

# Innovation in Monitoring

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# Why do we monitor?

## **Surveillance** (representative sites)

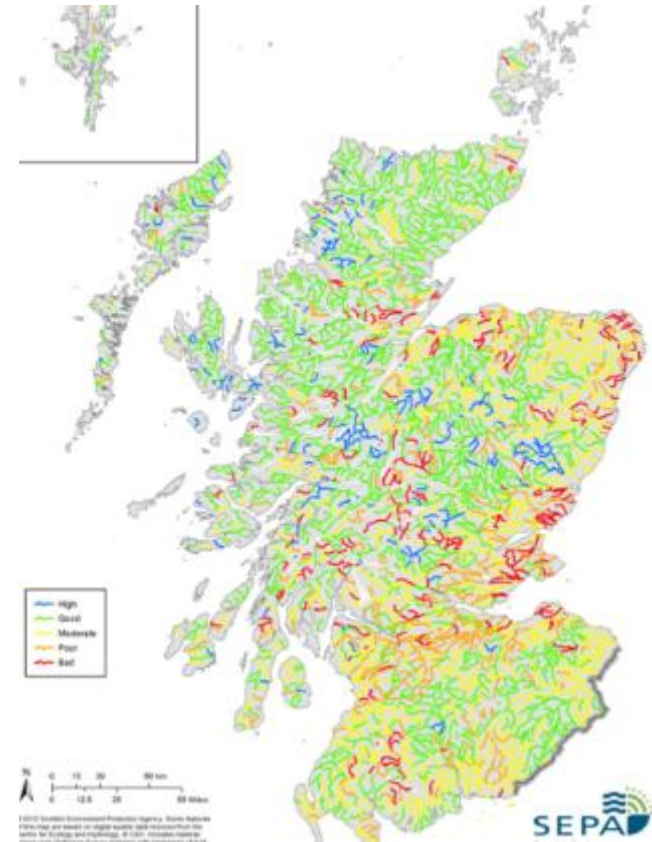
- Change through time
- Assess state

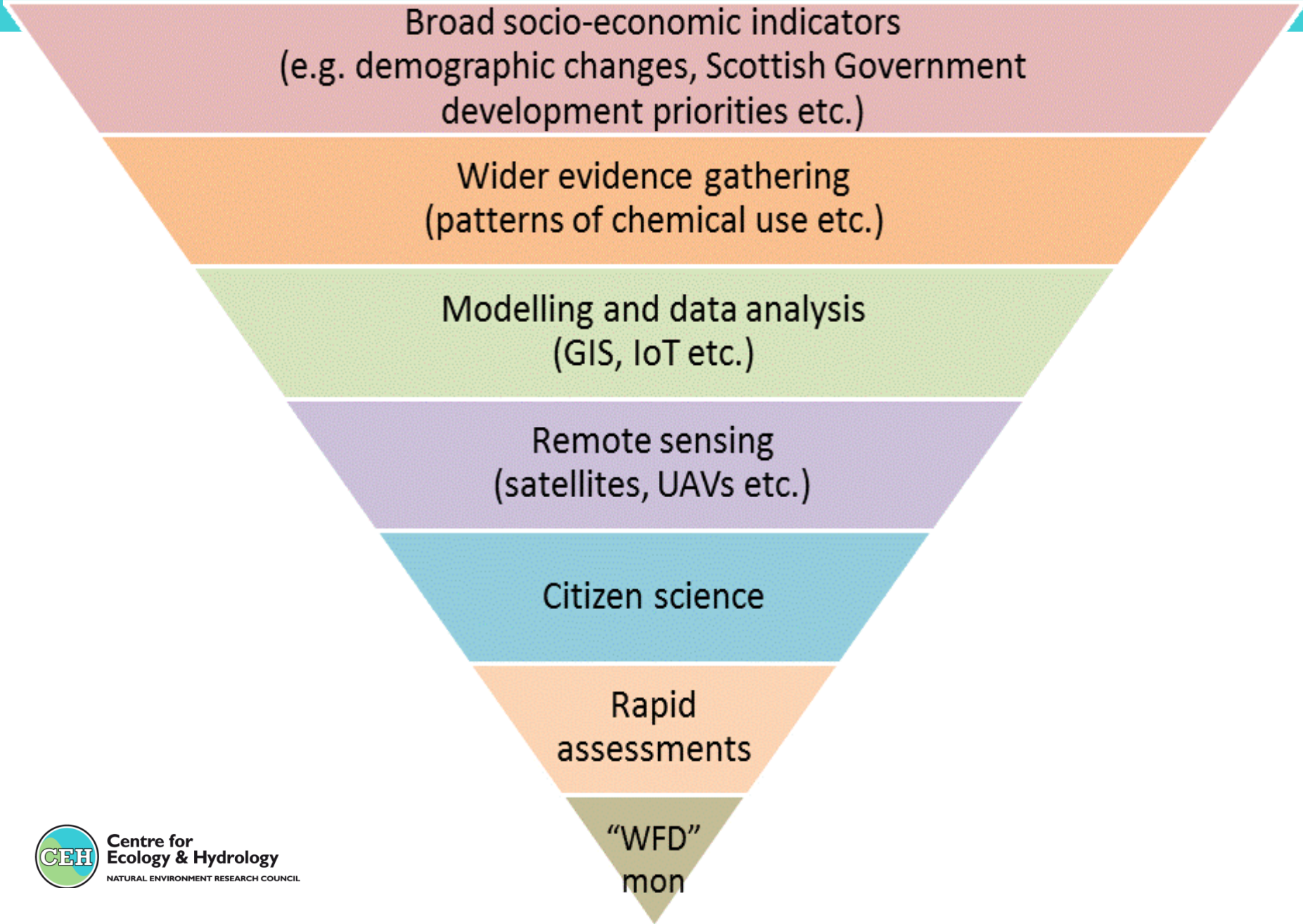
## **Operational** (sites at risk of failing)

- Change along gradients
- Assess state
- What is the impact of specific pressures?

## **Investigative** (cause of degradation unknown)

- Experimental





Broad socio-economic indicators  
(e.g. demographic changes, Scottish Government  
development priorities etc.)

Wider evidence gathering  
(patterns of chemical use etc.)

Modelling and data analysis  
(GIS, IoT etc.)

Remote sensing  
(satellites, UAVs etc.)

Citizen science

Rapid  
assessments

“WFD”  
mon



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# Decision making

- Can innovative monitoring save money and provide better data?
- What evidence do you need to make better, faster decisions?
- Can we use monitoring data to provide predictions which improve management?