Afternoon session Communication related problems with modelling

There is a need to explain concepts to non-technical people. There is not enough two-way communication → not enough trust.

1. Who are we communicating to? Definition of the audience and "Key message" (why, what, who, when)
- Identify/define/map the primary audience (stakeholders we want to communicate with), medium (how), purpose (what do we want them to do? And why?).
- Dealing with conflicting views: Consider the perspective you are looking at the result from - People either glace over or focus too hard on the numbers.
- Use of language specific to your audience. Language barriers in environment, engineering and economics.

2. What are we communicating? Knowledge transfer/education
- Where are the stories? Stories are plausible narratives. For example, the Ozone story with CFC, Gold Coast strategy, trunk sewer (London).
- Communicating policy decisions to the public. Communicate the outcome of probabilistic models.
- Understanding the data assumptions and outputs from a model and how they affect decision making (limits to the model)
- Model limitations: Explaining uncertainty effectively. Explaining how the model relates to the real world – what is it based on?

3. How can we better communicate model results?
- How to better communicate water model outputs: Multi-format, scale, culture.
- Graphical/pictorial. Visualisation → videos. With strong visible links back to the science.
- Provide tools, ways to enable full data to be made available. From surface to deep – accessibility and ease of access ("step the community through").
- Making data/information easy to understand for the public. Technical reports to simple language. Complexity → simplified (not dumbed down).
- Communication training for engineers. Water modellers and practitioners generally are not trained in key communicative skills. For example, stakeholder mapping, developing key messages, communicating technological information.
- Communication specialists: Marketing/promotional effort (collaborative game with marketing, communication and other degrees). Link in with communications and design teams early in the process.

4. Data handling. Flexibility of interpretation – tools to interrogate data.
- Data ownership between organisations. When is data and model outputs sufficient for papers?
- There is an opportunity in confronting the bureaucracy and constraints (line of least resistance)

5. Do we know how to generate trust in models?
- Trust (people & tool) → 'fit for purpose' ← approach, consistent, quality assure, not bleeding edge. "Us and them" (not us versus them!).
- Kitchen table conversations (eg. Primary school kids)
- Seek community input/information – democratisation of science.