Hydro-epidemiological Processes and Modelling

- Study undertaken by Cardiff, Sheffield and Aberystwyth universities to investigate non-compliance of Fylde Coast, including seaside resort of Blackpool, in UK
- 28 catchments, 3 river basins and coastal zone monitored during bathing season and modelled for hydrodynamics, sediments and faecal indicator organisms to understand system and source of non-compliance
- Needed to model system holistically from catchment to coast, including sediments, *e.coli* and enterococci to study source of non-compliance with EU Bathing Water Directive

Key findings from field and modelling study showed:
- Hydrodynamic modelling at all scales crucial for catchment to coast (C2C) studies
- Adsorption/desorption of *e.coli* with sediments is an important transport process, highlighting need to include sediments in hydro-epidemiological process modelling