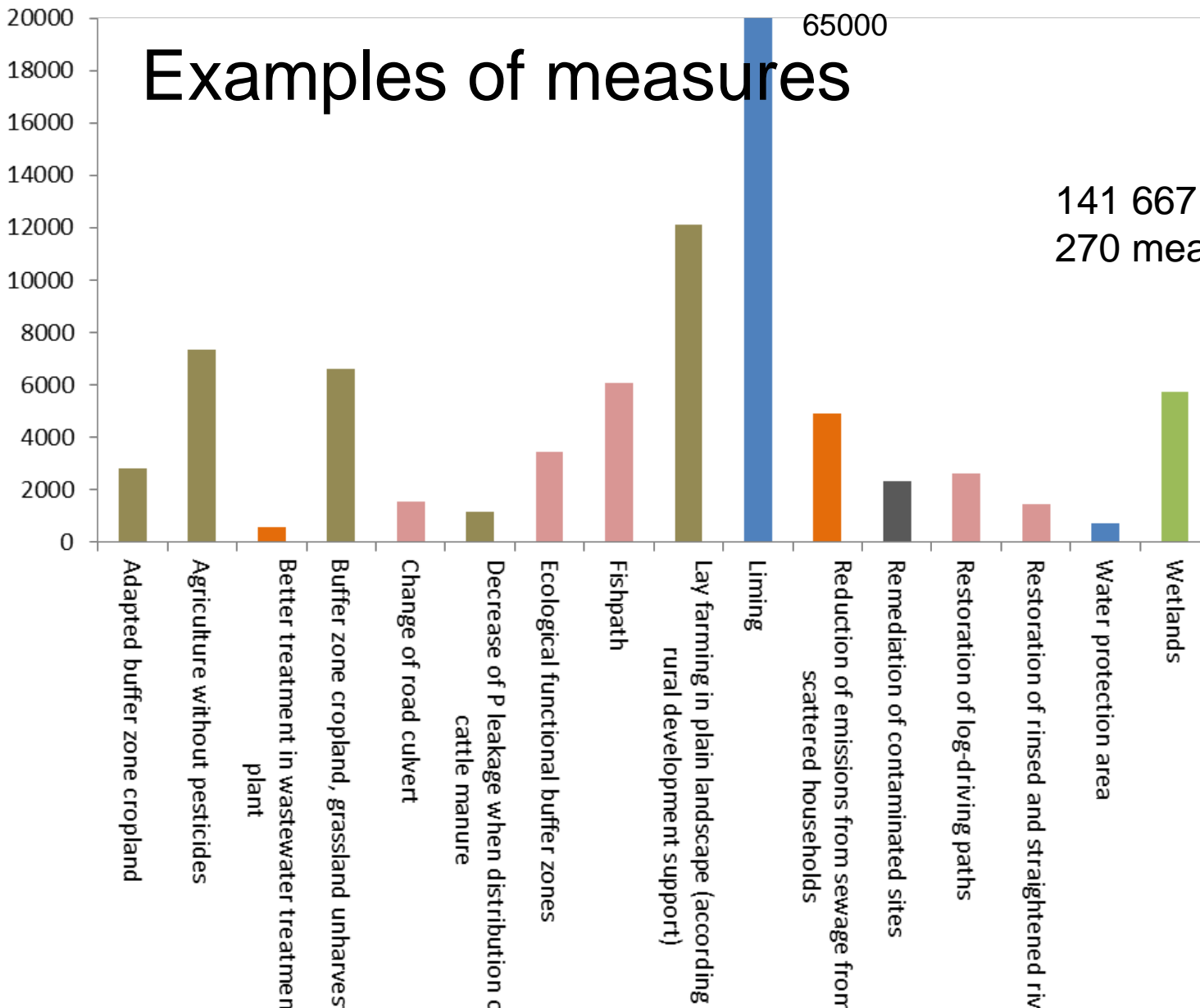


# PoM – schematic view of the process



# Examples of measures

141 667 unique measures  
270 measure types



# Timetable

1 Apr: Information from VISS version I

15 Aug: Information from VISS version II

Middle of October: Final version of documents for consultation

Jan Feb Mar Apr Maj Jun Jul Aug Sep Okt Nov Dec

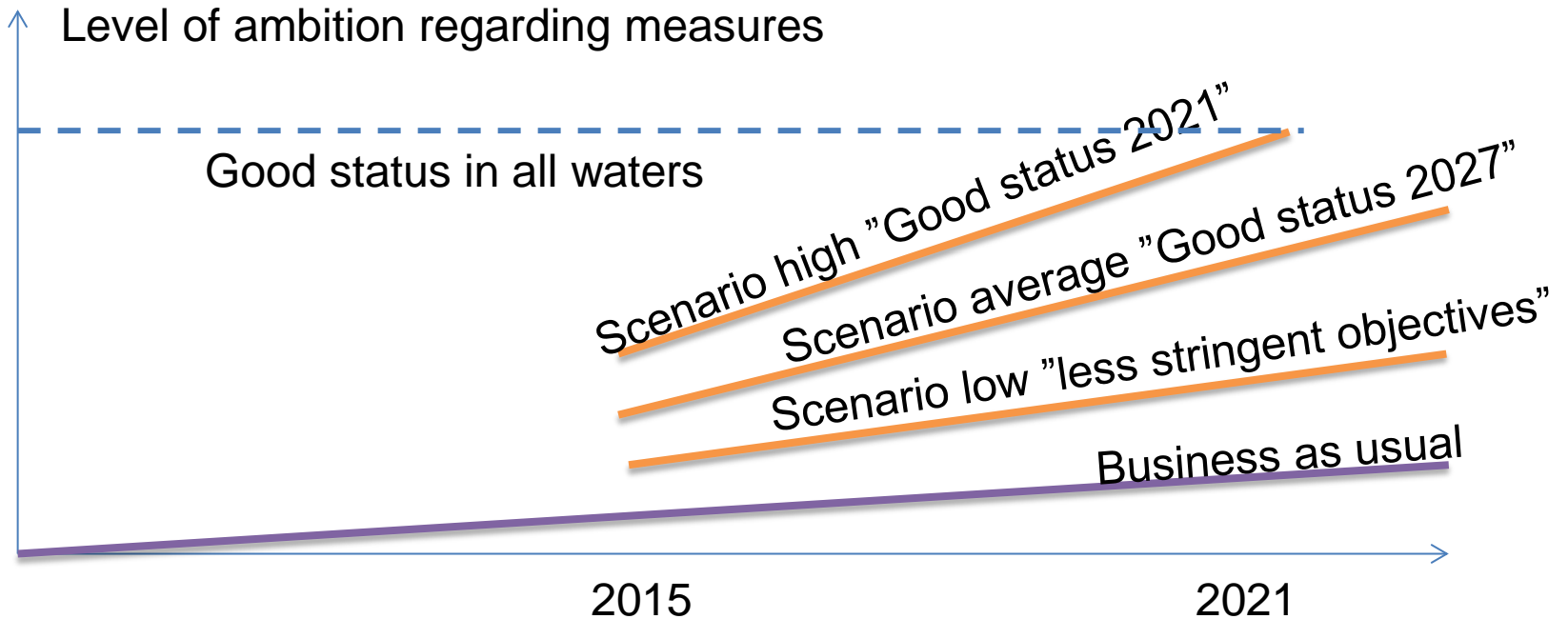
30 Apr: Draft version I of the documents delivered to the water delegations

15 Sep: Draft version II of the documents delivered to the water delegations

1 Nov – 1 May  
Public consultation



# Major problems of implementation



- Difficult to make accurate cost/benefit-analysis (value of water)
- Lack of information about cost and effect regarding measures
- Lack of data of sufficient quality.



Thank you for listening!  
Now back to Johan..

