



Linking monitoring inside and outside protected areas with whole-landscape modelling and scenario analysis

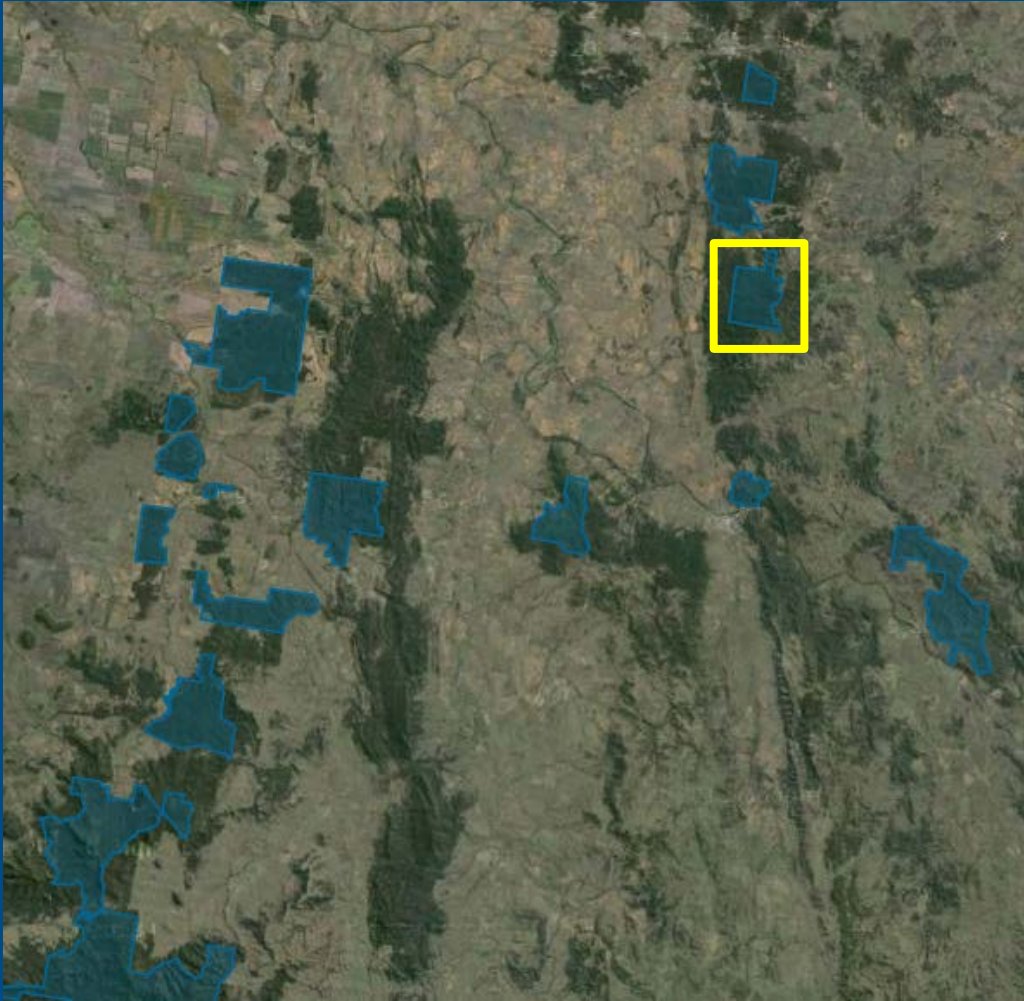
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 GROUP ON
EARTH OBSERVATIONS 



Many of the questions that monitoring can help to address in relation to management of individual PAs ...



How has the state of biodiversity been changing?

How is this state likely to change in the future?

What difference would proposed action x make?

What difference has implemented action y actually made?

... are also key questions at the scale of whole landscapes, countries, regions, or the entire planet



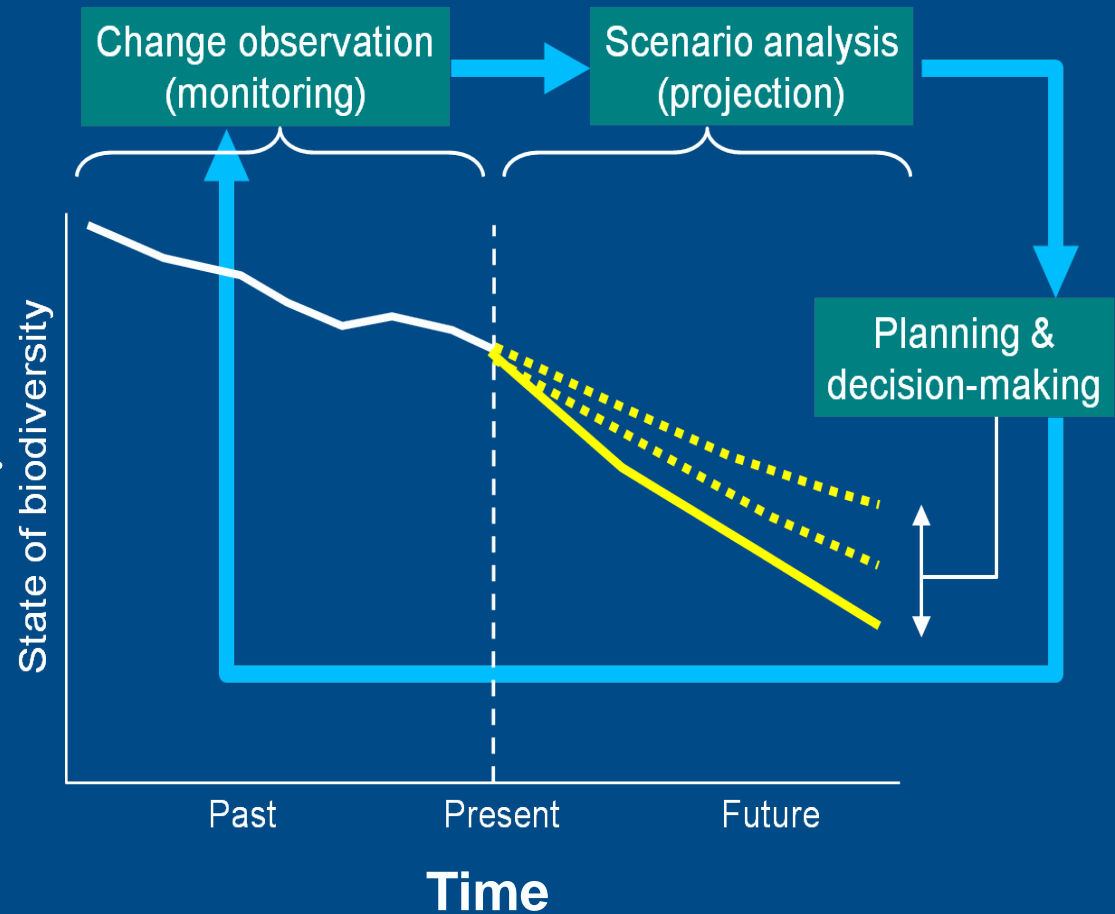
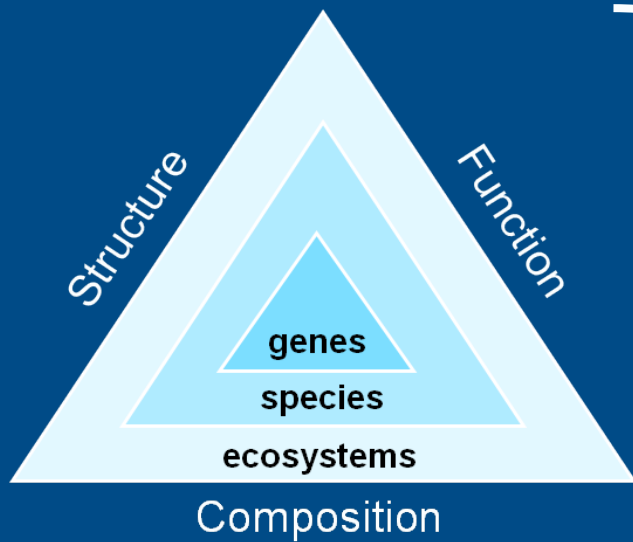
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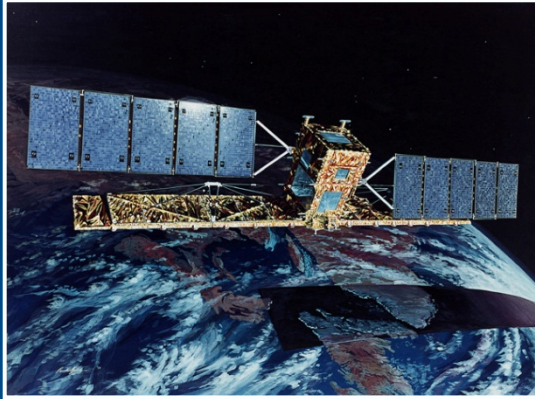
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Three fundamental assessment challenges across multiple scales and multiple levels and dimensions of biodiversity



Modelling plays a central role in integrating change observations from remote sensing & field-based monitoring



Remote sensing

- complete spatial coverage
- but limited detection of biodiversity composition



Model-based integration



- direct detection of biodiversity composition
 - but sparse, and uneven, spatial coverage
- In situ* (field based) observation**

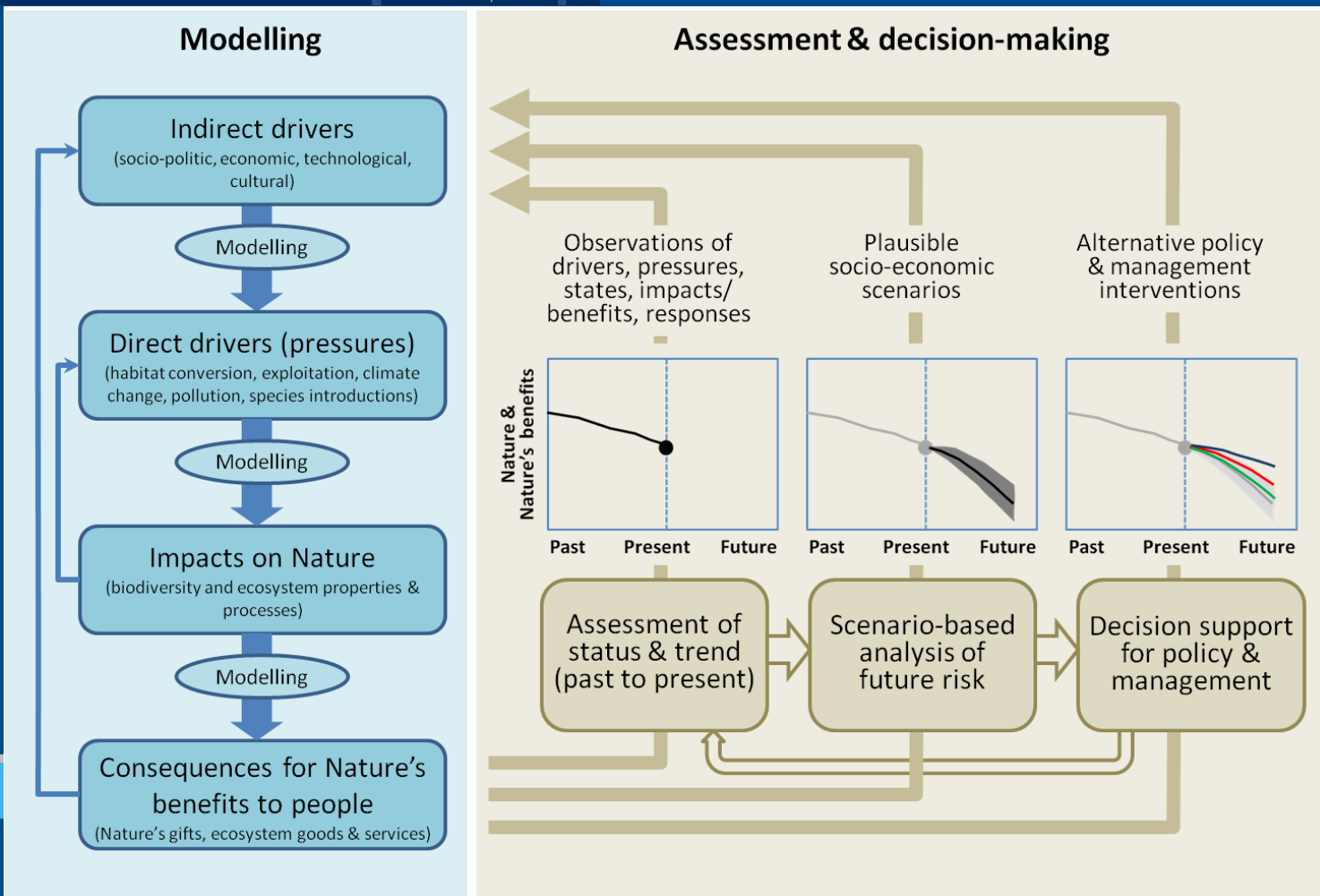
Modelling also underpins projection of outcomes under global-change and policy/management scenarios



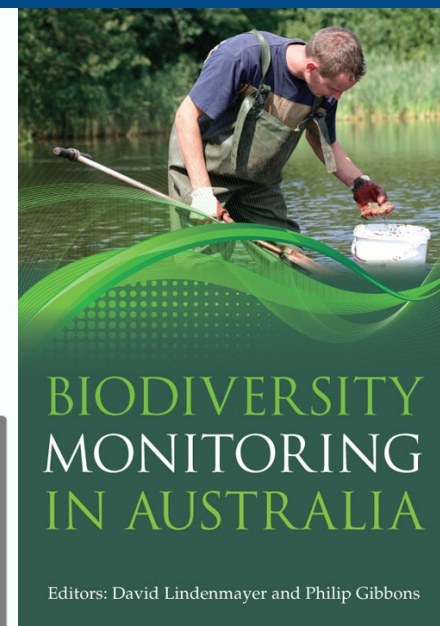
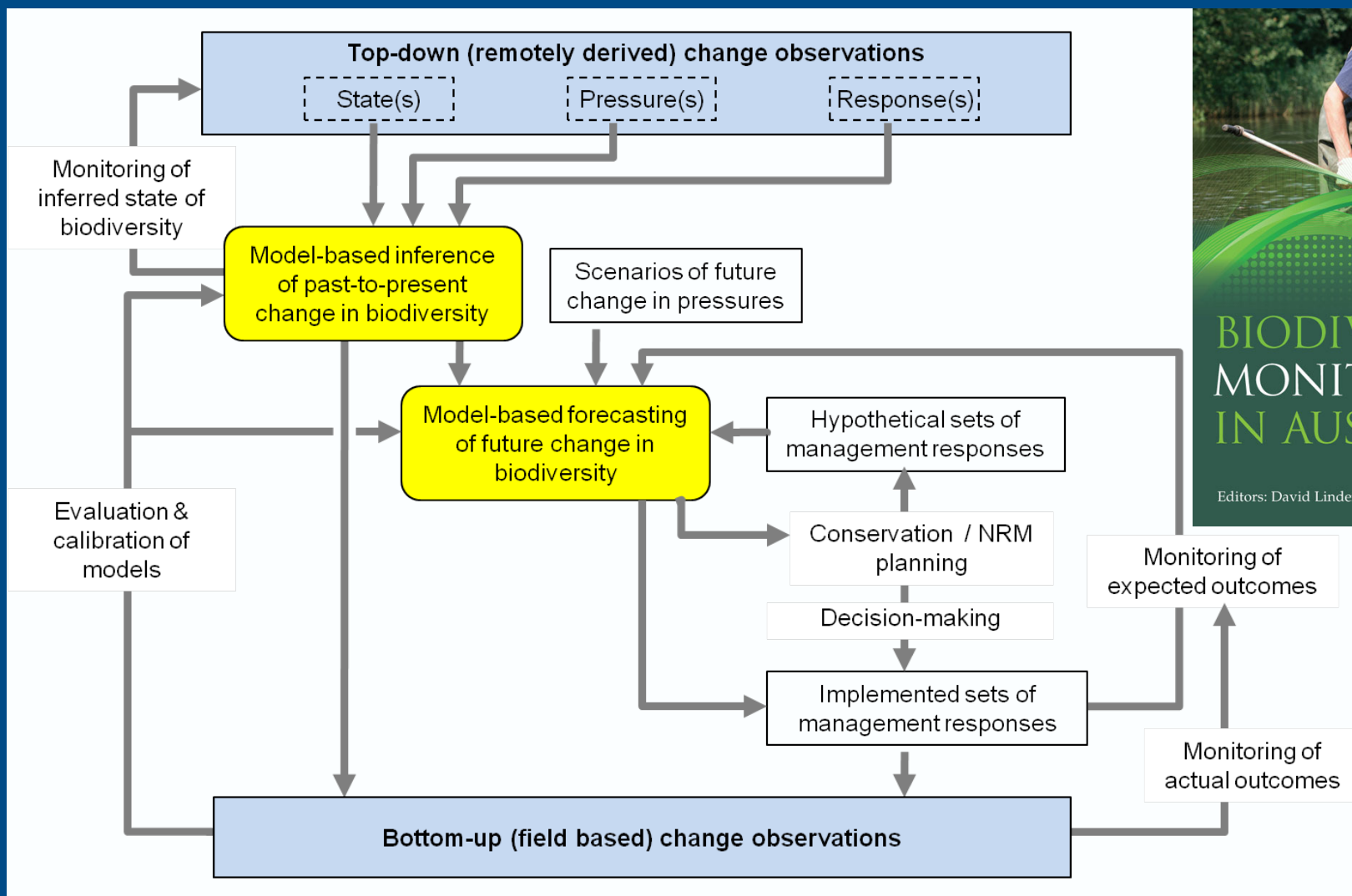
Intergovernmental Platform on Biodiversity & Ecosystem Services



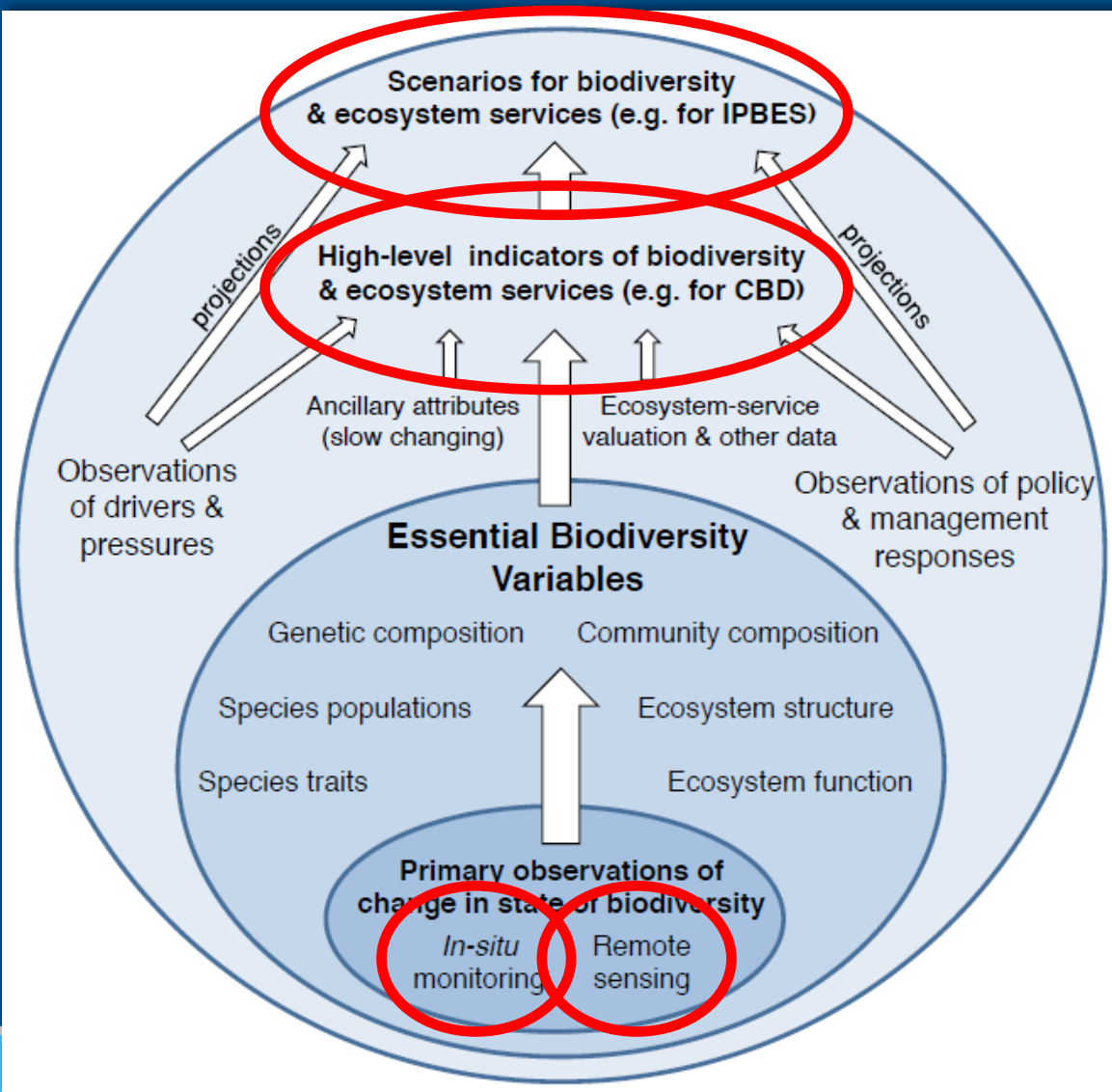
Deliverable 3c: Methodological assessment of scenario analysis and modelling of biodiversity and ecosystem services



Need stronger integration of modelling and monitoring within an adaptive policy/management framework



Can EBVs help by providing a “common currency” for biodiversity observation and projection across scales?



Thank you

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