

# Water Co-Governance for sustainable ecosystems



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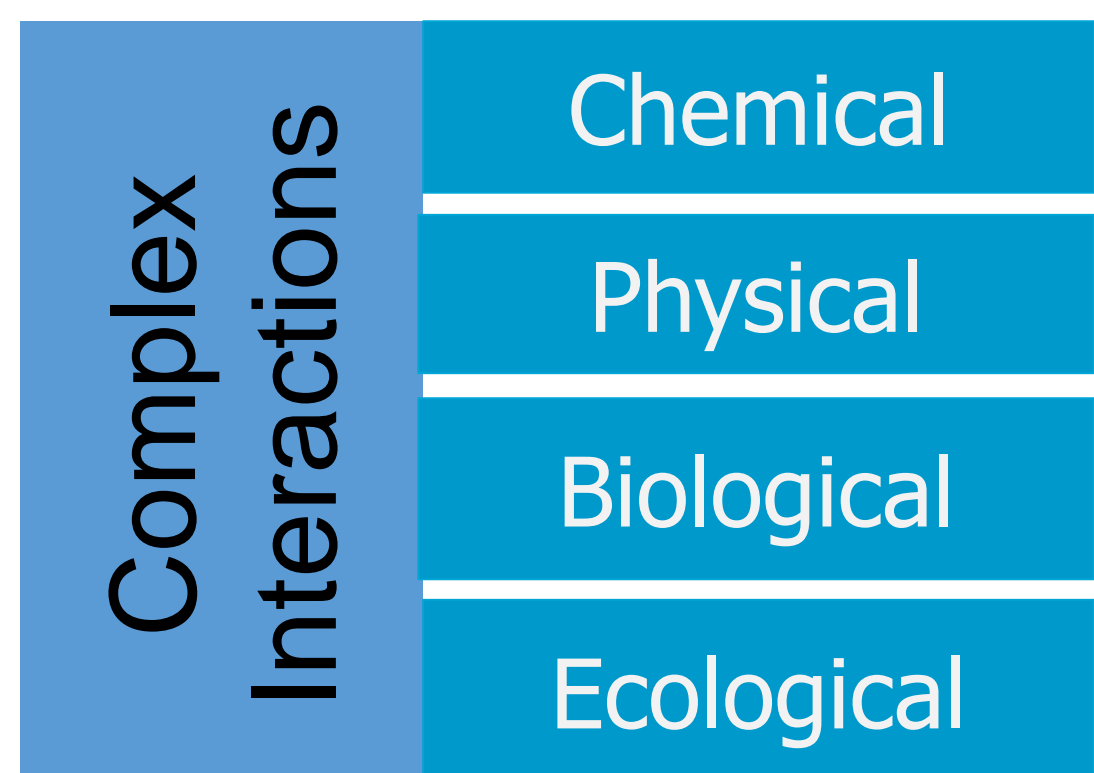
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## Introduction

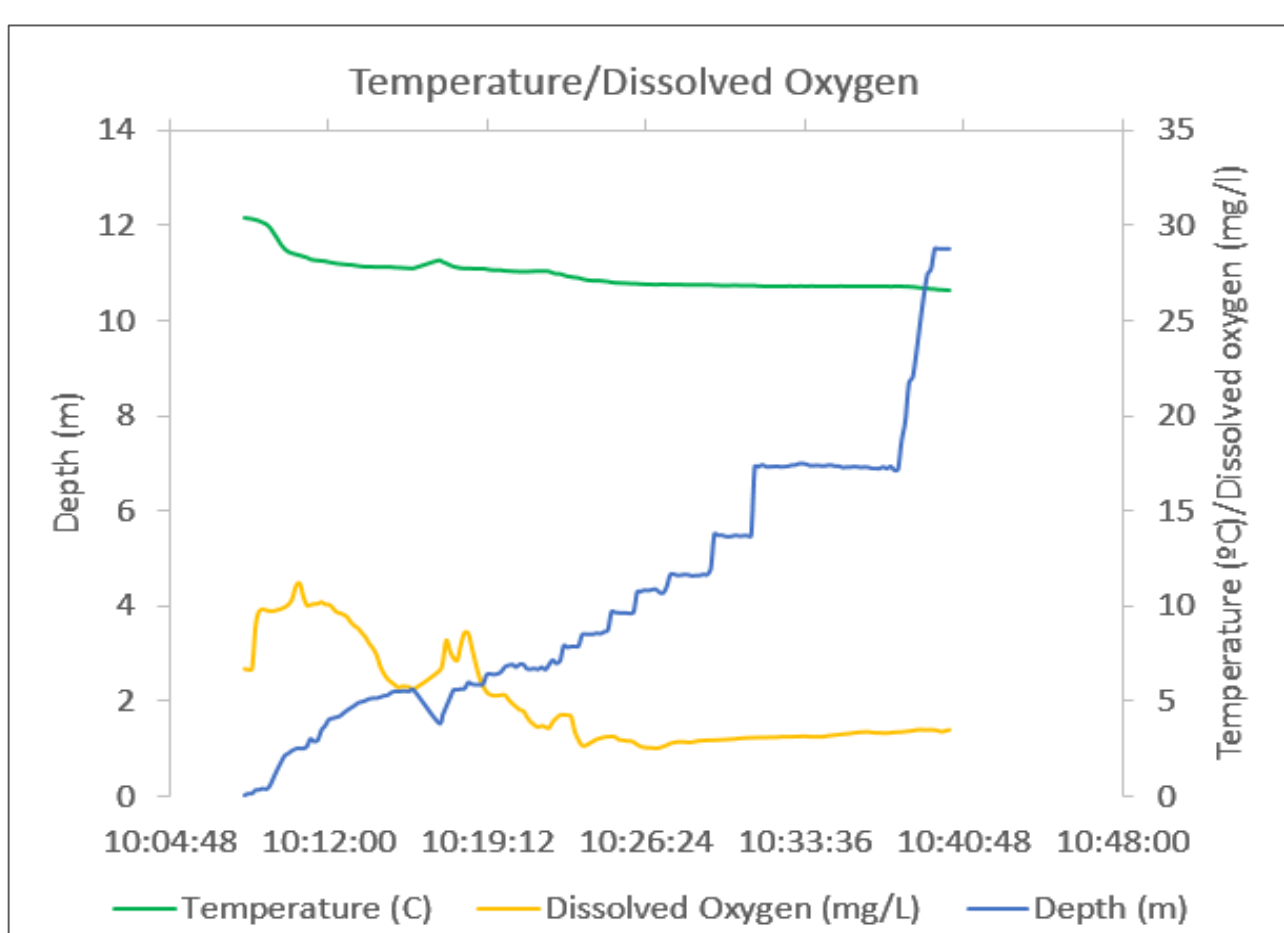
Water systems are critical to human and ecological survival and are changing faster than ever (climate change, population growth and urban development).



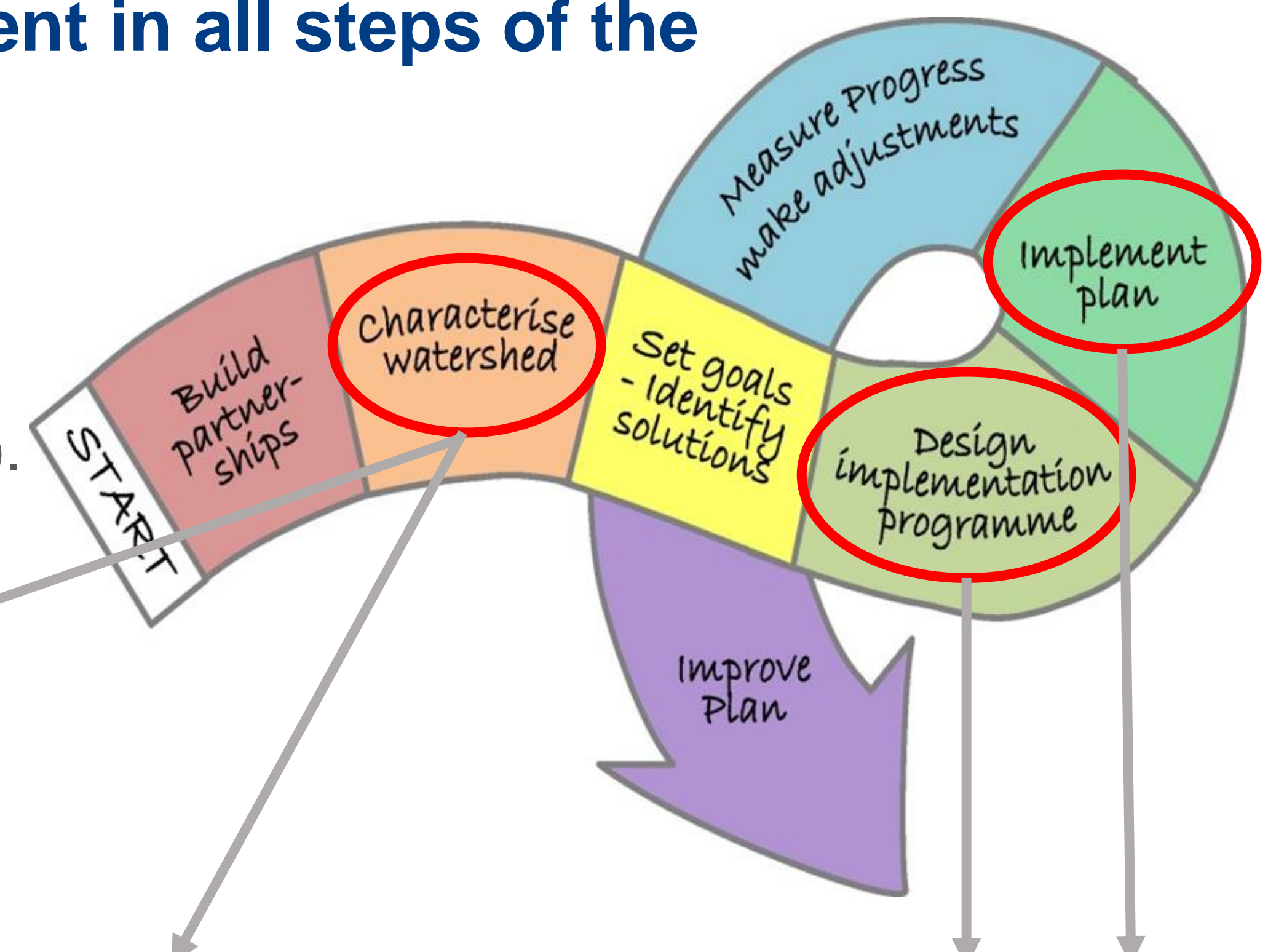
- Change in working practice and institutional arrangements towards “Co-governance”
- Improving the integration between top-down implementation of European directives and national legislation
- Bottom-up, participatory developed solutions for improving the quality and sustainable management strategies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

## Methodology

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



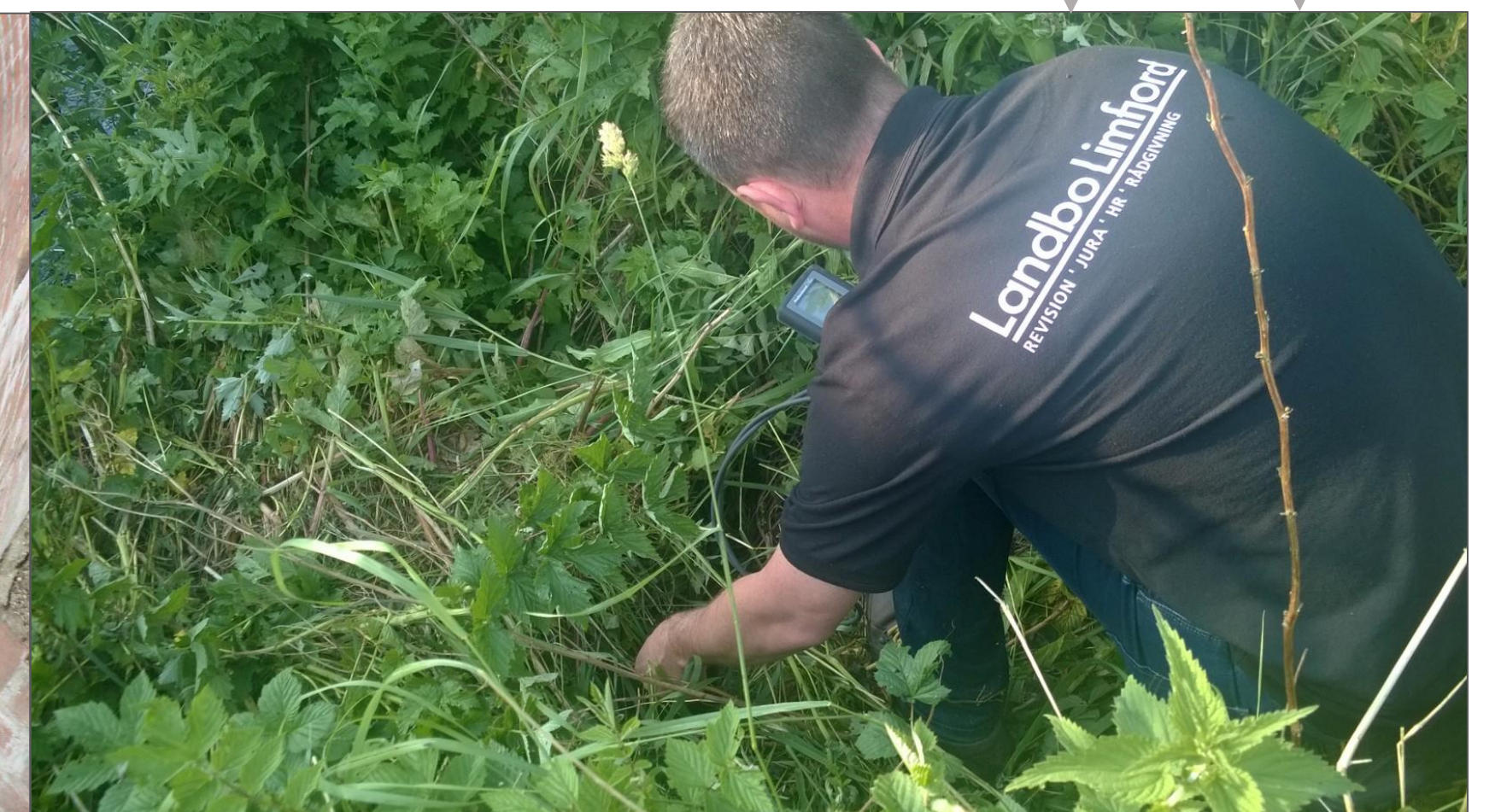
- Technology enable high resolution monitoring of basic water quality parameters such as turbidity, electrical conductivity, dissolved oxygen or nutrients (ammonium/nitrate, phosphate).
- Water quality parameters can vary widely in space (x, y and depth) and time (day / night and seasonal).
- Drones,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



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

## Local based water plans

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

