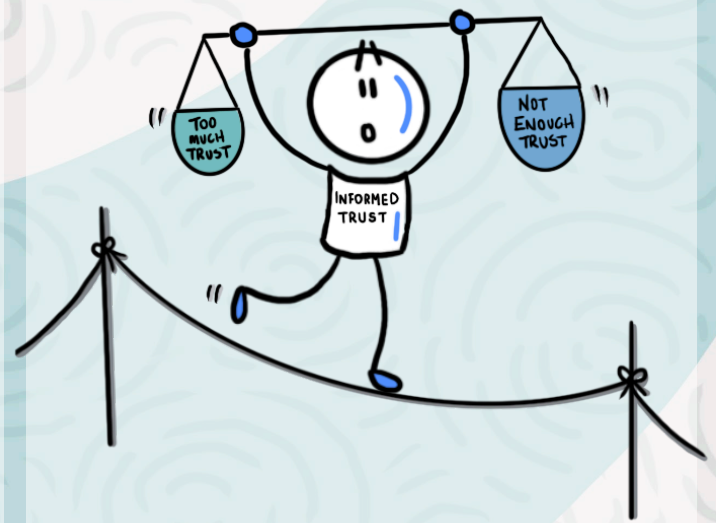
# A Guide to Building Informed Trust in Environmental Models
## (available on FigShare)

**The problem: Too much or not enough trust?** Environmental models can be powerful tools for informing decisions, but only if the models are trusted to provide valuable information. However too much trust in any model can lead to inappropriate use.

**The solution:** Informed trust strikes a balance between the extremes of blind acceptance of the model, and dismissing it as having no value. Informed trust involves an appreciation of the model purpose, the processes it captures and what it can and can't do. Models are more powerful with informed trust.

**What does informed trust look like?** Informed trust recognizes that stakeholder input to the modelling process is essential for the model to have value and relevance to the stakeholders. The process of building informed trust affects both how the model is developed and used.

### Informed trust is a balancing act




## How to develop informed trust in models

1. **Understand the modelling landscape:** Who has an interest in the model or its output? What's at stake for them? How can local knowledge inform the model?
2. **Build and maintain relationships with stakeholders:** Effective two-way communication over the model life cycle generates informed trust.
3. **Invest in success:** Budget for meaningful engagement with stakeholders.

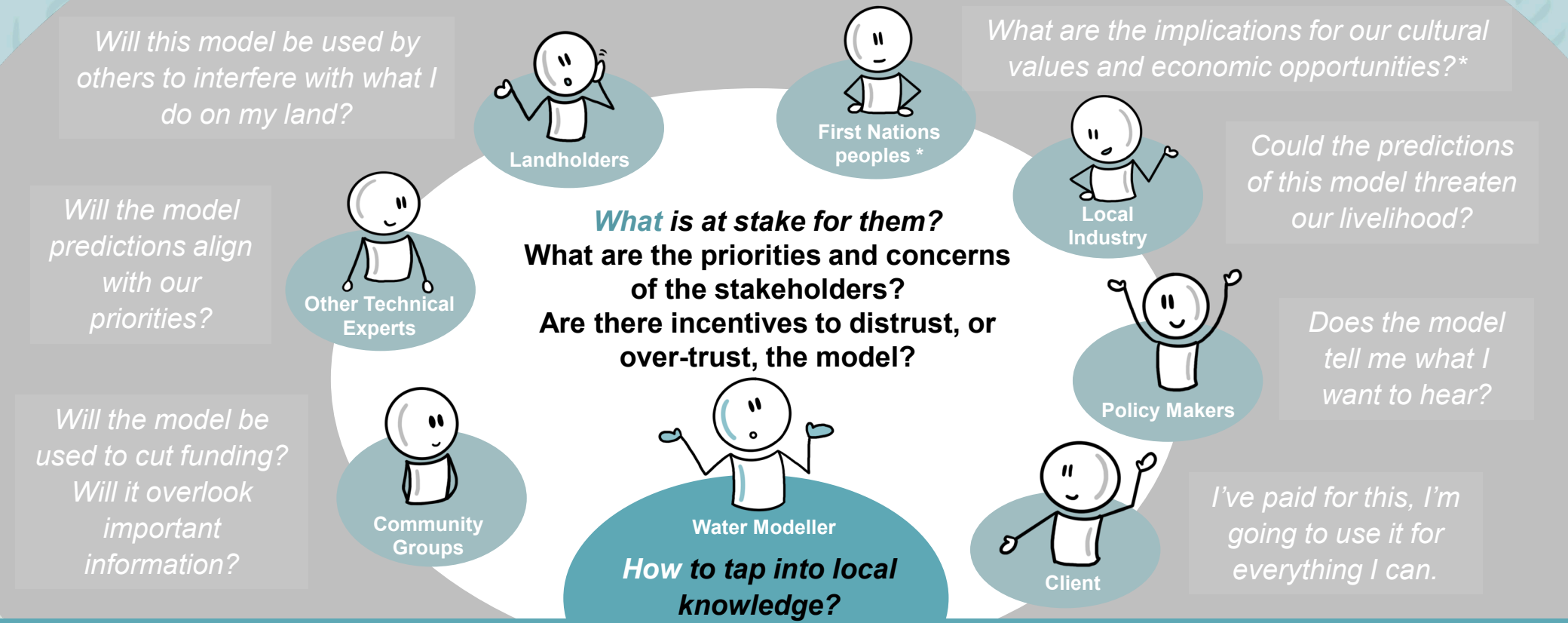
"no one trusts the model except the person who built it; everyone trusts the data except the person who collected it"

*Paraphrased from Harlow Shapley*

# Step 1: Understand the modelling landscape

## *Who are the stakeholders in the modelling endeavour?*

**Anyone who paid for the model, who will use the model to make decisions, or has a stake in decisions informed by the model**




**Who understands the physical and social landscape the model is simulating?**
**Who is respected in the community for their knowledge?**
***Don't be afraid to engage with people who are sceptical of your model: they may articulate the biggest issues.***

** For content on engagement with First Nations peoples, see "Starting the conversation" by Jibija Ung-gwee Pty Ltd*

# Step 2: Build and maintain relationships with stakeholders

communicate consistently

communicate well

**When engaging, consider your audience:** Who are they? What's their interest in the model and its applications? Be strategic in your communication. Choose your words carefully. Words matter.

**Take the time to listen and learn:** Shift from one-way presentation to two-way communication. Ensure local issues are captured in the modelling process.

**Use the right tools for the job:** Maps, round-tables, print-outs which facilitate conversation can be much more engaging than PowerPoint presentations.

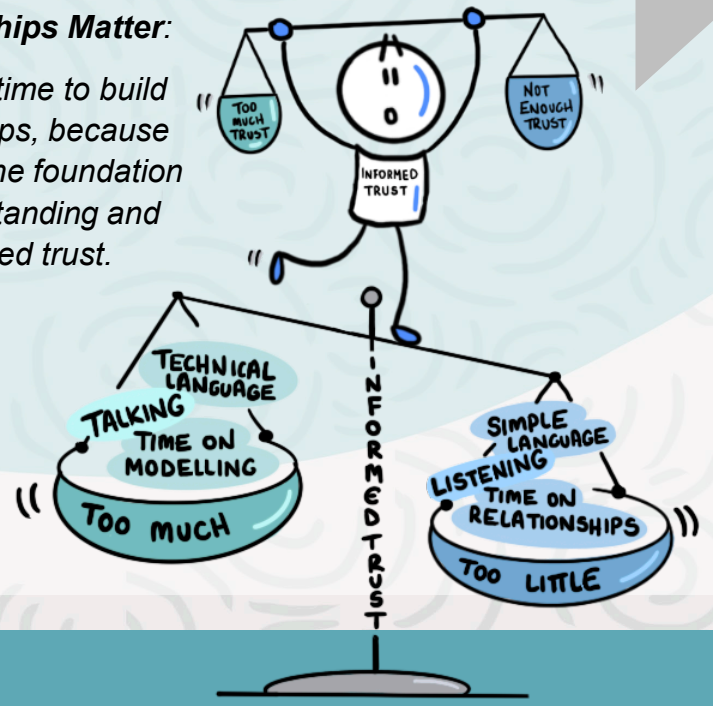
**Communicate your model at the right level of detail:** Credibility in the model requires credibility in the model foundations and supporting data. Communicate this clearly and concisely.

**Build and maintain relationships over the modelling life cycle and beyond**: not just a token visit at the start or end of the project but invest time and resources in building relationships with stakeholders, listening to their concerns and valuing their local knowledge.

**Relationships are built through on-going, face-to-face interaction:** show up to show your commitment. If trust is lost, it takes time to re-establish.

***Relationships Matter***:

*Make the time to build relationships, because these are the foundation of understanding and informed trust.*



# Step 3: Invest in success

## Make an engagement plan at the start of the modelling process

Building informed trust:

- needs to be appropriately resourced and included in the project budget and timeline.
- is hard work, it takes time, skill and involves lots of learning along the way.
- reduces the risk that your model will sit on the shelf, or be applied to contexts where it simply doesn't work.

***Informed trust enables models to be well used, and used well.***


*To Cite this work: "A Guide to Building Informed Trust in Environmental Models"*
*O'Brien, Vilas, Egger, Langsdorf, Weber, Turner, McCloskey, di Bella, Baird, Burford, Dean, Hamilton, Maier, Maxwell, O'Neill, Shaw, Adams 2024*

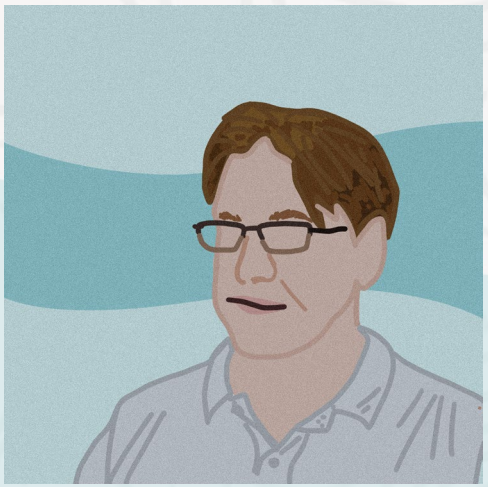
# Informed trust is built on relationships

## Lawrence di Bella

Manager - Herbert Cane Productivity Services Limited

Interact with industry and stakeholders throughout the project

Play Video



## Ryan Turner

Science Leader - Reef Catchments Science Partnership

Communicate clearly and concisely

Play Video

## Gill McCloskey

Senior Catchment Modeller - Dept of Environment & Science

Communicate in a way that is meaningful to stakeholders

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## Tony Weber

National leader, Water Modelling. - Alluvium

Build and maintain relationships

Play Video

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