

TReNDS

Transport and Reduction of Nitrate in Danish Landscapes at various Scales

TReNDS afslutningsseminar, 29. november 2018, Århus

Nye vandforvaltningsstrukturer tilpasset en målrettet regulering

Chefkonsulent Flemming Gertz¹, Chefforsker Charlotte Kjærgaard¹,
Seniorforsker Anker Lajer Højberg², Forskningsprofessor Jens Christian Refsgaard²

¹ SEGES

² GEUS



Midtvejsseminar - TReNDS feb. 2017

AKTIV INVOLVERING I SVERIGE (VATTENRÅD)



3 | 23. november 2018



MN Water Management Framework



"Watershed Restoration and Protection Strategy (WRAPS)"

Step 4. Conduct restoration and protection projects in the watershed

- Civic engagement and public participation.
- Prioritize, target and measure the implementation of restoration and protection projects.

Outcomes:

- Local Water Plans
- One Watershed One Plan

Comprehensive Watershed Management Plan

10 Year Cycle

Restoration and Protection Strategy Development

Water Resources Characterization & Protection Investment

Step 3. Develop strategies to restore and protect the watershed's water bodies

- Summarize details on water quality issues.
- Determine reduction goals for impaired or protected water bodies.

Outcomes:

- Total Maximum Daily Load (TMDL)
- WRAPS Report

Ongoing Local Implementation

Local Leadership State Coordination

Step 1. Monitor water bodies



The Rivers Trust & Catchment Based Approach (CaBA)



sustainability

Article

Opportunities and Barriers for Water Co-Governance—A Critical Analysis of Seven Cases of Diffuse Water Pollution from Agriculture in Europe, Australia and North America

Morten Graversgaard ^{1,4}, Beatrice Hedelin ², Laurence Smith ³, Flemming Gertz ⁴, Anker Lajer Højberg ⁵, John Langford ⁶, Grit Martinez ⁷, Erik Mostert ⁸, Emilia Ptak ¹, Heidi Peterson ^{9,10}, Nico Stelljes ⁷, Cors van den Brink ^{11,12} and Jens Christian Refsgaard ⁹ *

¹ Department of Agroecology, Aarhus University, Blichers Alle 20, 8850-DK Tjele, Denmark; eptak@agro.au.dk; lenstih@soas.ac.uk
² Centre for Climate and Safety, Faculty of Health, Science and Technology, Karlstad University, Karlstad 651 88, Sweden; beatrice.hedelin@kau.se
³ Centre for Development, Environment and Policy, SOAS University of London, London WC1H 0XG, UK; lenstih@soas.ac.uk
⁴ SEGES, Landbrug & Fødevarer F.M.B.A., Agro Food Park 15, 8200 Aarhus N, Denmark; fg@seges.dk
⁵ Geological Survey of Denmark and Greenland (GEUS), 1350 Copenhagen C, Denmark; alh@geus.dk (A.L.H.); jcr@geus.dk (J.C.R.)
⁶ Department of Infrastructure Engineering, the University of Melbourne, Parkville, Victoria 3010, Australia; laj@unimelb.edu.au
⁷ Ecology Institute, 10717 Berlin, Germany; grit.martinez@ecologic.eu (G.M.); nico.stelljes@ecologic.eu (N.S.)
⁸ Department of Water Management, Delft University of Technology, Stevinweg 1, 2628 CN Delft, The Netherlands; emostert@tudelft.nl
⁹ Department of Bioproducts and Biosystems Engineering, University of Minnesota, Falcon Heights, MN 55108, USA; hpeterson@mp.nri.mn
¹⁰ International Plant Nutrition Institute, Stillwater, MN 55082, USA
¹¹ Royal Haskoning DHV, P.O. Box 8064, NL-9702 KB Groningen, The Netherlands; cors.vandenbrink@rdh.nl
¹² Faculty of Spatial Sciences, Groningen University, Landjeu 1, 9747 AD Groningen, The Netherlands

* Correspondence: morten.graversgaard@agro.au.dk; Tel: +45-25-645-560

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Abstract: Diffuse Water Pollution from Agriculture (DWPA) and its governance has received increased attention as a policy concern across the globe. Mitigation of DWPA is a complex problem that requires a mix of policy instruments and a multi-agency, broad societal response. In this paper, opportunities and barriers for developing co-governance, defined as collaborative societal involvement in the functions of government, and its suitability for mitigation of DWPA are reviewed using seven case studies in Europe (Poland, Denmark, Sweden, The Netherlands and UK), Australia (Murray-Darling Basin) and North America (State of Minnesota). An analytical framework for assessing opportunities and barriers of co-governance was developed and applied in this review. Results indicated that five key issues constitute both opportunities and barriers, and include: (i) pressure for change; (ii) connected governance structures and allocation of resources and funding; (iii) leadership and establishment of partnerships through capacity building; (iv) use and co-production of knowledge; and (v) time commitment to develop water co-governance.

Keywords: collaborative governance; decentralized decision-making; non-point source pollution; nutrient management; water governance

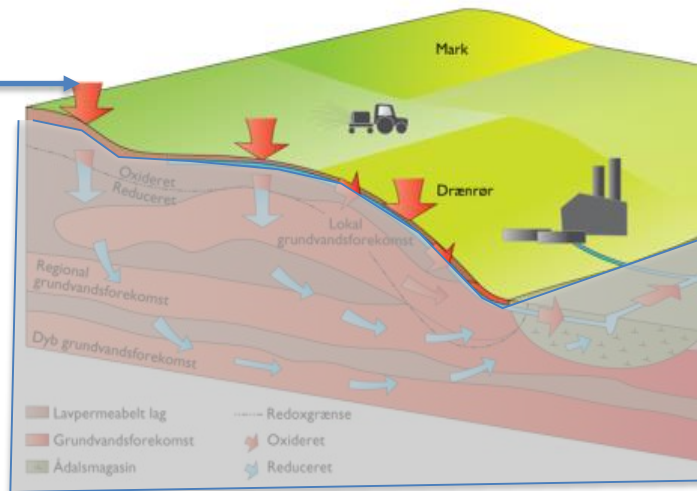


Nye vandforvaltningsstrukturer tilpasset en målrettet regulering

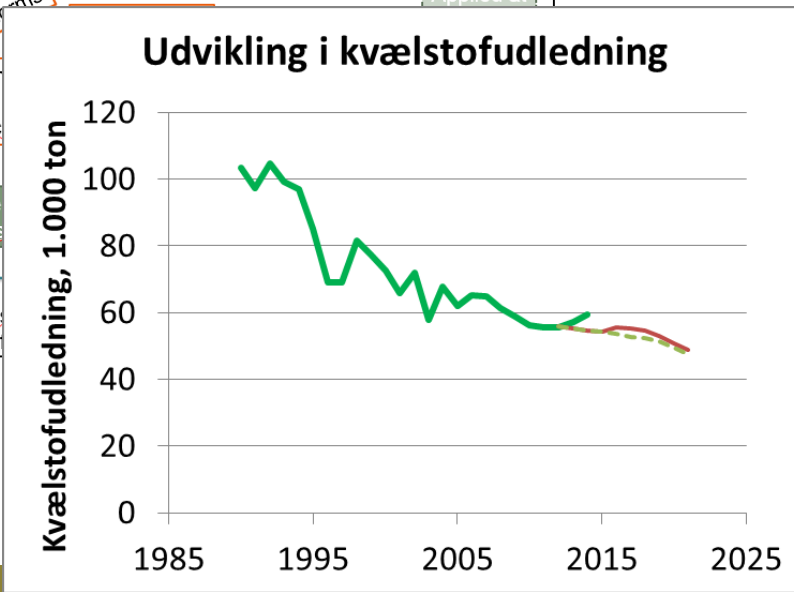
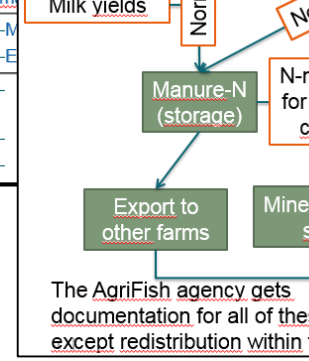
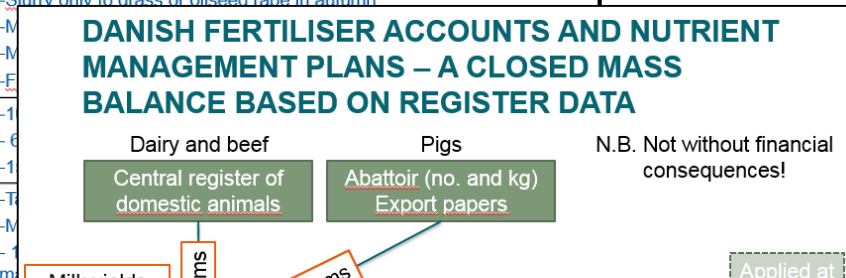
Hvorfor ?

30 års Top-down regulering

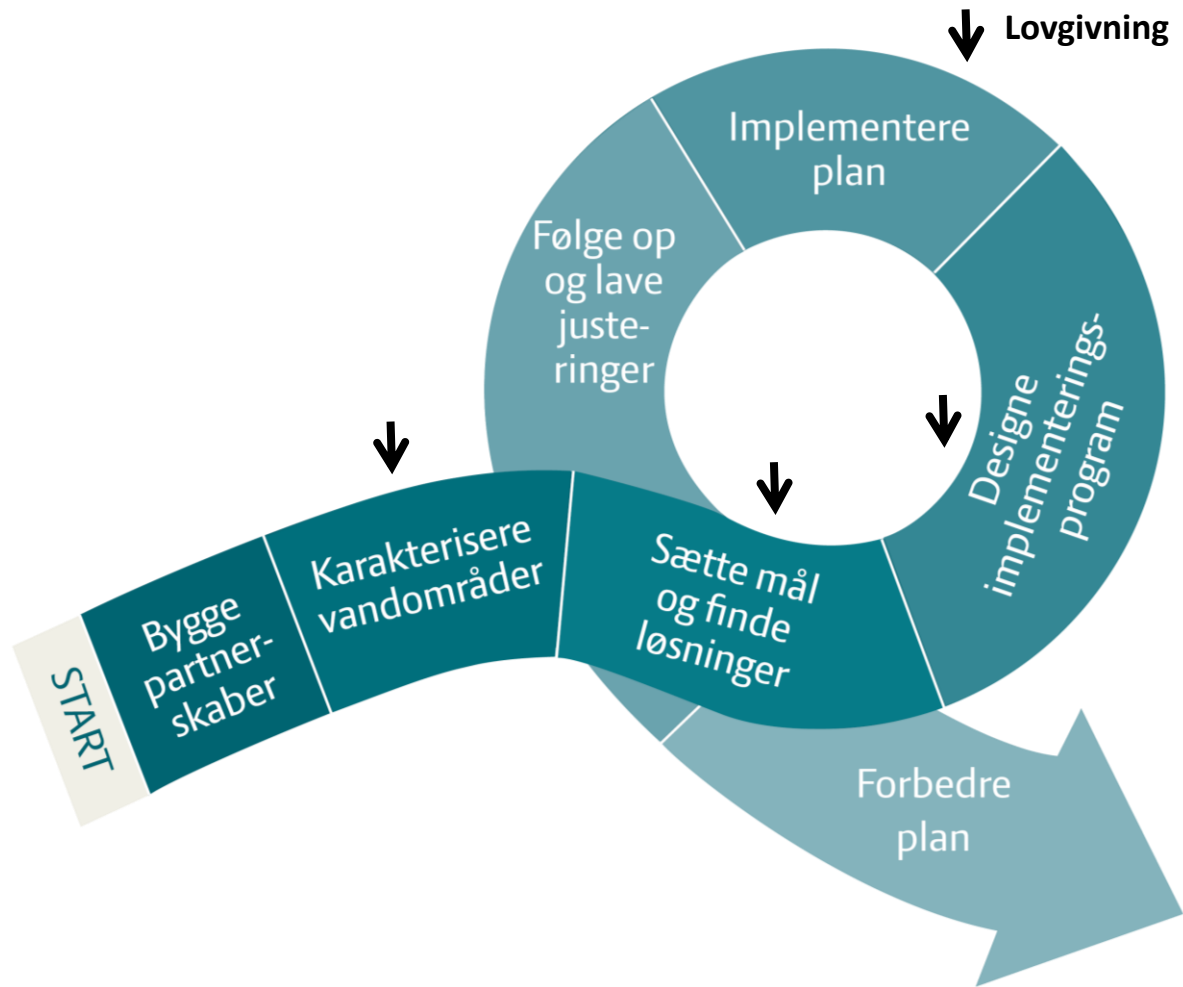
Mål
50% N
reduktion



Time	Plan	Significant elements in legislation:
1985	NPO-plan	-regulation of allowed animal unit per ha. - min. storage capacity for animal manure
1987	Water Environm. Plan I	-50 pct reduction in N-leaching from agr. -65 pct "autumn green fields" -Slurry in autumn only to wintercov. fields
1992	Action plan for sustainable agriculture	-Slurry only to grass or oilseed rape in autumn
1998	Water Environm. Plan II	
2003	Water Environm. Plan III	
2011-2013	WFD	
2016	Agricultural package WFD 2. gen plans	



30 års Top-down regulering

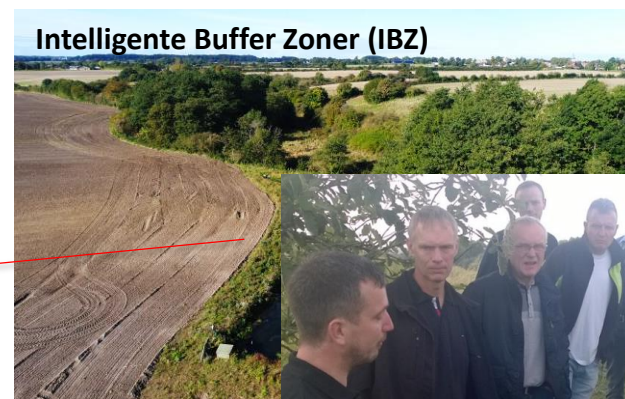
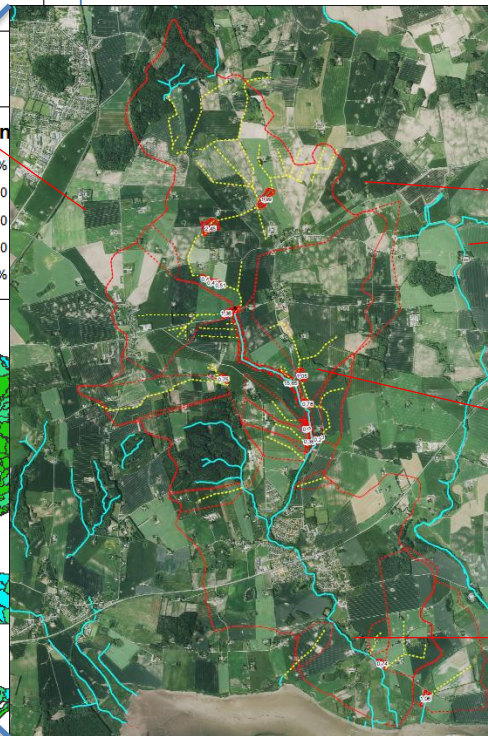
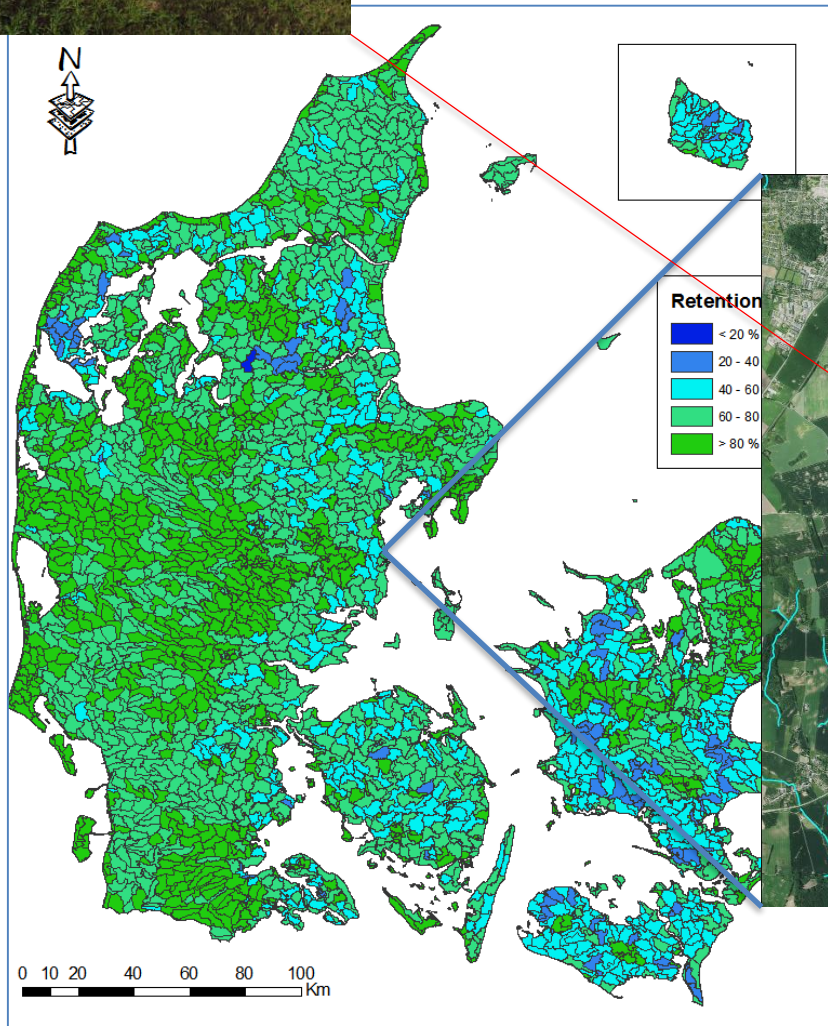


- Manglende ejerskab til at løse problem
- Manglende tillid
- Konfrontation og uvilje



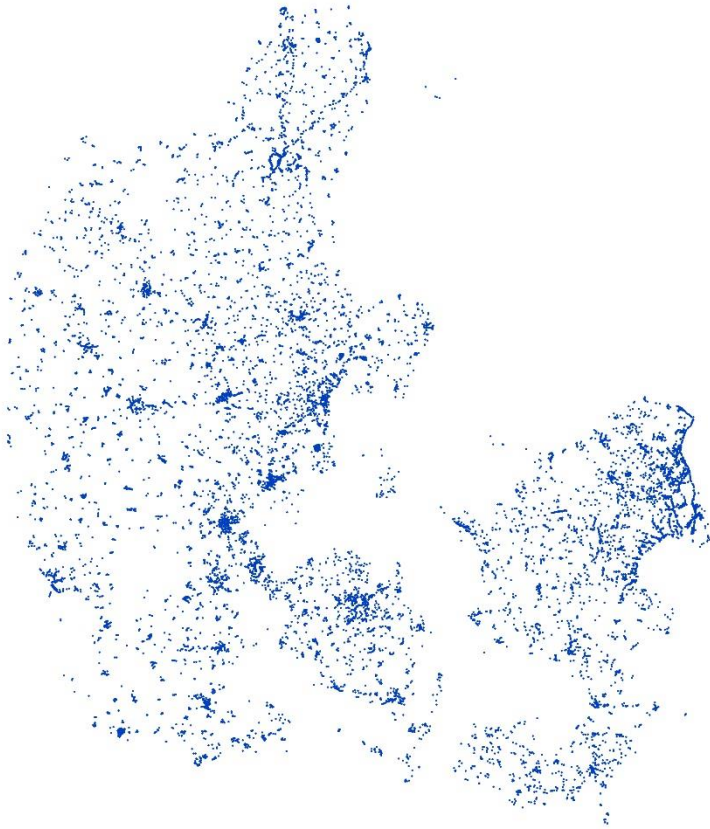


Når vi zoomer ind på virkeligheden



Når vi zoomer ind på virkeligheden

18.000 spildevandsoverløb



324.000 ukloakerede ejendomme

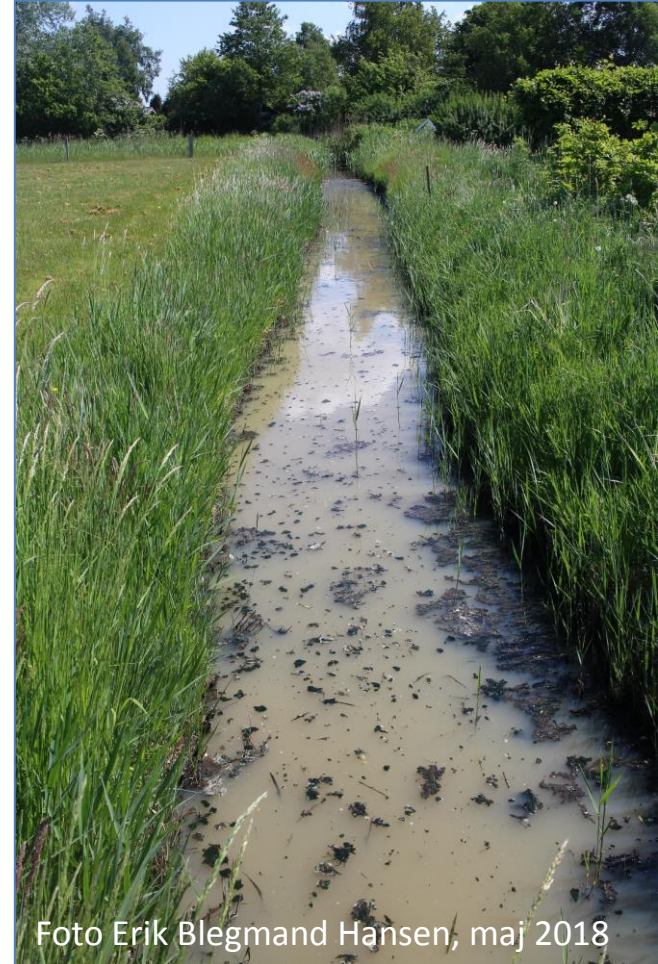


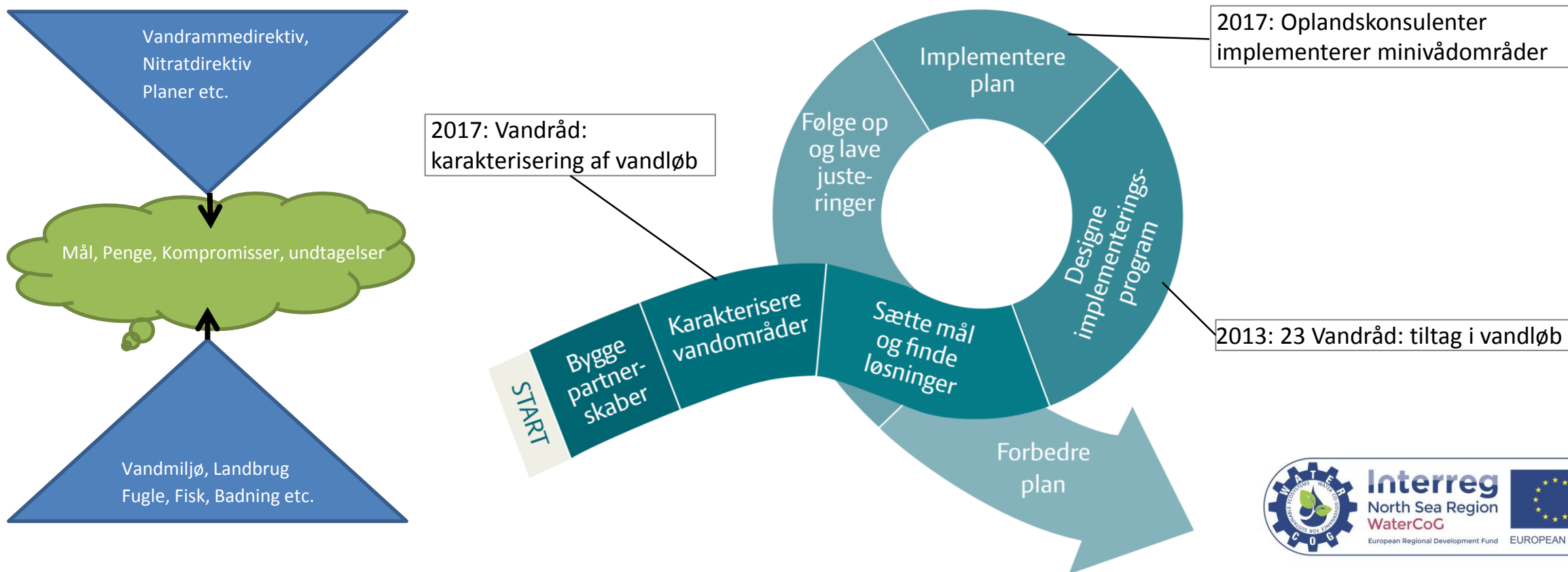
Foto Erik Blegmand Hansen, maj 2018

Nye vandforvaltningsstrukturer tilpasset en målrettet regulering

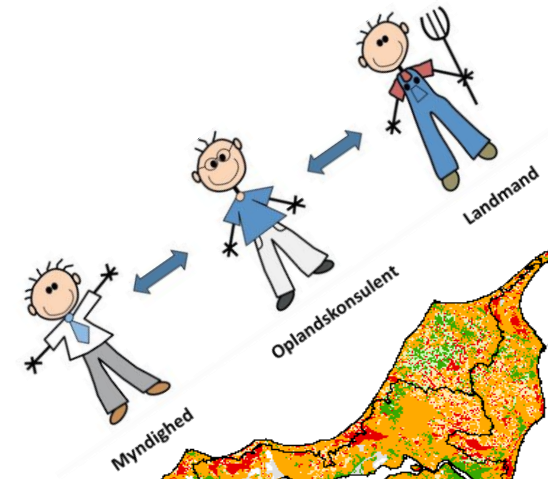
Hvordan ?

Nye vandforvaltningsstrukturer tilpasset en målrettet regulering

Bedre Inter-aktion mellem "Top-Down" og "Bottom-Up"

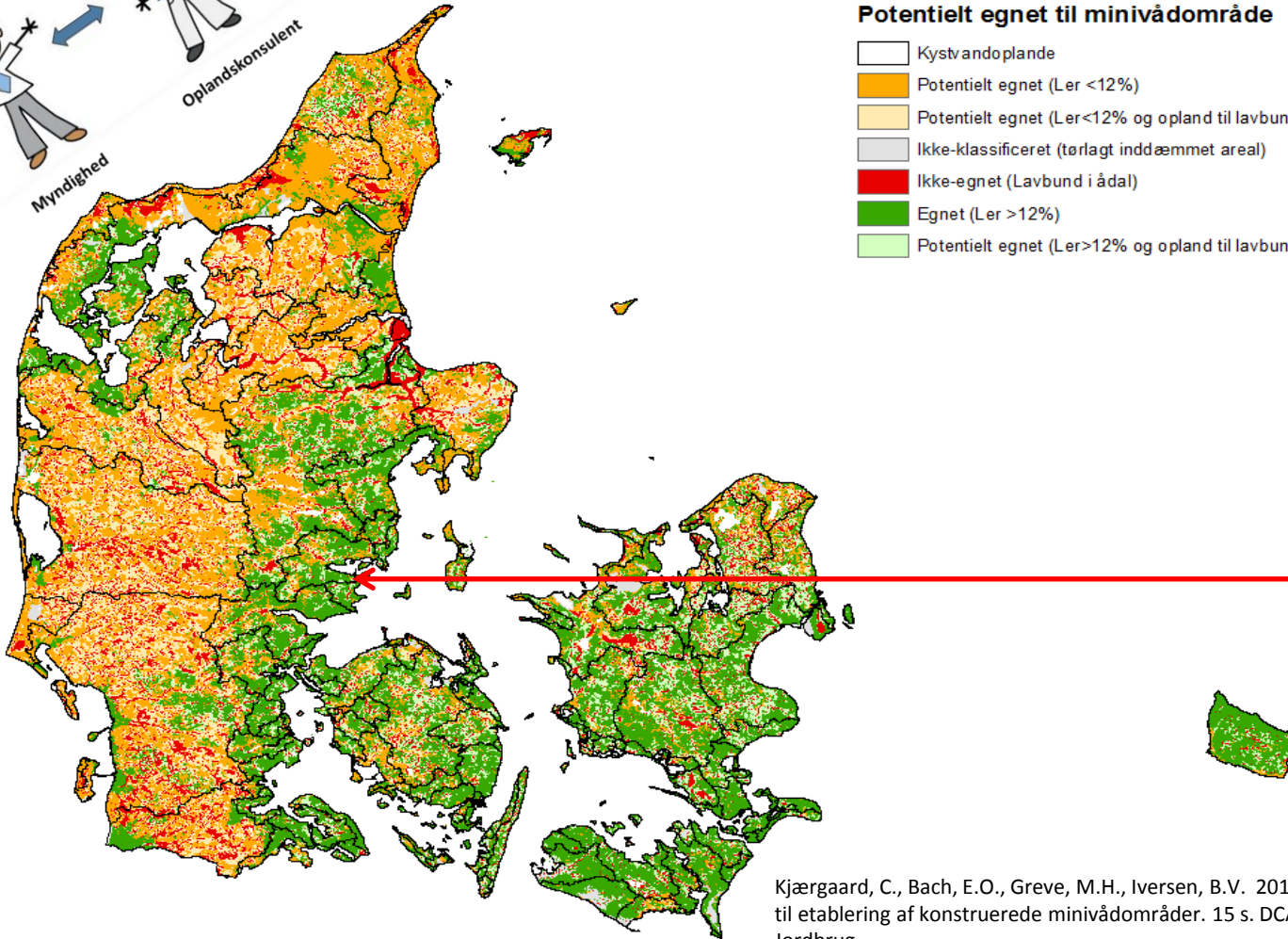


Eksempel på god inter-aktion



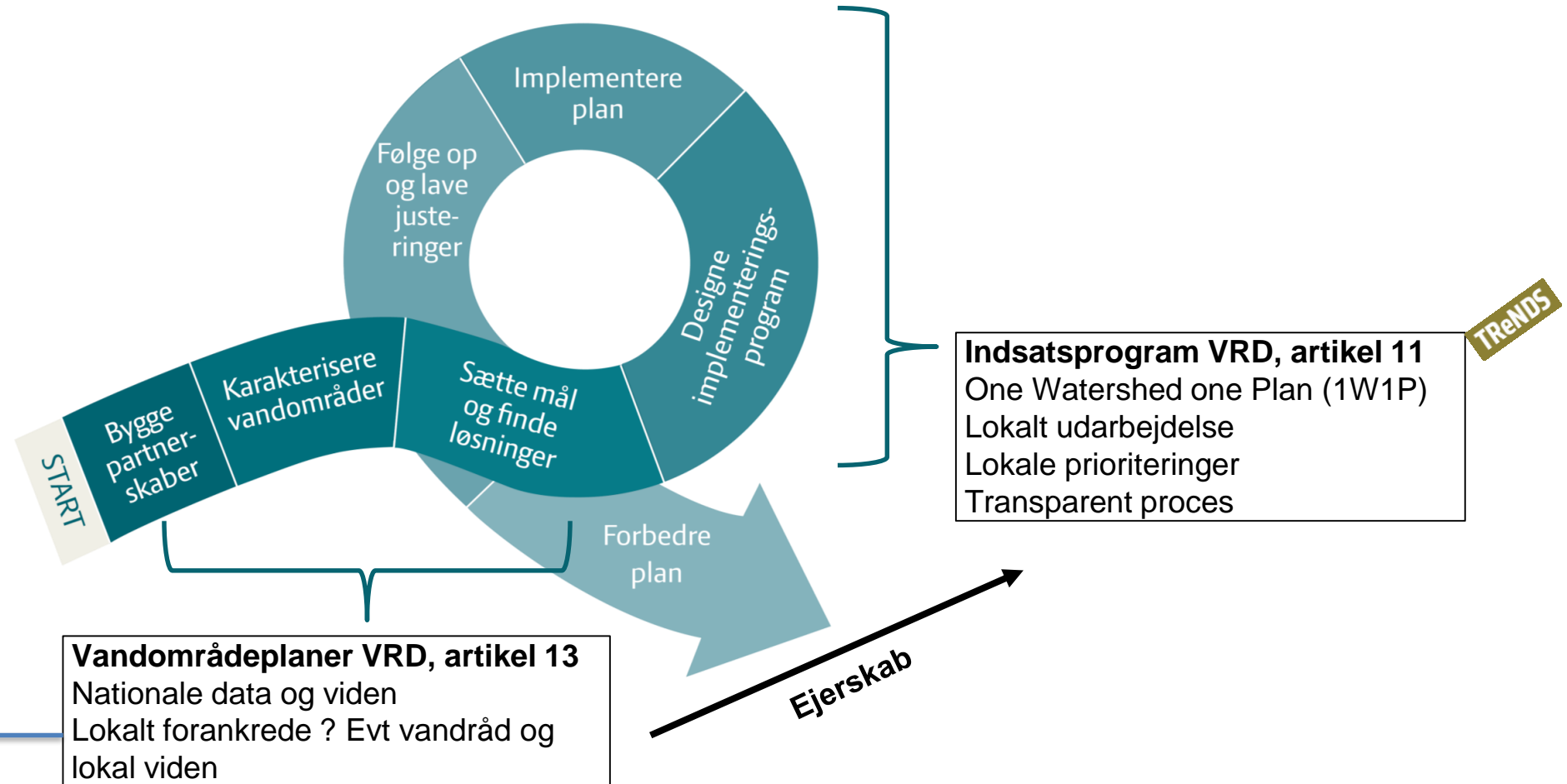
Potentielt egnet til minivådområde

- Kystvandompande
- Potentielt egnet (Ler <12%)
- Potentielt egnet (Ler <12% og opland til lavbund i ådal)
- Ikke-klassificeret (tørlagt inddæmmed areal)
- Ikke-egnet (Lavbund i ådal)
- Egnet (Ler >12%)
- Potentielt egnet (Ler >12% og opland til lavbund i ådal)

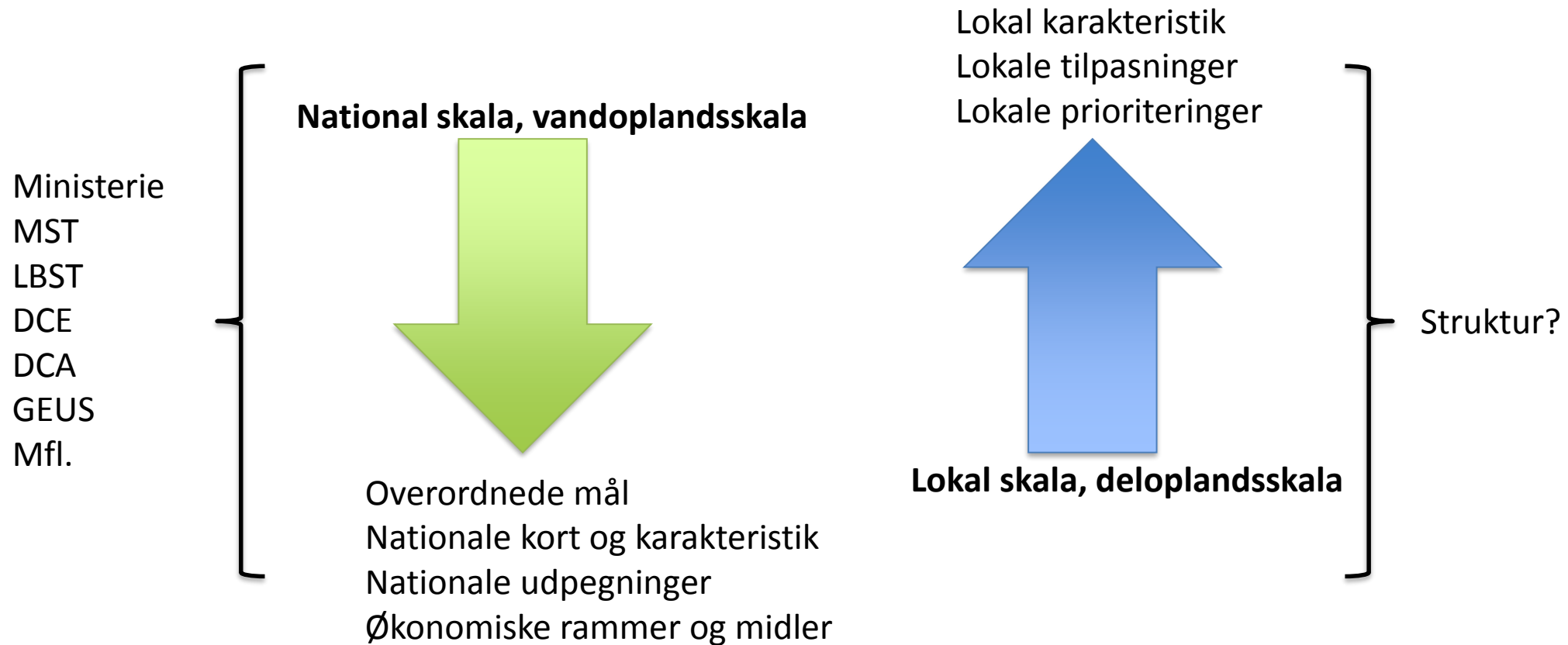


Kjærgaard, C., Bach, E.O., Greve, M.H., Iversen, B.V. 2017. Kortlægning af potentielle områder til etablering af konstruerede minivådområder. 15 s. DCA – Nationalt Center for Fødevarer og Jordbrug.

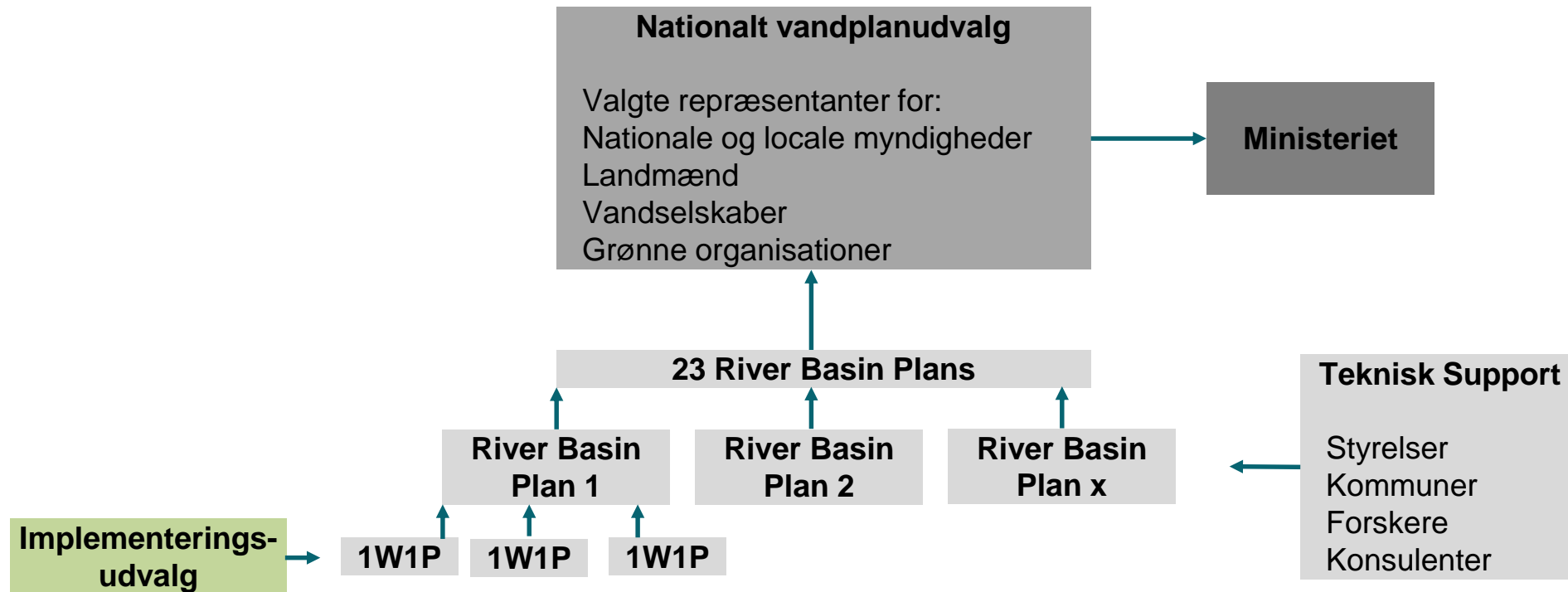
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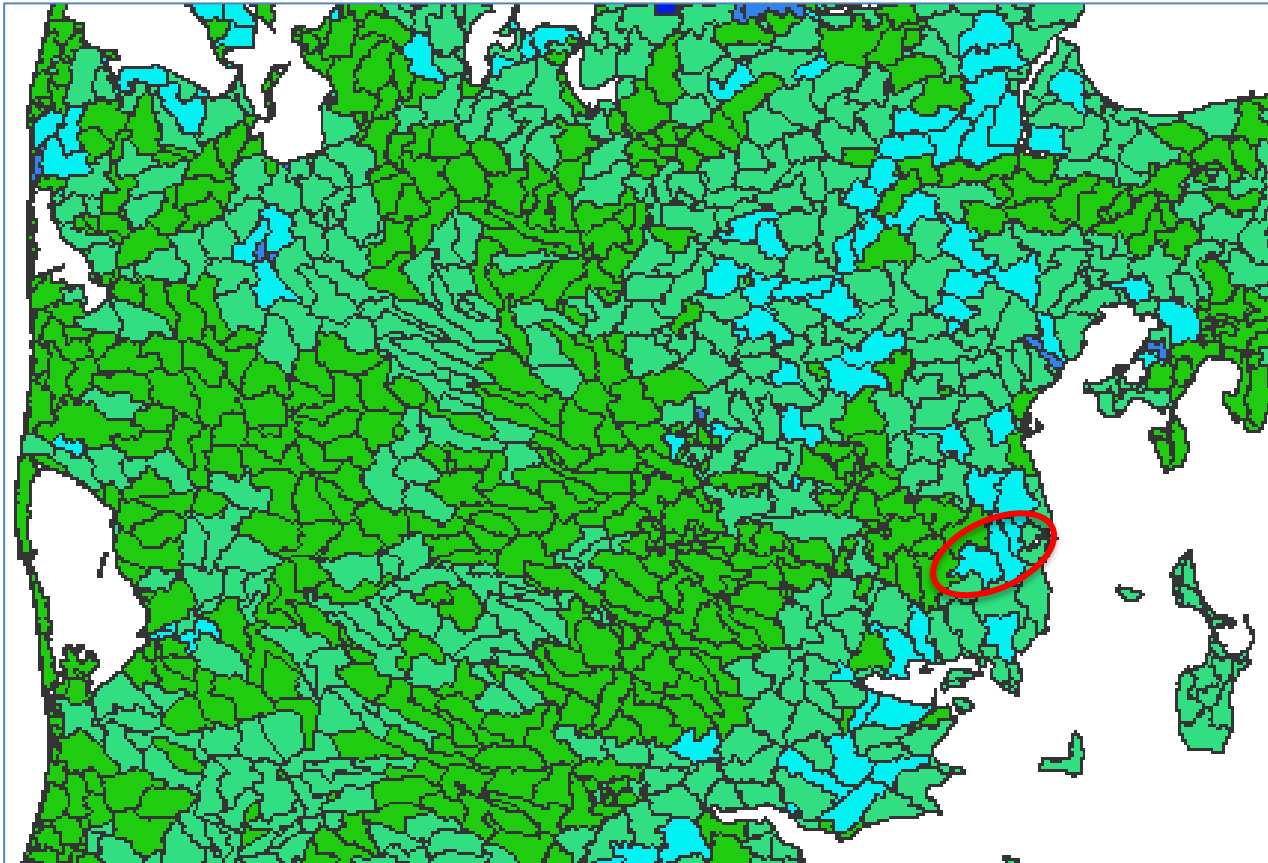
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Implementeringsudvalg



Skala



Skala for "lokal involvering" - 1W1P

Erfaringsmæssigt: 100 km² - svarende til ca. 8 "ID15 oplande"

Antal 1W1P: $3135/8 = 392$ stk

Realistisk: 100-200 stk?

Nye vandforvaltningsstrukturer tilpasset en målrettet regulering

Hvorfor ?

- Udnytte hele landskabets potentiale (mark, redox, dræn, ådale)
- Løsninger som er lokalt tilpassede
- Løsninger som har lokal konsensus og opbakning
- Løsninger med synergi – helhedstænkning
 - Vandmiljø, natur, klimatilpasning

Tak for opmærksomheden

