

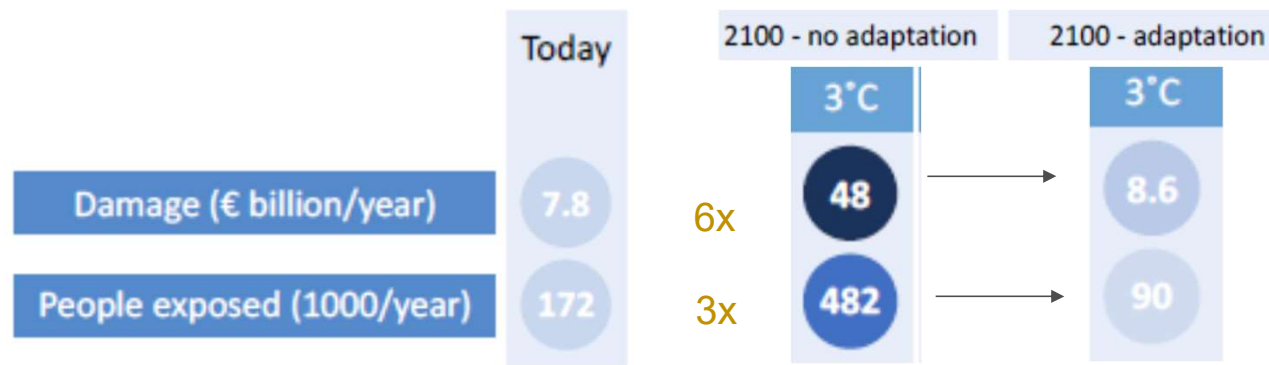
Wetlands & climate adaptation an EU perspective

Willem Jan Goossen
European Commission, DG Climate action

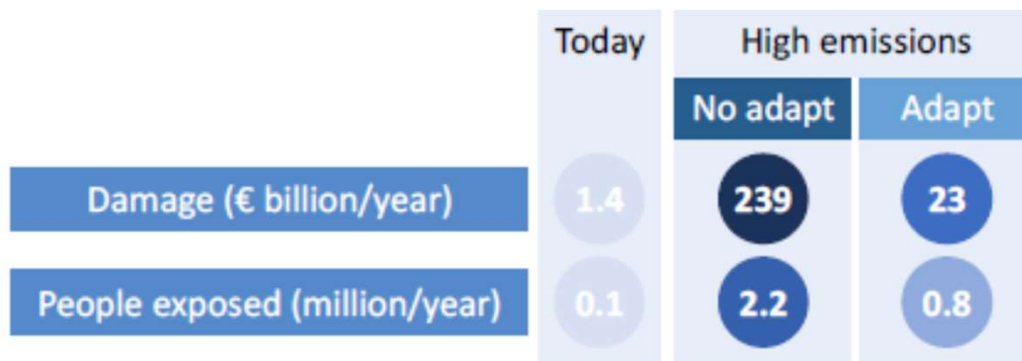
Wetland solutions to protect against droughts and floods

12 October 2023

River flooding and adaptation



Coastal flooding and adaptation



Adaptation leads to

90% reduction in damage

63% reduction in people exposed



Drought & water scarcity

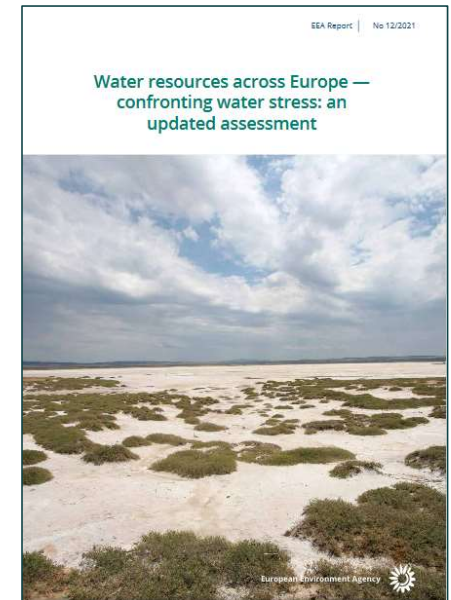
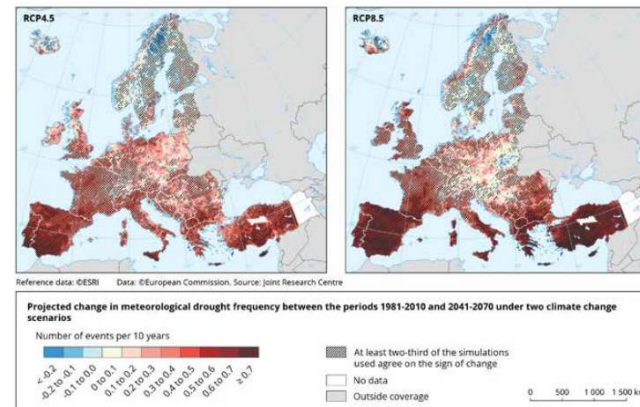
Current:

- economic damage: EUR 9 billion/yr & unquantified damage to ecosystems and their services

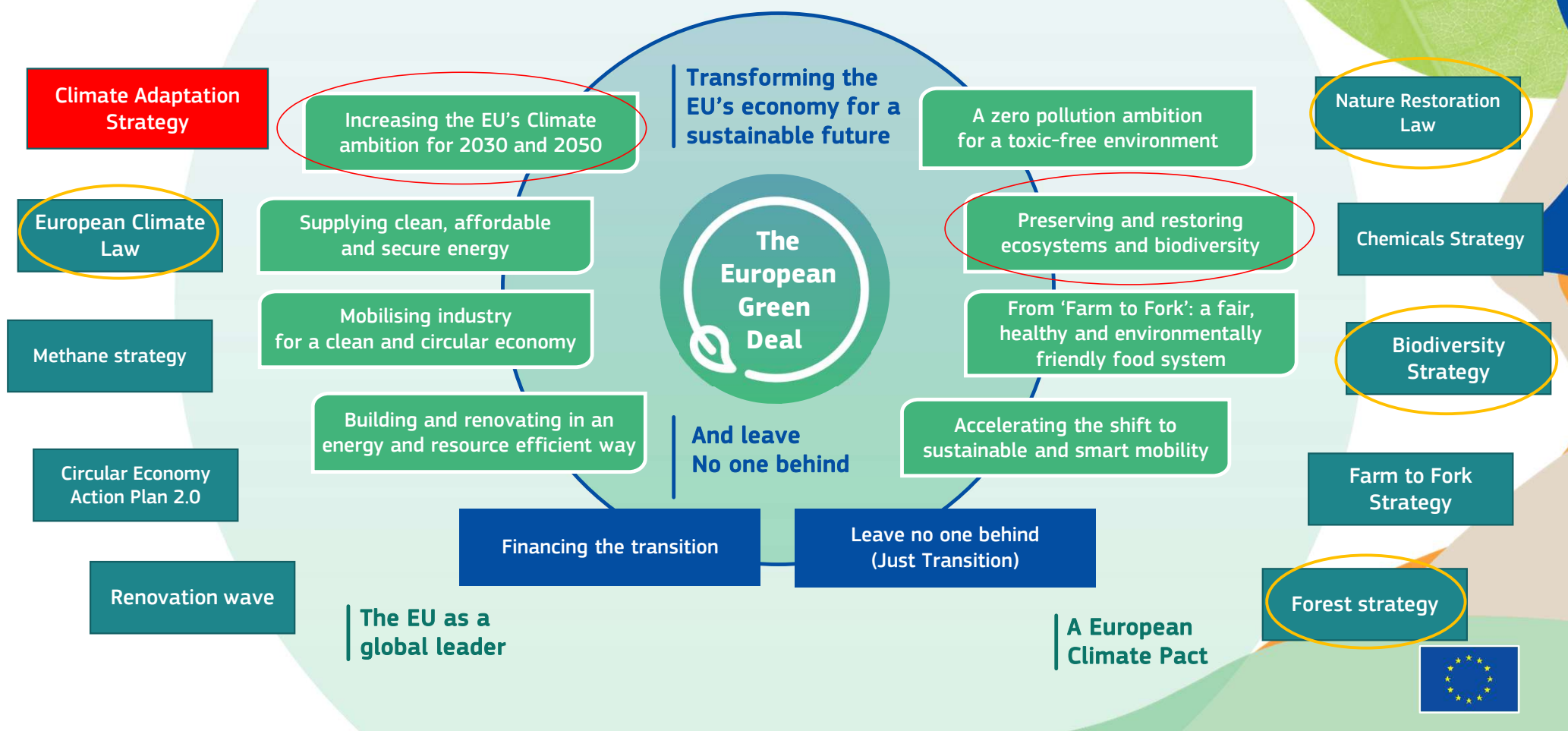
Future:

- Up to 40% less aquifer recharge and river discharges (+3°C)
- Up to 45 billion €/yr

Map 3.6 Projected change in meteorological drought frequency between the periods 1981-2010 and 2041-2070 under two climate change scenarios



European Green Deal



A new EU strategy on climate adaptation

- February 2021, a European Commission strategy
- Vision: by 2050 the EU will be a climate-resilient society, fully adapted to the unavoidable impacts of climate change
- Objectives:
 - **Smarter adaptation**
 - **More systemic adaptation**
 - **Faster adaptation**
 - **Stepping up international action** for climate resilience



© picture: Peter Löffler

Water (related) actions in the EU Adaptation Strategy

- Close knowledge gaps on climate impacts and resilience
- Help data collection
- Stimulate cooperation on adaptation regionally and across borders
- Missions Adaptation & Water
- Climate proofing infrastructure
- EU disaster risk prevention and management

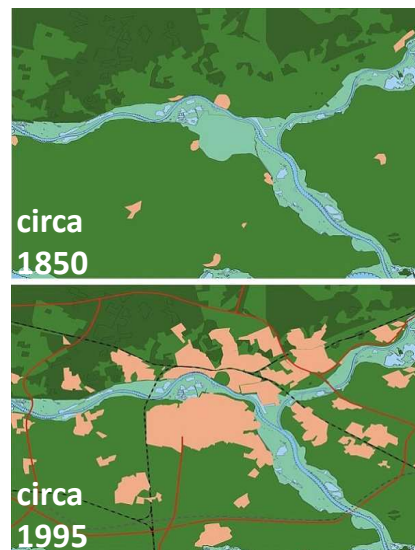
Ensuring the availability and sustainability of freshwater

- Climate-resilient management of water across sectors and borders
- Help MS with drought management plans & land-use.

Nature-based solutions

- Assist Member States in rollout of NBS
- Develop the financial aspects of nature-based solutions

Loss of floodplains along Rhine tributaries (NL)



CLIMATE-RESILIENT AGRICULTURE

Reduce drainage
Precision irrigation

Water storage
Increase organic
content

Climate
resilient crops

RESTORE THE NATURAL SYSTEM

Reforestation
Fill in ditches
Marshy stream /
floodplains
River valley restoration
Remeandering

CLIMATE-ADAPTIVE CITY

Replace impermeable
surfaces
Disconnect rainwater
drainage

Water storage in streets
and public spaces
Green roofs

Buffer zones

Restoration of groundwater flows
Sustainable soil management

biological crop protection

helophyte filters

near-natural stream cross-section

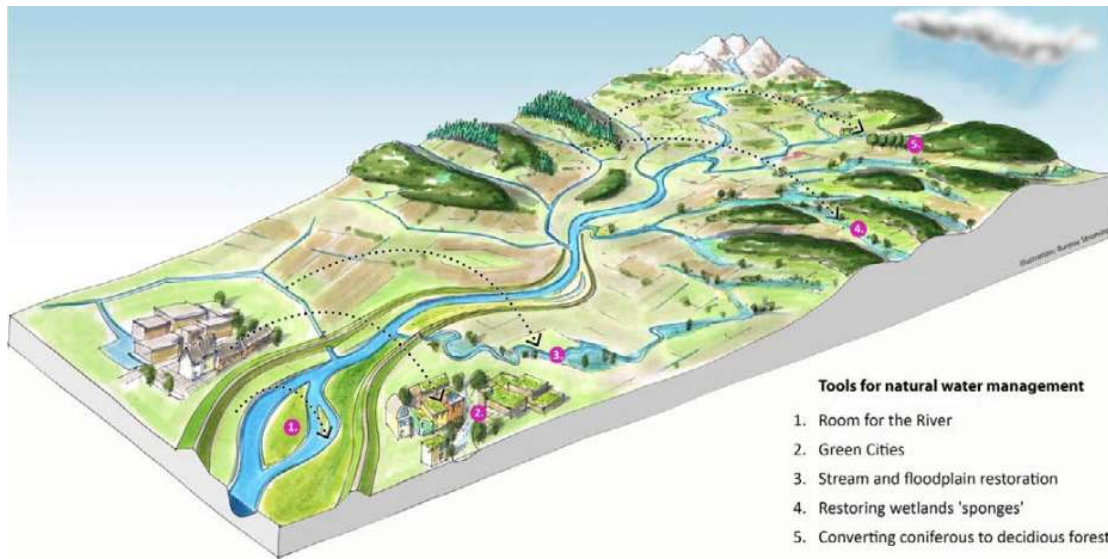
WATER QUALITY IMPROVEMENT

FROM UPSTREAM TO THE LOWER REACHES

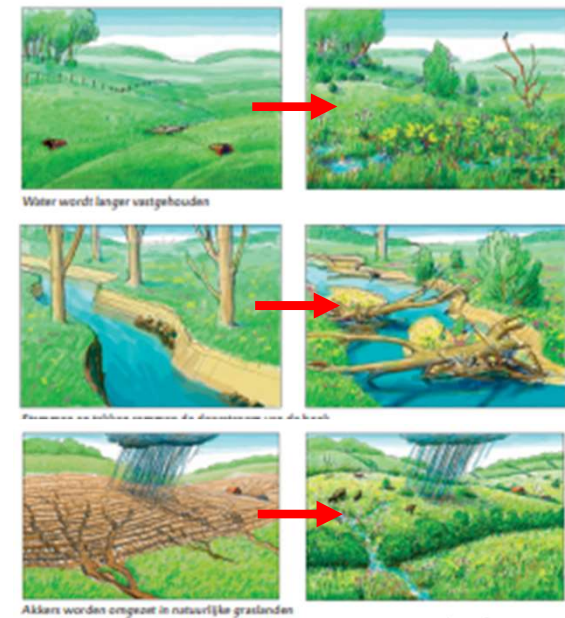
FROM THE VALLEY SLOPE

Source: STOWA, the Netherlands
[Praatplaat Naar een
klimaatbestendig
beekdallandschap](#) | STOWA

Restoration of the sponge function of the landscape



- Climate adaptation: restoration of the resilience of a large area to deal with the increasing risks of extreme droughts, flooding, and heat waves.
- Climate mitigation: enhancing carbon sequestration



Projects & reports

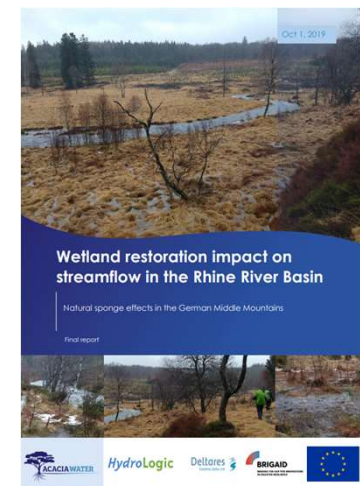
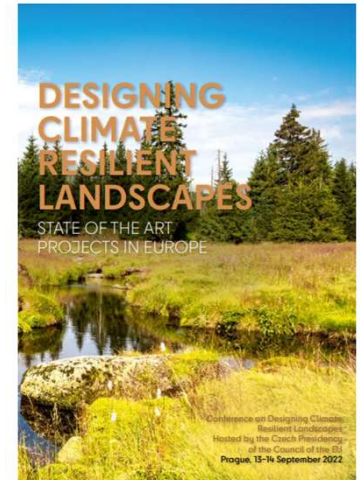
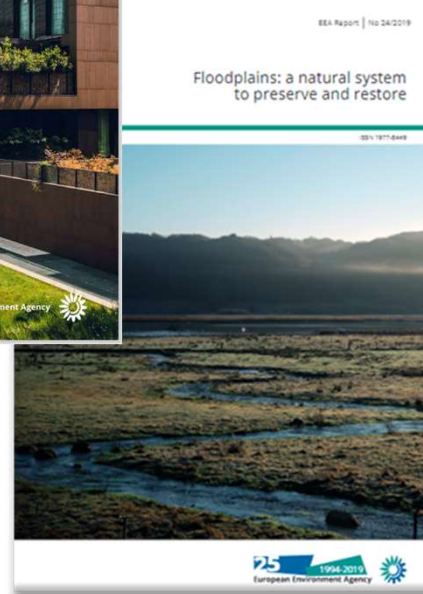
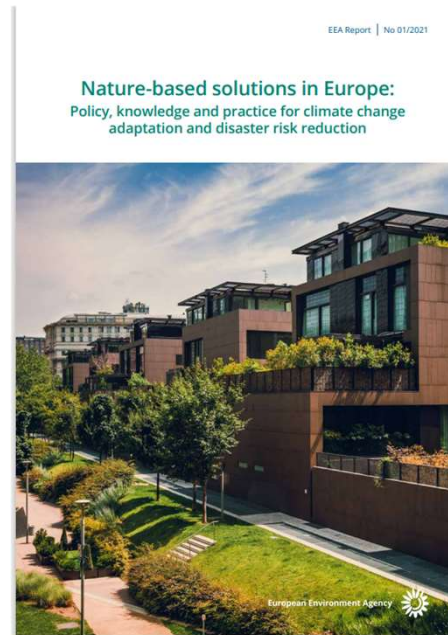


REST-COAST

Large scale RESToration of COASTal ecosystems through rivers to sea connectivity



WaterLANDS: Water-based solutions for carbon storage, people and wilderness



Thank you



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