

First Lessons from TOPSOIL

Groundwater Flooding

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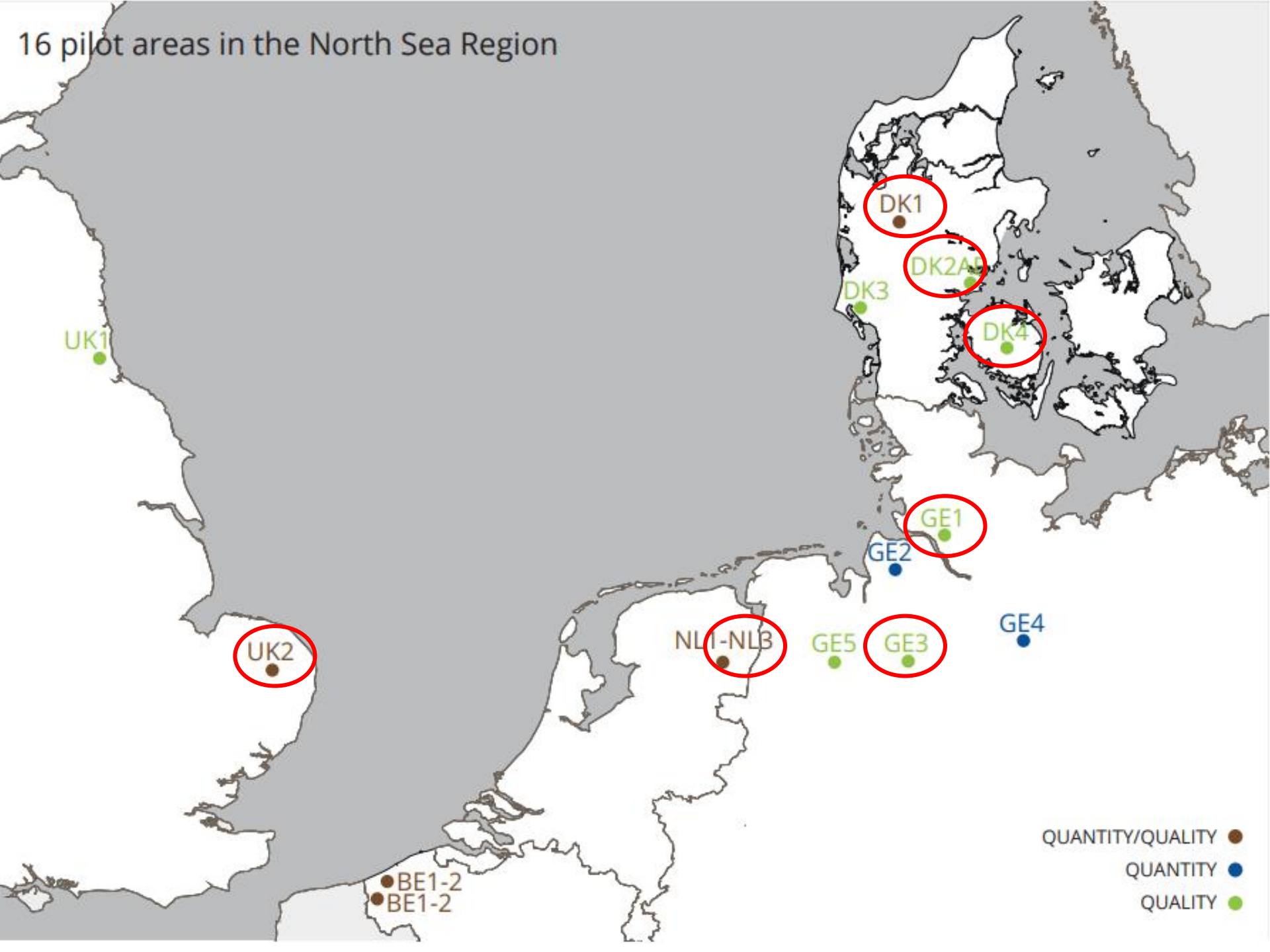
What is the challenge?

Climate change will affect groundwater levels, especially in the uppermost aquifers.

- The effects are caused by changed precipitation – climate
- Human behavior
 - change in usage of groundwater – change of abstraction
 - renewal of sewage systems
- Groundwater flooding will be investigated in 7 of the 16 pilots: [DK-1](#), [DK-2](#), [DK-4](#), [GE-1](#), [GE-3](#), [NL-3](#), [UK-2](#)



16 pilot areas in the North Sea Region



- QUANTITY/QUALITY ●
- QUANTITY ●
- QUALITY ●

What is the impact?

- Private homes – water in cellars
- Affect on public assets – buildings, roads ect.
- Public alert for flooding



What is the added benefit of TOPSOIL?



- Innovated investigation methods
 - FloaTEM measurements
- Knowledge exchange
 - Scientific approach
 - Management
 - Responsibility
 - Legislation



Key recommendations

- Holistic approach to problem solving
- Mutual reliant (stakeholder involvement)
- Data sharing
- Public / private partnership
- Involvement of decision makers
 - In Denmark our legislation in managing the challenge of raising groundwater are in some areas counteracting with obvious solutions

