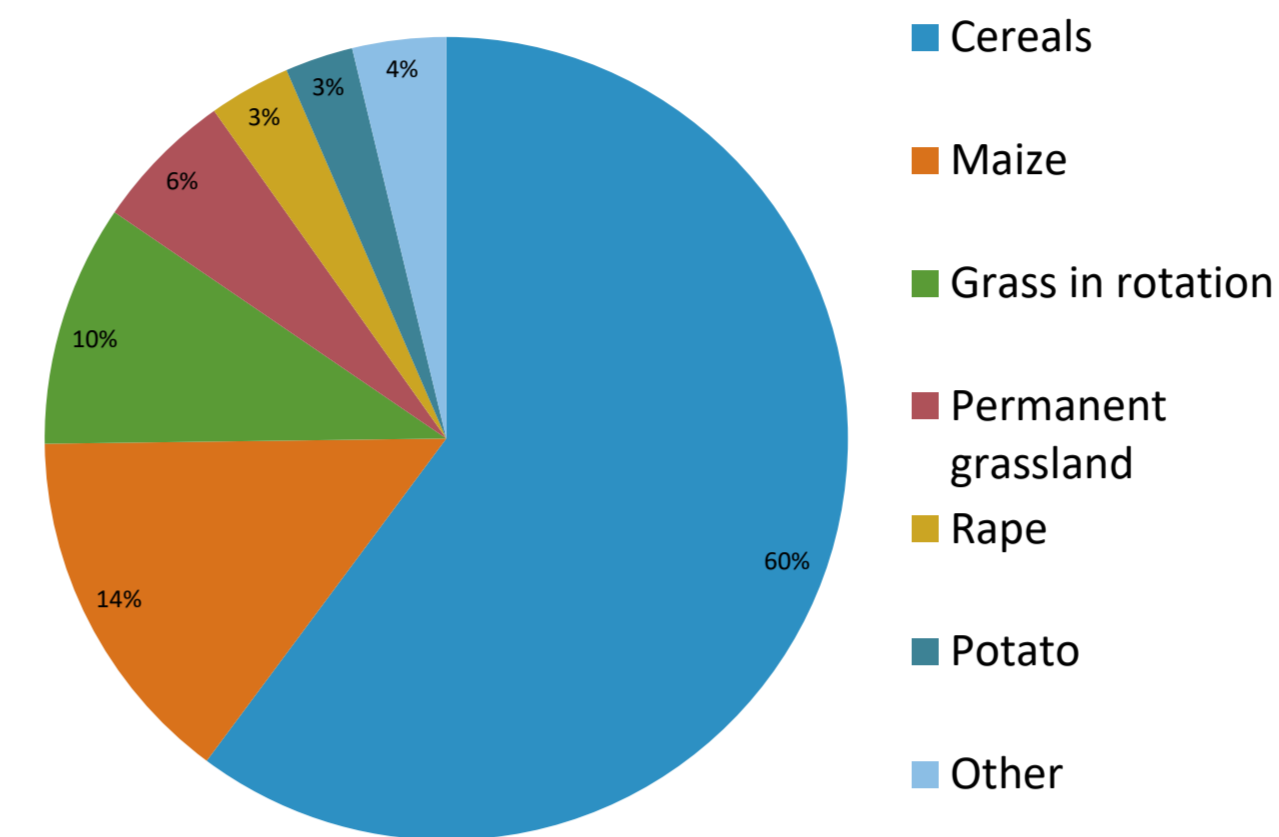
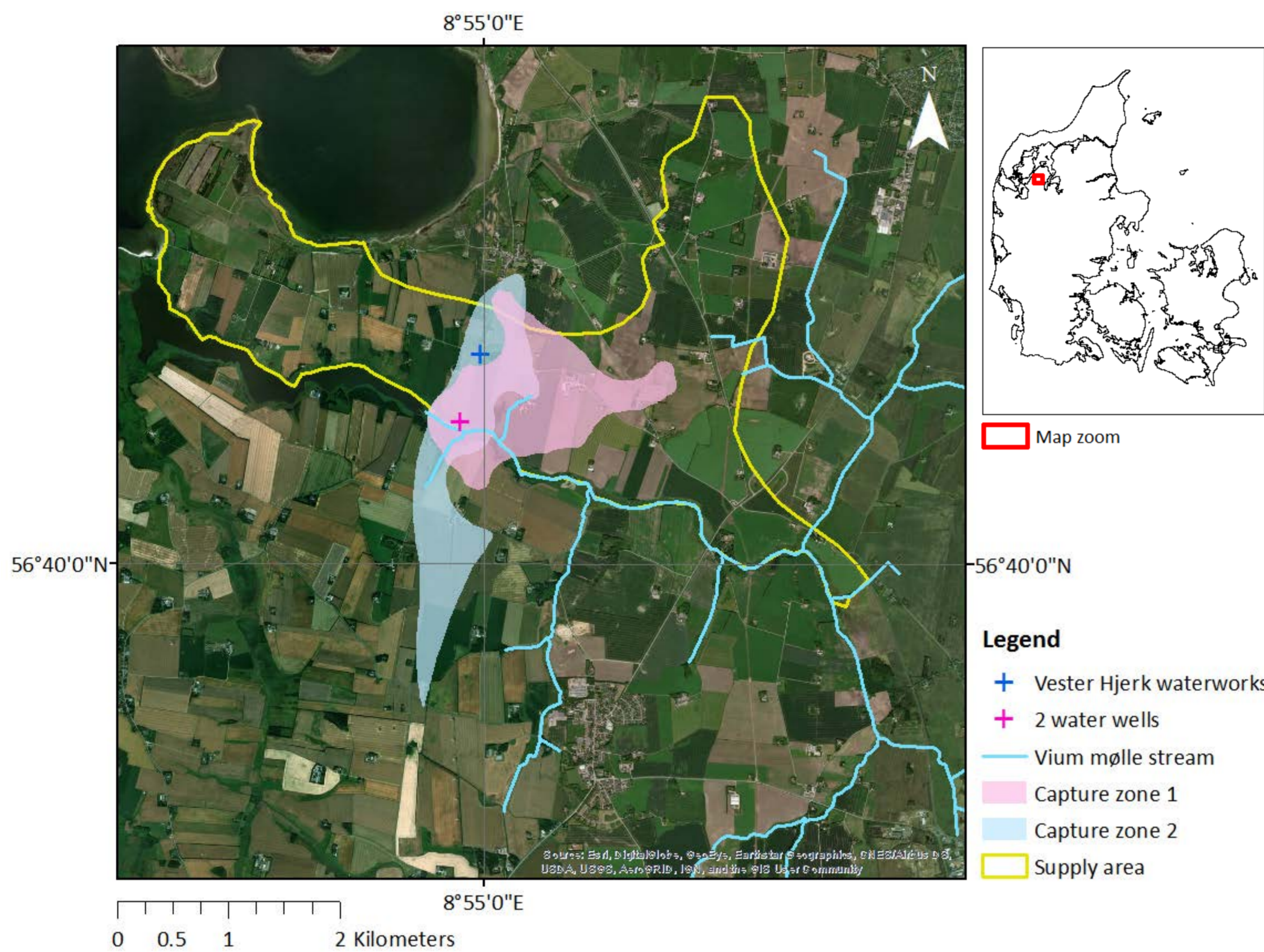




THE CATCHMENT

- abstraction license of 30,000 m³/year
- intensively managed agriculture is the dominating land use



AGRICULTURAL ACTIVITIES

- The agricultural area (800 ha) in Vester Hjerk water supply area is managed by 27 different farms, managing a total of 5954 ha (average size of 220.5 ha).
- 12 of the farms are actually located within the water supply area. Three of these are full-time farms (one dairy, one beef calves and one plant production farm), whereas 9 farms are hobby farms.
- The main agricultural activity in the areas is cereal production by conventional farming and livestock.
- Manure from the livestock comprise a substantial part of the N-application, but is supplemented by fertilizers.
- A large share of the crops produced in the area is used for fodder. Smaller areas are used for special productions like potatoes, seeds and Christmas trees

LOCAL CHALLENGES

- Increasing nitrate concentrations – last observation was 50,1 mg/l.
- Only simple water treatment at the waterworks is allowed – no removal of nitrate in treatment
- Different studies in the area have identified different captures zones, i.e. different areas to protect
- Local farmers sceptic to local action plan (delineation)

MITIGATION MEASURES & BMP's

- Aim: to reduce Nitrate leaching to the groundwater. Measures ordered with highest acceptance by farmers listed first.
- Field level: Plant cover in autumn and winter, Liming, Ureas inhibitor, Precision farming, Energy crops, Non-tillage management, Set a-side, Afforestation,
- Farm level: Phase feeding, N quota reduction, N balance, Burning of dry fraction of manure/slurry
- Landscape level: Constructed wetlands, Controlled drainage
- Collaborative solutions: Constructed wetlands, Land consolidation, Common crop rotations, Uncultivated land, afforestation, and

PROJECT IMPACT

- Trend towards better water quality: Nitrate leaching from agricultural farming is priority
- Training Events:
- Collaborative tool: GIS based "Landscape model", displays data, calculates nitrate leaching, calculates scenarios for different land uses
- Target /number of mitigation measures
15-20 BMPs have the potential, but in the most vulnerable areas a very limited number can actually contribute sufficiently
- Approach & goals for the harmonised datasets: National and local monitoring data joined and displayed together in the collaborative tool
- Farmer, local waterworks, municipality, Danish environmental agency, association of small waterworks, association of large waterworks, farms advisor, farmer organisation

GOVERNANCE

- The current situation in the action lab is characterized by a rather low participation. The municipality of Skive takes leadership in terms of implementing Water Actions Plans. However, farmers and other stakeholders are not very active in meetings. As long as there is drinking water in the pipes they seem to be happy.
- The fact that the last official measurement of Nitrate in the action lab was above 50 mg/L should force stakeholders to act – there is a risk of closure of the waterworks. This could be used as a momentum for the project and the municipality to increase involvement and participation.

