What more is needed for economic approaches to address biodiversity loss?

OECD-CRP funded conference

David Attenborough Building, Cambridge

September 19th 2019

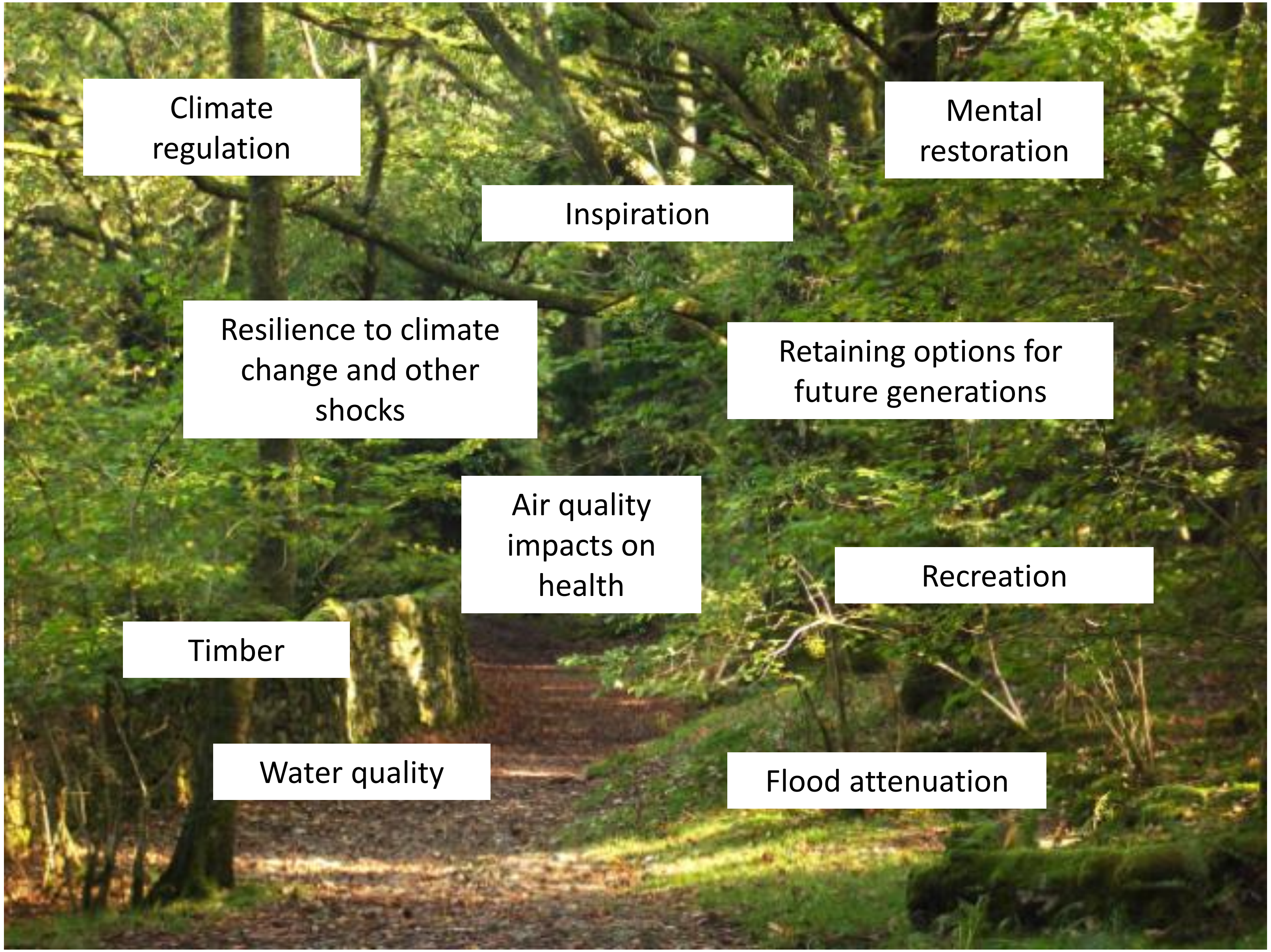
Blueprint for a Green Economy stressed need for urgent policy change

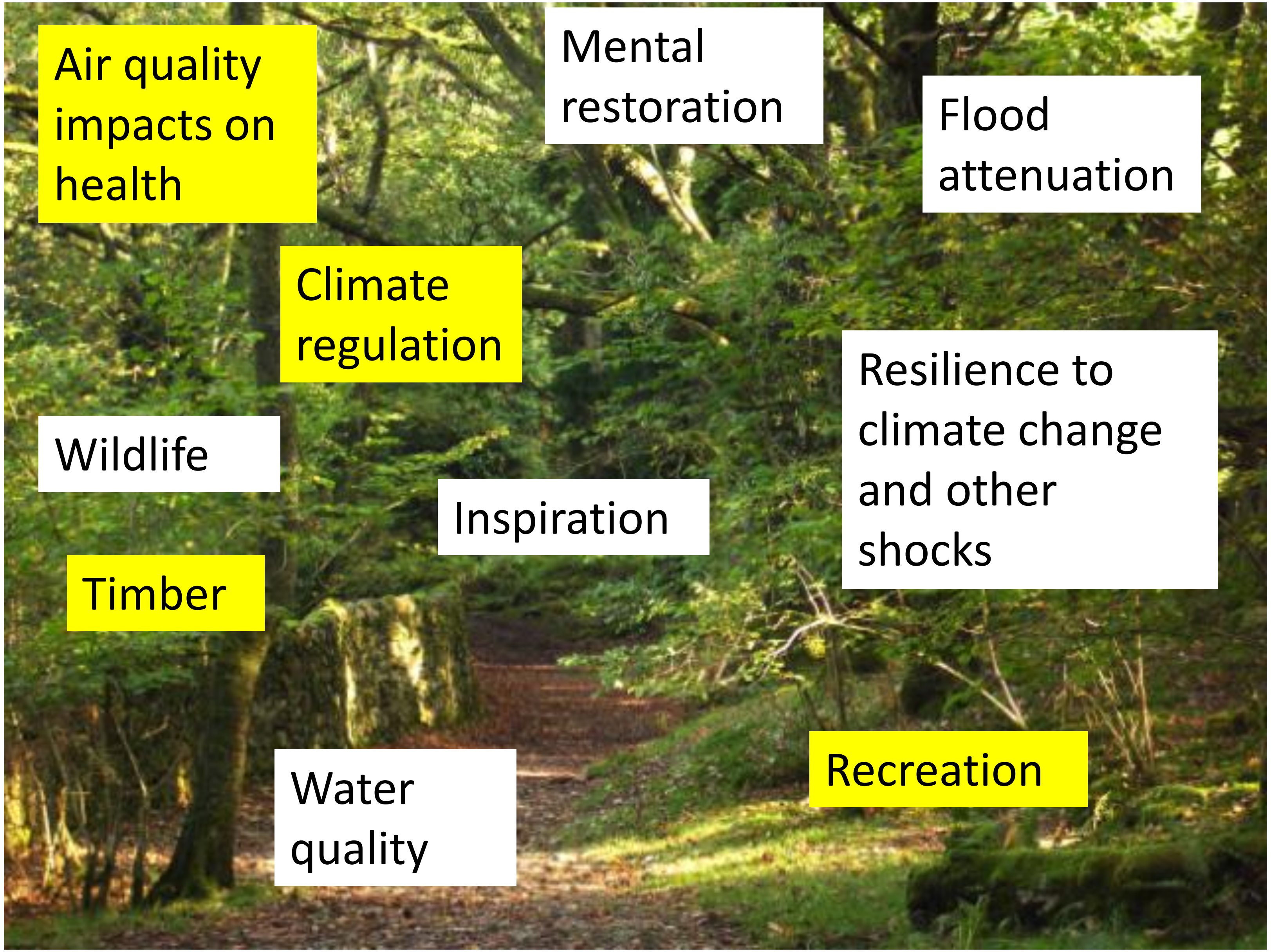
Incentives for environmental improvement

Accounting for the environment

Valuing the environment


Timber


Climate regulation
Mental restoration
Inspiration
Resilience to climate change and other shocks
Retaining options for future generations
Air quality impacts on health
Recreation
Timber
Water quality
Flood attenuation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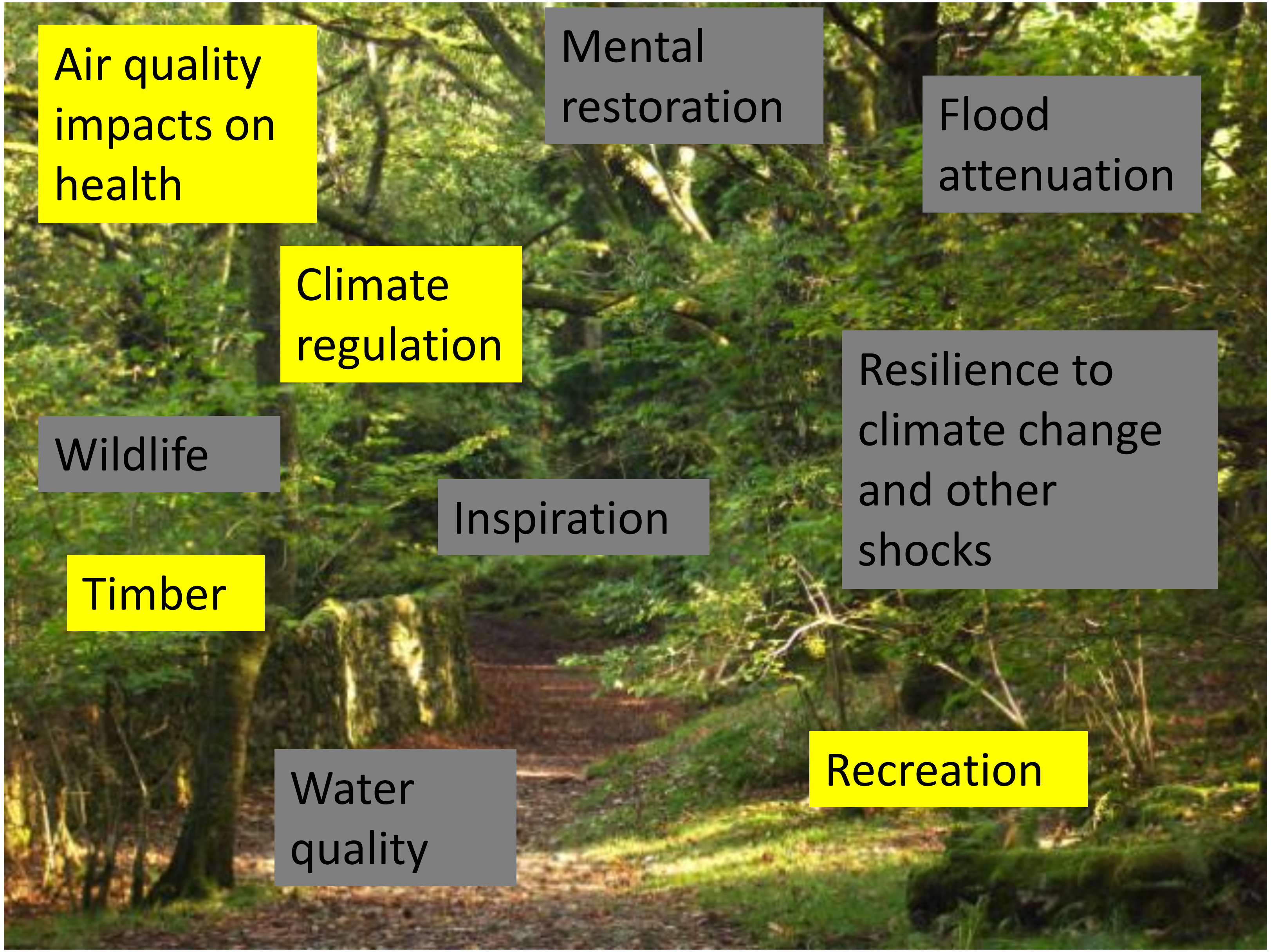
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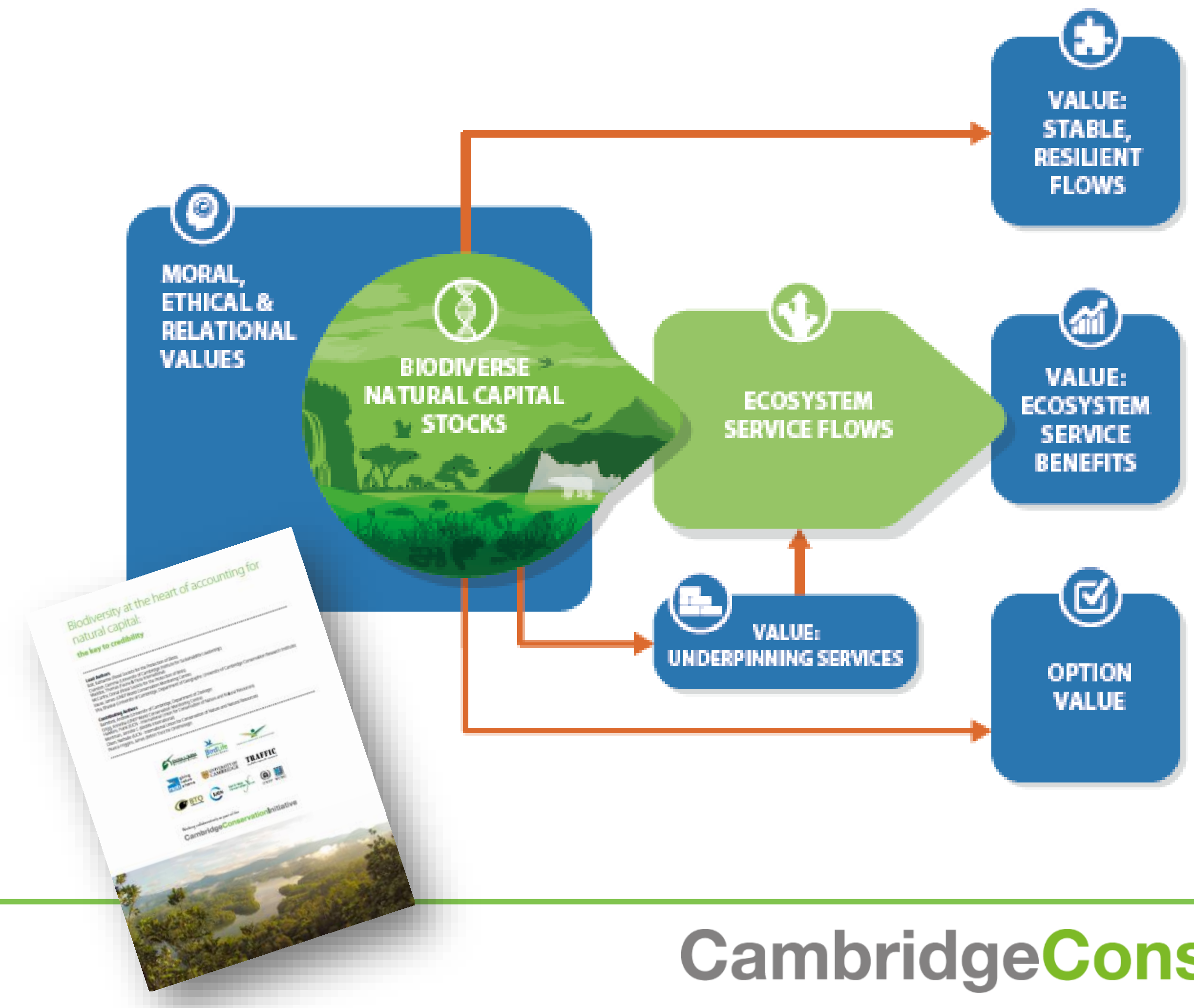
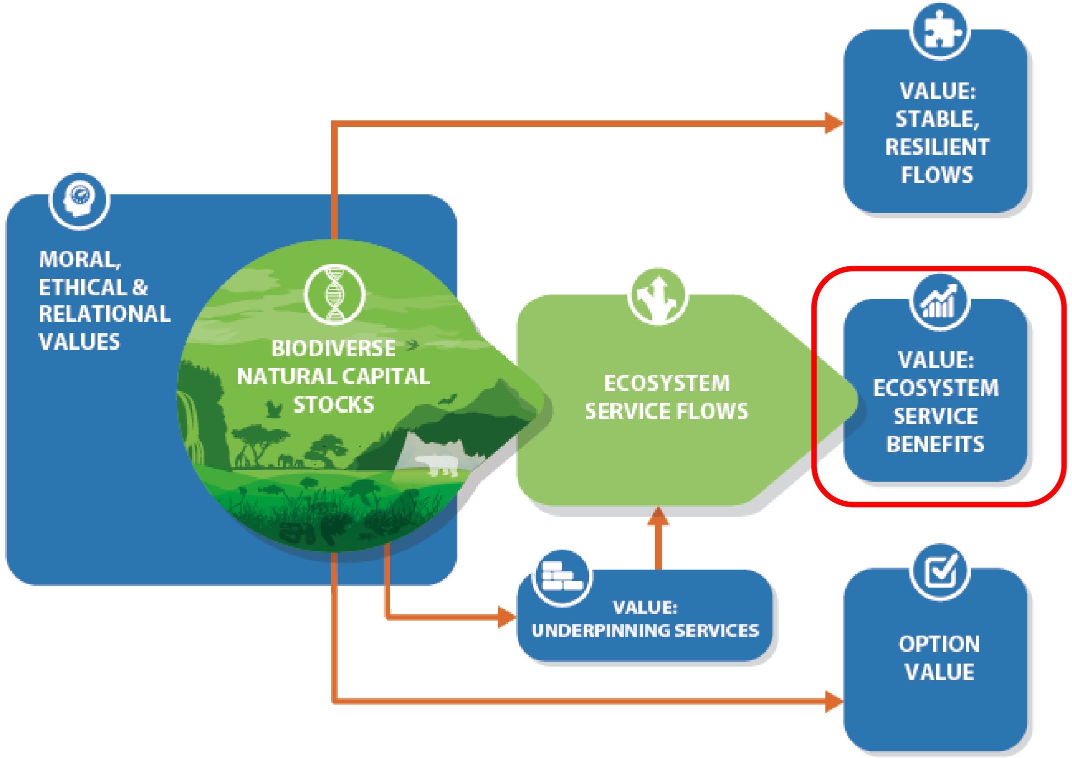
Values of biodiversity invisible or hidden



- Valuation tools work well for tangible, measurable values
- Many of the values of biodiversity are intangible and/or difficult to measure
- An incomplete natural capital assessment may be more harmful than beneficial if this is not accounted for

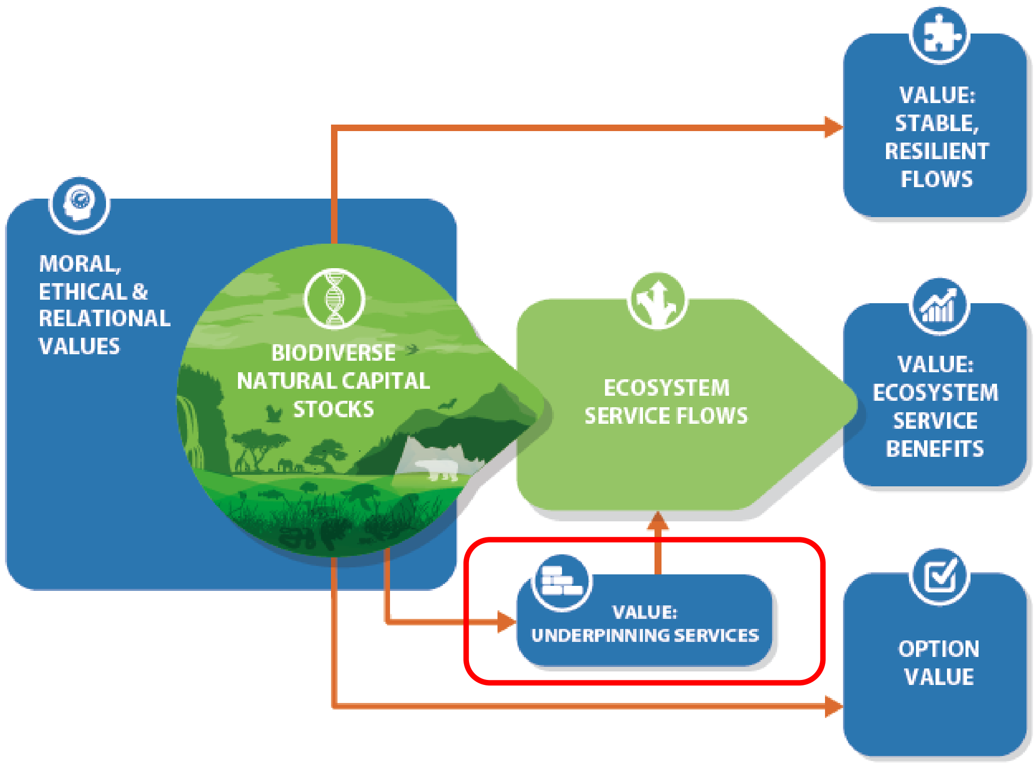
Values of biodiversity invisible or hidden



Direct biodiversity benefits

- Wildlife watching, innovation (bio-mimicry) and pharma and bio-tech advances
- Wild and cultivated species consumed
- Less tangible benefits including inspiration and enriching cultural and artistic endeavours **(hard to measure & missing)**

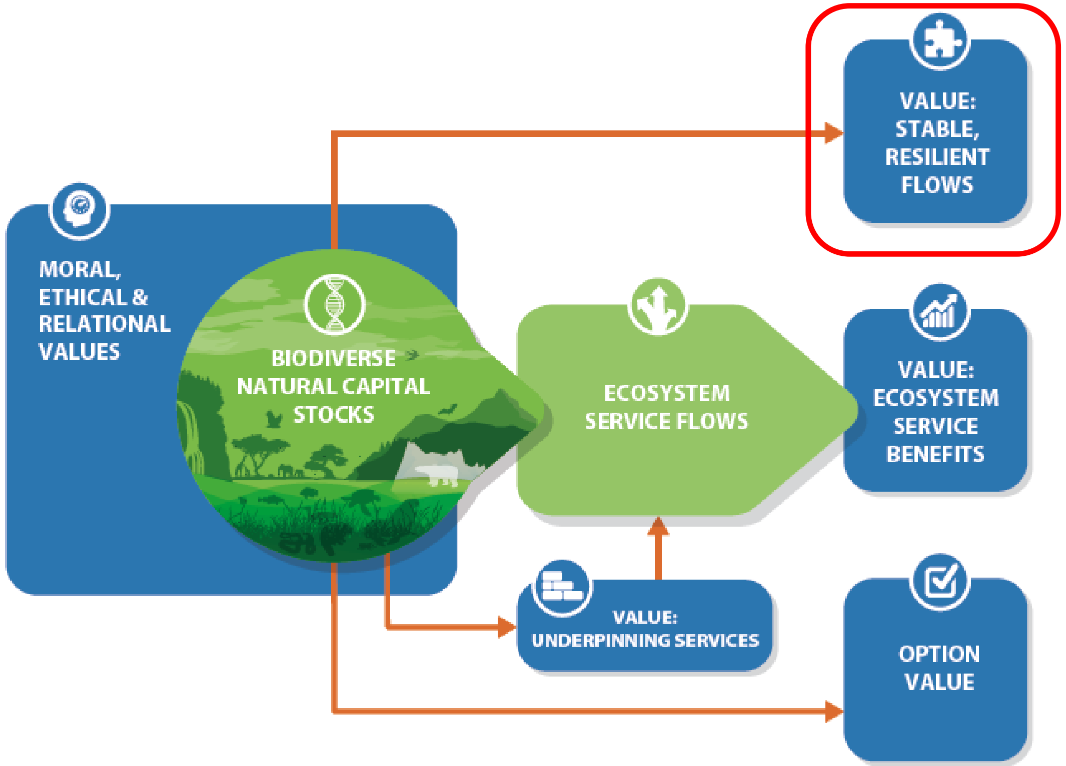
Values of biodiversity invisible or hidden



Underpinning biodiversity benefits

- Underpins ecological processes that support delivery of ESS
- Including pollination and soil fertility as well as carbon cycles
- Value is embedded in other ESS values and therefore **hidden**.
- Can't double count, but results in biodiversity being overlooked.

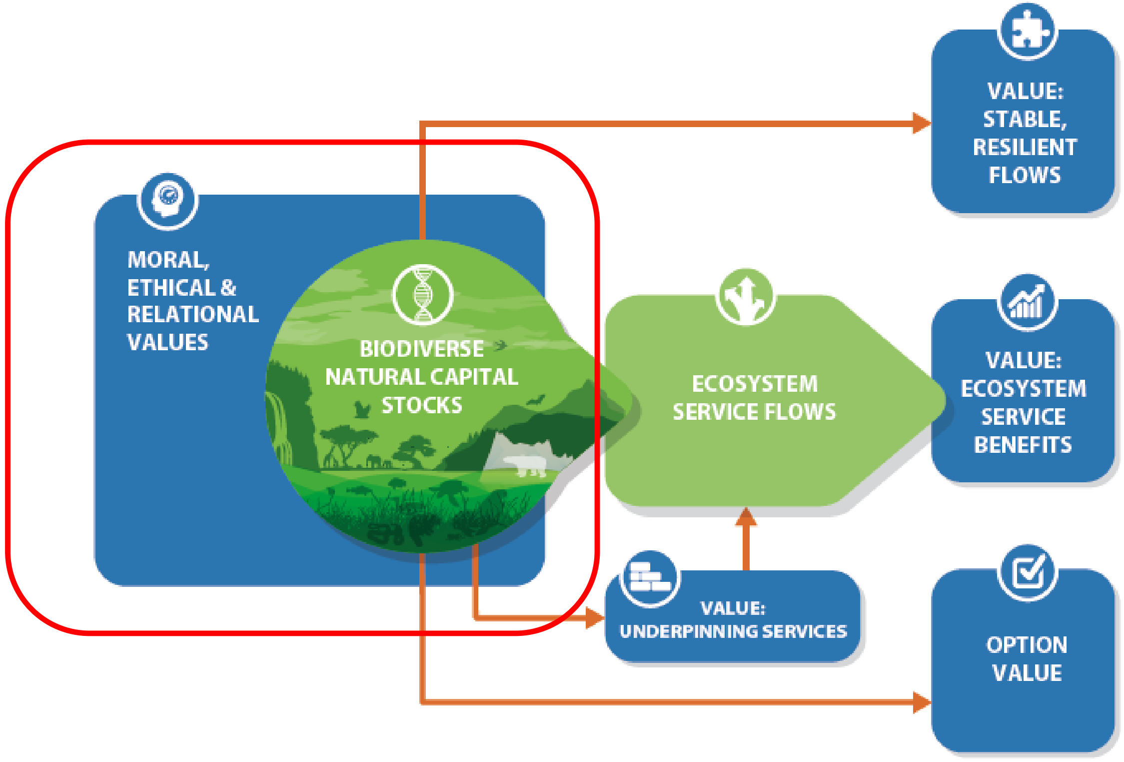
Values of biodiversity invisible or hidden



Nature's insurance

- Although lower levels of biodiversity may be ok in the short-term, biodiversity provides resilience against environmental changes.
- Not possible to quantify impact on temporal stability – **missing.**
- Often shared value with others.

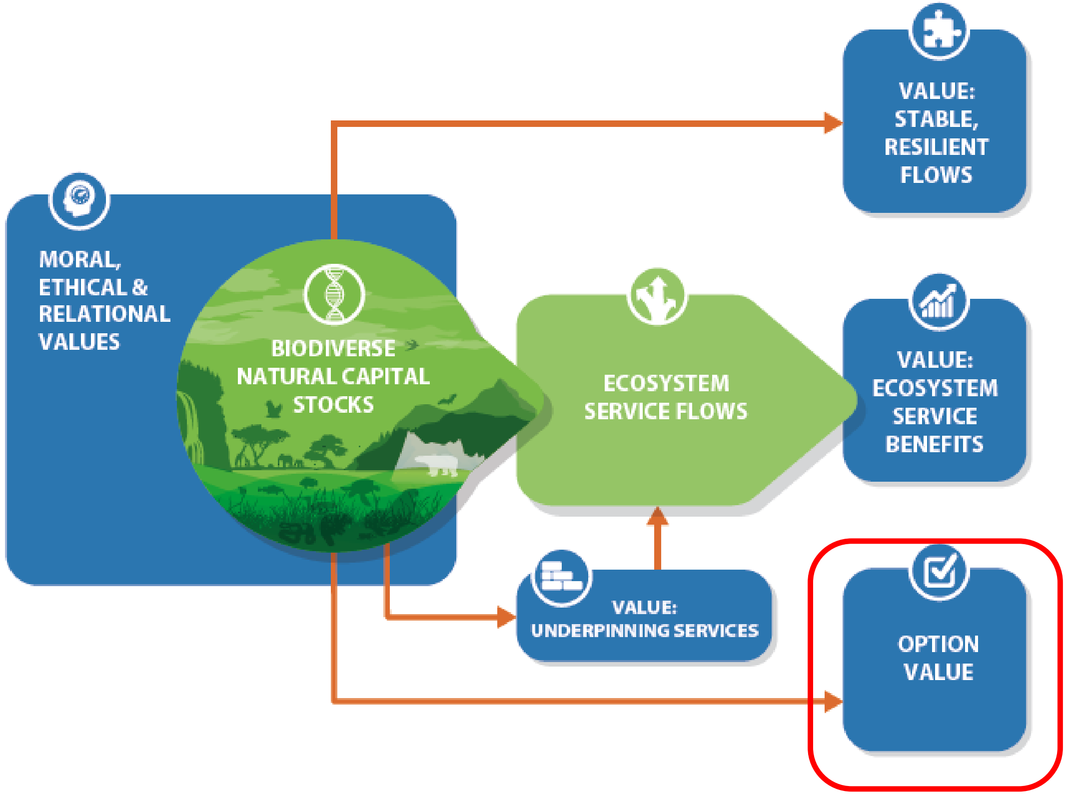
Values of biodiversity invisible or hidden



Moral, ethical and relational values

- Moral values structure our societies. What is fair? Income distribution, equality of people, equality with other species.
- Includes inter-generational equity.
- All have economic consequences but are not amenable to economic valuation – **missing.**

Values of biodiversity invisible or hidden



Option value

- Future uses of known and unknown unknowns
- Includes medicines, industrial processes, and others. Who knew peat bogs would play important role in climate regulation 30 years ago, for example.
- How would this be valued? – **missing.**

More support for decisions to take account of values that cannot be measured

- Need to be very explicit that biodiversity values cannot be included in a cost-benefit analysis in full. Any number will be partial.
- Need to focus efforts on improving the way that decisions are made with incomplete information.
- NC approaches potentially very useful for taking account of the state of the stock. But, this requires new responsibilities for stock values to be explicit and meaningful.

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Accounting for nature

- **Give an account... to be held to account.**
  - Accounting standards have been refined over decades to create standardised information with the purpose of holding an organisation accountable to its shareholders.
  - As many environmental land management decisions affect others (ie create externalities), accounts also need to hold organisation accountable to wider *stakeholders* rather than limited *shareholder* interests.
  - Efforts at national and organisational level to report on both financial stewardship <u>and</u> social stewardship.
  - Critical gap is what stakeholder accountability for natural capital looks like. Need clearly defined responsibilities to be held to account. Currently ill-defined and voluntary.

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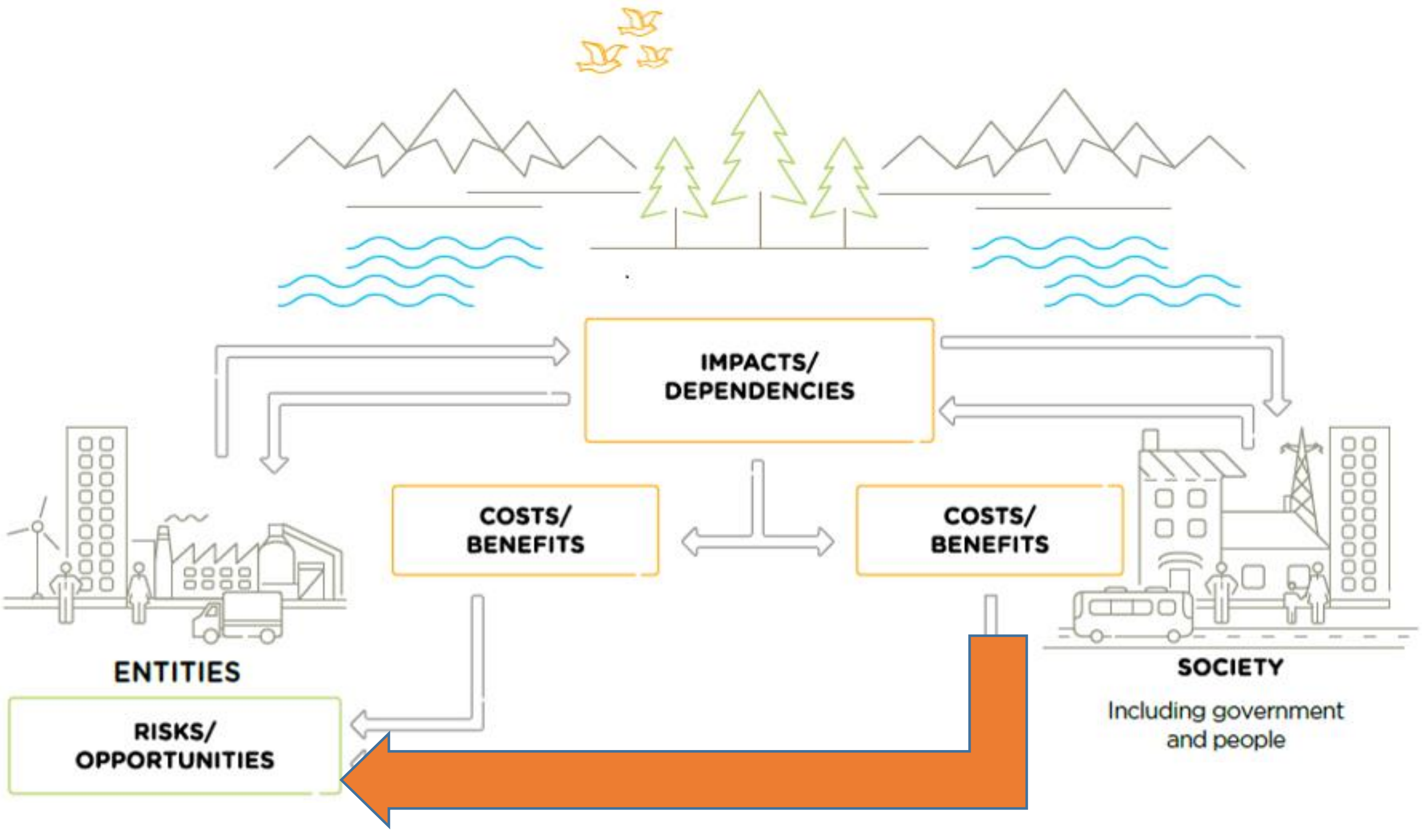
Externalities still fail to result in business risks and opportunities



- Consumer demand/
- New markets
- Legal and regulatory
- Taxes/subsidies
- License to operate and reputational risk

Natural Capital Protocol (2017)

Creating incentives: taking a systems view

- Valuation can make a clear ‘business case’ for society. But, to change a decision requires incentives to change. Remains a challenge because governance tends to siloed within sectoral contexts. Needs to:
  - Take a ‘system’ view
  - Take account of nature’s multiple stakeholders;
  - Consider interdependence amongst ecosystem services;
  - Consider the long-time horizons often involved;
  - Reflect the public good characteristics of many of nature’s benefits.
- Private businesses unable to bring about change without collaboration with both public and civil society stakeholders and without the right incentives from government.
- Policy implementation tends to be separated between different government agencies and departments.

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Incentives – systems governance

Accounting – clear and binding responsibilities

Valuing – support decision-making where valuation falls down