



**Analysis and simulation of the
Long-Term / Large-Scale interactions
of C, N and P
in UK land, freshwater and atmosphere**

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LTLS questions & approach

- Over the last 200 years, what have been the temporal responses of soil C, N and P pools in different UK catchments to nutrient enrichment?
- What have been the spatial patterns of C, N and P transfers from land to the sea in different UK catchments and estuaries?
- How has freshwater biodiversity responded to increases in system productivity engendered by nutrient enrichment at different locations?

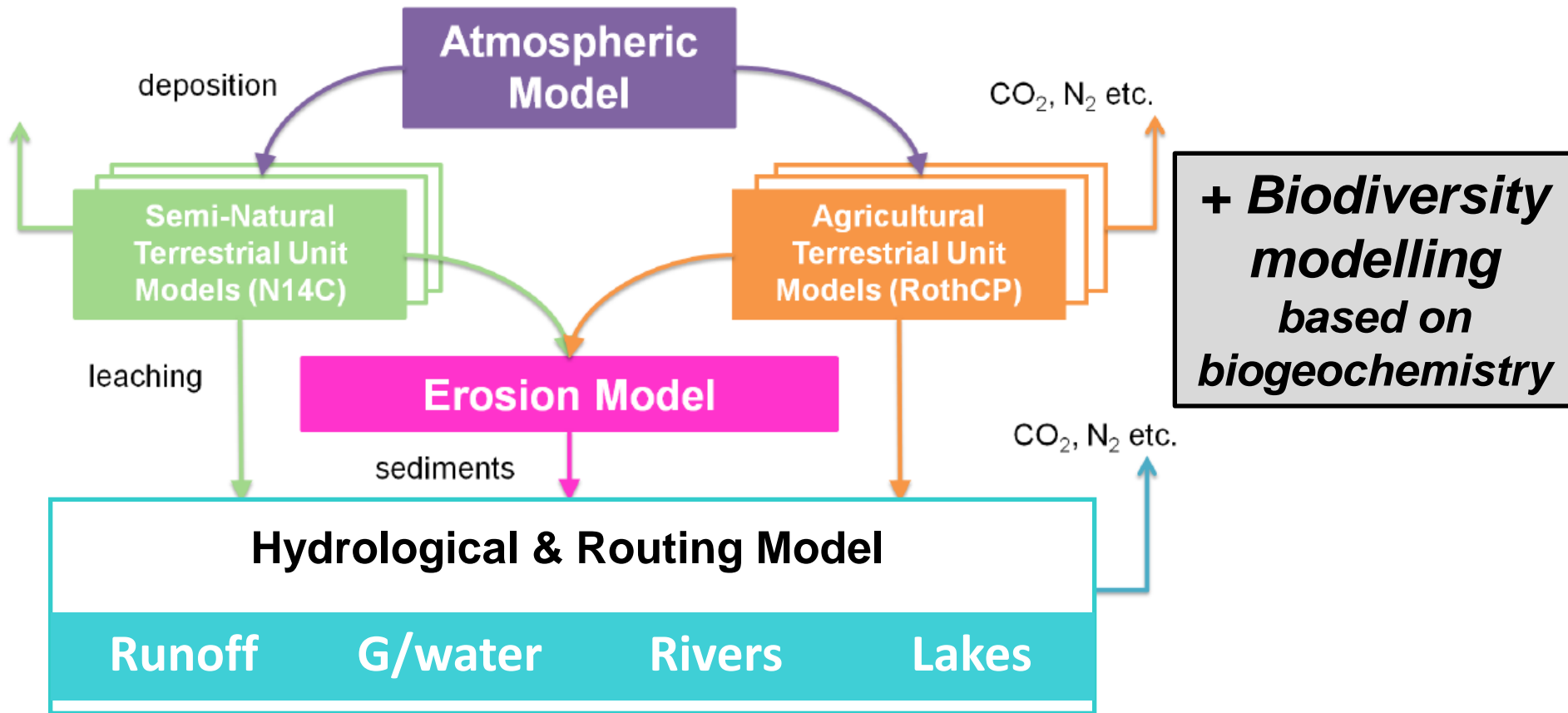
...or, how did we get to where we are today?

Answered by:

***integrated modelling analysis,
aimed at accounting for observable present element
pools and fluxes in different UK catchments
in terms of their nutrient enrichment histories***

***Followed by: scenario-based forecasting with
Stakeholder participation***

LTLS activities



+ Measurements

soil denitrification
river transport (¹⁴C)
fuel experiments
NPP

soil survey (¹⁴C)
lakes
bracken survey

Presentations

- Vicky Bell
 - Hannah Toberman
 - Fotis Sgouridis
 - Susan Jarvis
 - Ed Tipping
- Integrated modelling
Terrestrial sampling
Soil denitrification
Biodiversity modelling
Other work etc