

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.***