Water Co-Governance for sustainable ecosystems



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### Introduction

Water systems are critical to human and ecological survival and are changing faster than ever (climate change, population growth and urban development).







- Change in working practice and institutional arrangements towards "Co-governance"
- Improving the integration between top-down implementation of European directives and national legislation
- Bottom-up, participatory developed solutions for improving the quality and sustainable management strategies of North Sea Region (NSR) ecosystems.

watershea

## Methodology

# Top down and bottom up involvement in all steps of the water management cycle is crucial



- Technology enable high resolution monitoring of basic water quality parameters such as turbidity, electrical conductivity, dissolved oxygen or nutrients (ammonium/nitrate, phosphate).
   Water quality parameters can vary widely in space (x, y and depth) and time (day / night and seasonal).
   Drones, apps, and other user-friendly monitoring tools create
  - awareness and stimulate participation of locals and all

#### stakeholders involved



Build Partner-Partners

Mobile sensors. Bio-monitoring (sediments). Ecology scans using underwater cameras. Continuous/static measurements

Citizens science. Using apps for water quality measurements

Catchment officers finding size specific measures. Eg constructed wetlands, bufferstrips

Improve Plan Implement

*implementation* 

programme

## Local based water plans

- WaterCoG will demonstrate local based water plans in different pilots
- > Applying new participatory approaches in the

Characteristics of the river basin district article 5	River basin management plans article 13	Programme of measures - article 11	
Godkendelse Kvalificering af 'Verdensbille udfordringer + Skive Fjord/f nye input basisanalyse	' i Input til og	Input til og kvalificering af implementeringsplan	

- planning, delivery and monitoring of activities
   Balancing the need for growth, sustainable intensification of farming and forestry, and renewable energy schemes with the need to deliver other environmental ecosystem services
- Improved integration and implementation of existing Directives aimed at delivering environmental ecosystem services
- Developing transferable approaches and support tools to enable the adoption and up scaling of best practice to build capacity within North Sea regions to improve the quality of ecosystems.

