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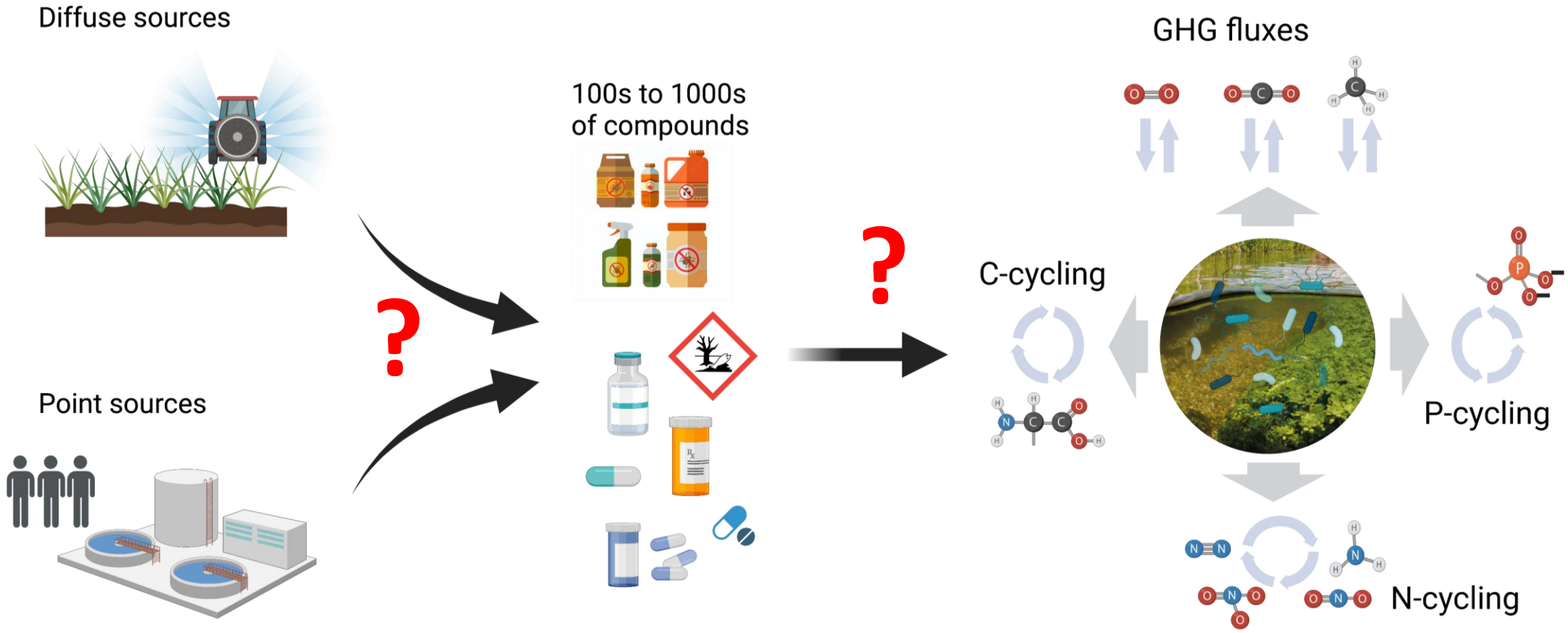
THAMES21

Thames Water

Wessex Water YTL GROUP

FRESHWATER BIOLOGICAL ASSOCIATION


Diffuse sources
Point sources
100s to 1000s
of compounds
?
?
GHG fluxes
C-cycling
P-cycling
N-cycling

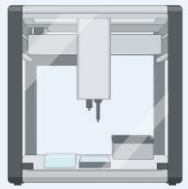
Tractability, reproducability

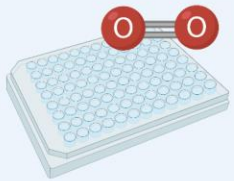
Relevance, complexity

WP2

PRESTWICK CHEMICAL LIBRARIES

1,520 pharmaceutical chemicals + metals and biocides

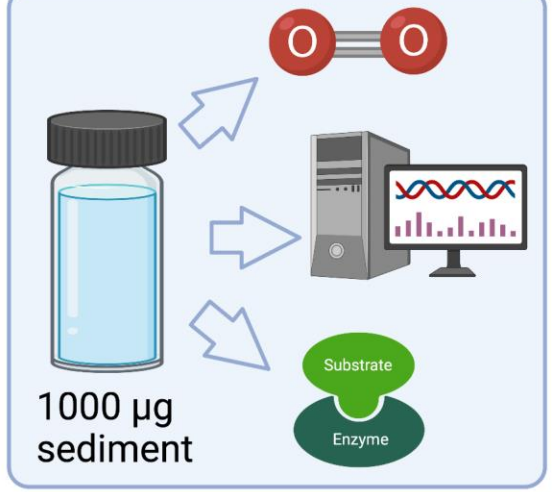




100 µg sediment

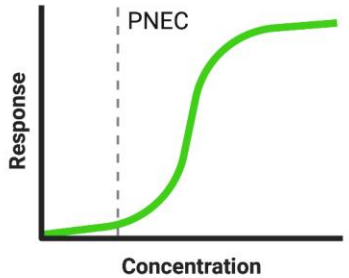
Chemical prioritisation

WP2



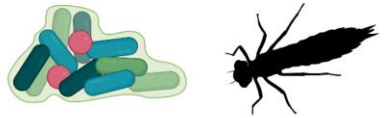
1000 µg sediment

Taxonomic and functional thresholds

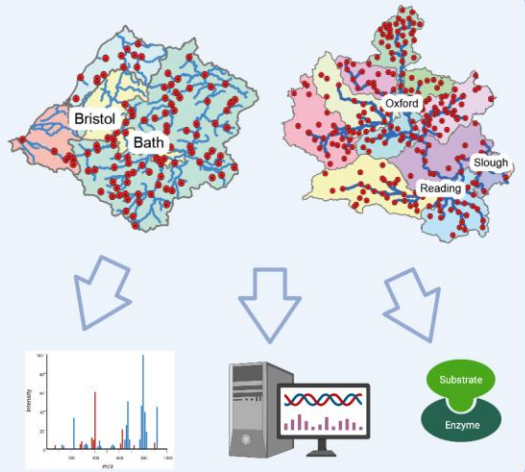


WP3

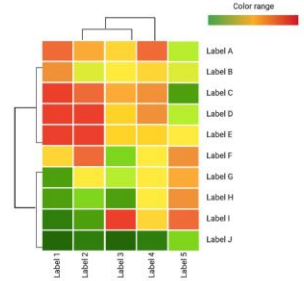
Multi-stressor interactions and chemical fate



WP1



Real world pollutant and ecology associations



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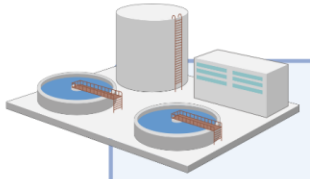
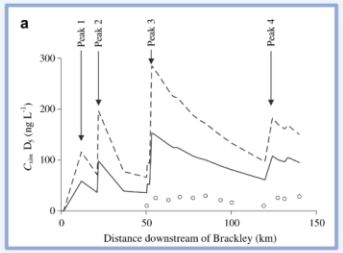


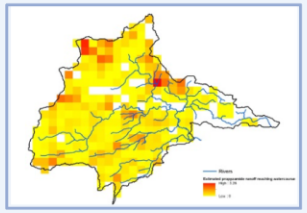
Point source modelling - Qube WQX model

- Stochastic Model - probability distributions of predicted environmental concentrations (PECs)



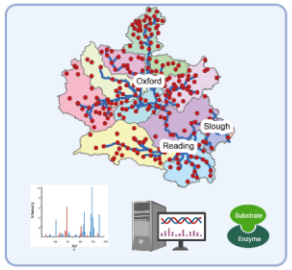
Diffuse source modelling - InVEST NDR model

- UKCEH Land Cover Map (LCM) predictions of agrochemical applications to land
- Hydrological routing and mass-balance equations to estimate pollutant run-off

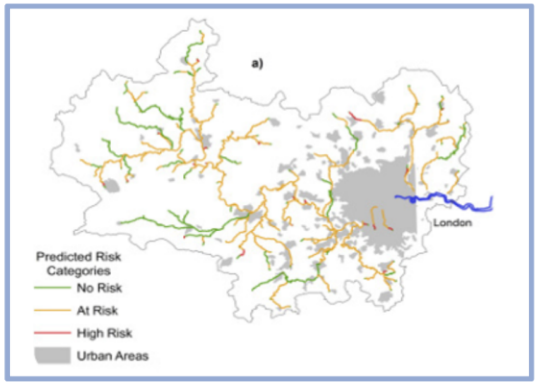


InVEST
integrated valuation of ecosystem services and tradeoffs

WP 1



Field observations



Catchment risk maps

Experimental thresholds

WPs 2 & 3