

# Breakout session: Resilience planning and adaptation strategies

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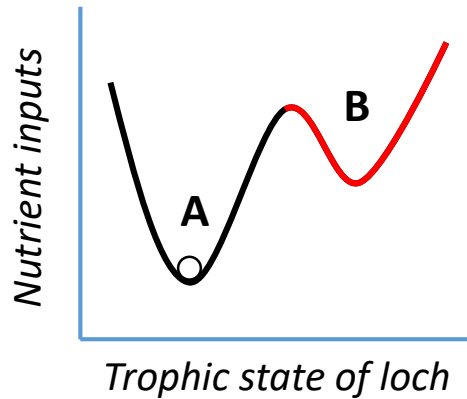


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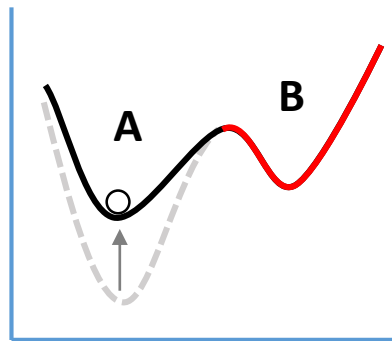
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# Resilience and changes to stable states

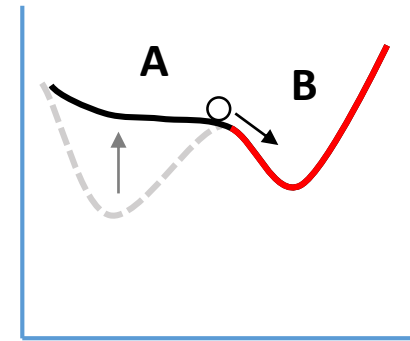
*Two steady states*



*Nutrient increases  
changes conditions*



*Change of trophic state*



# Resilience and drivers of change

## Drivers of change

- Climate change
  - Drought/flooding
- Population growth
- Land use change
- Technological changes
- Change in water management practices
- Change in water governance and institutions
- Water use change

A



B

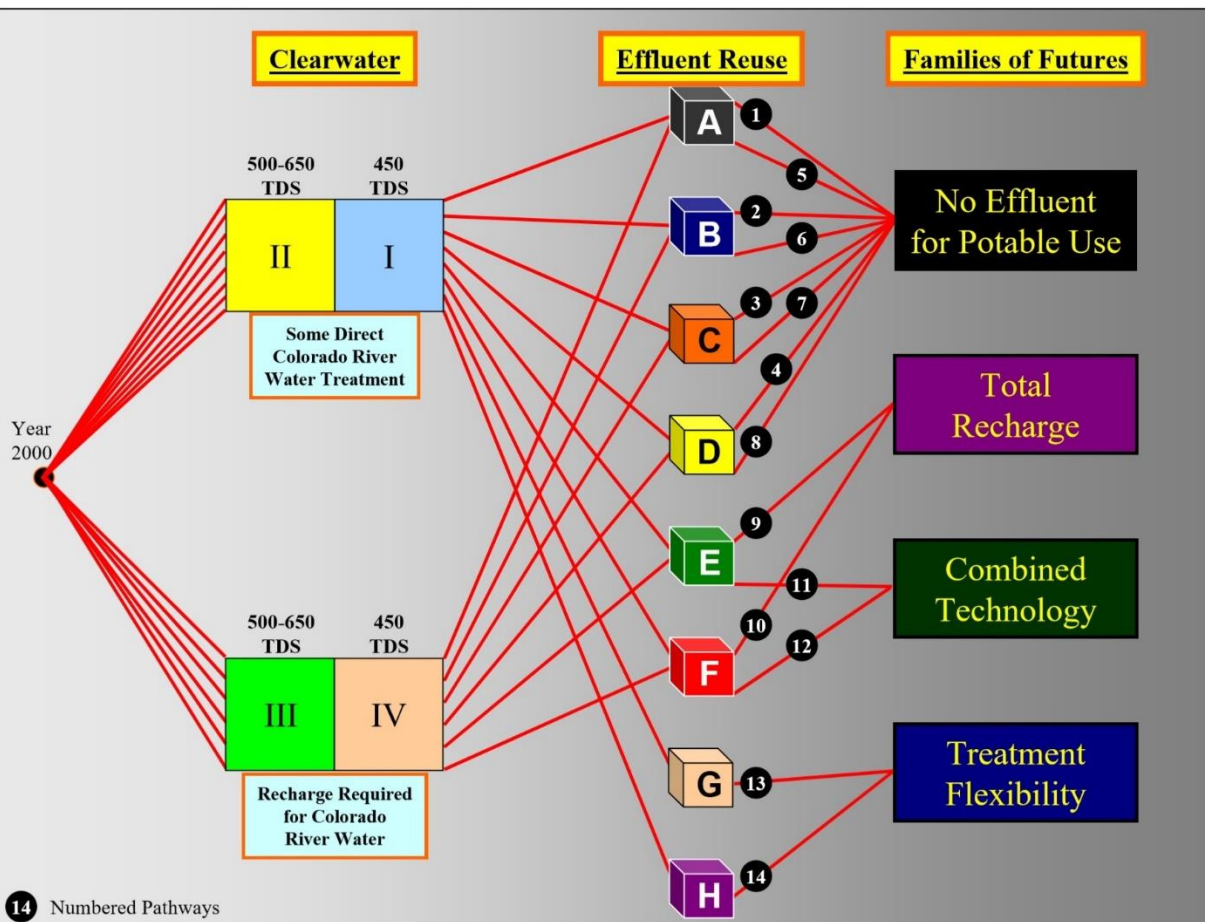




# Example: Tucson Water Water Plan: 2000-2050

Water Plan: 2000-2050, Chapter 6:

<https://www.tucsonaz.gov/files/water/docs/wp-ch06.pdf>



## Possible Futures

Common project/programs around e.g.

Additional supply sources

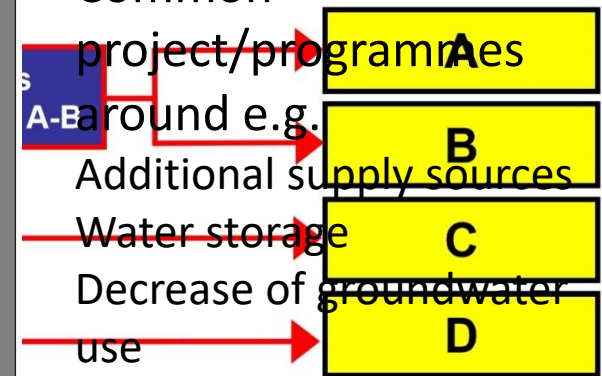
Water storage

Decrease of groundwater use

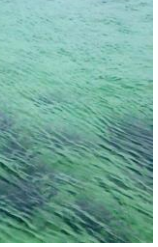
Use of effluent

Efficiency

Public outreach



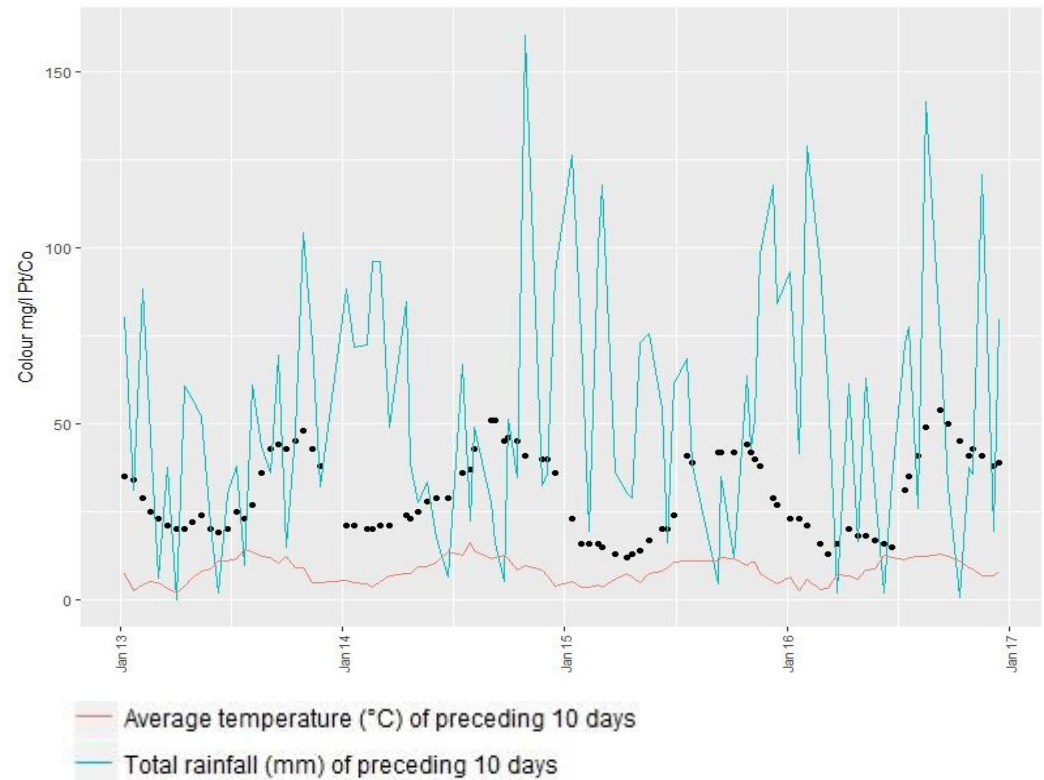
**Figure 6-8:** Pathways to the Families of Futures.

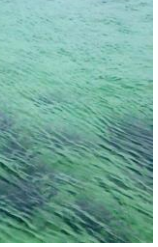


# Drought and water quality - colour

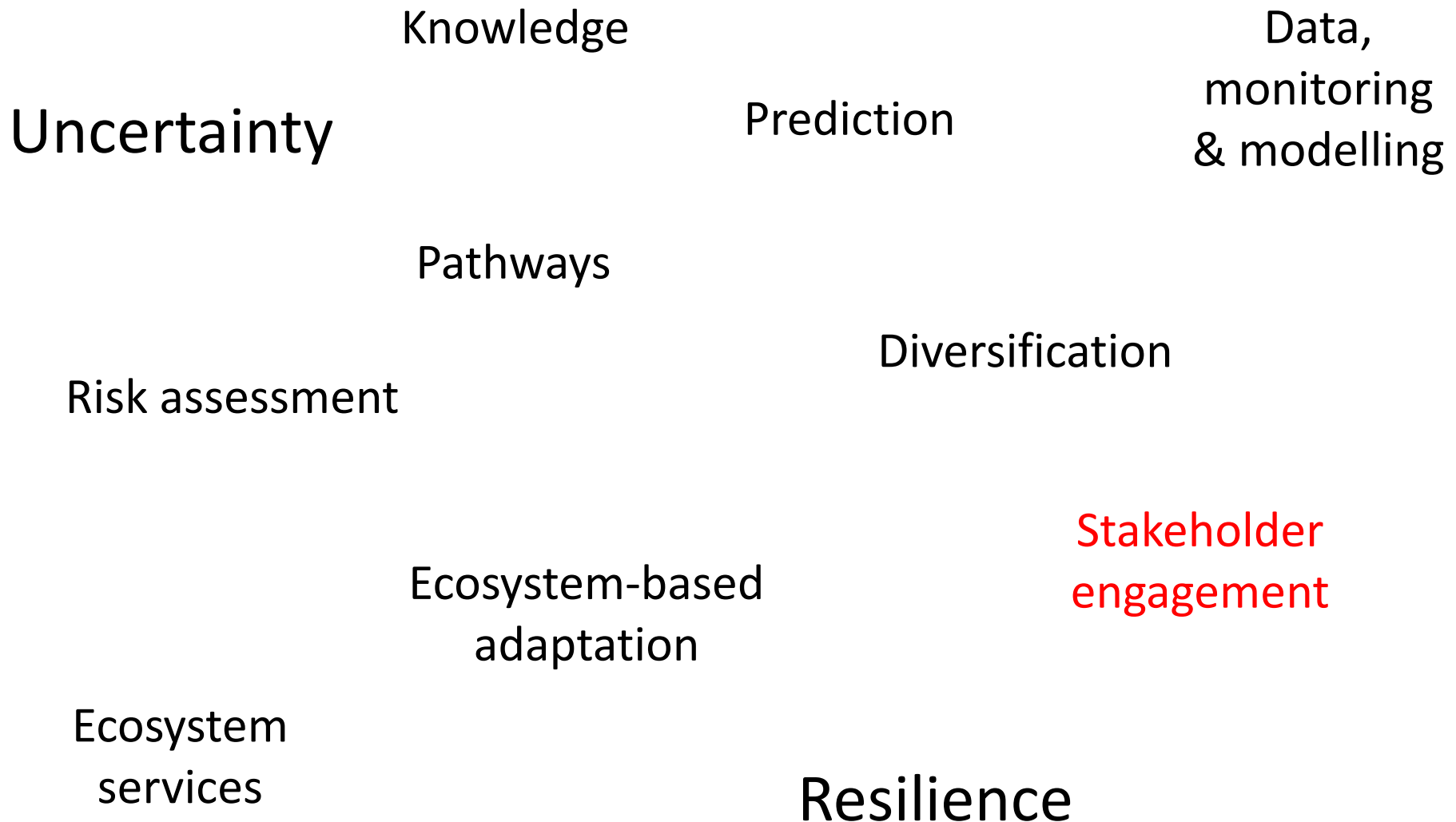


## Colour concentrations in a drinking water catchment 2013-2016

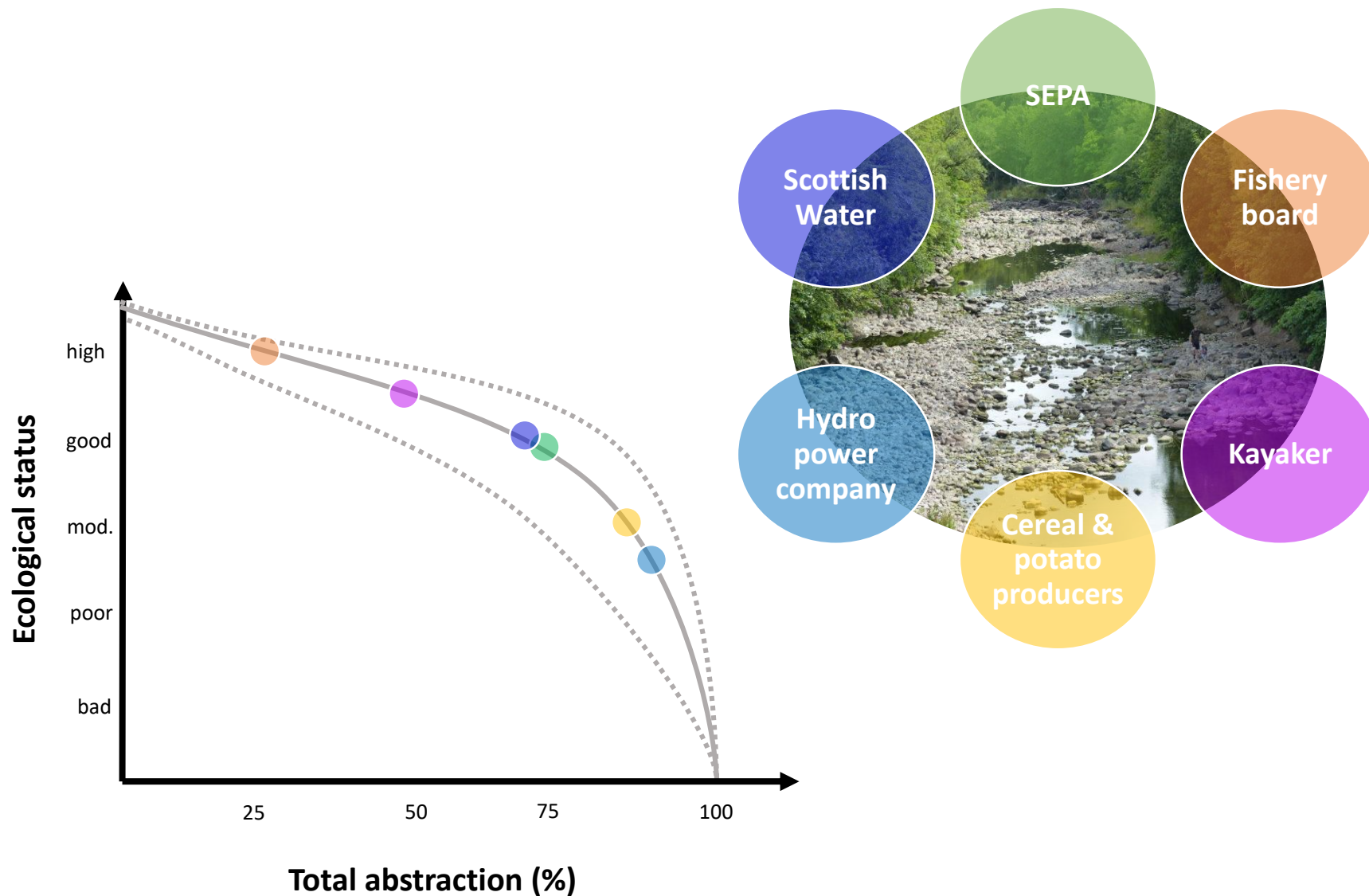




# Adaptation and decision making



# Stakeholder perceptions and priorities





# Resilience planning and adaptation strategies

*What lessons have we learnt from recent experiences?*

*What lessons can we learn from our national and international counterparts?*

*How can we work more effectively across disciplines to enhance resilience?*

*How can communities support monitoring and adaptive management?*

*Identifying the 'need' for research— what, when, why and how?*

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