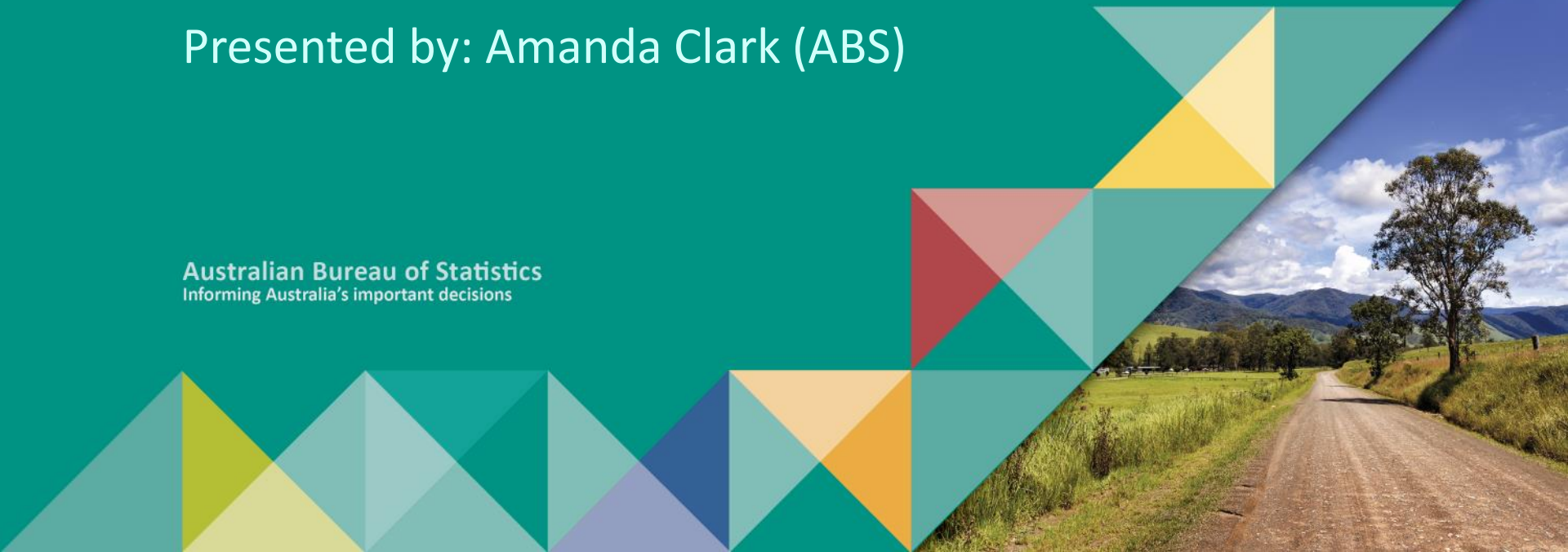


ABS Environmental-Economic Accounts for the Great Barrier Reef, 2017



Presented by: Amanda Clark (ABS)

Australian Bureau of Statistics
Informing Australia's important decisions



Experimental Environmental-Economic Accounts for the Great Barrier Reef

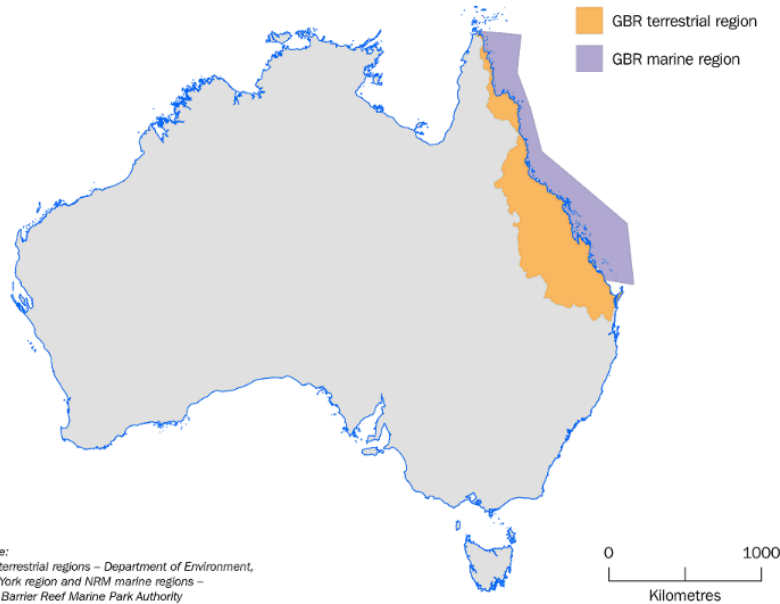


- Used a System of Environmental-Economic Accounting (SEEA) based approach
- Integrated information on biophysical, economic and social dimensions
- Labelled as “experimental”
- Started with an Information Paper and expanded the concept into the Account
- Much of the input data used was publically available
- Accounted for both the marine park and the mainland terrestrial catchment region that drains into the marine park



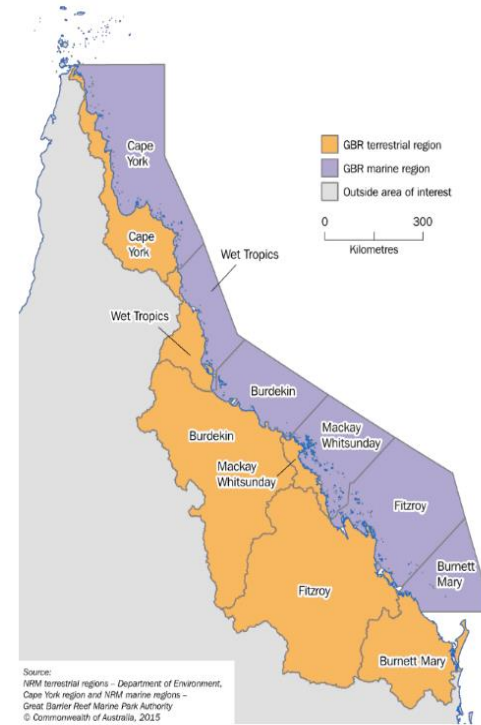
Experimental Environmental-Economic Accounts for the Great Barrier Reef, 2017

FIGURE 1: STUDY REGION - GREAT BARRIER REEF REGION



Source:
NRM terrestrial regions – Department of Environment,
Cape York region and NRM marine regions –
Great Barrier Reef Marine Park Authority
© Commonwealth of Australia, 2015

FIGURE 2: TERRESTRIAL AND MARINE REGIONS OF THE GREAT BARRIER REEF REGION



Source:
NRM terrestrial regions – Department of Environment,
Cape York region and NRM marine regions –
Great Barrier Reef Marine Park Authority
© Commonwealth of Australia, 2015

What do the GBR accounts contain?

Integrated environmental and economic data on:

- Marine and terrestrial extent and condition
- Biodiversity
- Ecosystem services (physical and monetary)
- Employment and business profile
- Aboriginal and Torres Strait Islander peoples
- Expenditure on environmental goods and services
- Tourism
- Agriculture and forestry
- Fishing and aquaculture
- Carbon
- Water



What do the GBR accounts contain?

	Ecosystem services	Physical	Monetary
1	Biomass provisioning services from agricultural and forestry activity, including input services such as pollination services	yes	yes
2	Biomass provisioning services from fisheries activity, including input services such as nursery services	Yes	Yes
3	Sediment/soil retention services	No	No
4	Air filtration services	No	No
5	Water purification services	No	No
6	Carbon sequestration and storage services	Yes	No
7	Water regulation services for mitigating extreme events	No	No
8	Water supply services	Yes	No
9	Nature based tourism related services	Yes	Yes
10	Urban recreation related services	No	No
11	Habitat and biodiversity related services	No	No

Data sources - ABS

- National Accounts
- Tourism Accounts
- Linked employee earnings and jobs data
- Counts of Australian Businesses
- National Aboriginal and Torres Strait Islander Social Survey
- Population Census
- ABS Agriculture statistics

Data sources - external

- Department of the Environment and Energy
- Great Barrier Reef Marine Park Authority
- Various Queensland government agencies data sources
- Australian Institute of Marine Science
- Bureau of Meteorology
- Geoscience Australia
- Tourism Research Australia

Data gaps / further work

Ecosystem services

- Regulating services
 - coastal protection
 - value of carbon sequestration and storage services (+ blue carbon)
- Provisioning services - water
- Cultural services - recreational activity, especially fishing

Other

- Expenditure on the Environment
- Terrestrial condition
- Marine extent
- Mining impacts
- Land use at NRM level

Lessons learnt

- Focus on our strengths
 - Economic data
 - Valuation
 - Social data
- Closer stakeholder engagement
 - More detailed engagement prior to developing the account
 - Extended peer review period very important
- There are many opportunities for collaboration, leverage them as much as you can
- Long time series is important. Point in time case studies are not as valuable to policy and important decision making