Dr. Michael Vardon

michael.vardon@anu.edu.au

21st Meeting of the London Group

2-4 November 2015

Linking policy and natural capital accounting

After the "Accounting push and policy pull"
by Michael Vardon, Peter Burnett and Steve Dovers

WAVES

Wealth Accounting and the Valuation of Ecosystem Services
www.wavespartnership.org

WORLD BANK GROUP

Outline

Accounting is for management

Uses of accounts

- Summaries of uses and users
- From accounts to decisions
- How and when information is used
- Policy Roundtable (Opportunities – how to find them and develop accounts to match)

Accounting for management (not just policy)

Corporate sector

- Management of business

Public sector

Management of overall government spending

- E.g. by Department of Finance

Management of the economy

- E.g. by Treasury or of particular industries

Management of the environment and natural resources

- E.g. by Department of Environment for particular programs, protected areas, threatened species etc.

International uses and users of accounts

Summarised by UN et al 2014 and World Bank 2014

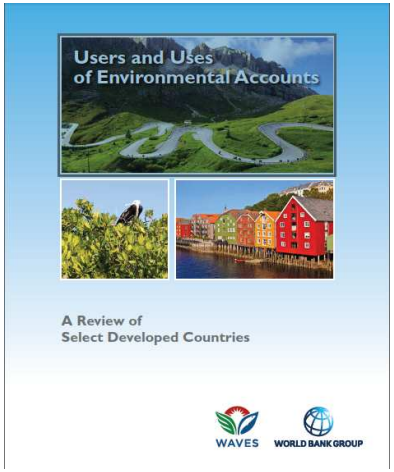
http://unstats.un.org/unsd/envaccounting/ae_white_cover.pdf

Indicators
- Resource use and efficiency
- Wealth
- Adjusted income measures (e.g. Green GDP)

Analytical techniques
- CGE, I-O modelling

Spatial analysis

Sector or industry analyses (e.g. households or tourism)



http://www.wavespartnership.org/sites/waves/files/documents/PTEC1-%20Users%20and%20Uses%20of%20Environmental%20Accounts.pdf

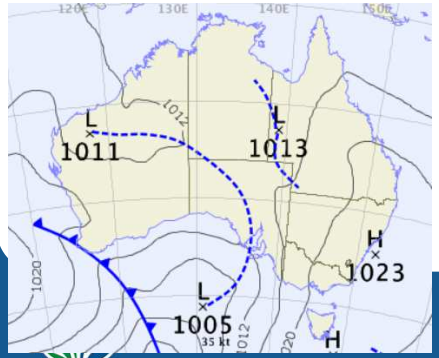
Summarised by country:
- Australia, Canada, Denmark, Finland, France, Germany, Italy, Mexico, Netherlands, Norway, Sweden, UK
- Coverage uneven
- No overall analysis of uses or users

From accounts to decisions

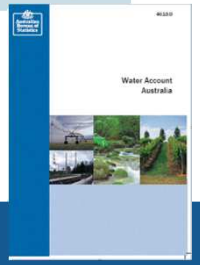
Basic data
(e.g. rainfall, agricultural survey)

Water data

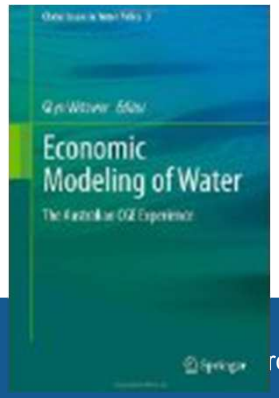
- Design Rainfalls
- Environmental Monitoring Sites
- Geofabric
- Groundwater information
- Hydrologic Reference Stations
- Water Data Online

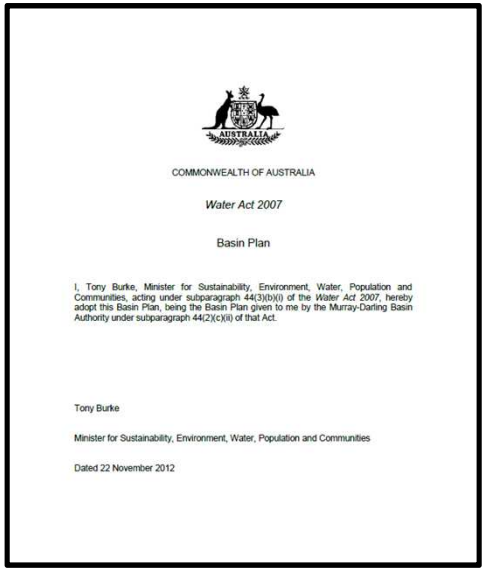


Account compilation
(e.g. water account)



Analysis and interpretation
(e.g. water use by industry)





COMMONWEALTH OF AUSTRALIA

Water Act 2007

Basin Plan

I, Tony Burke, Minister for Sustainability, Environment, Water, Population and Communities, acting under subparagraph 44(3)(b)(i) of the *Water Act 2007*, hereby adopt this Basin Plan, being the Basin Plan given to me by the Murray-Darling Basin Authority under subparagraph 44(2)(c)(ii) of that Act.

Tony Burke

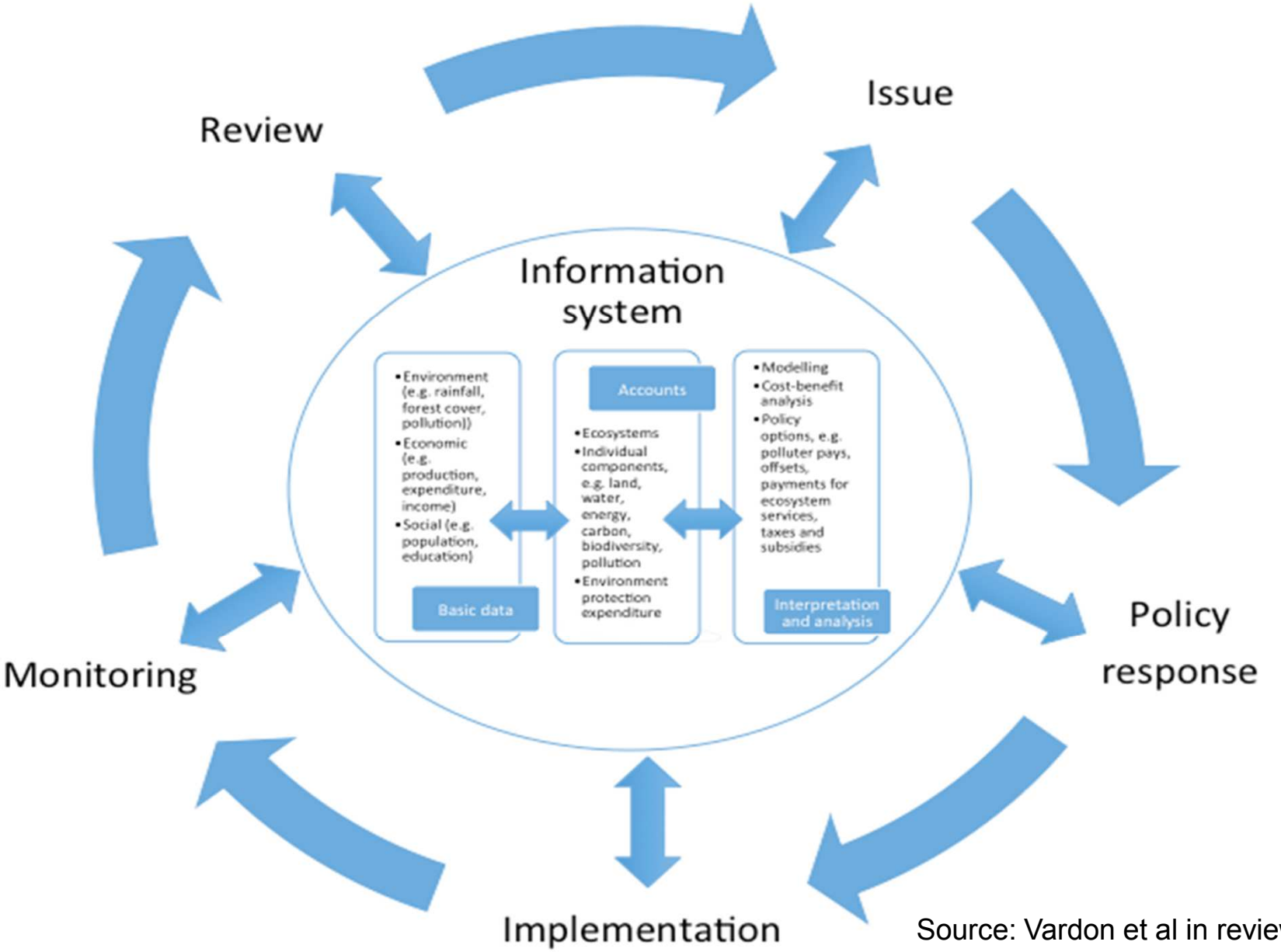
Minister for Sustainability, Environment, Water, Population and Communities

Dated 22 November 2012

Policy and decision making
(e.g. Basin Plan)

Decision-centered design.

Understanding the place of accounts in the information system and policy cycle



Source: Vardon et al in review

Draft principles for decision-centered design

Decision-analysis. A process of identifying the quantitative components of decisions that need to be made, the data most relevant to quantitative components, and the appropriate measures of data quality ('Fit-for-purpose')

Scalability. The capacity to derive reports from the accounts at various levels of detail and for different economic or environmental groupings, to suit the needs of the widest possible range decision-makers (e.g. national and state/provincial).

Role separation. Ensuring that data gatherers and account producers are independent of decision-makers, to maximize the objectivity and credibility of the basic data and accounts

Phased and existing system-based implementation. Building on existing data, processes and institutions, together with phasing-in and testing. Should build acceptance by putting the quality of decision-making before quantity of accounts. **'Fit-for-purpose' and continuous improvement**.

Tailored outputs and indicators. Accounts and indicators in the form that are more readily understood, with high level indicators and outputs for specific purposes (e.g. modelling tools or government process like annual budget cycles)

Source: Vardon et al in review

Types of information uses and policy lens

Uses of information (Herzi and Dovers 2006)	Policy lens (Head 2008)		
	Academic	Programmatic	Political
Instrumental			
Conceptual			
Tactical			
Symbolic			
Political			
Source: Vardon et al in review			

Head BW. 2008. Three Lenses of Evidence-Based Policy. *The Australian Journal of Public Administration* **67**: 1–11
Hezri AA and Dovers SR. 2006. Sustainability indicators, policy and governance: issues for ecological economics. *Ecological Economics* **60**: 86-99.

How to advance? Policy roundtables

Agenda

- Where are we with accounting
- Where are we with linking accounting to policy
- How can account producers and user better engage
- Next steps and potential activities/research

Materials

- Draft 'push and pull' paper

5 so far

- 3 in Australia, shortened versions at WAVES Annual Partners Meeting and UK

Dutch reviewing uses

Things noted at the roundtables

- **It is the countries and government agencies within countries that are the managers of the economy and environment**
- **The goal of policy is to influence behavior in society**
- **There is already lots of data and new technologies mean more are coming**
- **The nature of environmental policy and decision-making is changing.**
  - It used to be highly thematic (land, water, pollution) but it is now more diverse (e.g. considering conservation on public and private land) and needing to identify multiple impacts and benefits (within and outside the environment).
- **Information is needed quickly for advice/decisions**

What did we learn from the roundtables?

- **There is interest in the accounts but they are poorly understood**
- **There is interest in government for both:**
  - Learning more about accounting
  - Assisting with targeting applications of the accounts to decision-making research
- **Useful to focus on:**
  - Decisions points in the policy cycle
  - The place of accounts in an information system
- **Need to builder broader support and understanding**

What international issues could be linked to accounts?

- **Sustainable development**
  - E.g. Post 2015 sustainable development goals
- **Climate change**
  - E.g. Kyoto Protocol and UNFCCC
- **Biodiversity conservation**
  - E.g. Aichi targets and IPBES

What policy tools or management actions could be linked with accounts?

- Payments for ecosystem services
- User pays (pricing natural resources)
- Polluter pays (pricing externalities)
- Budget process (shadow budget)
- Offsets
- Land use planning
- Protected area management
- Threatened species management
- Regulatory process (development approvals)
- Others?

Lots possible but what first?

Australia

Great Forest National Park

- What is the extent and condition of the forests of the Central Highlands of Victoria and what service do we get from them?

Biodiversity Offsets

- What can accounting do for the established system of biodiversity offsetting?

State of the Environment Reporting

- Using accounts to structure information

Getting accounts into the public

- E.g. Better budgeting with environmental accounting

https://theconversation.com/better-budgeting-with-environmental-accounting-40699

UK linking accounts and policy

Natural Capital Committee

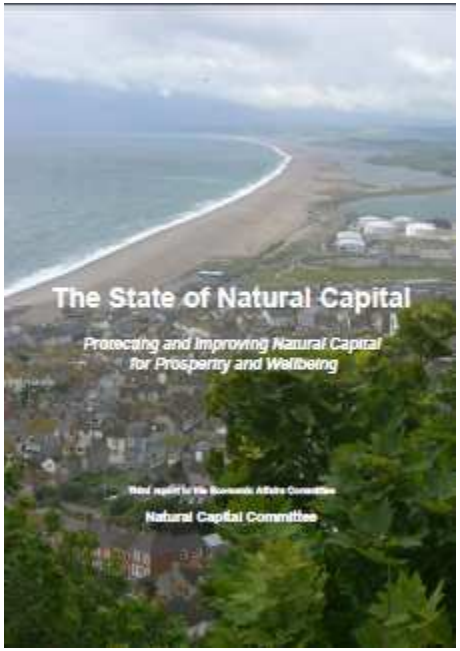
3rd State of Natural Capital Report

•Recommendations

E.g. “develop a strategy to protect and improve natural capital and the benefits it provides”

NCC Advice to government on research priorities

•Decision-making for sustainability



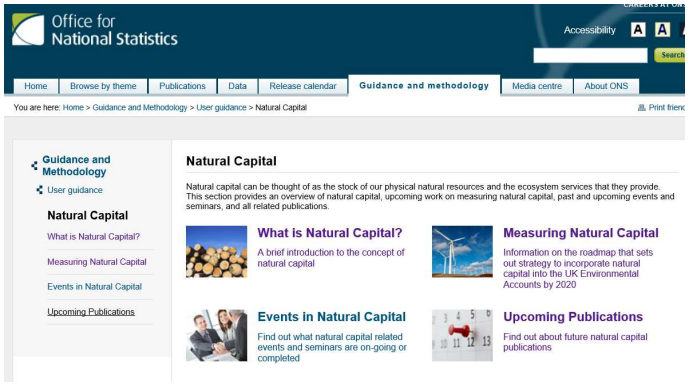
https://www.naturalcapitalcommittee.org/

Office of National Statistics

•Environmental accounts

•Roadmap for natural capital accounting

•Experimental ecosystem accounts



http://www.ons.gov.uk/ons/guide-method/user-guidance/natural-capital/index.html

Acknowledgements

This presentation is based on a range of work and inputs from a large number of sources but especially the participants in the policy roundtables conducted in Australia, the UK and World Bank Annual Partners Meeting (held USA).

Particular thanks go to:

•Peter Burnett, Steve Dovers (ANU)

•Mladen Kovac and Nick Conner (NSW OEH)

•Diannah Wrigh (Australian DoE)

•Rocky Harris (DEFRA) and Steve Bass (IIED)

•Glenn-Marie Lange, Sofia Ahlroth, JP Castanada and Stig Johansson (World Bank)

•John Matuszak (US Department of State)

•3 anonymous reviewers of the “Push and Pull” paper

Thank you