

Limited number of existing studies on CC & ES

		Alpine	Atlantic	Continental	Northern	Southern
<i>Provisioning services</i>	Food production	↓↓↓↓↓○	↓	↓	↓↑	↓
	Livestock production	↓○				
	Fibre production	↓				
	Bioenergy production	↑			↑	↓
	Fish production		↓○	↓	↓○	↓↓↓○
	Timber production	↓↓↓↓↓ ○○ ↑↑↑↑↑	○○○ ↑↑	○ ↑	○ ↑↑↑↑↑↑↑	↓↓↓
	Non-wood forest products				○↑	↓
<i>Regulating services</i>	Climate regulation (carbon sequestration)					
	- General/forests	↓↓↓↓↓○ ↑↑↑↑↑	○ ↑↑↑↑↑	○ ↑↑↑	↓○ ↑↑↑↑↑	↓ ↑↑↑↑
	- Wetland		↓↓↓○	↓	↓○	↓○
	- Soil carbon stocks	↓↓↓○	↓↓↓○	↓○	↓↓↓	↓○
	Pest control	↑		↑	↑	↓
	Natural hazard regulation					
	- Forest fires / wildfires		↓	↓↓		↓
	- Erosion, avalanche, landslide	↓↑↑				
	- Flooding	↓				
	- Drought			↓		↓○
	Water quality regulation		↓		↓	
Biodiversity	↓↓↓↓↓ ↑↑	↓↓↓↓↓○ ↑↑	↓↓↓↓↓ ↑↑	↓↓↓ ↑↑↑	↓↓↓↓↓↓↓ ↓↑	
<i>Cultural services</i>	Recreation (fishing, nature enjoyment)		↓		↓↓↑	↓
	Tourism (skiing)	↓			↓	
	Aesthetic/heritage (landscape character, cultural landscapes)	↑	↓	↓○		↓

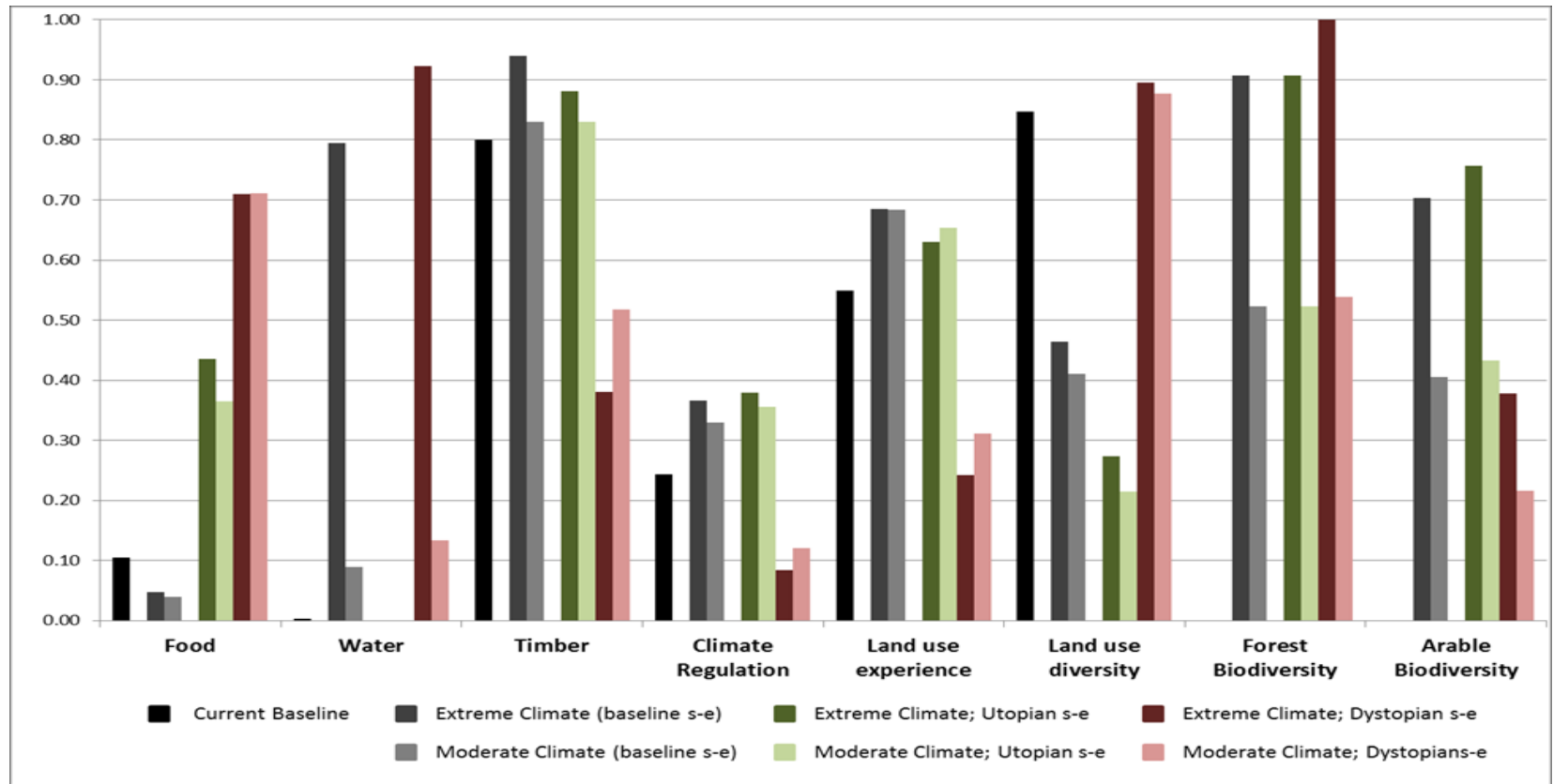
↓ = Decreasing ↑ = Increasing ○ = No change

Source:
Kovats et al. (2014)
IPCC AR5
"Europe"
chapter

26 papers
in total:
(2004-2013)

Research/policy need 1

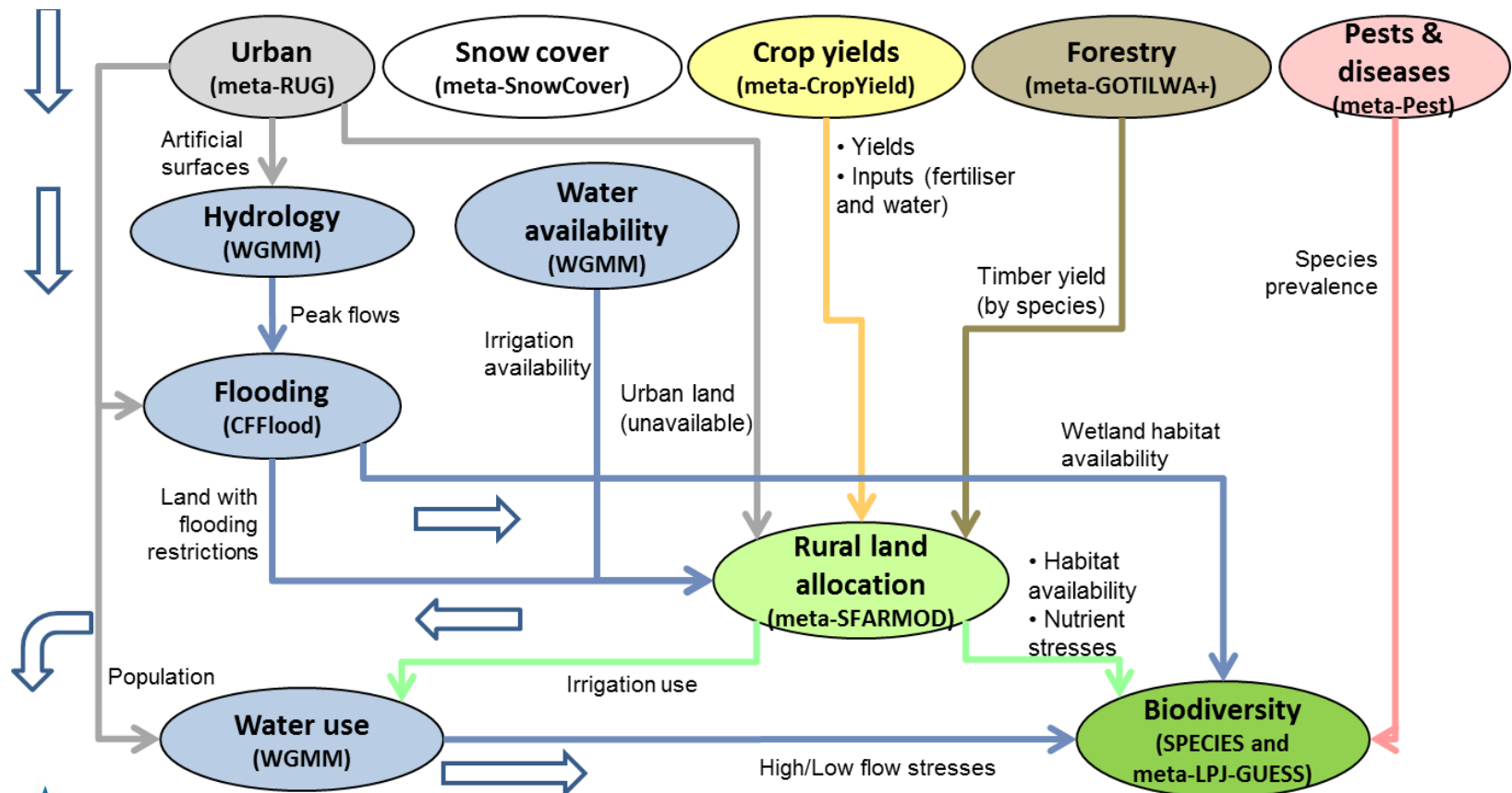
- There is a need to move beyond climate change impact assessments based on single drivers.



Source: Dunford et al. (2014). Ecosystem service provision in a changing Europe: Adapting to the impacts of combined climate and socio-economic change. *Landscape Ecology* (under review).

Research/policy need 2

- There is a need to move beyond climate change impact assessments based on single sectors.

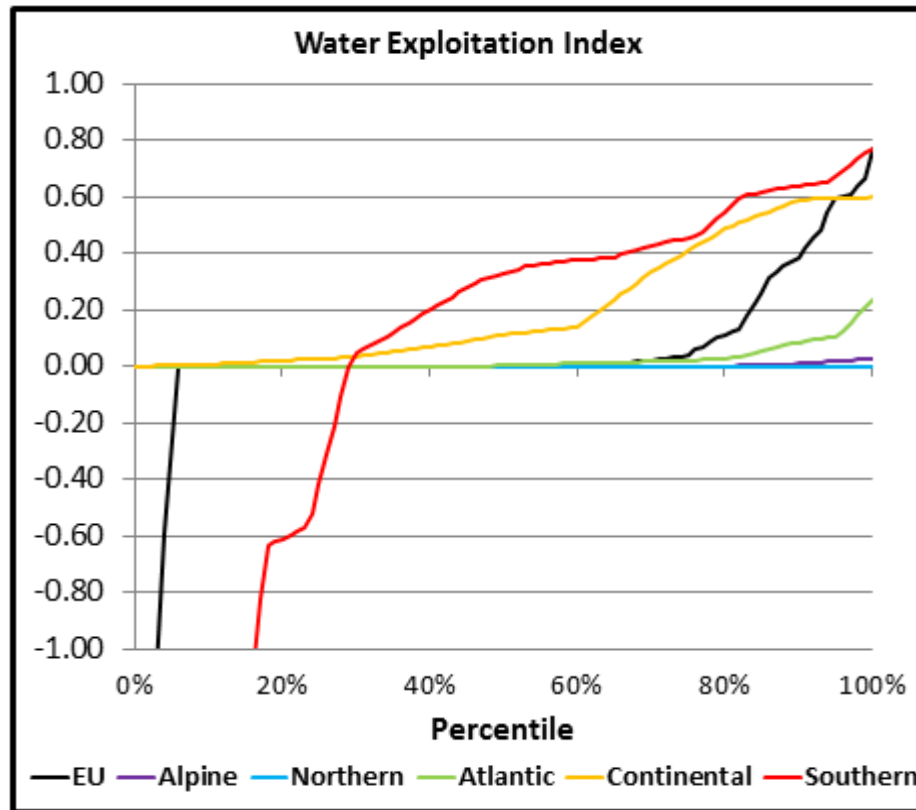


Source: Harrison et al. (2014). Assessing cross-sectoral climate change impacts, vulnerability and adaptation: An Introduction to the CLIMSAVE project. Climatic Change, in press.



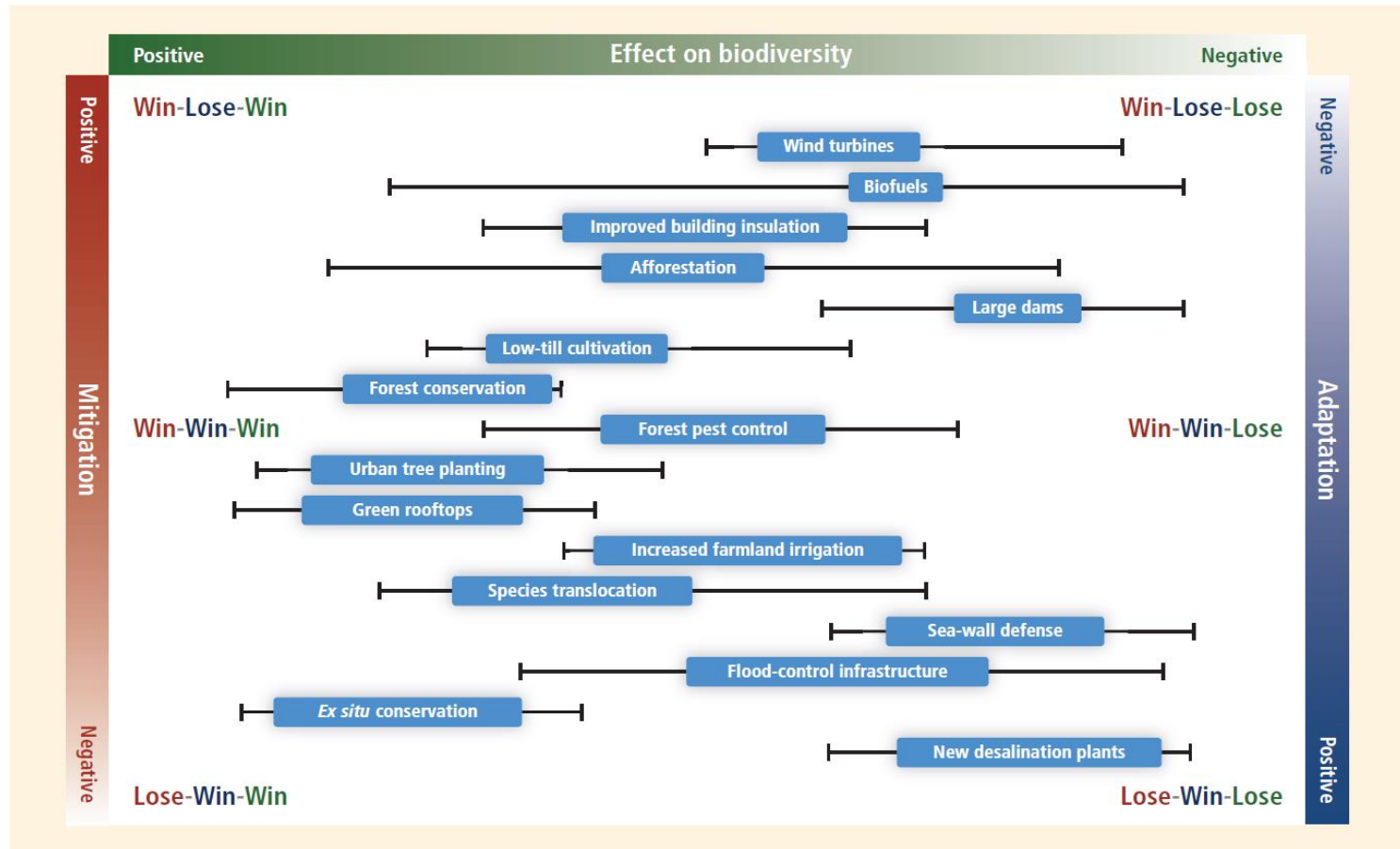
Single sector studies may over or under-estimate impacts

Percentile plots of differences: integrated model - stand-alone models



Research/policy need 3

- There is a need to integrate assessments of adaptation and mitigation to search for win-win-win options.



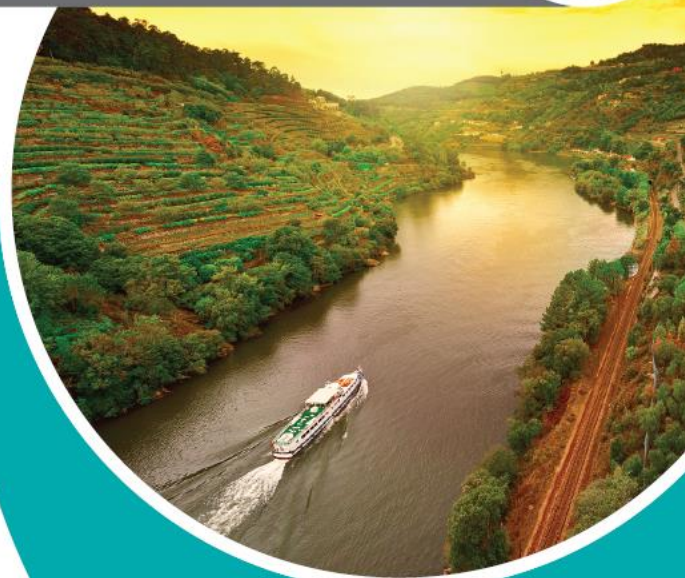
Source: Kovats et al. (2014). IPCC AR5 "Europe" chapter. Based on: Paterson et al. (2008). Mitigation, adaptation, and the threat to biodiversity. *Conservation Biology*, 22(5): 1352-1355.

The latest knowledge about natural capital and ecosystem services:

oppla



Oppla is a new online platform, which aims to bring together knowledge about natural capital and ecosystem services from around Europe. Its overall purpose is to assist people in making nature work for the benefit of humankind.



If you are an entrepreneur, a consultant, a policymaker, a land manager, a scientist... whoever you are, Oppla aims to help you with practical advice, guidance, tools and techniques. It will feature a database of information and case studies, as well as a 'Question & Answer' facility – through which your questions about natural capital and ecosystem services will be answered by experts.

Oppla aims to establish a community of practice that shares resources, new ideas and practical experience. It also aims to function as a marketplace – enabling members to find consultants specialising in natural capital and ecosystem services, to help with their own projects.

The Oppla website will be complemented by events, training courses, a helpdesk and other services on demand.

All of which will combine to help you find the information and assistance you need: **faster, easier and more reliable.**

www.oppla.eu

The logo features the acronym 'ECCA' in large, white, sans-serif capital letters. To the right of the text is a white silhouette of the European continent on a green background. A small yellow rectangle highlights the location of Copenhagen on the map.

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