Economic assessment of algal blooms: An important contribution in the development of appropriate policy responses.

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Introduction

- Algal blooms represent significant ongoing economic costs to government and community.

- Costs include management response; loss of income; mitigation activities; risks to human and animal health.

- Economic assessment assists in policy development and allocation of scarce resources.
Economic assessment techniques

- Contingent valuation/choice modelling
  - willingness to pay

- Travel cost method
  - recreational values
  - travel expenditure

- Opportunity cost
  - benefits foregone from alternative uses
  - threshold value
Darling River Contingent Valuation study.

- Willingness to pay assessment methodology valued community willingness to “invest” in activities to reduce algal blooms.
- Respondents from along Darling River, the rest of New South Wales and Sydney
- Estimated Sydney households willing to pay $26 million to improve water quality along the Darling.
Costs of 2009 Murray Bloom

- Easter visitor numbers little impacted.
  - However accommodation “pre booked” and
  - Easter visitor experience not just water based, unlike summer recreation.

- Tourism industry identified significant cost in “communication of information” (a management response activity).

- Tourism clients not “distressed” by presence of bloom.

Has the public become accepting of lower water quality and/or has government via the “scientific community” raised public understanding???
Time to reassess?

- Past assessment identified willingness to pay - have attitudes and values changed?
- Has Government investment in science and science communication been effective?
- The apparent limited impact on tourism numbers may be a direct outcome from the investment in “mitigation” activities. How do we assess this?
- **Science and economics mutually benefit from working together to inform policy and decision makers.**