

What steps have the public and private sectors taken to value, protect and enhance water ecosystem services?

Methodologies and Frameworks (across scales and purposes)



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Learning from experience ... how, what, when, where and why? ... drivers behind the methodologies

- **Processes –**

What is an appropriate process to develop an ecosystem services framework?

- **Information –**

What type of information is required to support an ecosystem services framework?

- **Decision Support Tools –**

What type of decision support tools are required to support an ecosystem services framework

... synergies, interconnectedness, ...

International/National Scale

- Environmental-Economic Accounting (UN SEEA; WAVES);
- Economic valuations (TEEB);
- Intergovernmental Panel on Biodiversity and Ecosystem Services (UN);
- Networks and collaboration (Ecosystem Services Partnership);
- Linking biodiversity science and human well-being (DIVERSITAS);
- Status and trends (poverty alleviation) (MA);
- Policy responses (UK NEA; US EPA);
- Community and consumer education: eco-labeling (Rainforest Alliance)
- Payment schemes for multiple benefits (Forest Trends);
- Business sustainability reporting (WRI; WBCSD);
- Wetland assessment (Ramsar);
- Climate change strategies (IPCC);
- Nature/ biodiversity conservation strategies (CBD);
- ...

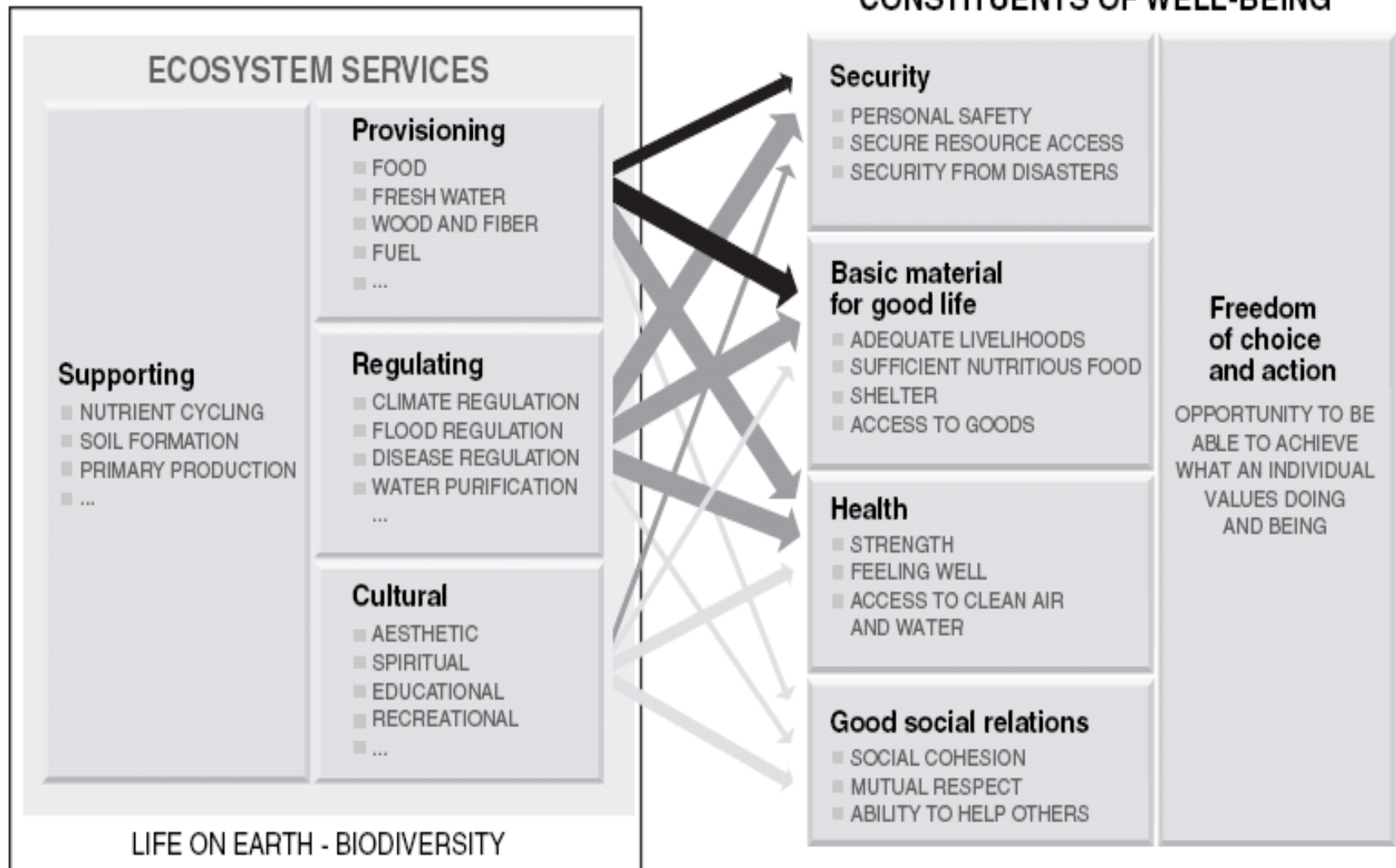


State/Regional/Local Scale

- Statutory Planning Documents
- NRM Plan – targets
- Integrated Catchment Management
- Restoration initiatives
- Local Govt Planning Schemes and Community Plans
- State of Region/State of Environment
- Climate change mitigation sites
- Nature Conservation Strategies
- Water Resource Strategies
- Business Strategies
- Property Management Planning



Millennium Ecosystem Assessment (UN 2005)



Underpinning Drivers of Methodologies

- Researchers
- Organisational missions and mandates
- Culture
- Who was involved (e.g. geodiversity, types of economists,..)
- ES language/definitions/ terminologies
- Existing information – not necessarily the right information (e.g. habitats, ecosystems, environmental classes)
- Flexibility of application – capacity of stakeholders
- Resources available
- Policy led or policy relevant
- Scale – ES are derived, ES received, framework development and application, policy and management, ...
- Purpose – End Users – who will apply the framework? Who are you trying to influence?
- Purpose – valuation (\$, scores, ...)??

Towards a Common Classification – across scales and purposes

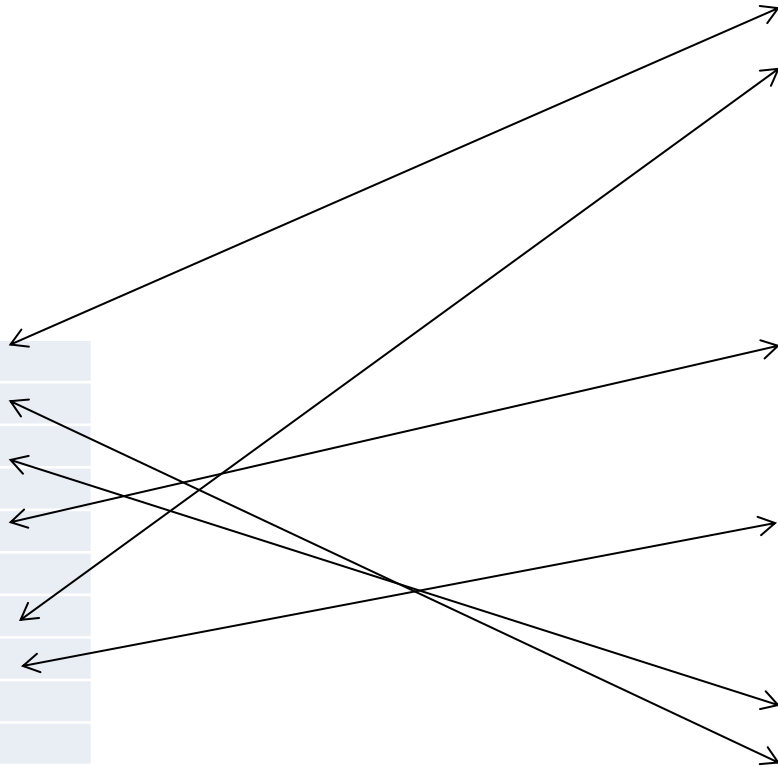
Inconsistent Terminology ...
however some convergence.

FES/FECS/ES/ES/G/B
191 'things' listed – 30 common

EP/EF/SF/SS/IS
56 'things' listed –
10 common'

10	Food production
10	Nutrient Cycling
8	Gas regulation
8	Soil formation
7	Soil retention
7	Pollination
6	Climate regulation
6	Habitat
5	Water cycling
5	Biological control

18	Pest and disease regulation
14	Disturbance regulation
14	Recreation and Tourism
13	Food products
13	Waste treatment (excess nutrients)
12	Climate regulation
12	Pollination
11	Air quality
11	Aesthetics
11	Fuel and Energy
11	Spiritual and Religious values
10	Pharmaceuticals
10	Soil Fertility
10	Soil Retention
9	Water regulation
9	Use of water
9	Water supply
9	Genetic resources
8	Water quality
8	Habitat
7	Cultural Diversity and Heritage
7	Knowledge, research and education
6	Timber and fibre products
6	Habitable climate for humans
6	Gas regulation
6	Inspiration
5	Nutrient Regulation
5	Noise abatement
5	Genetic Diversity
5	Raw materials



**Process is as important
(if not more)
as product!**