

# Predicting low flows – So what?

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# Why predict low flows?

- Assumptions:
  - Need to know amount of water available
  - To ensure sustainability of source (control extraction)
- If system has low flows, it impacts:
  - Water availability and management (short and long term)
  - Users: economic, social, political, environmental
- Therefore, if can foretell water availability (scarcity) then can prepare for shortfall

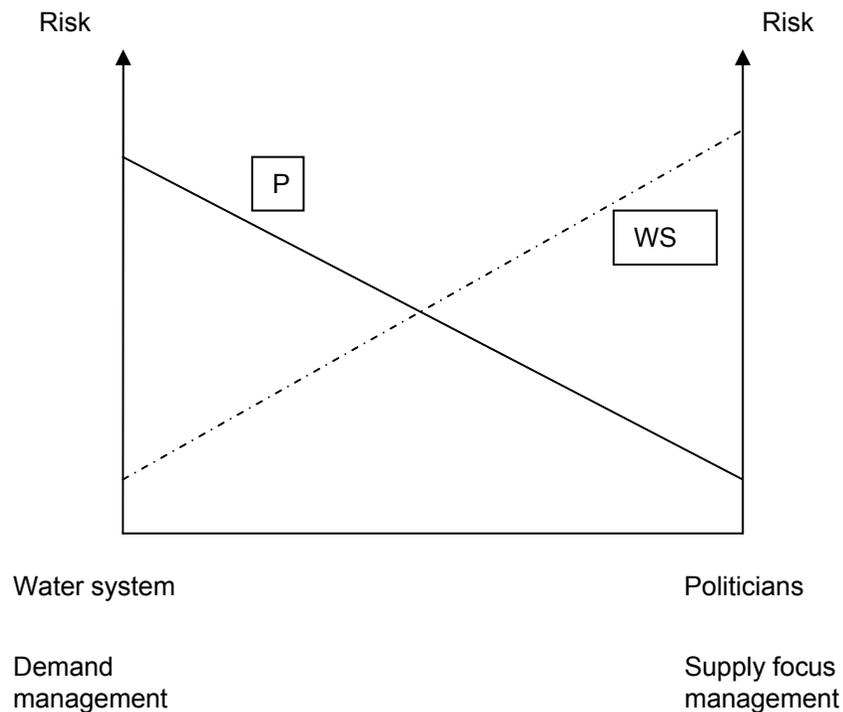
## Good data → good action

- Suggest scientists assume:
  - If policy makers know, they will act
  - Good quality data leads to good quality action
  - Therefore, need good quality data on low flows
- Scientists spend a lot of time improving the quality of data collected on low flows, and improving the accuracy of predictions
- BUT. Despite good data and more accurate predictions, policy related decisions lag behind.

# Why?

- What happens to the data?
  - Goes from the technical collection point
  - Passed onto technical personnel in national ministry
  - If low flows suggest need to alter water use, the government has to agree to change
- Who makes decisions, sets national strategies?
  - Politicians
  - Decision-making is politics *informed* by technical data, and a risk assessment
  - But risk to who – system or politician?

# Water management & associated risk



## Supply management

- Low risk for political decision-makers
- High risk to the water system

## Demand management

- Low risk to the water system
- High risk for political decision-makers

# Good data → ?

- An example: Hurricane Katrina
  - Technical information points to an unusually strong hurricane, need urgent action
  - Top level political inaction, plus larger context, creates a disaster
  - Heavy cost: lives, financial, environmental etc
- Who are scientists talking to?
  - Focus on data quality AND communicating the message
  - Need to understand the politicians' framework
    - Timeline (votes), action needed
    - Speak in their 'language'

# Coffee breaks & corridors

(Rodgers, 2007)

<b>Impose</b>	<b>Inform</b>
<b>Informal coalitions</b>	<b>Involve</b>

- Interact with decision-makers in the place that change is supported or not supported.

# Conclusions

- Cannot assume that good data leads to good action
- If want action, speak to decision-makers in their language
- Engage with them where change is happening.
- An action necessary to reduce risk to the water system, may increase political risk
- NOTE: Manage expectations – own, decision-makers, public