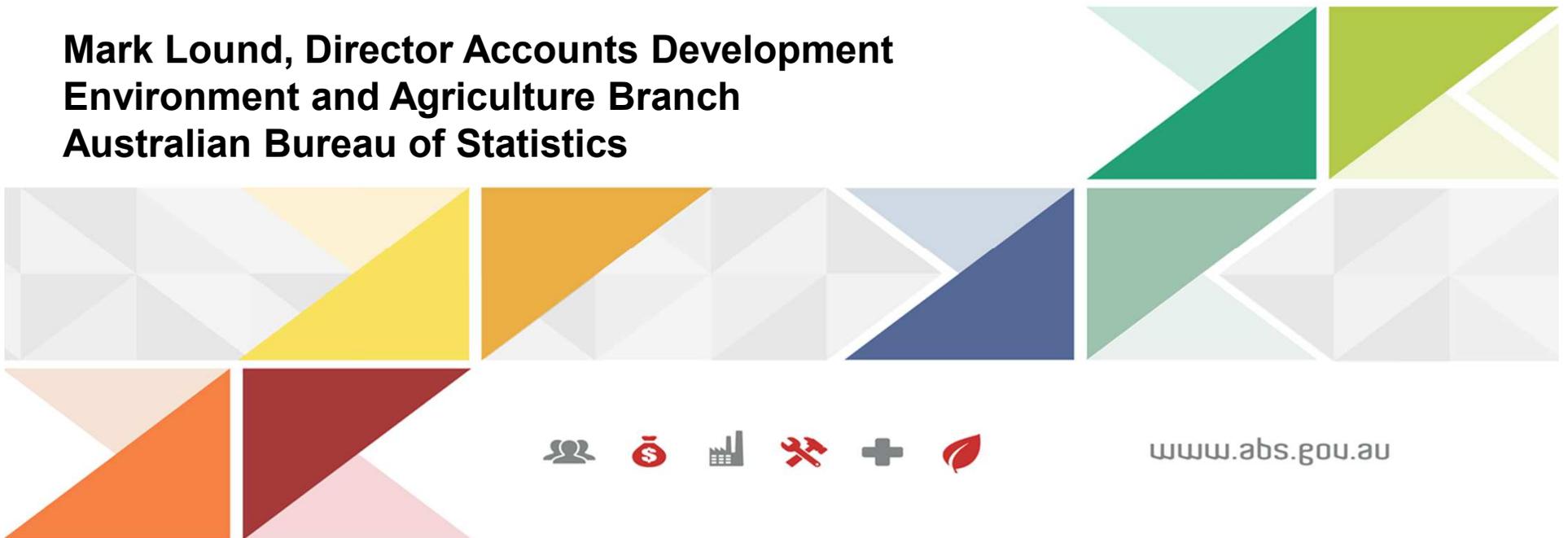




# Tourism Satellite Accounts and Resource Rent in the Great Barrier Reef Environmental Account

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## Resource Rent Background

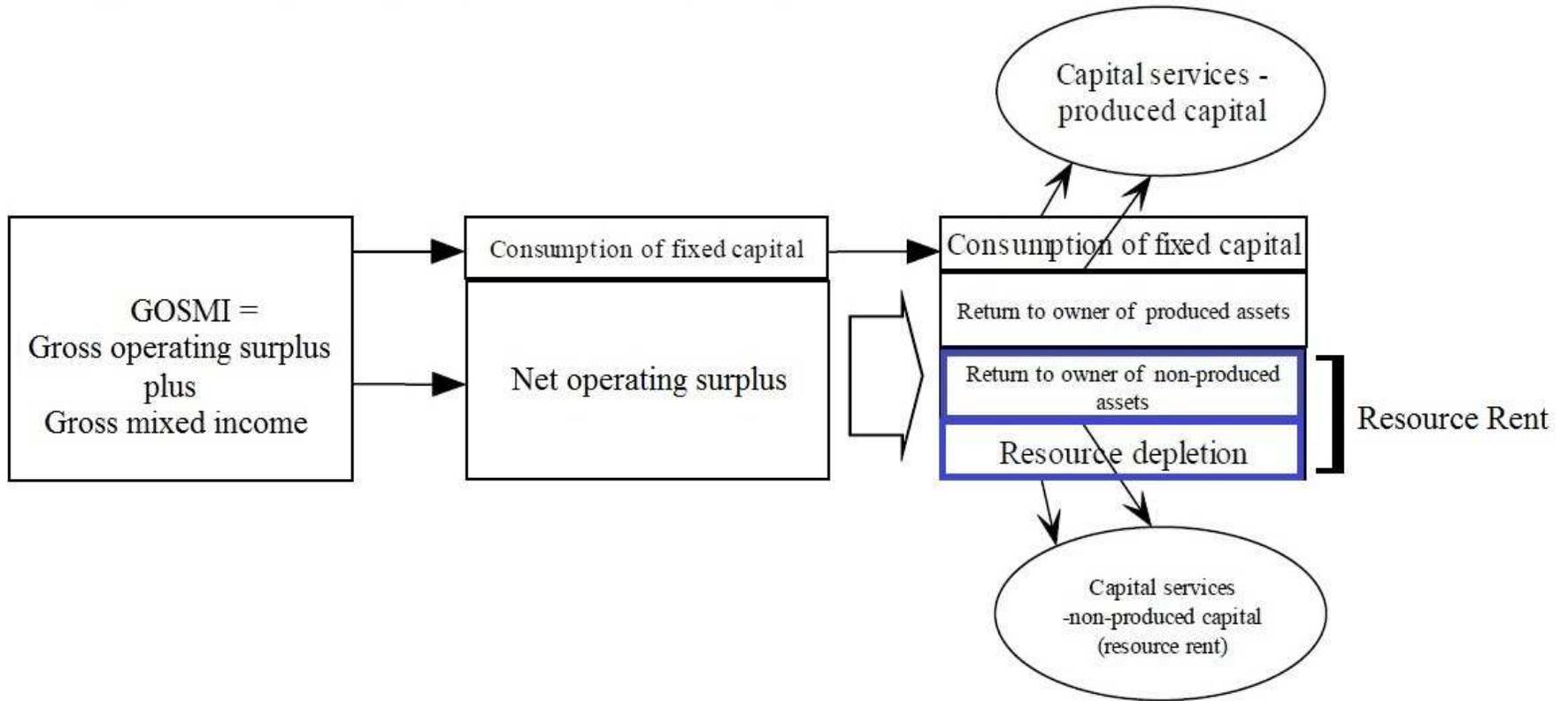
Resource rent is the benefit institutional units are entitled to claim from using natural resources (or environment assets) with an economic value. It is derived as a residual.

Resource rent includes a return to the owner of non-produced assets from the provision of capital services, and includes a value for resource depletion.

It is also been used as a proxy for the value of ecosystem services.



# Resource Rent Background





## Ecosystem Service Value = SNA Resource Rent

Relationships between different flows and income components

**Output** (sales of extracted environmental assets at basic prices, includes all subsidies on products, excludes taxes on products)

*Less* Operating costs

Intermediate consumption (input costs of goods and services at purchasers' prices, including taxes on products)

Compensation of employees (input costs for labour)

Other taxes on production plus other subsidies on production

*Equals* Gross operating surplus—SNA basis

*Less* Specific subsidies on extraction

*Plus* Specific taxes on extraction

*Equals* Gross operating surplus—for the derivation of resource rent

*Less* User costs of produced assets

Consumption of fixed capital (depreciation) + return to produced assets

*Equals* Resource rent

Depletion + net return to environmental assets

SOURCE: Table 5.5 in System of Environmental-Economic Accounting 2012 - Central Framework (SEEA-CF). New York: United Nations Statistical Office, p.153.





## Subnational industry-based resource rent in ABS environmental-economic accounts



### Top-down subnational resource rent, general method

- Calculate GOS, capital measures, rent for the industry/s at a national level
- Split down to region based on available geographically specific information (eg production)
- This method assumes same input structures within region as occurs nationally (ie if 10% of Australian production in 2010 was in GBR region then 10% of GOS, COFC, return to produced capital, and resource rent is assigned there as well)





## Tourism summary table in Great Barrier Reef Environmental-Economic Account 2015



Selected Indicators	2001-02	2002-03	2003-04	2004-05	2005-06	2006-07	2007-08	2008-09	2009-10	2010-11	2011-12	2012-13
Direct tourism consumption (\$ million)	5 627	5 663	5 836	5 888	7 080	8 001	8 364	8 176	8 275	7 658	8 560	8 634
Tourism direct GVA (\$ million)	1 865	1 877	1 935	1 952	2 347	2 653	2 853	2 842	2 949	2 744	3 050	3 077
Tourism rent (\$ million)	285	294	268	262	320	351	379	440	449	453	634	575
Tourism rent as share of tourism GVA (percentage)	15.3	15.7	13.8	13.4	13.6	13.2	13.3	15.5	15.2	16.5	20.8	18.7
Direct tourism employment ('000)	na	na	na	na	na	45.4	46.5	45	44.5	41.4	43.8	43.5
Tourism GVA per tourism employee (dollars)	na	na	na	na	na	58 484	61 364	63 097	66 335	66 216	69 712	70 663
Tourism rent per tourism employee (dollars)	na	na	na	na	na	7 734	8 153	9 769	10 101	10 921	14 486	13 207
Number of visitors (millions)	na	na	na	na	14.8	16.2	16.4	15.9	17.4	15.6	18.8	18.3
Tourism direct GVA per visitor (dollars)	na	na	na	na	158.73	163.29	173.65	178.34	169.86	175.56	162.04	168.45
Tourism rent per visitor (dollars)	na	na	na	na	21.63	21.59	23.07	27.61	25.87	28.96	33.67	31.48





## Tourism Satellite Account background



	Direct tourism gross value added	Industry gross value added	Tourism contribution to industry gross value added (a)
	\$m	\$m	%
<b>Tourism characteristic industries</b>			
Accommodation	6,139	8,275	74.2
Ownership of dwellings	3,512	128,838	2.7
Cafes, restaurants and takeaway food services	4,854	17,195	28.2
Clubs, pubs, taverns and bars	2,418	10,643	22.7
Rail transport	434	6,715	6.5
Taxi transport	414	711	58.3
Other road transport	658	22,679	2.9
Air, water and other transport	5,911	10,902	54.2
Transport equipment rental	903	1,271	71.0
Travel agency and tour operator services	1,509	1,552	97.2
Cultural services	500	3,644	13.7
Casinos and other gambling services	440	4,555	9.7
Sports and recreation activities	573	3,720	15.4
<i>Total tourism characteristic industries</i>	<i>28,265</i>	<i>220,700</i>	<i>12.8</i>
<b>Tourism connected industries</b>			
Automotive fuel retailing	228	2,708	8.4
Other retail trade	5,296	65,724	8.1
Education and training	3,392	70,144	4.8
<i>Total tourism connected industries</i>	<i>8,916</i>	<i>138,576</i>	<i>6.4</i>
All other industries	2,775	1,067,494	0.3
<b>TOTAL GROSS VALUE ADDED, at basic prices</b>	<b>39,955</b>	<b>1,426,770</b>	<b>2.8</b>
Net taxes on products	3,718	97,613	3.8
<b>TOTAL GDP</b>	<b>43,673</b>	<b>1,524,383</b>	<b>2.9</b>



## Subnational industry-based resource rent in ABS environmental-economic accounts



### Top-down subnational tourism resource rent method

- Calculate tourism GOS, capital measures, rent for tourism activity at a national level
- Split down to region based on available geographically specific information (tourism expenditure)
- This method assumes same input structures within region as occurs nationally (ie if 33% of Queensland tourism in 2010 was in GBR region then 33% of Queensland tourism GOS, COFC, return to produced capital, and resource rent is assigned there as well)





## Subnational industry-based resource rent in ABS environmental-economic accounts



### “Tourism resource rent” is not ecosystem rent

- Tourism rent should be attributable to tourism attractions but not all tourism is attributable to *ecosystems*.
- Missing link is attribution of shares of tourism expenditure/rent by ecosystem related purpose
- Ecosystem relatedness of activity varies widely across areas (GBR region = 1m people, area the size of Sweden)
- May be an insurmountable provider burden and data at any large scale





## Subnational industry-based resource rent in ABS environmental-economic accounts



### Challenges, issues, further work

- Attribution to ecosystems
- COFC and returns to capital
- Subnational industry-specific tourism information
- Linkage to other SEEA accounts to measure sustainable tourism

