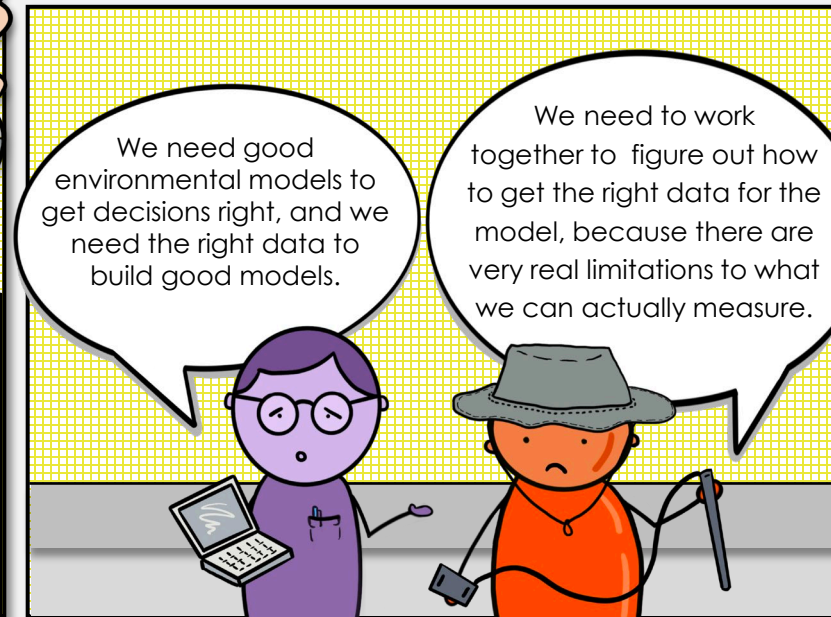


Action plan for model-data integration

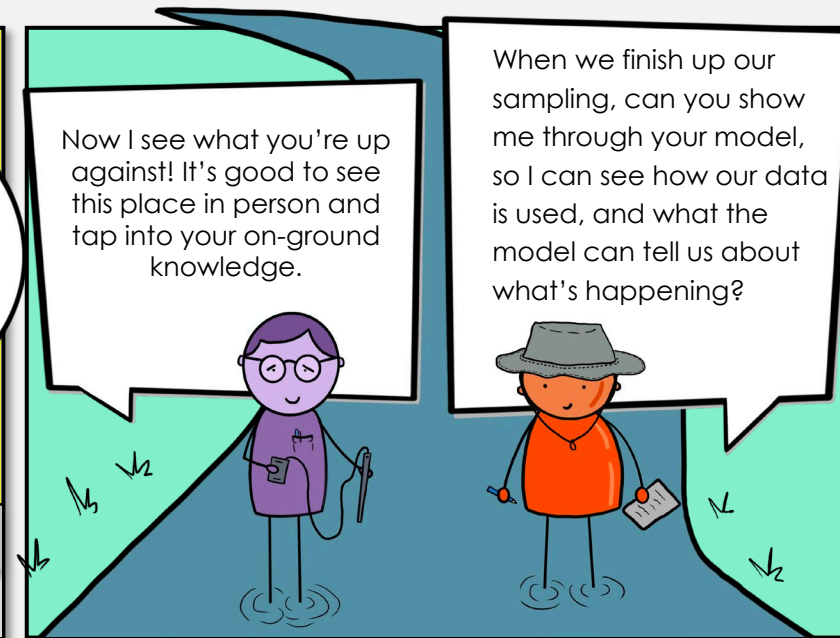
(Spoiler: it's all about the people)



Step 1: Acknowledge the challenge
Modellers and data gatherers may not understand each other's priorities and constraints



Step 2: Find the common ground



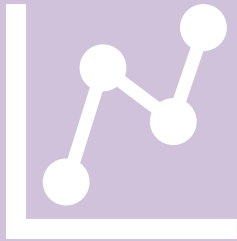
Step 3: Take the time to build good relationships across the model-data divide

Good relationships between the people who build and use models, and the people who collect data, can help to get the most out of both models and data

Mathematical models and measurements (data) are both important for managing environmental systems

Models can tell you...

What might happen under different scenarios or why observed changes might occur



Models can't tell you...

Whether important processes are missing from the model, or what might happen in scenarios outside those for which the model was designed

Data is needed for model calibration, parameterization and evaluation

Models and data work better together!

Models can explore underlying mechanisms and fill gaps in data

Data can tell you...

What has happened at specific locations and times



Data can't tell you...

What has happened to anything not measured, or at other locations and times, or what might happen under different scenarios