



Earth Observations to Value Ecosystem Services: A Series of Workshops

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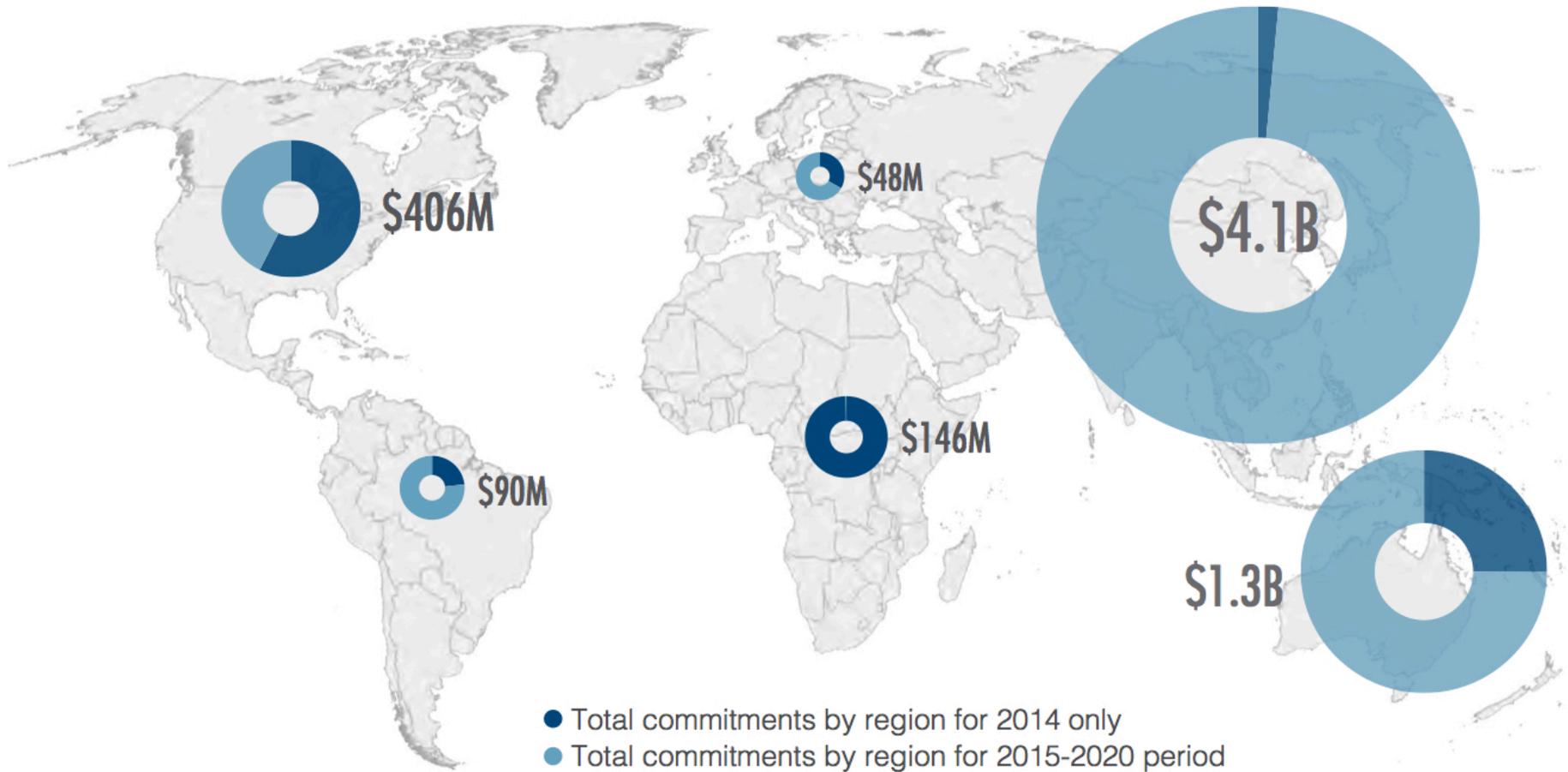
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Ecosystem Services are Widespread

Figure 9: Funding Commitments 2014 and 2015-2020 by Region



Source: Forest Trends' Ecosystem Marketplace. *State of Watershed Investment 2014*.



October 7, 2015

M-16-01

MEMORANDUM FOR EXECUTIVE DEPARTMENTS AND AGENCIES

FROM: Shaun Donovan, Director
Office of Management and Budget

Christina Goldfuss, Managing Director
Council on Environmental Quality

John Holdren, Director
Office of Science and Technology Policy

SUBJECT: Incorporating Ecosystem Services into Federal Decision Making

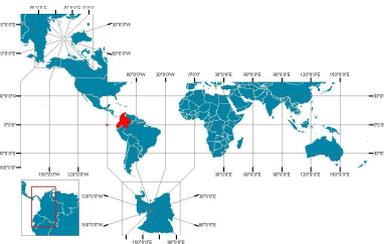
Water Funds are Proliferating



NASCA Conservation Program WaterFunds Portfolio

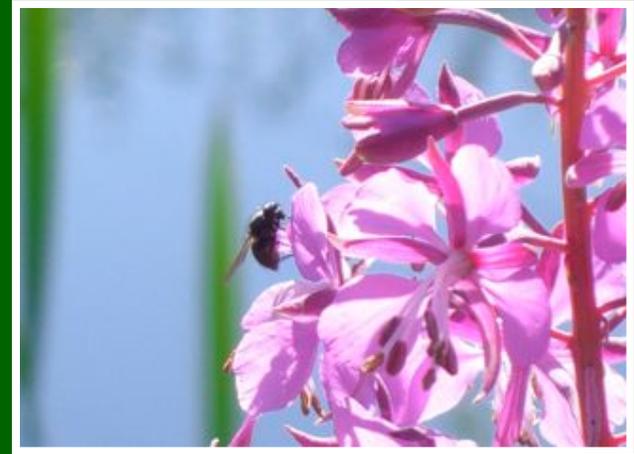


Related Protected Areas



Ecosystem Services

Ecosystem Services
are the benefits
people receive from
the environment



Why monetary valuation?



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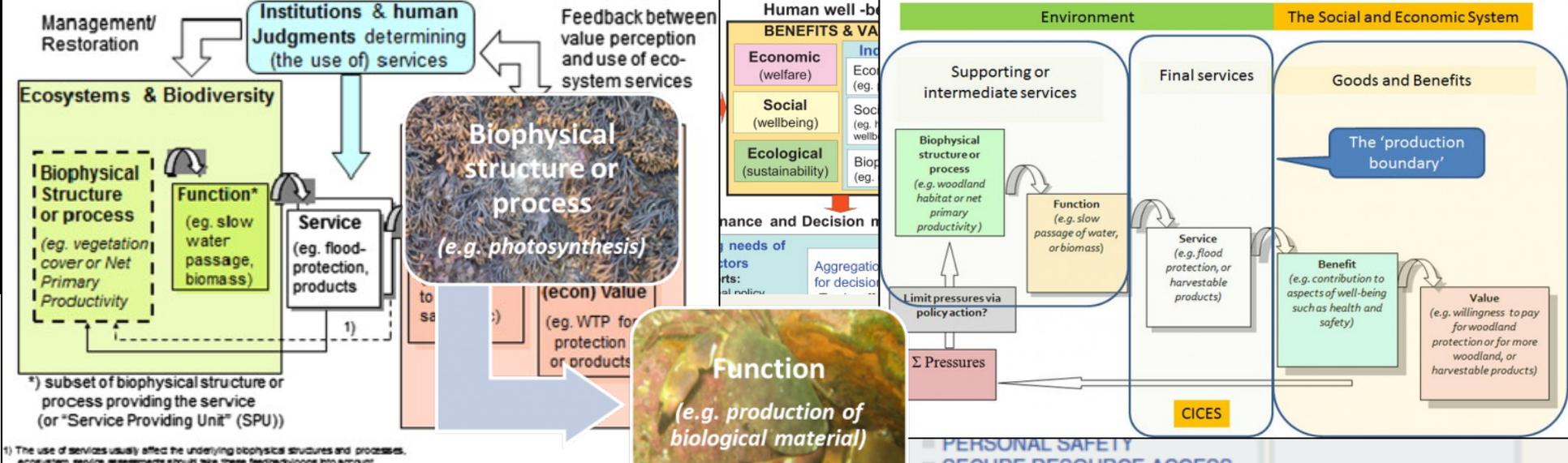
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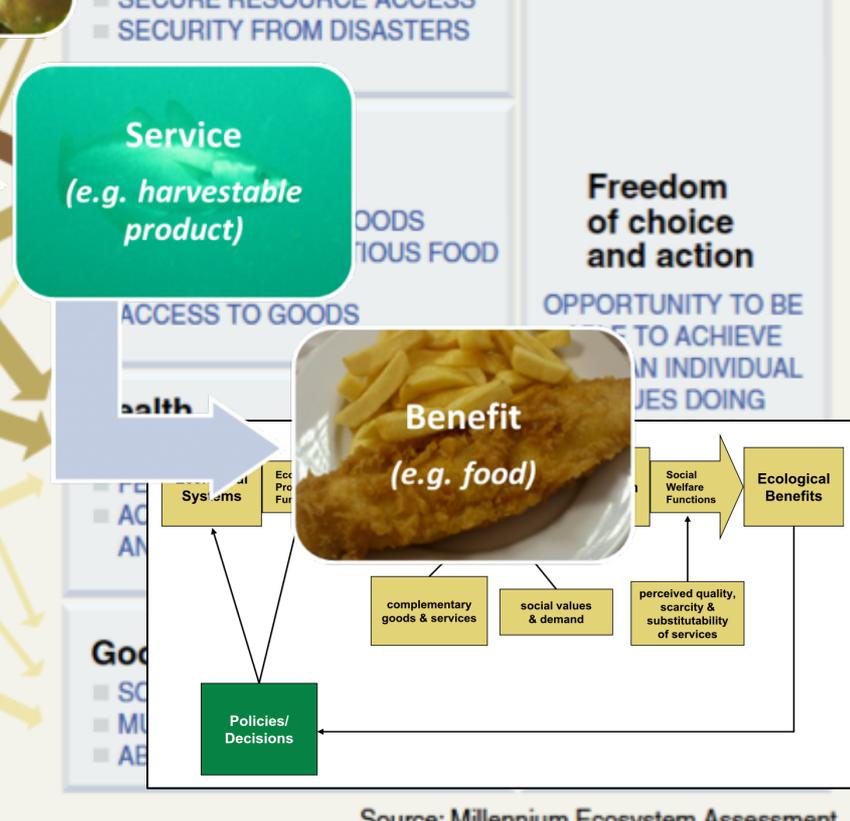
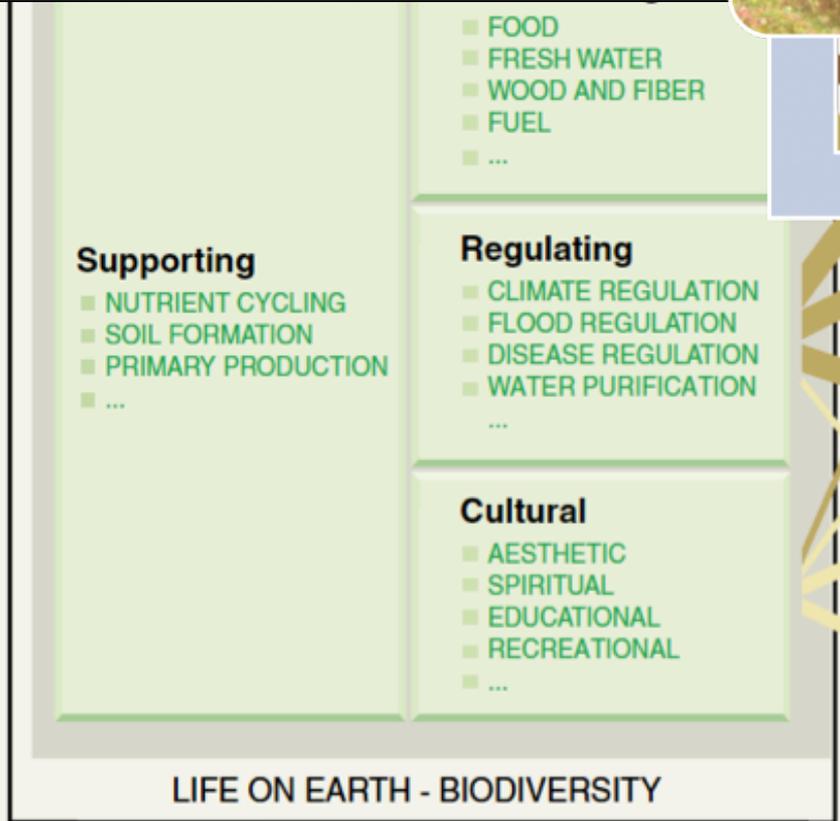
Why monetary valuation?

- Cost benefit assessments
- Evaluating policies and regulations
- Strategic use
- Prioritizing protection or restoration





1) The use of services usually affect the underlying biophysical structures and processes. ecosystem service assessments should take these feedback-loops into account.



Reality of Ecosystem Service Evaluation

- Rapid evaluation
- Data scarce environments
- Limited local capacity
- Limited funding

Difficulty level

ES model

EO product

| Difficulty level | ES model | EO product |
|--|---|------------|
| Tier 1: ES models and EO products exist, lack of integration is lack of communication | Carbon storage/ climate stabilization | Biomass |

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| Tier 3: New ES models and EO products must be developed | Population-based demand functions | Nighttime imagery (DMSP/OLS) |

| Workshop | Goals |
|--|---|
| 1 - Scoping | Strawman documents to link EO with ES models |
| 2 - Development and Community Building | Build EO-ES community, expose work of both communities, build use-case partnerships, develop guidelines |
| 3 - Jumpstarting New Projects | Develop technical review and guidelines, work on individual EO-ES project grant applications |

- Potential postdocs!
- Interested in participating?
- Guidance ideas



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