



Capacity-building workshop for the Europe region on ecosystem conservation and restoration to support achievement of the Aichi Biodiversity Targets

ecosystem service benefit valuation:
conceptualising a stepwise approach

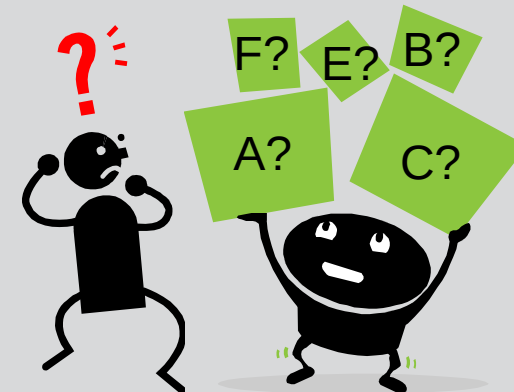
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Agenda

1. Introduction
2. Concept
3. Implementation
4. Conclusion

1. Introduction - Problem

- biodiversity and ecosystem services (BES) are very important (especially in restoration – unique chance)



- To highlight those benefits for decision-making, economic valuation is needed (best value for money, highest net benefit)

1. Introduction - opportunities

- Assessing benefits of biodiversity and ecosystem services offers chances

activate advocacy
and raise
awareness

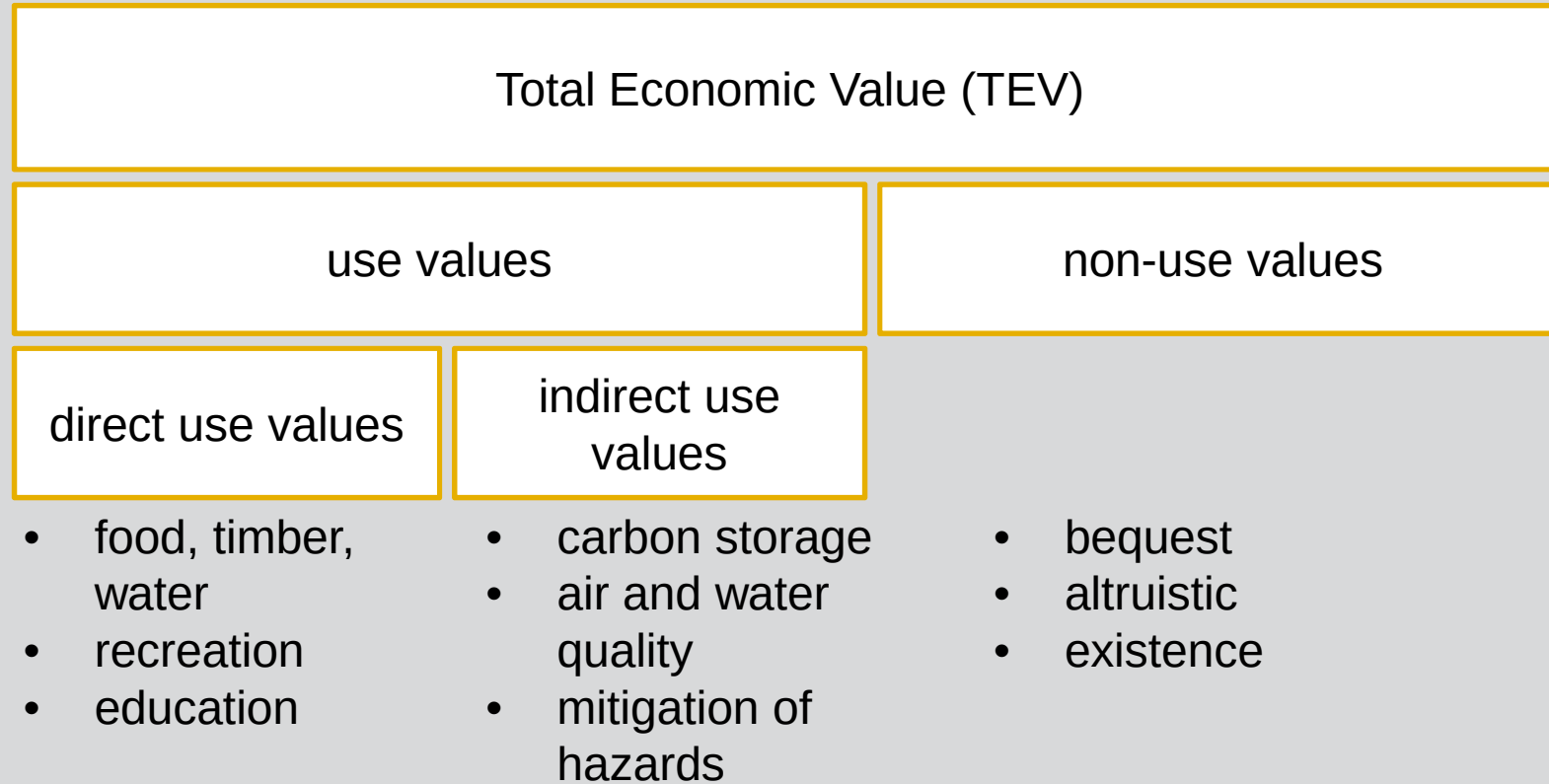
support decision
making and
management

identifying and
addressing social
impacts

Source: Kettunen/ten Brink (2013)

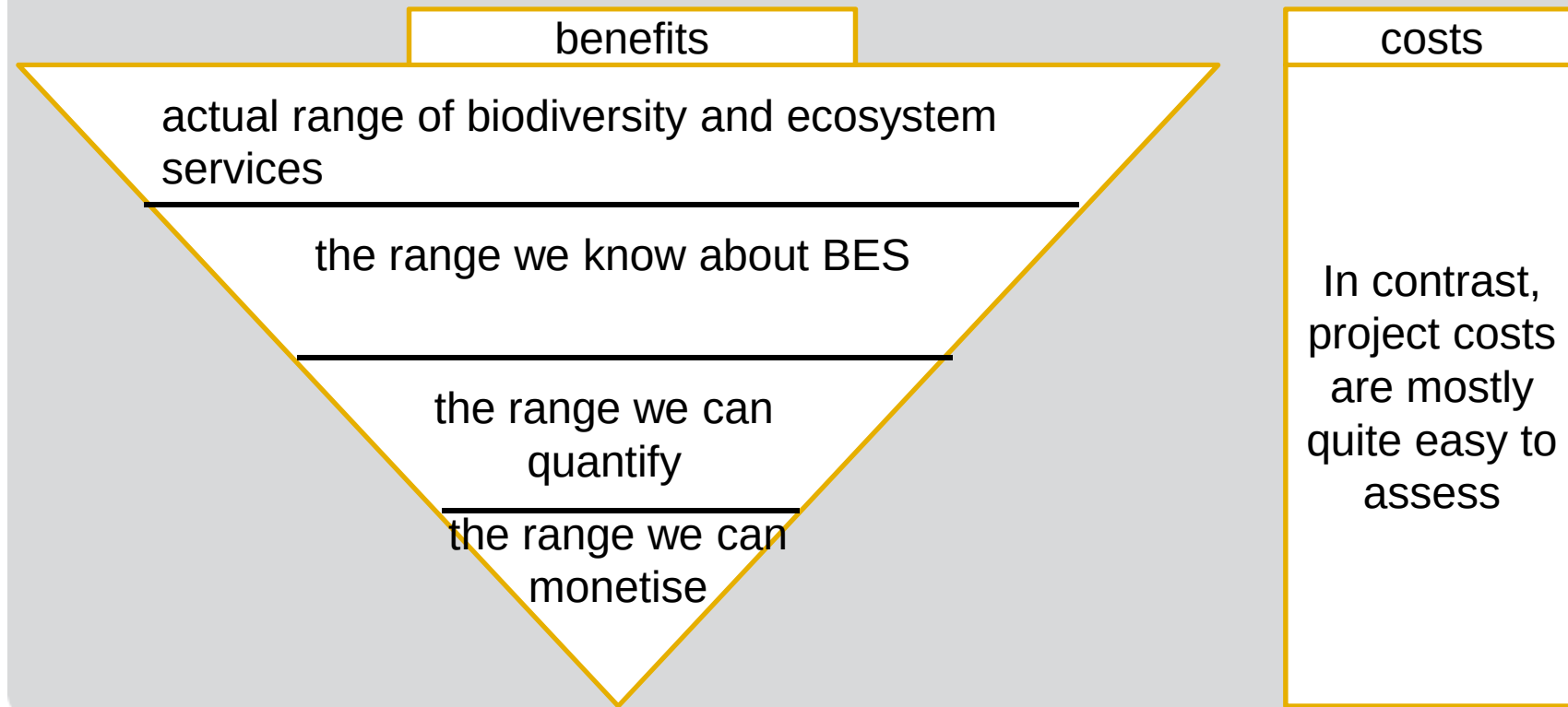
1. Introduction - values

- What are the (anthropocentric) “values” we speak of?



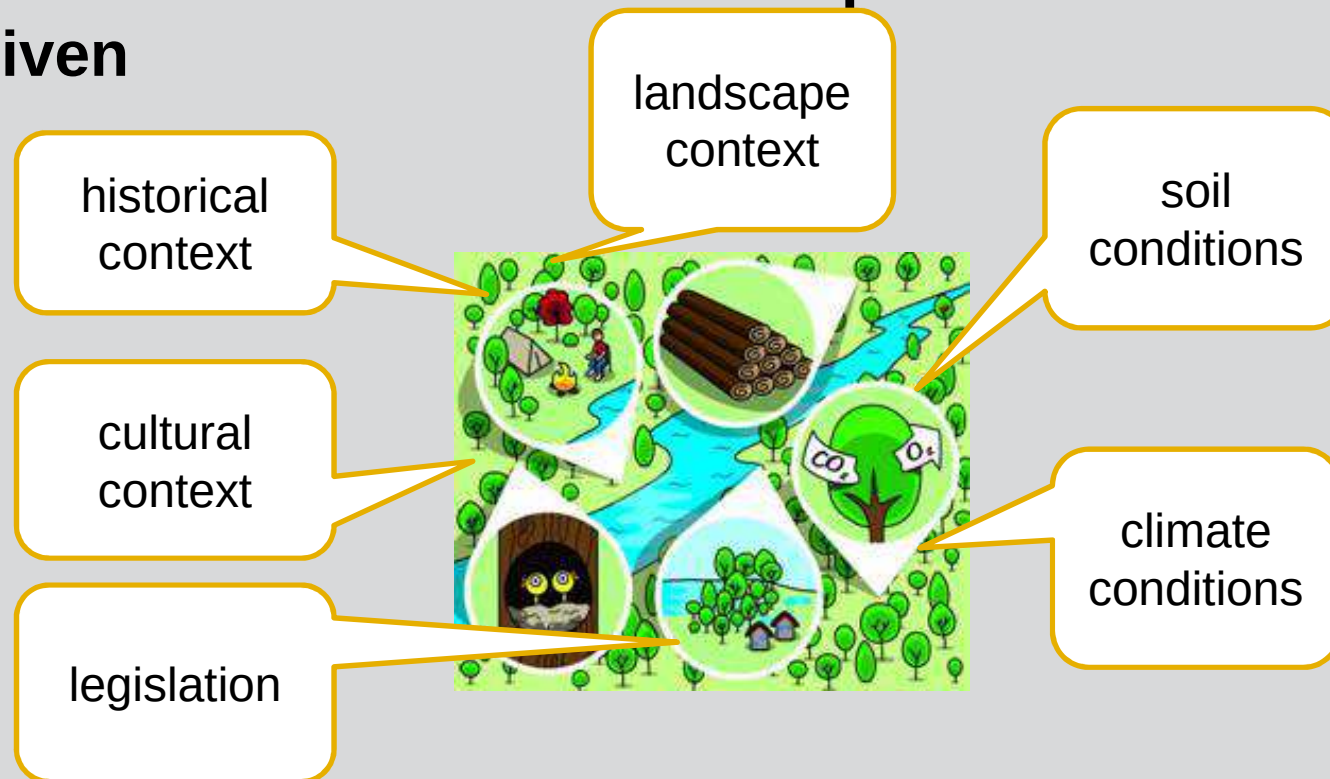
1. Introduction – limitations to valuation

- What can we really measure?



1. Introduction – limitations to valuation

- BES are to a wide extent **site specific and context driven**



1. Introduction – motivation

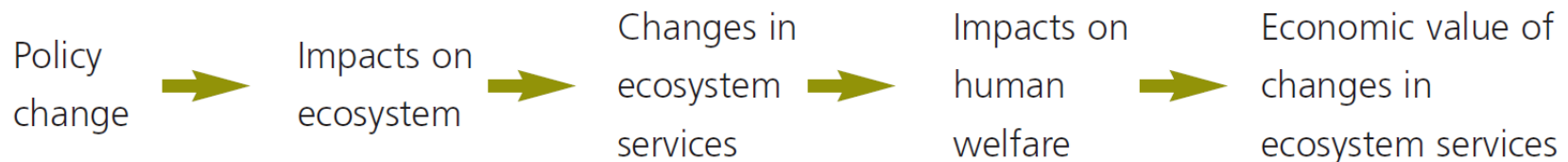
- BES are mostly “fuzzy” and hard to measure
- Costs are way more easy to monetise
- Effects are site specific and context driven
- Therefore, a comprehensive and well structured approach is needed when assessing restoration benefits

1. Introduction – research gap

- literature offers a lot on classifications and methods (MA 2005; de Groot et al 2010)
- applied, conceptual approaches that are
 - structured,
 - transparent and
 - transferableare rare (for example, the TESSA tool, inVEST tool).

2. Concept – idea

- Bringing together ecosystem service approaches and economic valuation in a common concept, following an “impact pathway”



Source: DEFRA (2007)

2. Concept – General structure

Block 1: Alternative (planning) states

Block 2: Identifying relevant ecosystem services and their benefits

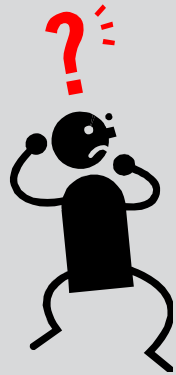
Block 3: Linking economic valuation methods

Block 4: Conduct analysis, disseminate results

2.1 Principle of alternative states

- the basis for our approach is a planning perspective
- for each restoration, there is at least one current state and one alternative (planning) state
- those need to be developed, assessed and described in a participatory, co-productive way

2.1 Principle of alternative states



Current state



Alternative state A: Do nothing



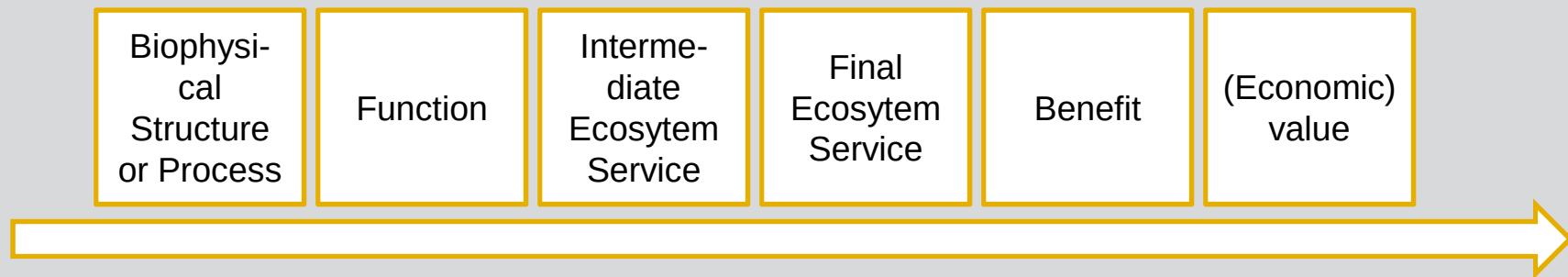
Alternative state B: Restoration

2.2 Finding the relevant BES

- Identifying the relevant BES is a key task for each state
- Those are relevant BES that alter benefits significantly between alternative states
- Classification should be oriented at a common classification to avoid confusion (i.e. CICES)

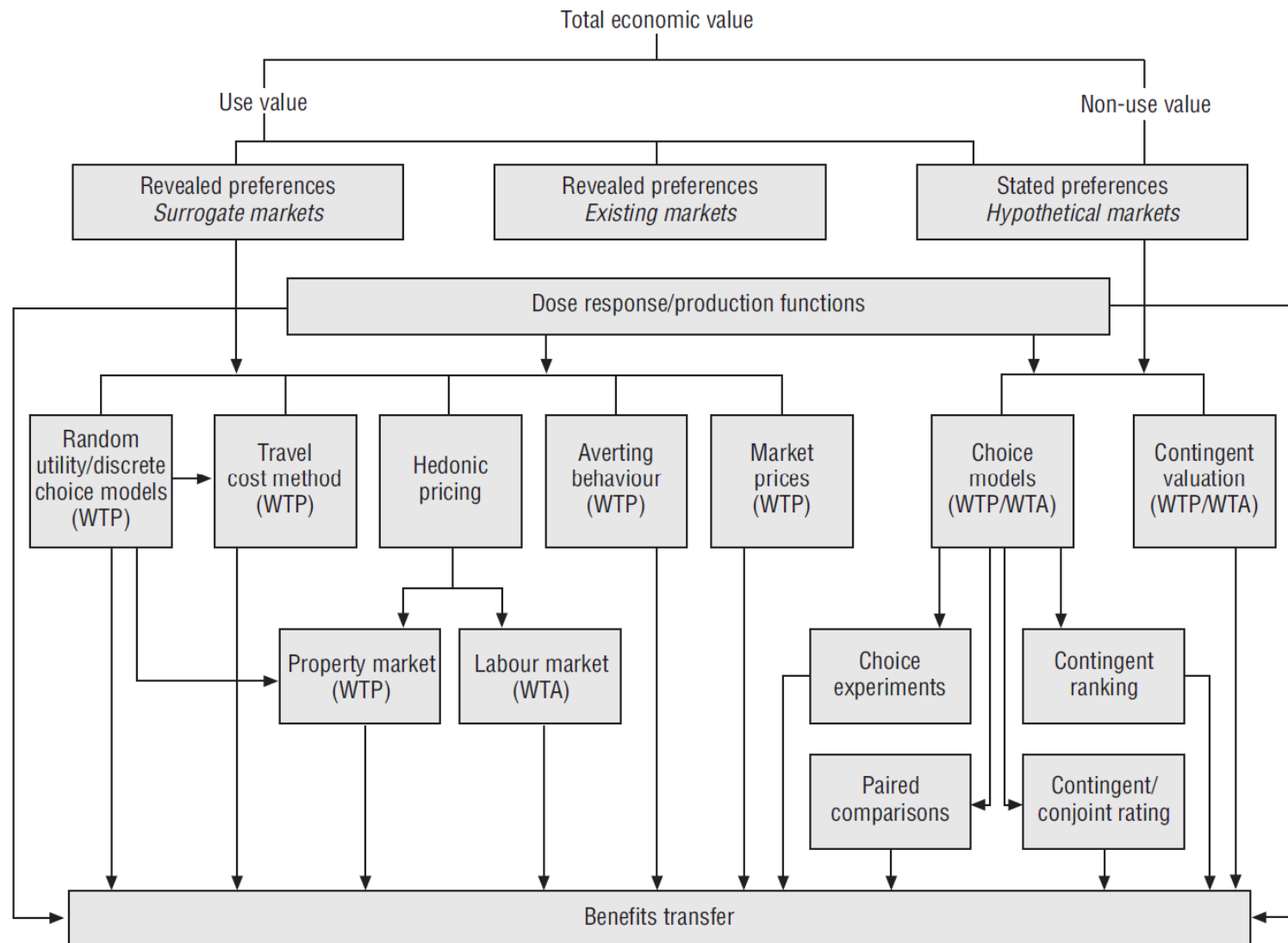
2.2 Finding the relevant biodiversity and ecosystem services

- BES have to be thought of being part of a production chain, at which end there are benefits for society



- To avoid double counting, valuation has to focus only on **final** services and their delivered benefits

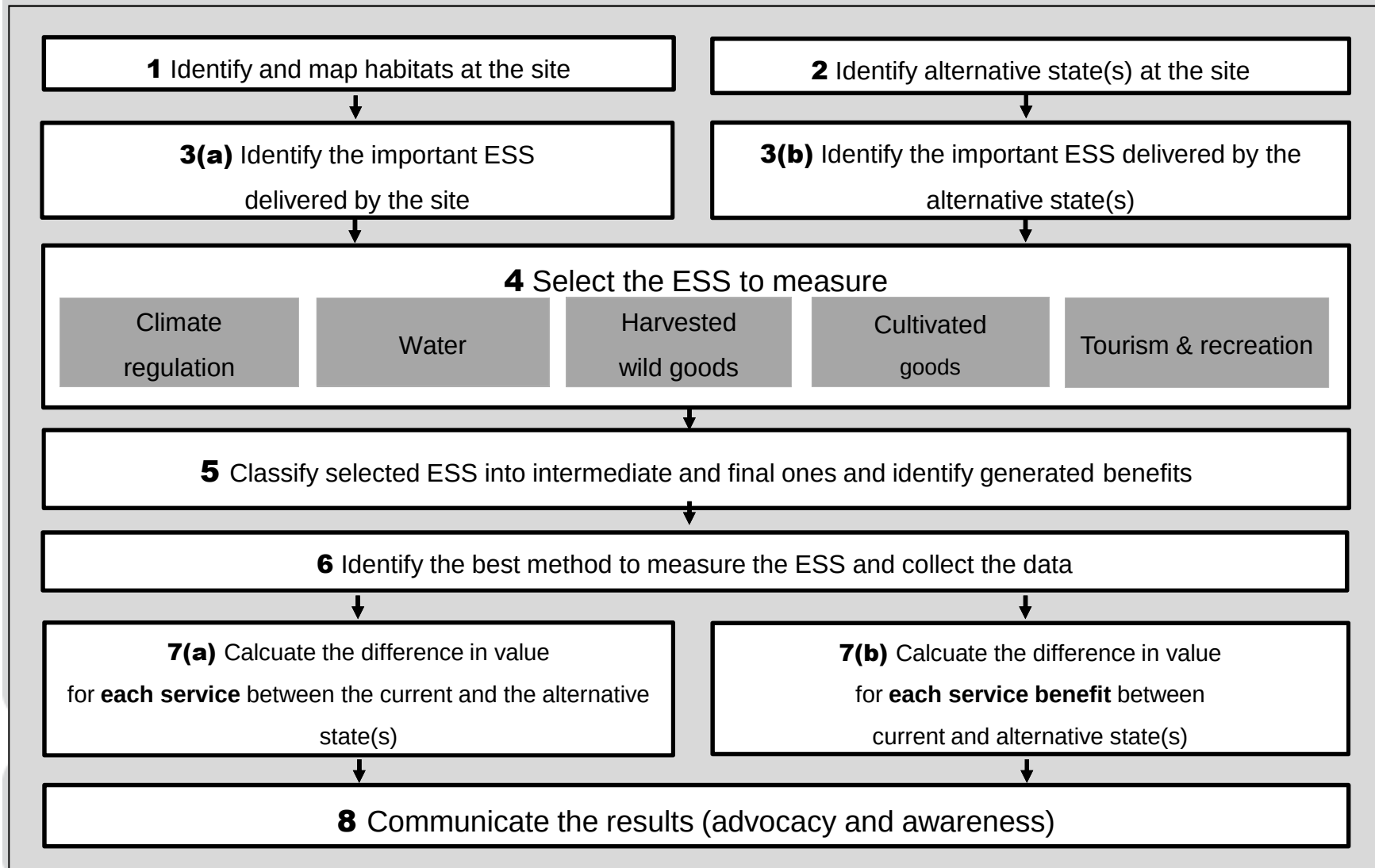
2.3 Identifying suitable valuation methods



2.4 Conduct analysis, disseminate results

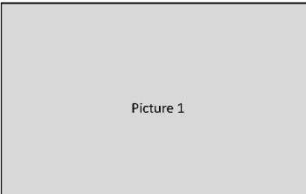
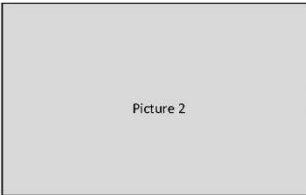
- Primary data vs secondary data
- Depend heavily on ex-ante or ex-post restoration
- Mostly SP/BT in planning approaches

2. Concept – stepwise approach



3. Implementation of approach

1. current state
2. description
3. alternative states
4. relevant ecosystem services for each state
5. Link of final ESS benefit to valuation approaches

NAME, COUNTRY CURRENT STATE →		1	
DESCRIPTION			
			
RESTORATION STATE			
RELEVANT ECOSYSTEM SERVICES:			
ALTERNATIVE RESTORATION STATE			
RELEVANT ECOSYSTEM SERVICES:			
RELEVANT ESS CICES Class	FINAL ESS	ASSESSMENT METHODS	DATA REQUIREMENTS

RESTORE CONTACT:

4. Conclusion

- the suggested stepwise approach helps conducting valuation studies
- it aims to provide guidelines in ecosystem service benefit thinking
- it helps to structure case study analyses through factsheets
- will be tested and developed further within RESTORE to support policy and decision making related to restoration