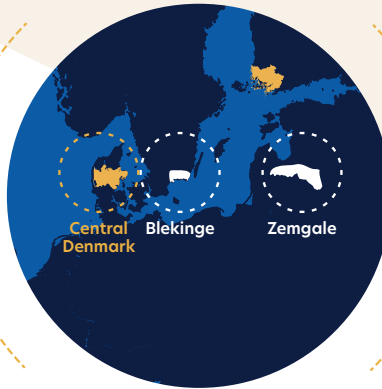
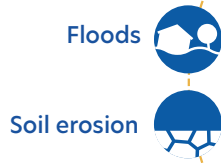


# Central Denmark

## Main challenges



## Demo sites

## Main focus in RESIST

Central Denmark region will implement **innovative solutions focusing on sustainable infrastructure in five municipalities** across the region: Lemvig, Randers, Horsens, Hedensted and Norddjurs.

The activities will focus on **demonstrating ways of adapting buildings to flooding, raise public awareness** by demonstrating alternative building methods and **visualising nature-based**

**solutions (NBS)** and infrastructure projects using extended reality (XR) technology.

The Central Denmark region will also **focus on implementing an Internet of Things (IoT) network of groundwater loggers**. The data collected will be integrated into the development of an early warning app based on Machine Learning. All these innovations will promote a participatory approach to resilience.

## Goals

- Raise awareness on water related risks to landowners and managers in flood-prone areas by the sea, streams or in a low-lying area.
- Analyse the regulatory framework, and identifying mechanisms that accelerate climate change adaptation implementation.
- Use socio-economic decision support tool, BEST Adapt, to prioritise climate change adaptation (CCA) investments, including non-monetary benefits.
- Increased public finance and private sector investment in adaptation.
- Identify policy gaps for the upscale of climate change adaptation.

## Innovations

### NBS in regulation

Promoting the inclusion of nature-based solutions (NBS) requirements in buildings and construction.

### NBS in buildings

Promoting the inclusion of nature-based solutions (NBS) in regulatory measures.

### Digital Modeling

Visualizing the impacts of implementing nature-based solutions (NBS) through digital models.

## Main achievements so far

- **Selection of the location and set up of IoT logger network on the shallow groundwater:** extension of existing 82 wells in Bøvlingbjerg (Lemvig municipality) and set up of logger network in Juelsminde (Hedensted municipality). A local stakeholder group organised in Juelsminde to investigate the use of excess shallow groundwater in local industry as well as input to development of ML warning app.
- **Alignment of expectations and scoping of the XR visualisation technologies,** to be integrated into development projects throughout stakeholder involvement processes in Norddjurs and Horsens municipalities, to strengthen local ownership and participation. The solutions will focus on implementing

augmented reality to simultaneously pay attention to the accessibility of the developed tools.

- **Finalisation of the tendering process for the two demo houses to be built in Lemvig,** including a state of the art on adaptation building methods and technology to either "1) avoid, 2) deviate or 3) accept" water in risk areas. Planning of expert workshop in November and dissemination of the challenges in continued construction in risk areas without adapting to future climate scenarios.
- **New recreational value module in the BEST Adapt tool and test planned in Randers municipality** on the cost benefit analysis of new recreational, green areas in CCA projects.

## Consortium

