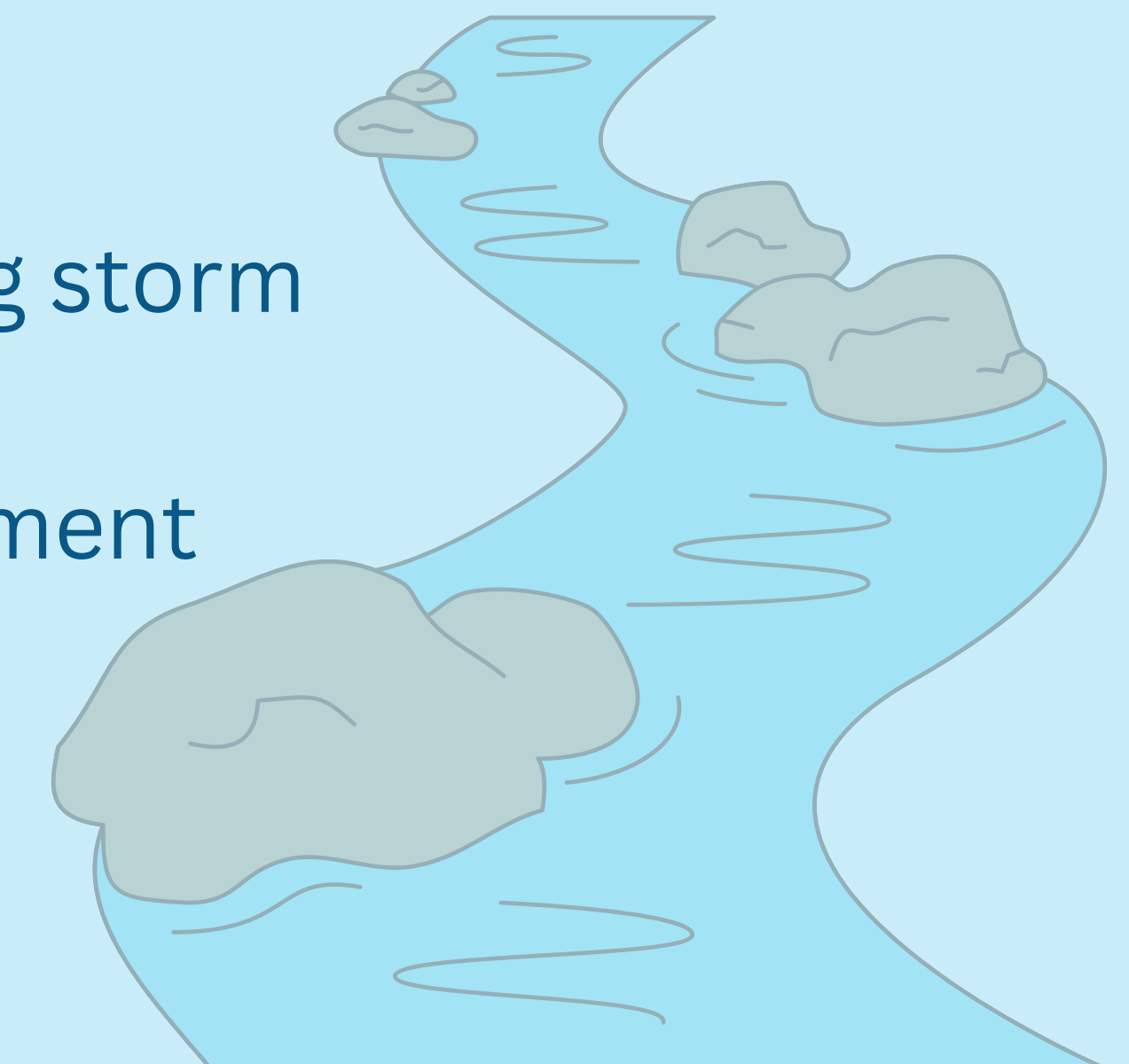
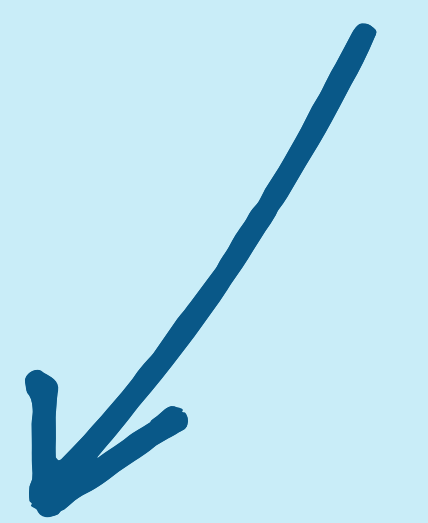
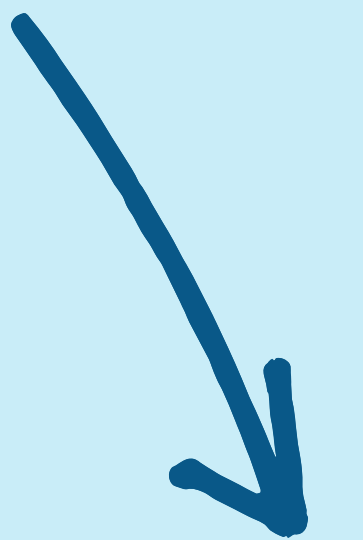


Analysing the Relationship Between Rainfall, Combined Sewer Overflows (CSOs), and River Water Quality in Carmarthenshire

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Research Question

To what extent does rainfall intensity influence the frequency and duration of CSO discharges and associated changes in river water quality in Carmarthenshire?

Aim

To examine the relationship between rainfall intensity, CSO activity, and river water quality in Carmarthenshire.

Objectives

- Analyse rainfall intensity patterns
- Assess CSO frequency and duration
- Evaluate impacts on river water quality

Why It Matters

- Climate change may increase heavy rainfall
- CSOs contribute to river pollution
- Limited integrated catchment-scale studies linking rainfall, CSOs and water quality.

Methodology

- Rainfall, CSO and water quality datasets
- Temporal + spatial analysis
- Correlation analysis at 10-15 sites

Expected Outcomes

- Stronger rainfall-CSO link
- Water quality deterioration during storm events
- Support improved water management