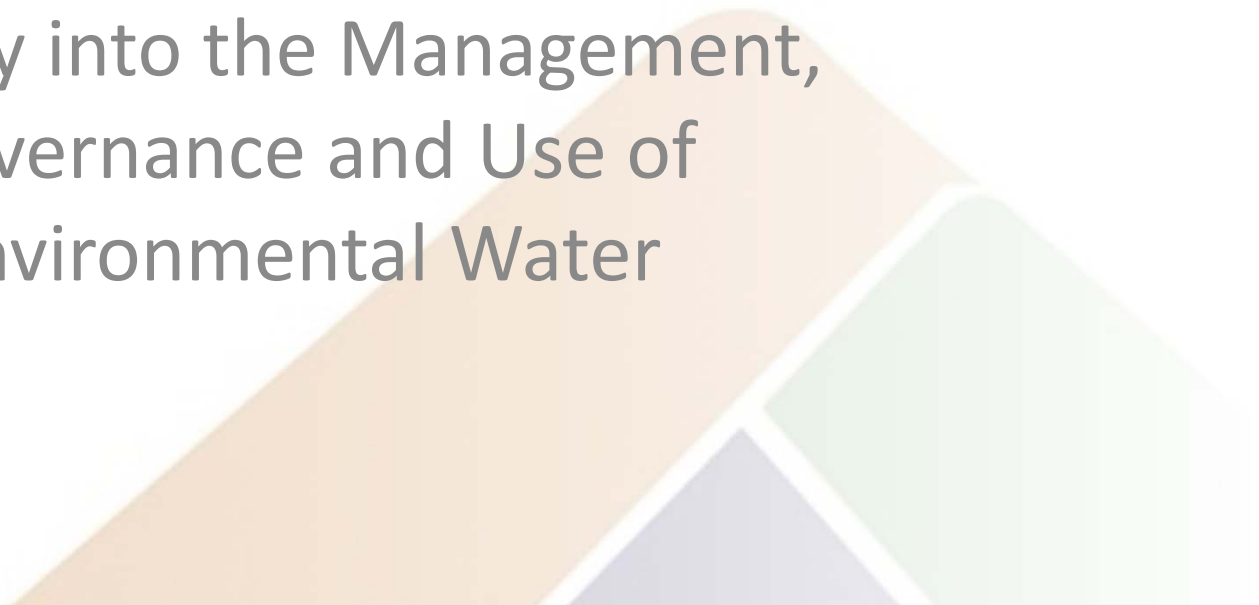


# River Basin Management Society

Mark Stacey – Immediate Past President

Inquiry into the Management,  
Governance and Use of  
Environmental Water



# Context of management

- Water management historically designed to support consumptive use
- Recent decade has seen major investment in environmental water
- Despite this, environmental water management still constrained by legacy issues
- Important to acknowledge these legacy issues during this inquiry

Assessment of the role of environmental water management in preventing or causing ‘blackwater’ events

**BLACKWATER**



# Blackwater cause and impacts

- Blackwater events occurred naturally
- Now more frequent and more severe due to:
  - Fewer high flows, which increases organic matter load
  - High flows occurring later in season, which increases microbial activity
- No scientific evidence to suggest environmental watering has exacerbated blackwater events

# Blackwater prevention and mitigation

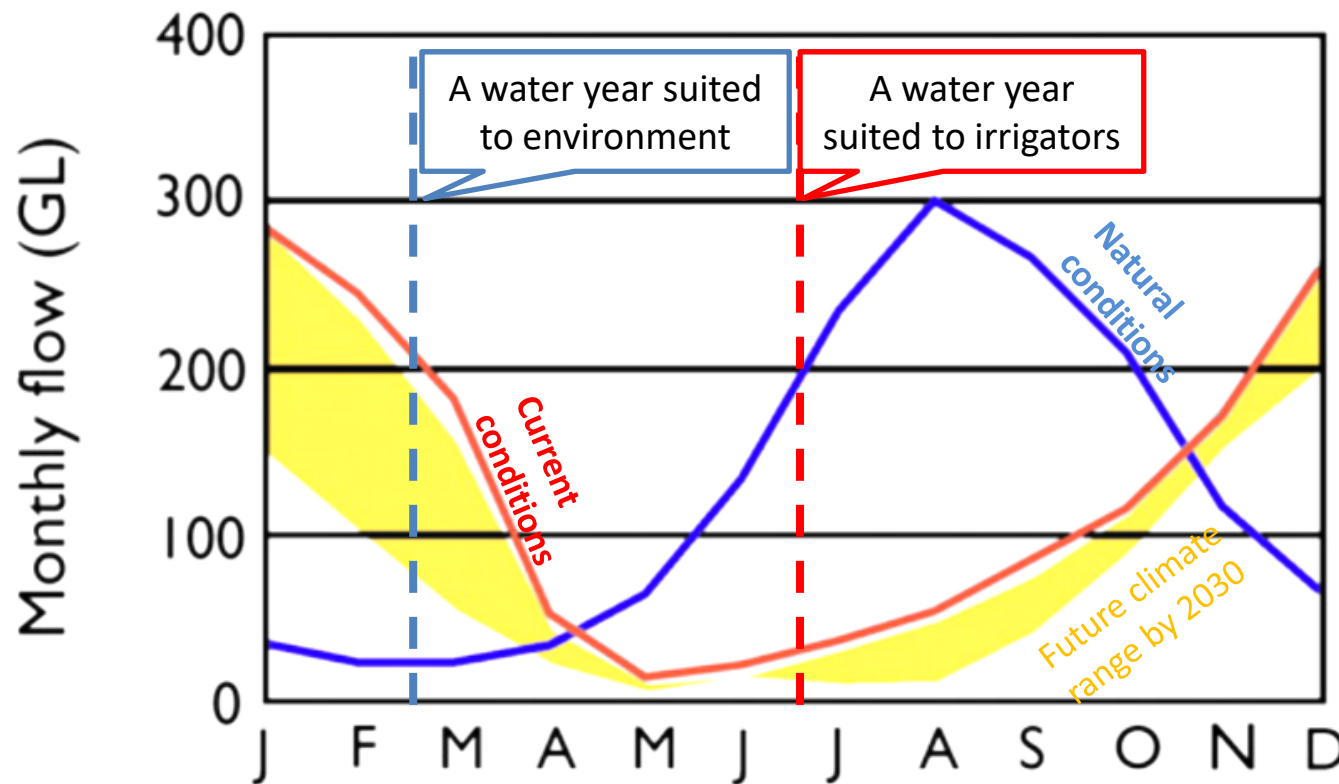
- Environmental water is a critical tool in blackwater event management
  - Prevention → Reduce organic matter accumulations on floodplains
  - Mitigation → Provide dilution to localised events
- But ability to apply this tool is limited
  - By physical and operational constraints
- Blackwater management would be improved by
  - Improving ability to water floodplains
  - Greater predictive capacity

How environmental water and environmental water managers interact with, and utilise, management tools such as carryover and whether the carryover of environmental water impacts on the availability of water for irrigators

## **CARRYOVER & TRADE**



# History of carryover



Average flow of Goulburn River below Lake Eildon

# Carryover implications


- Carryover is critical for environmental watering in early spring and for multi-year planning
- Carryover and trade prevents needing to obtain more water from the consumptive pool
- Carryover is currently used in similar proportions across consumptive and environmental water users



Consideration of what barriers exist to the more efficient use of environmental water and how these may be addressed

## **BARRIERS TO EFFICIENT USE**

## Causes of some barriers

- The environmental watering program is relatively new (~20 years compared to ~100 years of irrigation)
  - Some of the greatest barriers relate to knowledge of water use
- 

# Addressing barriers

- Improve efficiency by maximising ‘shared benefits’
  - but not at the expense of environmental outcomes
- Protect ability to utilise “return flows”
- Mitigation, removal or modification of physical barriers

Assessment of fees and charges applied to environmental water and whether these differ from those imposed on other water users

## **FEES AND CHARGES**

# Principles for fees and charges

- ‘Beneficiary pays’ principle
  - i.e. public benefits to be financially supported by the public, but private benefits funded by private
- Prevent ‘net’ sale of environmental water to pay fees and charges
- Recognise past Government investment to secure environmental water entitlements

# Summary

- Victoria's water management has legacy biases against environmental water use
- The water management context:
  - leads to increased blackwater events
  - requires extensive use of carryover and trade
  - increases barriers to efficient use of environmental water
  - justifies a beneficiary pays fees and charges model
- There are a range of options available to address each issue