



Who let the economists into the decision making tent? Insights from urban waterways in Victoria

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Overview

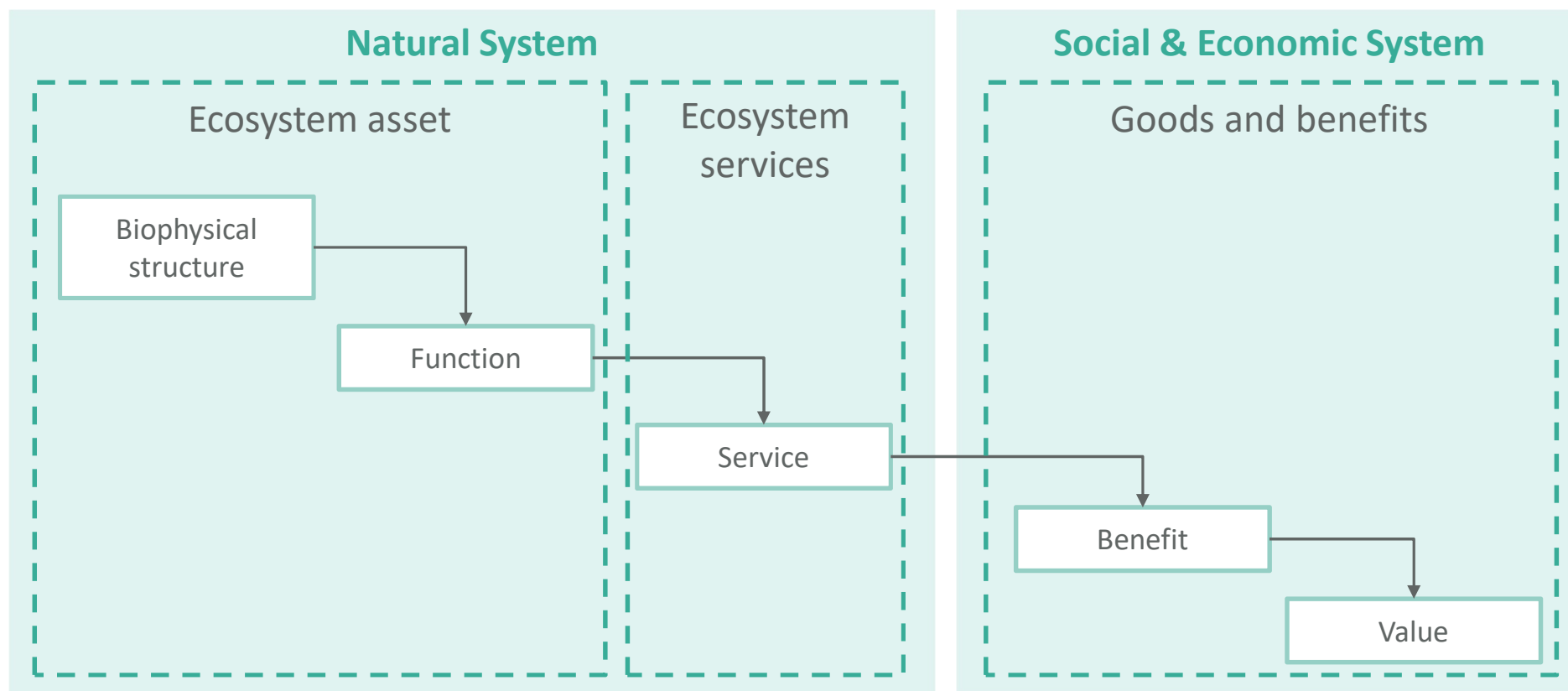
- The *theory*: Why would a decision-maker incorporate an ecosystem services approaches in decision making?
- The *practice*: Case study from Melbourne
 - Project context
 - Approach
 - Results
- Observations: Challenges and opportunities for decision-makers

The theory: What are ecosystem services?

- The benefits provided to humans through the transformations of resources (or natural capital, including land, water, vegetation and atmosphere) into a flow of essential goods and services e.g. clean air, water, and food
- Types of ecosystem services:
 - Provisioning: e.g. food and water
 - Regulating: e.g. flood and disease control
 - Cultural: e.g. recreational and spiritual



The theory: How do ecosystem services provide benefits to humans?



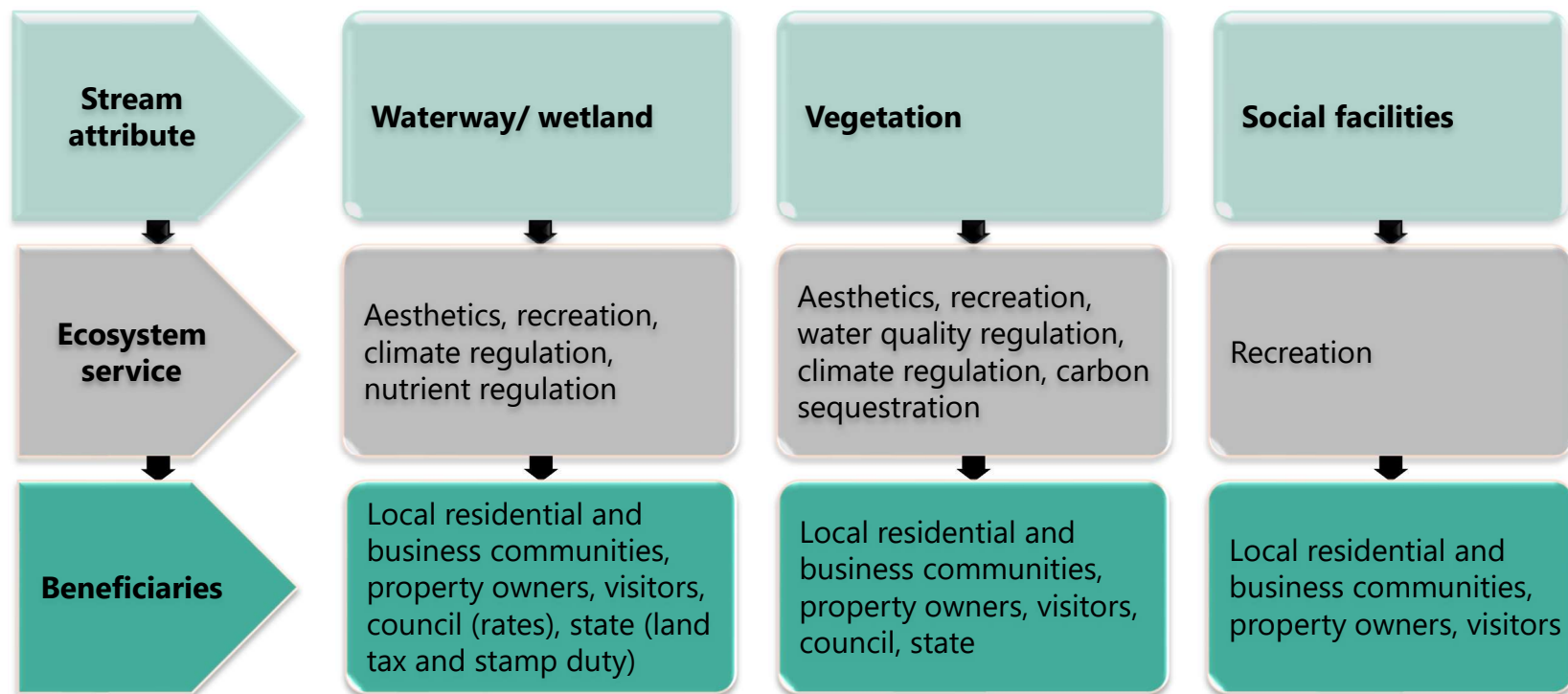
The theory: Why use an ecosystem service approach in decision making?

- Inform decision-making and risk management:
 - Environmental and financial regulators expect to see natural capital and ecosystem services considered in decision-making
 - Prioritise interventions
 - Justify use of public funds
 - Support funding and investment co-sharing arrangements
- Powerful communication tool for internal and external stakeholders
- Demonstrate leadership

The practice: Case from Melbourne

- Objective: Develop estimates of the economic benefits of open spaces to local communities (where possible)
- Case study area: Moreland City Council
 - Moreland open space area: 1,000ha or 20% of the LGA*
 - Most of these are located along waterways
 - The quality of the stream banks and vegetation affect ecosystem services from stream segments
- Why

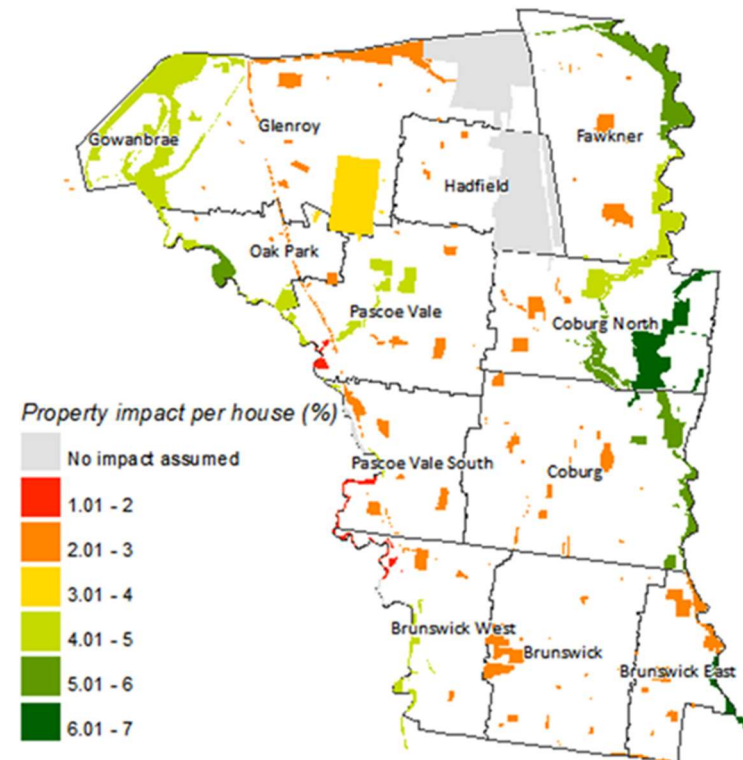
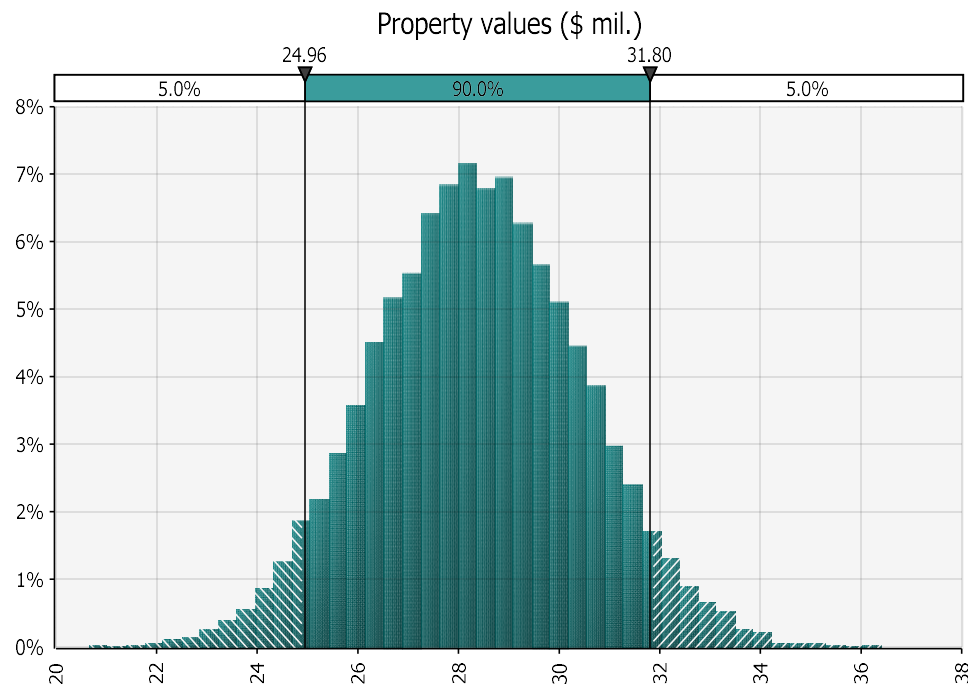
The practice: Identification of key ecosystem services and beneficiaries



The practice: Estimated value of benefits (\$ million)

Benefit	Most likely	90% Confidence interval
Property values	28.4	[25.0; 31.8]
Recreation	9.1	[5.1; 14]
Avoided health costs	13.6	[9.3; 18.5]
Decongestion	0.7	[0.3; 1]
Total quantified benefits	51.8	[44.8; 59.3]

The practice: Detailed property value impact estimates



Observations

Opportunities

- Potential to enhance environmental and social benefits from investments.
- Leads to informed operational decisions.
- Can be an empowering engagement tool, internally and externally.

Challenges

- Data and time requirements
- Developing a methodology that:
 - links with existing business systems
 - transparently addresses less tangible services.
- Most ecosystem service benefits accrue to society, not private companies.



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