

Welcome to SEGES

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Miljø & Land

SEGES





**SEGES is one of Europe's leading
agricultural innovation companies**

SEGES



SEGES is involved in all aspects of the farming sector

Scientific integrity is essential to us

We aim at working across professional boundaries



SEGES



SEGES is the bridge-builder between research and practical farming

- dNmark
- BufferTech
- rOpen
- Fairway
- MapField
- Trends

SEGES





650

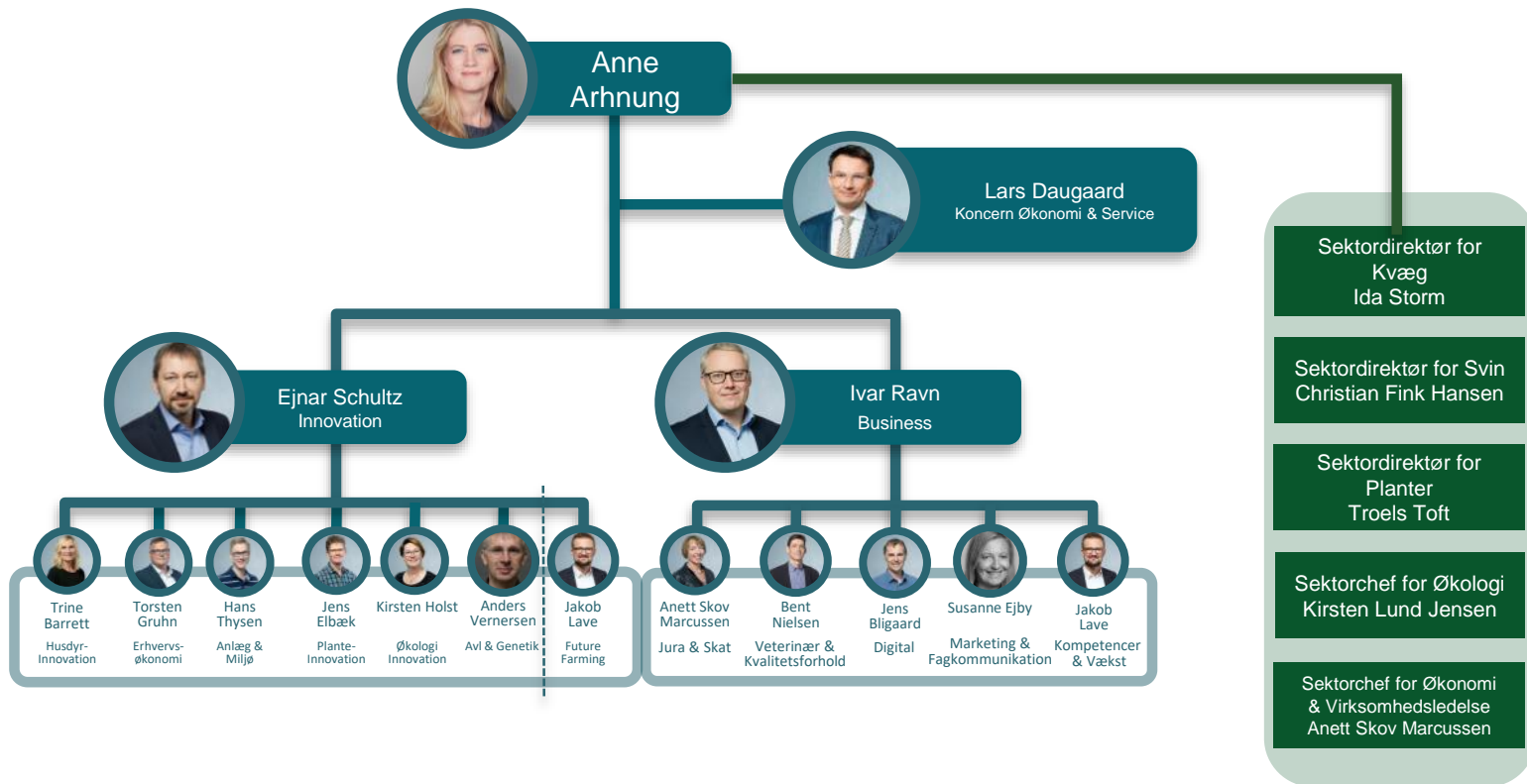
employees

8 out of 10

have an academic
background

70

different
educational
qualifications





Anlæg & Miljø

Anlæg &
Produktionsstyring
Kent Myllerup

Miljøteknologi
Anders Leegaard
Riis

Miljø & Land
Irene Wiborg

Miljø & Virkemidler

Natur
Heidi Buur Holbeck

Arbejdsmiljø
Helle Domino



PlantInnovation

Gødningsteam
Leif Knudsen

Planteværnsteam
Poul Henning
Pedersen

Regelteam
Jon Birger Pedersen

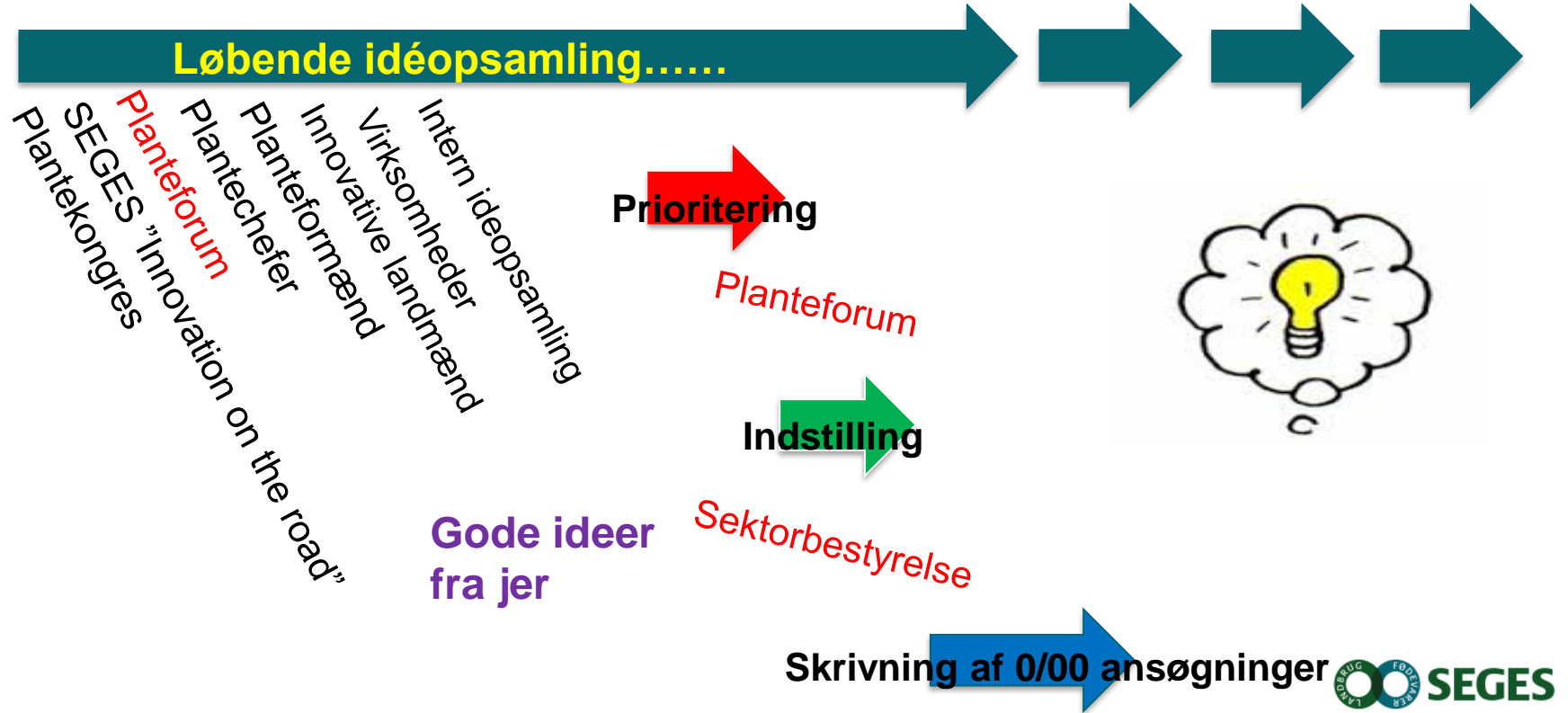
Afgrødeteam

Bioenergiteam
Torkild Qvist
Frandsen

COLLABORATION WITH LOCAL EXTENSION SERVICE

D L B R®

SEGES INNOVATIONSPROCES



INTRO LINE

- Biologist from Aarhus University, 2016
- Newly hired in construction & environment at SEGES from June 1st 2018
- Data processing and planning workshops

INTRO SEBASTIAN

- Cand. scient Agri-Environmental Mangement (2014)
- Started at SEGES in February 2015
- Work tasks: project management, GIS catchment analysis and data processing

GENERAL REGULATION (RAMMEVILKÅR) SOURCES IN DANISH AGRICULTURE IN RELATION TO ENVIRONMENT

EU Water Framework Directive (WFD): All water bodies in EU is required to be in "good ecological state" before 2027.

- Better conditions in streams, fjords and lakes
- Reduce emission of nutrients and wastewater
- Create better physical conditions

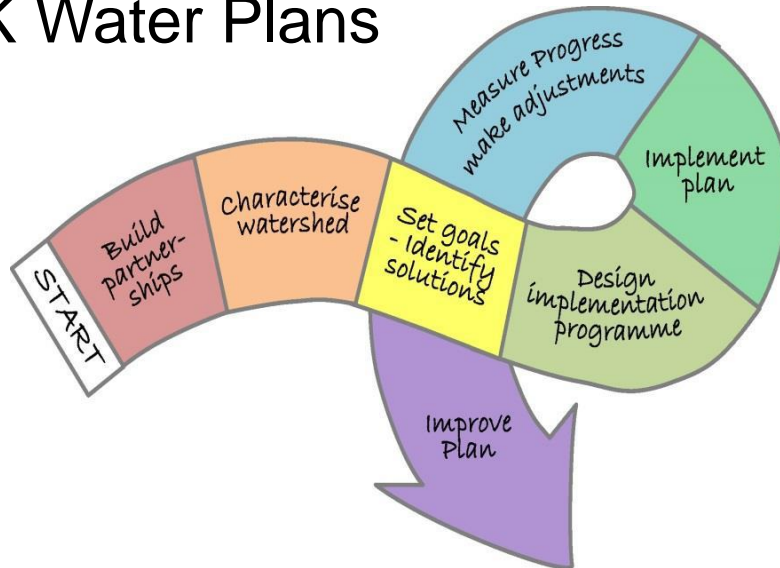
Danish implementation: Water Plans I-III (Vandplaner) & policy of agricultural package (Fødevarer- og landbrugspakken)

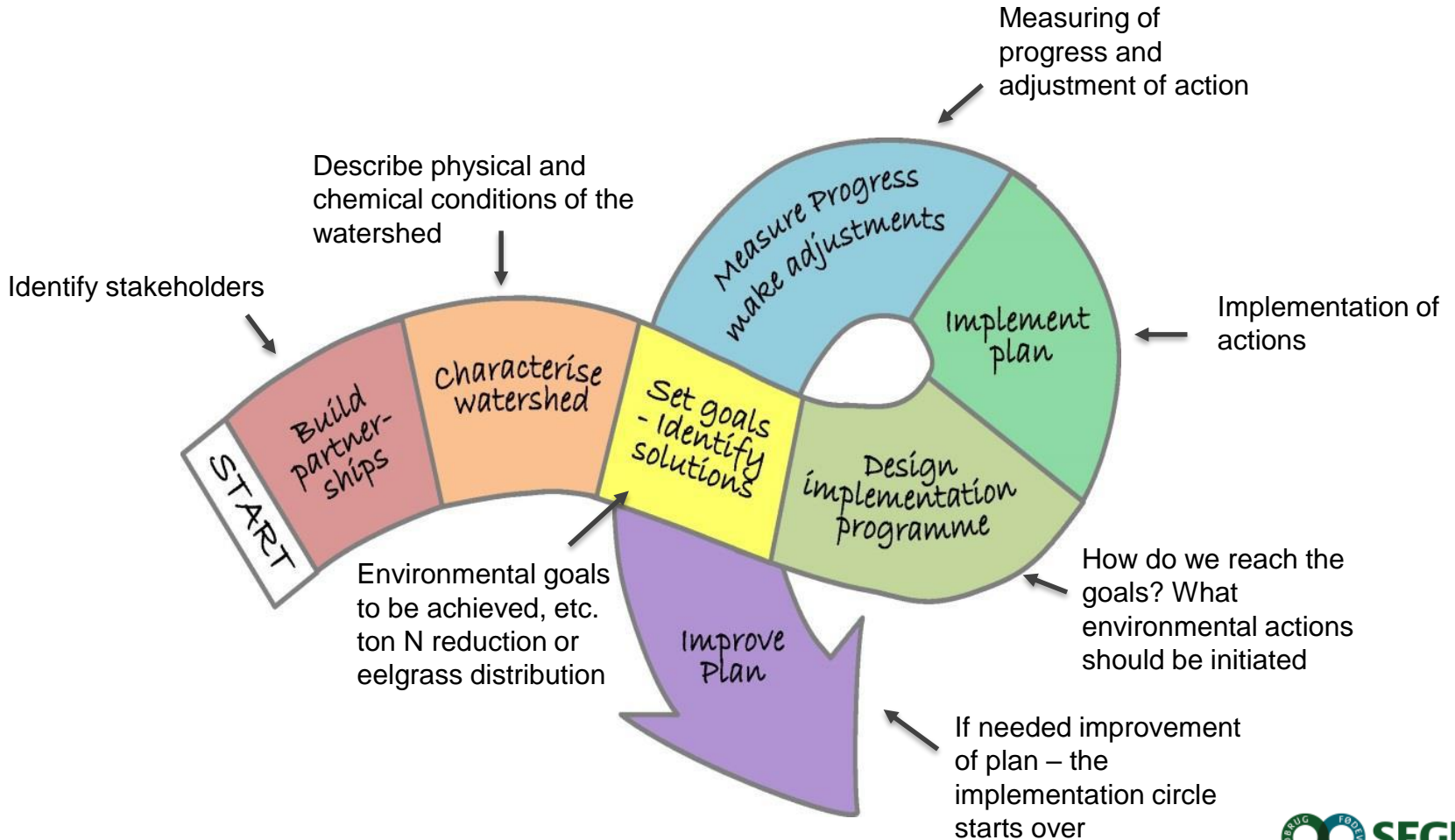
CO-DEVELOPERS OF ENVIRONMENTAL MEASURES

- To ensure that the goal of nutrient emission reduction is achieved
 - Targeted regulation (målrettet regulering)
 - Catch crops, alternatives to catch crops, precision agriculture
 - Collective measure (kollektive virkemidler)
 - Wetlands, constructed wetlands, forestation
- “Virkemiddelkatalog” (environmental measure catalogue)

WATER MANAGEMENT CIRCLE

- Adaptive management framework
- A time line of the management of etc. the EU WFD or the DK Water Plans

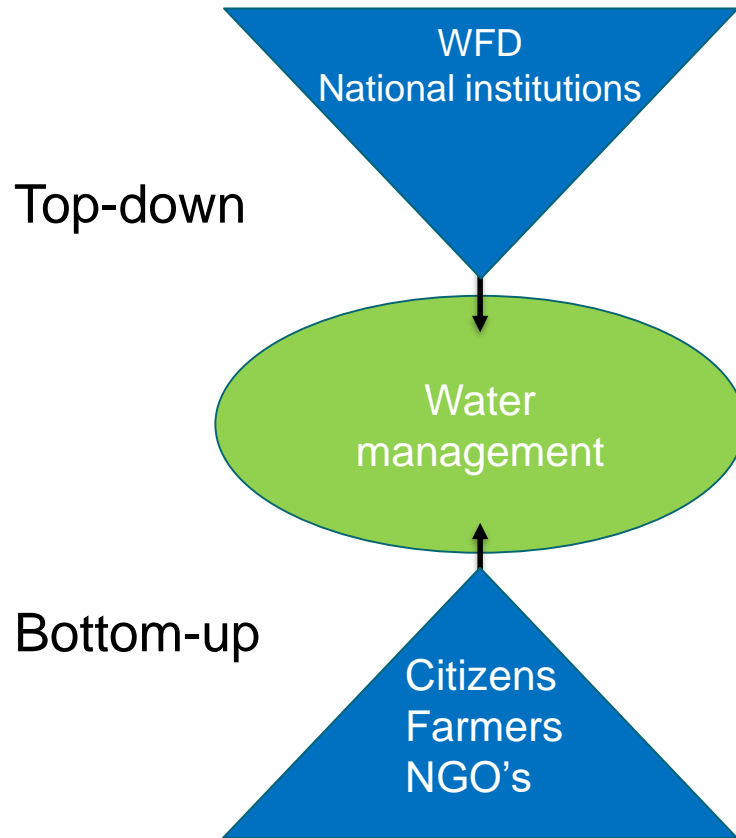




EU PROJECT WATER COG



- Aim: to understand how stakeholder and community participation in water management can improve the implementation of the Water Framework Directive



WATER COGOVERNANCE

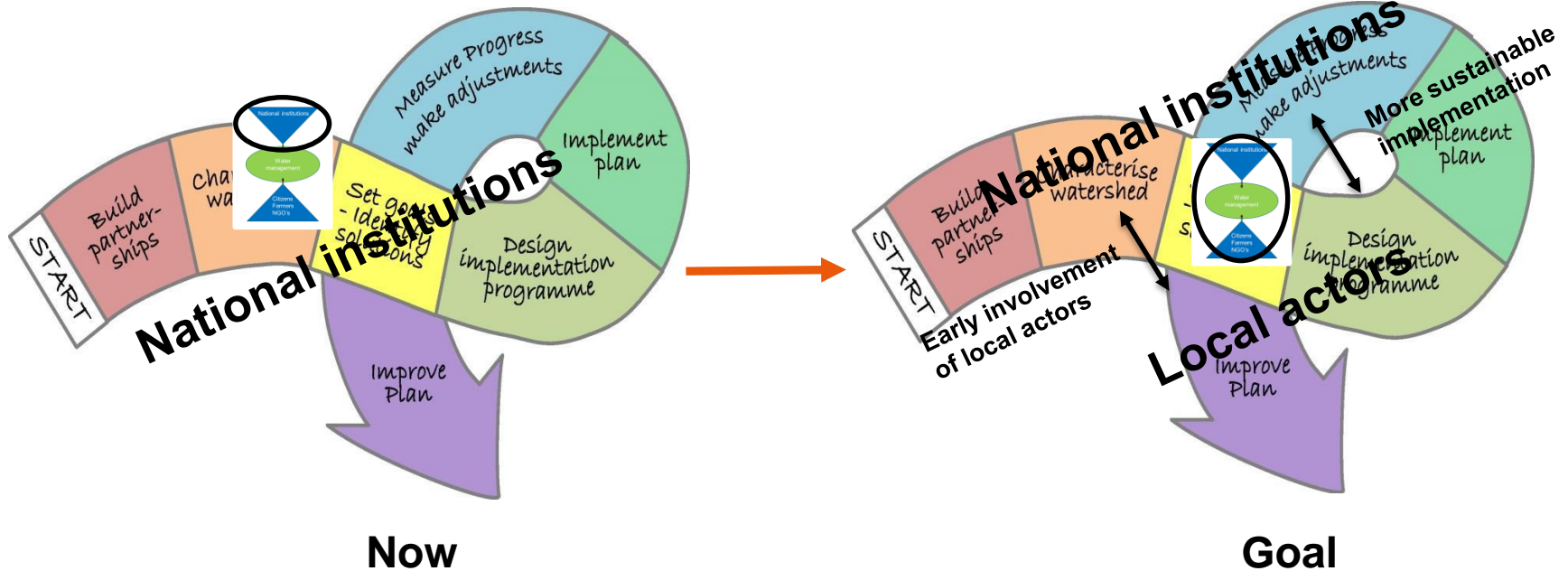


Interreg
North Sea Region
WaterCoG

European Regional Development Fund



EUROPEAN UNION



BETTER CHARACTERIZATION OF WATERSHED – SKIVE FJORD PILOT

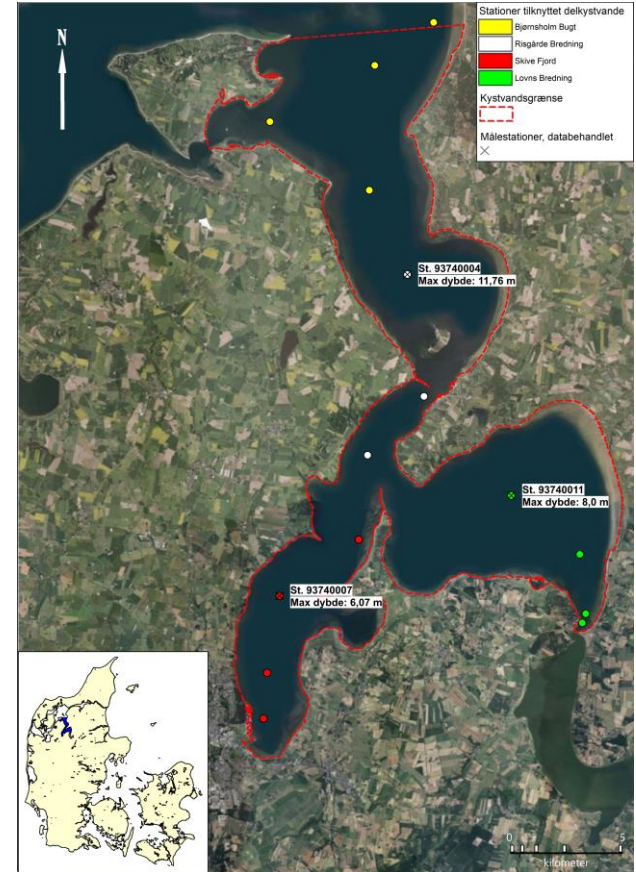


TWO CASES OF WORKING WITH GENERAL REGULATION AND WFD



SKIVE FJORD: A PILOT AREA

Aim: to demonstrate that a new top-down/bottom-up interaction, when characterizing water environment status in Skive Fjord will lead to a better common understanding and better decisions, concerning actions towards improving the water environment.



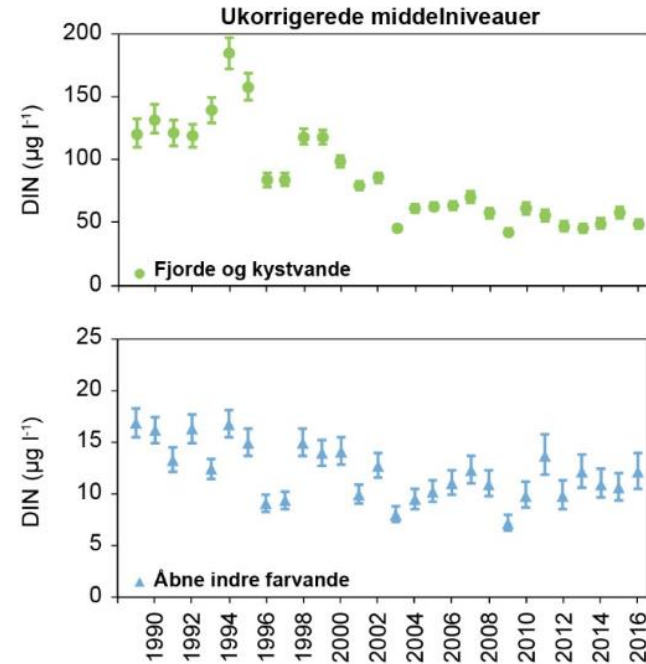
SKIVE FJORD: A PILOT AREA



Current situation

Each year is an environmental status report (NOVANA report) published by The Danish Environmental Protection Agency.

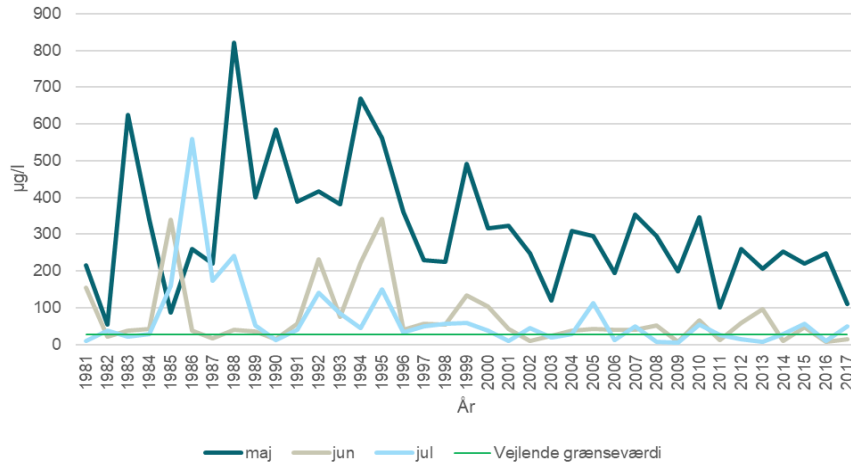
The report summaries all fjords or all watercourse on a national scale into one graph or into one indicator, which means that local stakeholders are lacking the possibility of gaining insight into the environmental status of their local surface water.



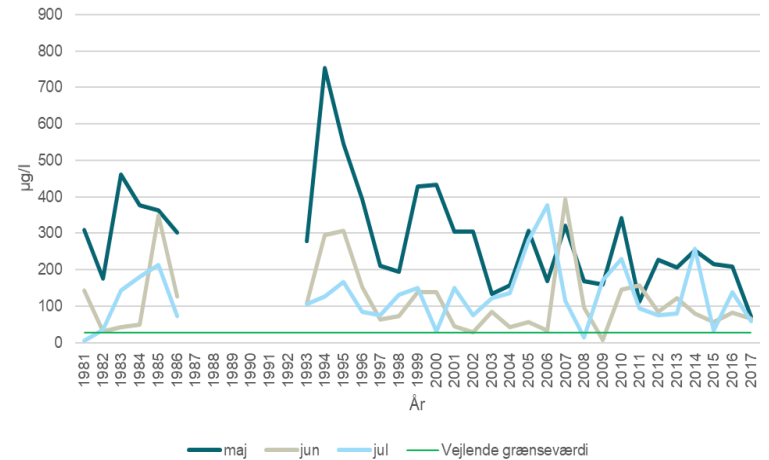
Hansen, 2018

EXAMPLE FROM SKIVE FJORD REPORT

DIN: Top



DIN: Bottom



50 page report with 200 pages of appendix

SKIVE FJORD: A PILOT AREA

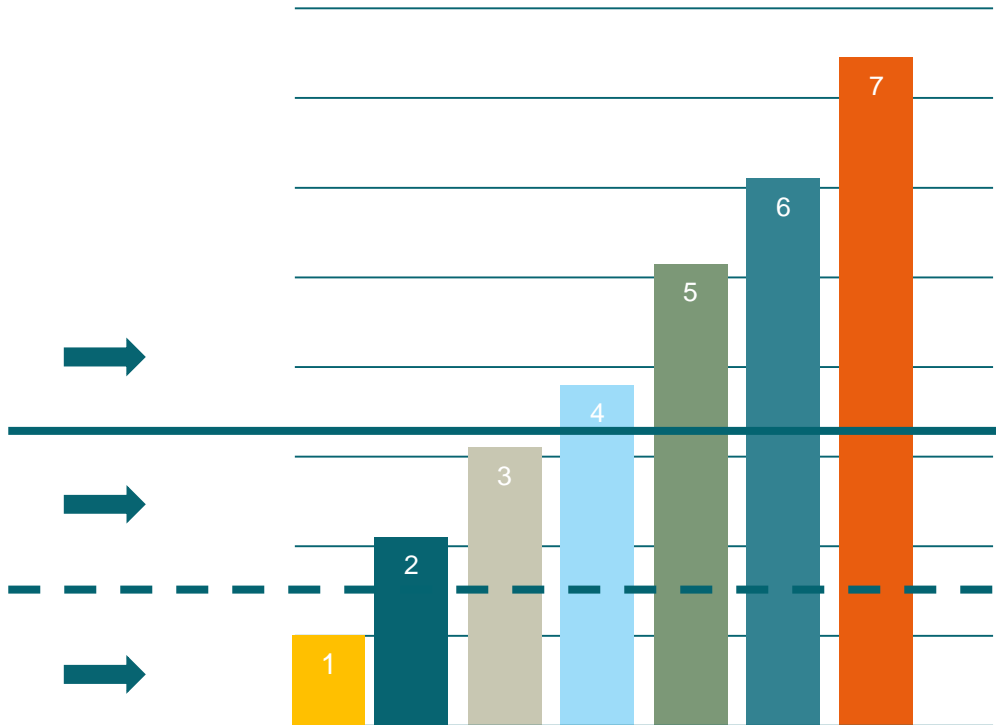


- More detailed description of the environmental condition of Skive Fjord
- Stakeholder meeting – we got:
 - Local inputs such as birds, fishing, algae blooms etc.
 - Agreement on local involvement is essential in water management
 - Willing to participate in the future management
- An inspiration to national institutions on how to do water management in the future



Targets for reduction of emissions

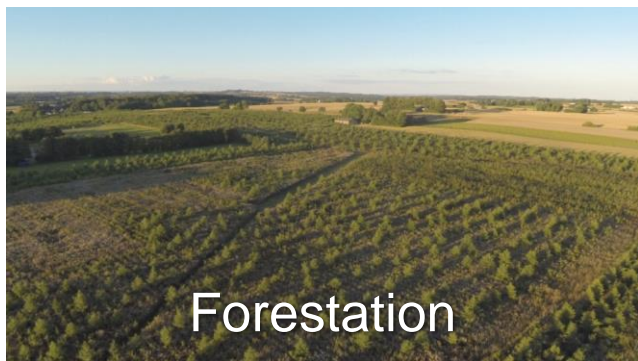
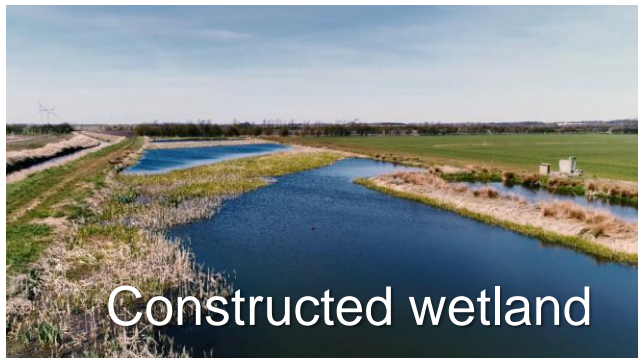
Category	Actions	Effect, ton N
Postponed	-	Approx. 6.200
Targeted regulation	Catch crops and other field operation measures	Approx. 3.500
Collective environmental measures	Wetlands, constructed wetlands and forestation	Approx. 3.400



Reductions demanded pr. catchment (approx. 90 catchment on national level)

UDVIKLET PÅ BAGGRUND AF SLIDE FRA MILJØ OG FØDEVARE MINISTERIET

Effective implementation of collective environmental measures

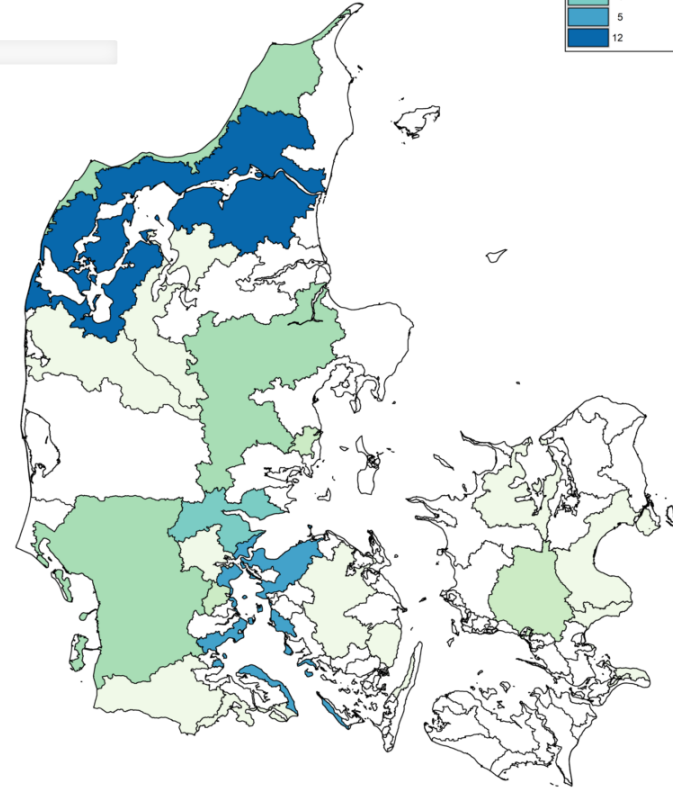
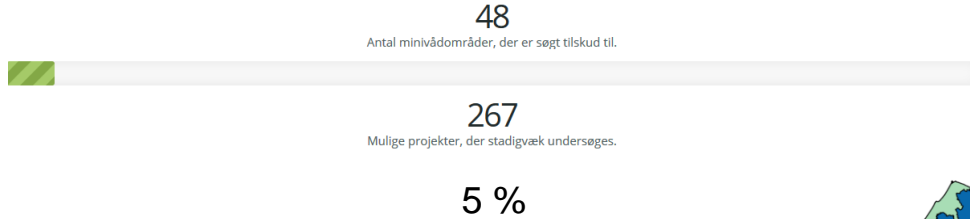


Catchment officers in Denmark (22 people)

- Guiding and assisting in collective measures
 - Process of establishment of constructed wetland
 - Finding suitable areas, grant applications etc.
- Important for the dialog between farmers, farmers unions and municipalities in order to find the best solution



Status after 1. round of applications for constructed wetland



Thank you for your attention!

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