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**Department of the Environment,
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Putting the “eco” in economics....

ENVIRONMENT

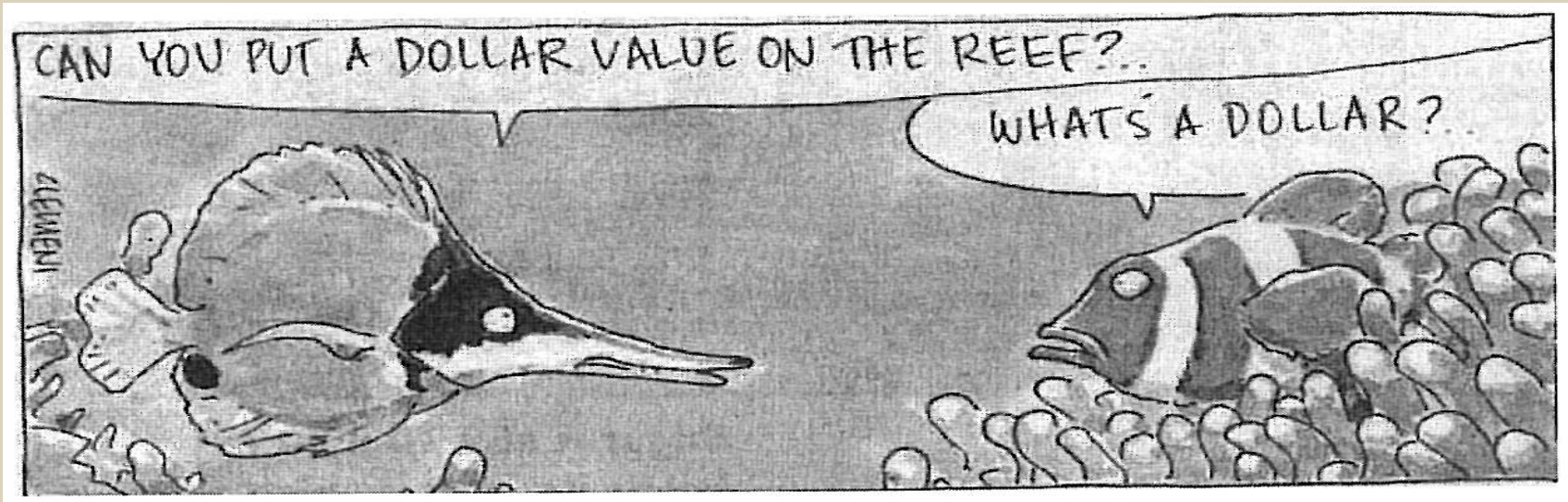
WATER

HERITAGE

ARTS

Biosecurity:

The protection of the economy, environment and human health from negative impacts associated with pests, diseases and weeds.



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Looking to develop and implement a whole of government approach to biosecurity delivery across the three sectors of :

- **primary production**
- **the environment**
- **human health and well being**



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A whole of government approach will involve:

- greater clarity about roles and responsibilities
- clear and better linkages within and between government agencies and jurisdictions
- better opportunities to identify and address gaps, synergies and potential efficiencies in biosecurity delivery



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Agreed principles to provide nationally consistent policy directions:

- enhanced commitment to delivery of cost-effective solutions to biosecurity risks
- enhanced capacity to reduce the establishment, spread and impact of invasive organisms.



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Environmental asset valuation:

- use values (direct use values, indirect use values, option values)
- commercial values,
- ecosystem service values
- passive values (existence values, bequest values, option values), preserving biodiversity, future generational enjoyment, future genetic resources



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Environmental valuation techniques work best where:

- there is some good or service traded in a market
- there is some data about that market or
- some estimates of the market value can be developed.



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There are a variety of environmental valuation techniques:

- the productivity change method
- the human capital approach
- preventative / defensive expenditure method
- replacement / repair cost method



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Despite the development of environmental valuation techniques, the environment continues to be degraded at alarming rates and in ways that:

- cannot be repaired (e.g. the on-going environmental disaster of the Exxon Valdez oil spill)
- make replacement impossible (e.g. desertification)
- threaten whole ecosystems (e.g. loss of the Amazonian forests),
- undermine economic production (e.g. over fishing) and
- threaten social security and stability (e.g. loss of rural production due to lower hydrological changes such as dam building)



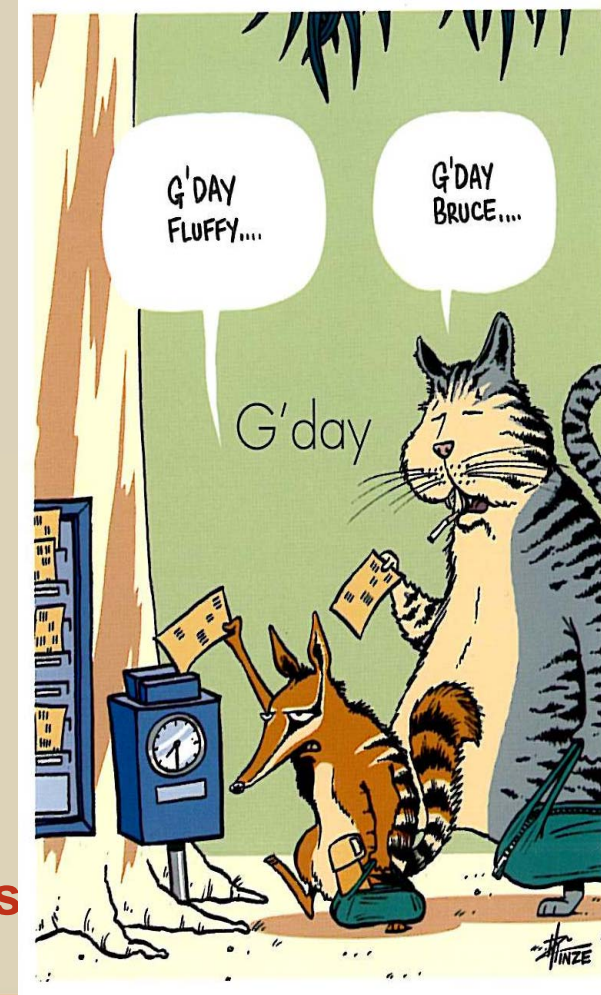
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What we need when valuing the environment:

- a mechanism for acknowledging the irreplaceable nature of many aspects of the environment
- mechanisms for specifying and taking into account 'tipping points' as scientific measures rather than social values, especially where community understanding of environmental absolutes is very limited
- debate and new ideas as to how the discount rate or other mechanisms can provide an adequate measure of the increasing value of diminishing environmental resources
- access to an increasing body of work that uses alternate methods to value environmental assets
- meta data analysis of this work.



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