



Priority 3: Sustainable North Sea Region: Protecting against climate change and preserving the environment

TOPSOIL Top soil and water - The climate challenge in the near subsurface

The values of society are tied to the uppermost subsurface and climate change has a rapid impact here.

In the WaterCAP projects (InterReg IVB) the TOPSOIL partnership has performed an extensive consultation with the EU commission, waterworks, farmers, city planners and public bodies across the NSR. Five shared climate adaptation challenges related to the top soil and groundwater were revealed:

1. Groundwater flooding in towns and agricultural areas
2. Saltwater intrusion into freshwater reserves
3. The need for a groundwater buffer to store excess rain water for later use
4. Better management of soil conditions, to strengthen the resilience to extreme rain events and improve water quality
5. An unused capacity to break down nutrients and hazardous pollutants in the uppermost layers

These challenges will be addressed in 16 pilot areas, to develop and test solutions for managing uppermost 20-30 m of the subsurface. This will lead to a strong improvement of climate resilience in and across pilot areas.

The project will improve e.g.:

- protection against groundwater flooding,
- groundwater storage for irrigation and drinking water inland and in coastal areas
- less leaching of nutrients and pollutants along with improved yields

New investigation and management methods will be developed through transnational joint approach techniques and management will be transferred between the countries.

The partnership is strongly committed to bridging science, practice and countries.

Total budget 7.342.220 €

ERDF contribution 3.671.110 €

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