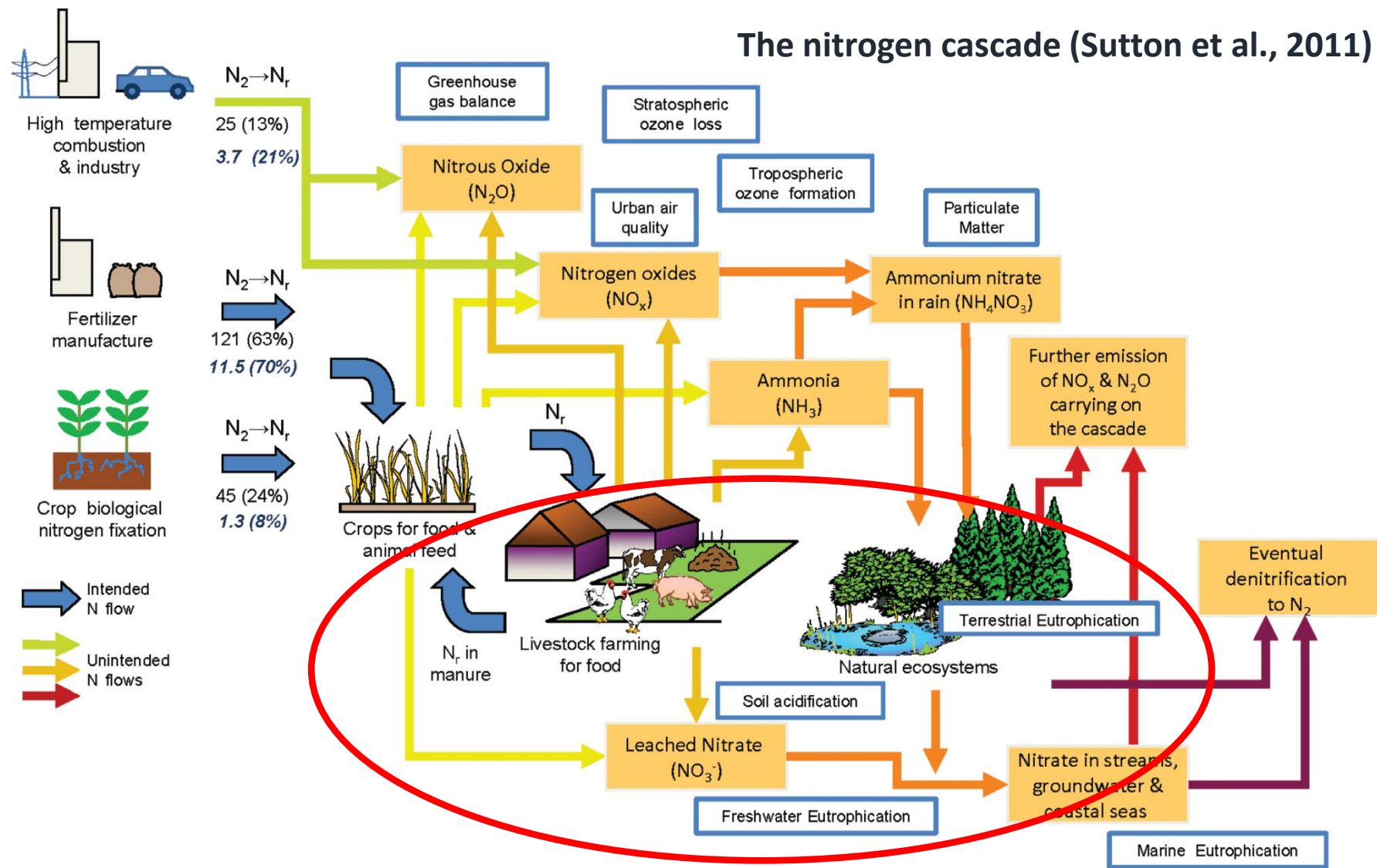


Introduktion til MapField

Birgitte Hansen, Seniorforsker, GEUS

KVÆLSTOF

Gødning og miljøproblem



Kvælstofregulering i landbruget

1985 - • Samme regulering overalt

Kvælstofregulering i landbruget

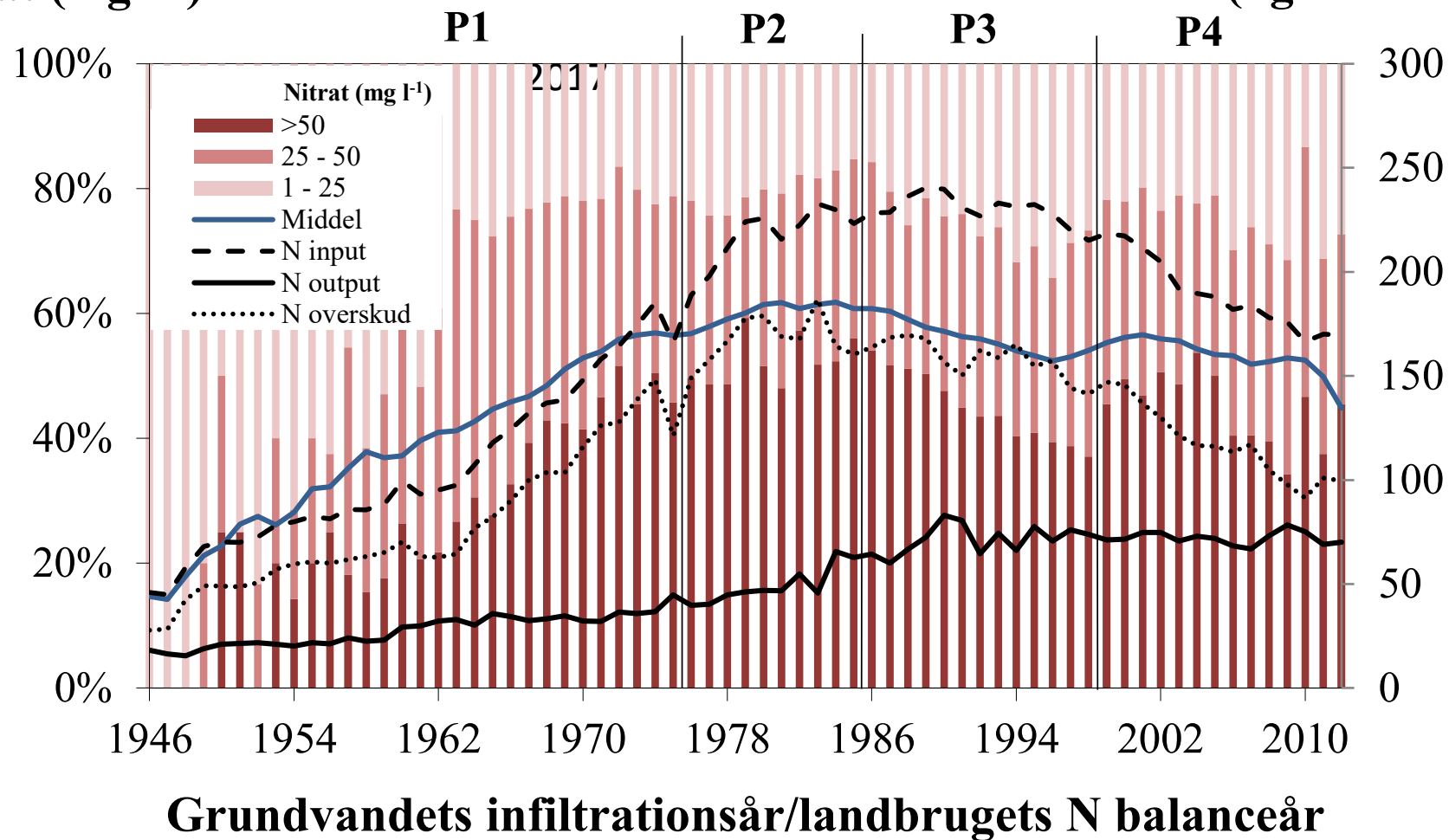
- 1985 - ● Samme regulering overalt
 - 2013 ● Målrettet regulering foreslået af Natur-og Landbrugskommissionen
 - 2019 ● Implementering af målrettet regulering på ID15 skala (15 km²)
- 
- 2021 ● Nyt landbrugsudspil med mere målrettet regulering?

Nitrattrends i iltet grundvand

Der er brug for
en mindre
miljøpåvirkning

Nitratklasser
(% år⁻¹)
nitrat (mg l⁻¹)

Kvælstof-
overskud
(kg N ha⁻¹ år⁻¹)



Vores vision

At udvikle et nyt koncept til målrettet regulering af kvælstofanvendelse i landbruget

Vores fokus

- HøjbundsJORde
- Grundvandszonen

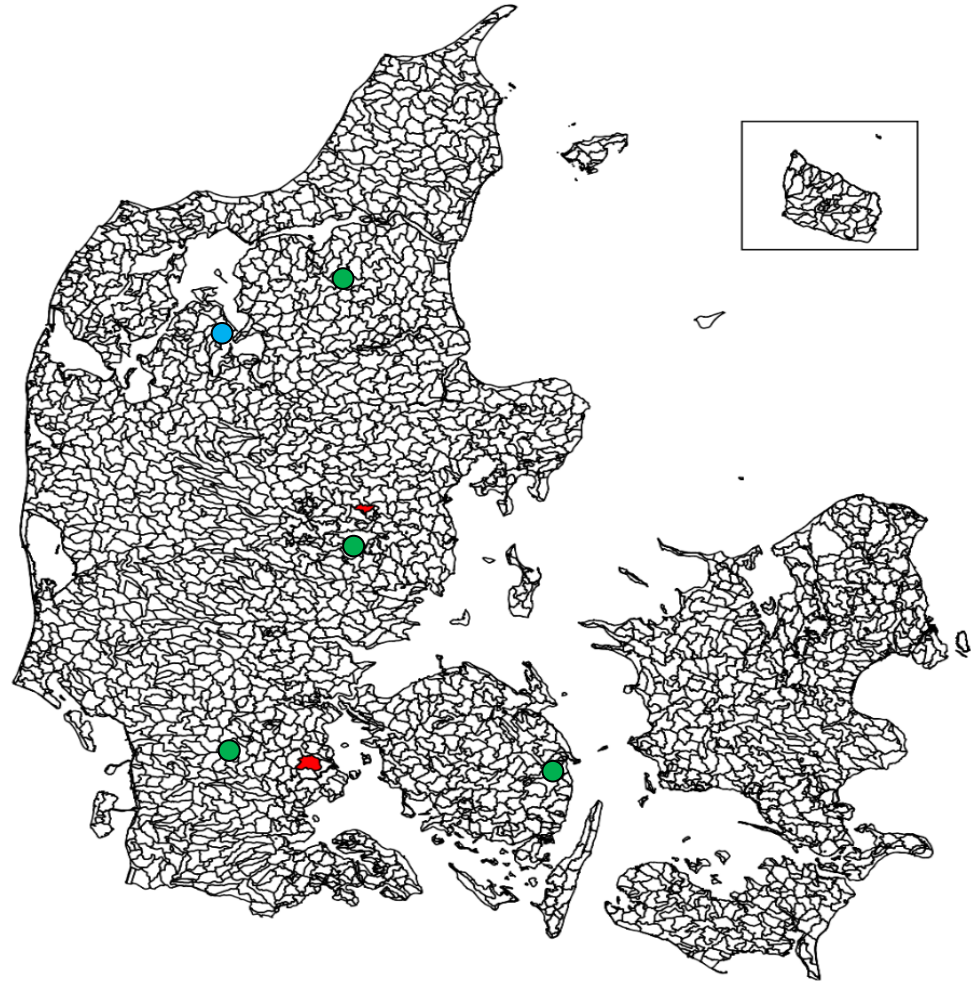


Udvikling af koncept foretages i ID15 oplande

Pilot-områder

Validerings-områder (LOOP)

DEMO-områder



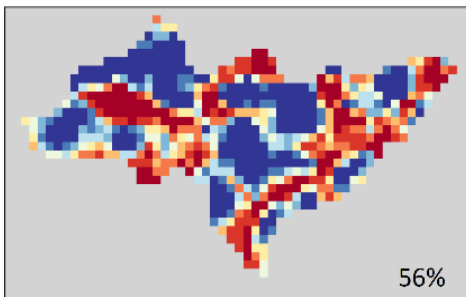
N retentionskort for marker i et ID15 opland

Kvælstofretention: Andel af nitrat, som udvaskes fra marken, og som ikke når frem til vandløbet på grund af naturlig omsætning i undergrunden og afgasning til atmosfæren.

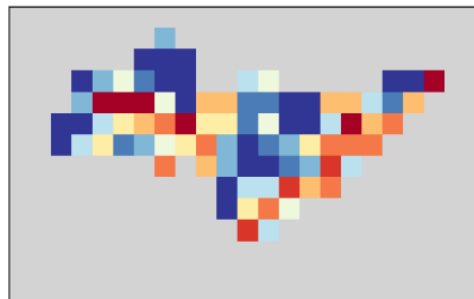
N-retention (%)



120 x 120 m



300 x 300 m



ID15 niveau



Usikkerhed (%-point)

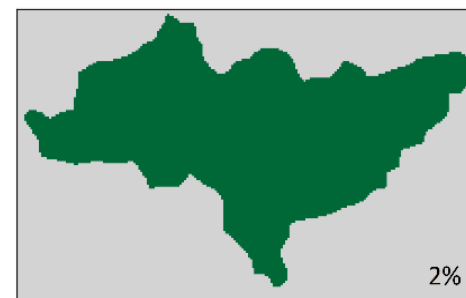
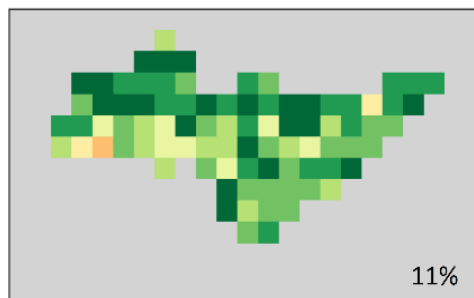
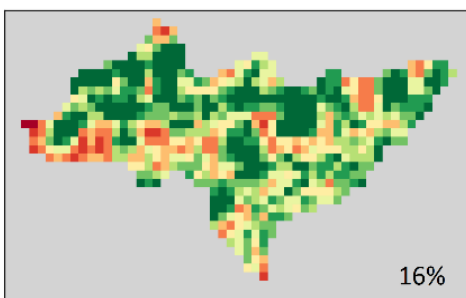
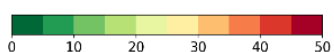
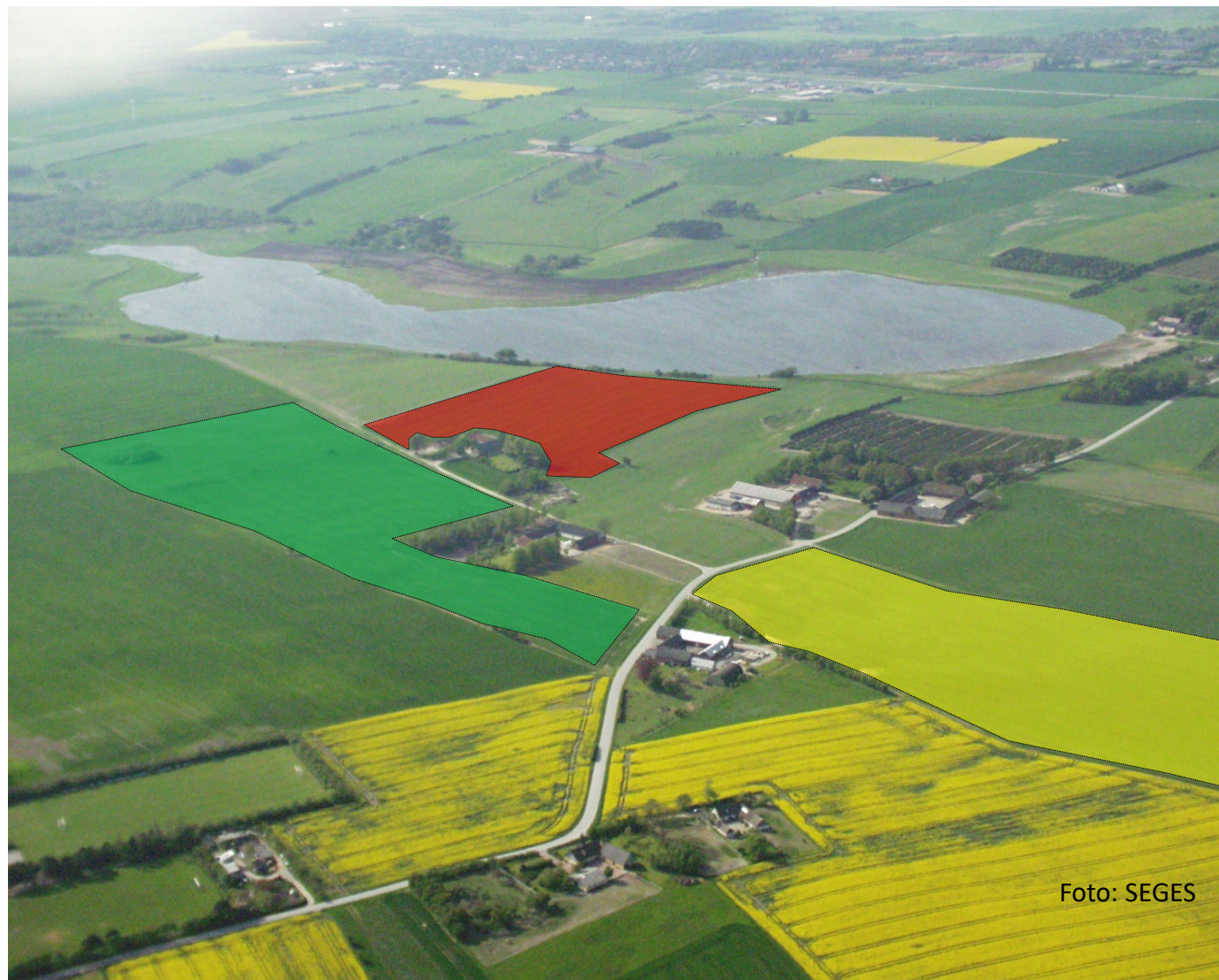


Foto: SEGES

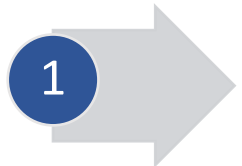
Optimal placering af virkemidler



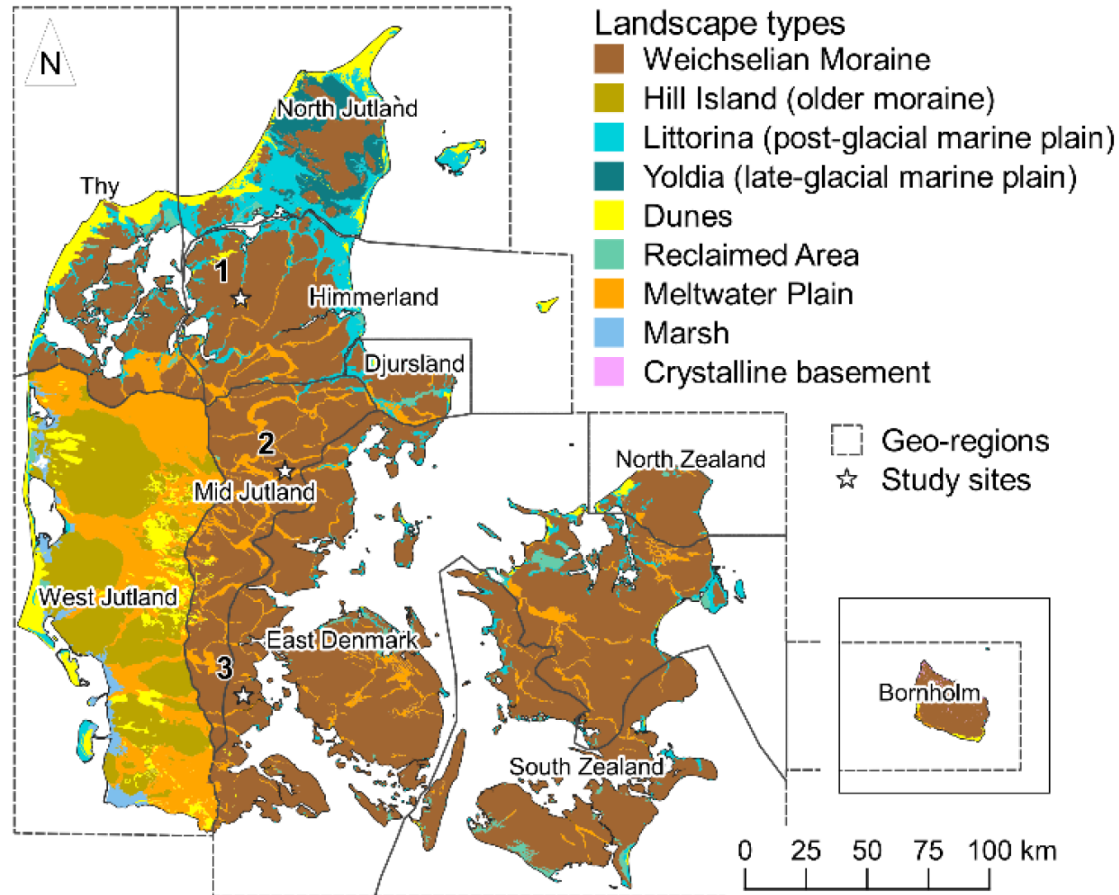
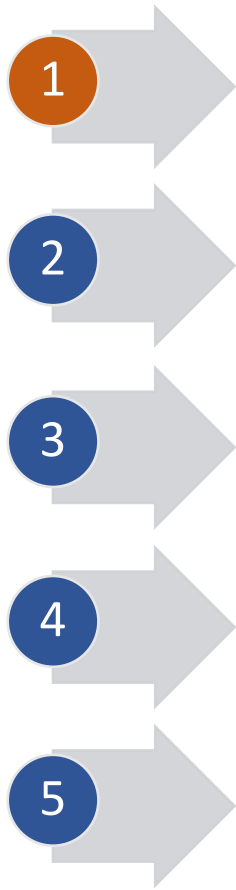
Beskyttelse af grundvand



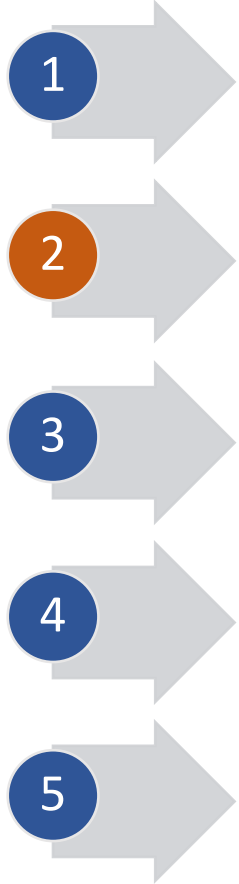
Konceptets 5 trin

- 1 Eksisterende viden bliver gennemgået
- 2 Undergrunden bliver scannet
- 3 Centrale steder bliver undersøgt nærmere
- 4 Kort over kvælstofretention bliver fremstillet
- 5 Valg af virkemidler bliver analyseret

Eksisterende viden bliver gennemgået



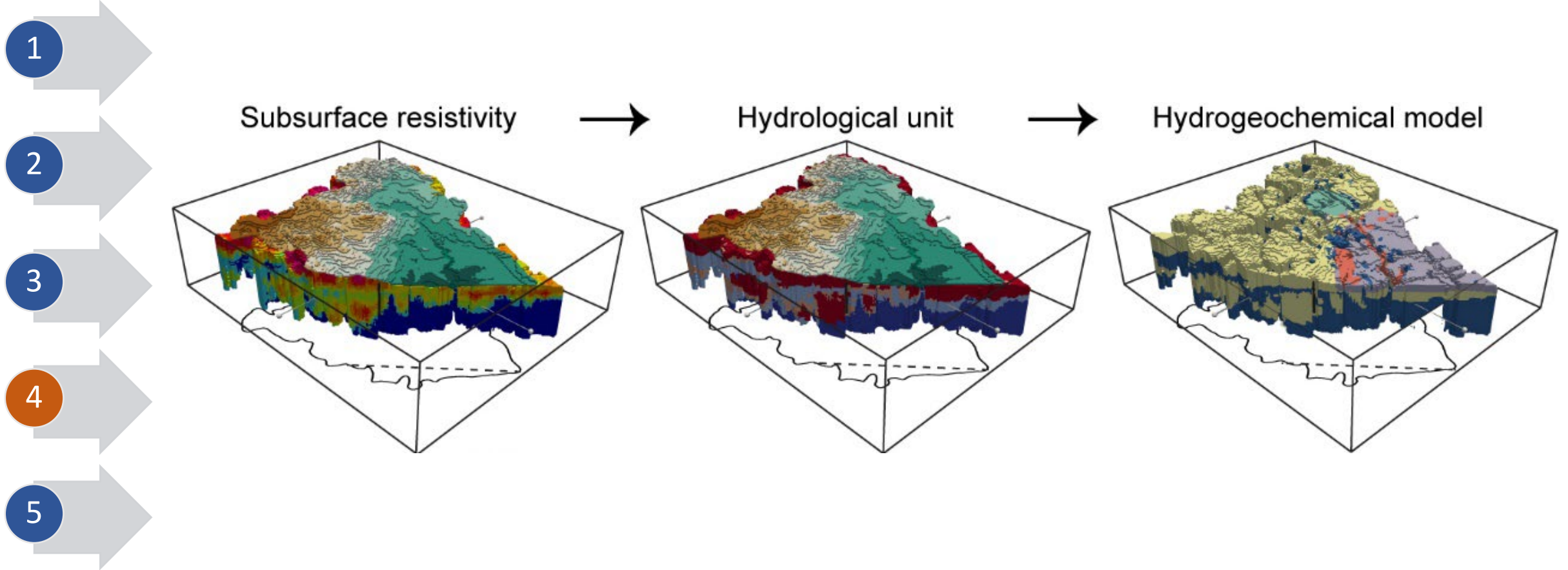
Undergrunden bliver scannet



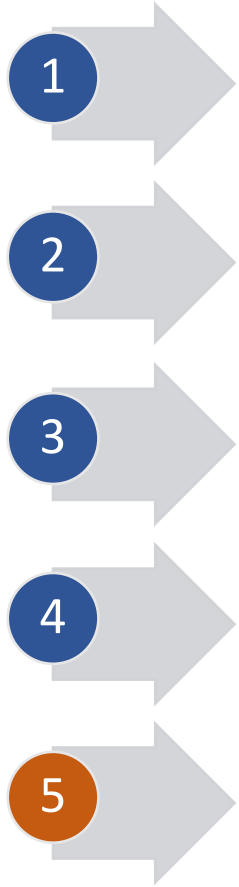
Centrale steder bliver undersøgt nærmere



Kort over kvælstofretention bliver fremstillet



Valg af virkemidler bliver analyseret



Fokus i dag

- 1 Eksisterende viden bliver gennemgået
- 2 Undergrunden bliver scannet
- 3 Centrale steder bliver undersøgt nærmere
- 4 Kort over kvælstofretention bliver fremstillet
- 5 Valg af virkemidler bliver analyseret

Hvor giver konceptet mest mening?

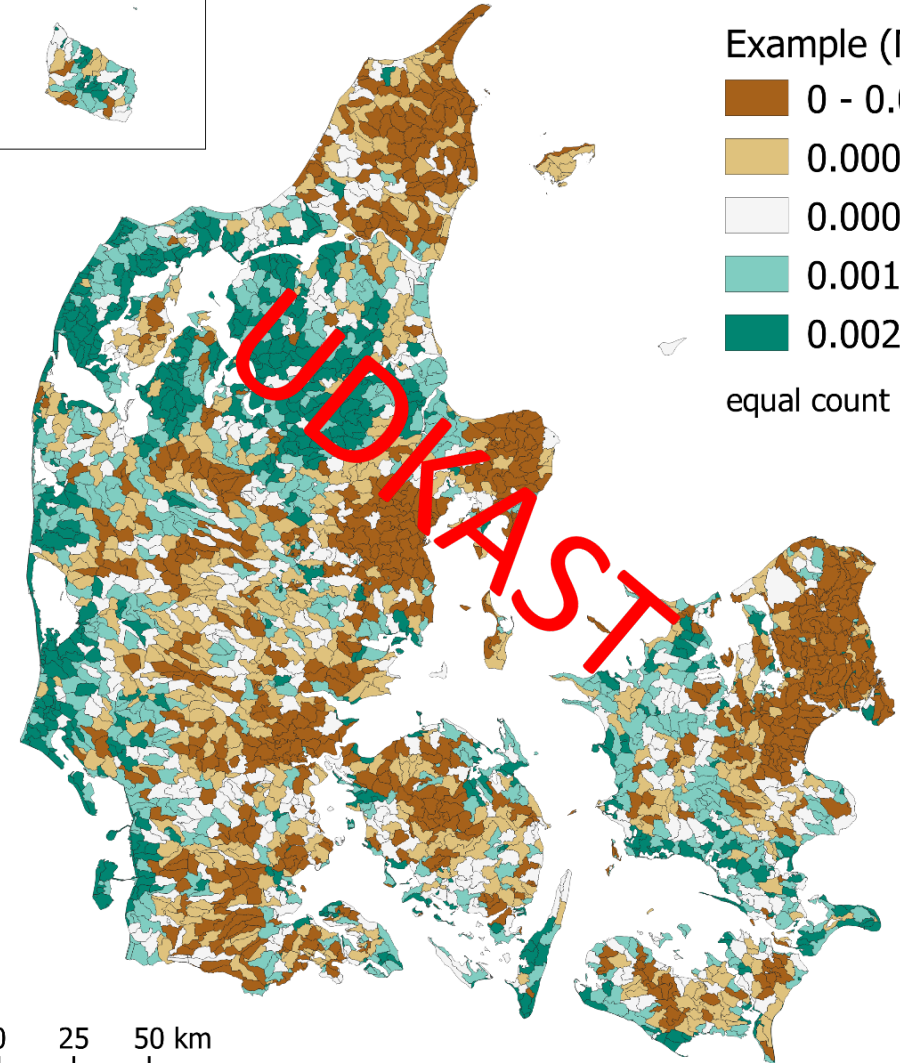
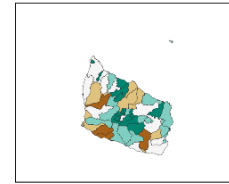
*Jo højere score
jo højere prioritet*

Krav til
reduktion af
N-udledning

Redox
kompleksitet

Geologisk
kompleksitet

Usikkerhed
på
eksisterende
grundlag



Example (N*G*R*U*D)

0 - 0.0001

0.0001 - 0.0004

0.0004 - 0.001

0.001 - 0.0029

0.0029 - 0.081

equal count

0 25 50 km

Hjemmesiden

www.mapfield.dk



Welcome to MapField – Field-scale mapping for targeted N-regulation and management

In the research project MapField, scientists, companies, authorities and the agriculture sector will collaborate to develop innovative environmental technologies that will help protect Danish groundwater, streams and fjords against nitrogen pollution while at the same time creating better production conditions for agriculture.

MapField will create knowledge about the nature of the subsurface with a few metres accuracy, which is crucial for precise predictions of the water and nitrogen pathways and turnover from the individual field to groundwater and streams in specific hydrological catchments.

GEUS is the leading part of the project and the Innovation Fund Denmark supports the project with 18,9 millions.

NEWS ABOUT MAPFIELD

New synthesis report from MapField >
09-06-2020

Video: How to map the soil resistivity with tTEM >
12-12-2019

[See all news](#)



[The Project >](#)



[Partners >](#)



[Field sites >](#)



[Publications >](#)

Mapfield

Project duration: 3 years and 3 months

Project budget: 29.7 million danish crowns

The investment of Innovation Fund Denmark:
18,9 million danish crowns
Innovation Fund Denmark

Contact

Birgitte Hansen

Project leader, Senior scientist

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About the Website

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Tak fordi I lyttede med!

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