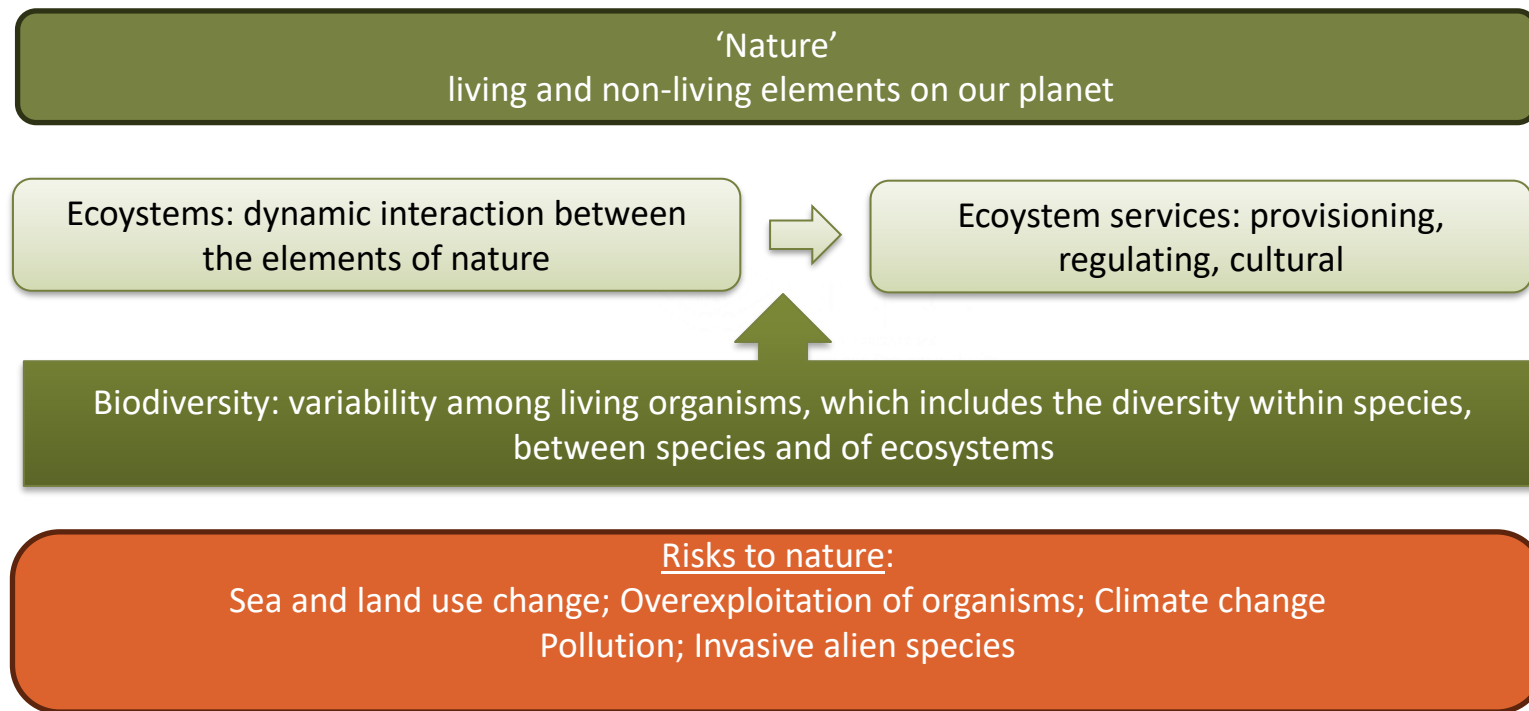


NATURE-RELATED RISKS AND IMPACTS FOR INSURANCE

Stakeholder engagement on biodiversity loss risk for insurers
10 June 2024

EIOPA REGULAR USE

NATURE AND BIODIVERSITY-RELATED RISKS



SIMILARITIES AND DIFFERENCES WITH CLIMATE RISK

Similarities to climate risk

Translated via existing prudential and conduct risks

Uncertainty about timing and severity, non-linearity, systemic nature, tipping points causing irreversibility of damage

Requires forward-looking risk assessment + scenarios for risk prevention

Issues to insurability, also due to interrelation of risks

Differences with climate risk

Even more multi-dimensional, targets difficult to capture in one metric (e.g. such as reduction of GHG emissions)

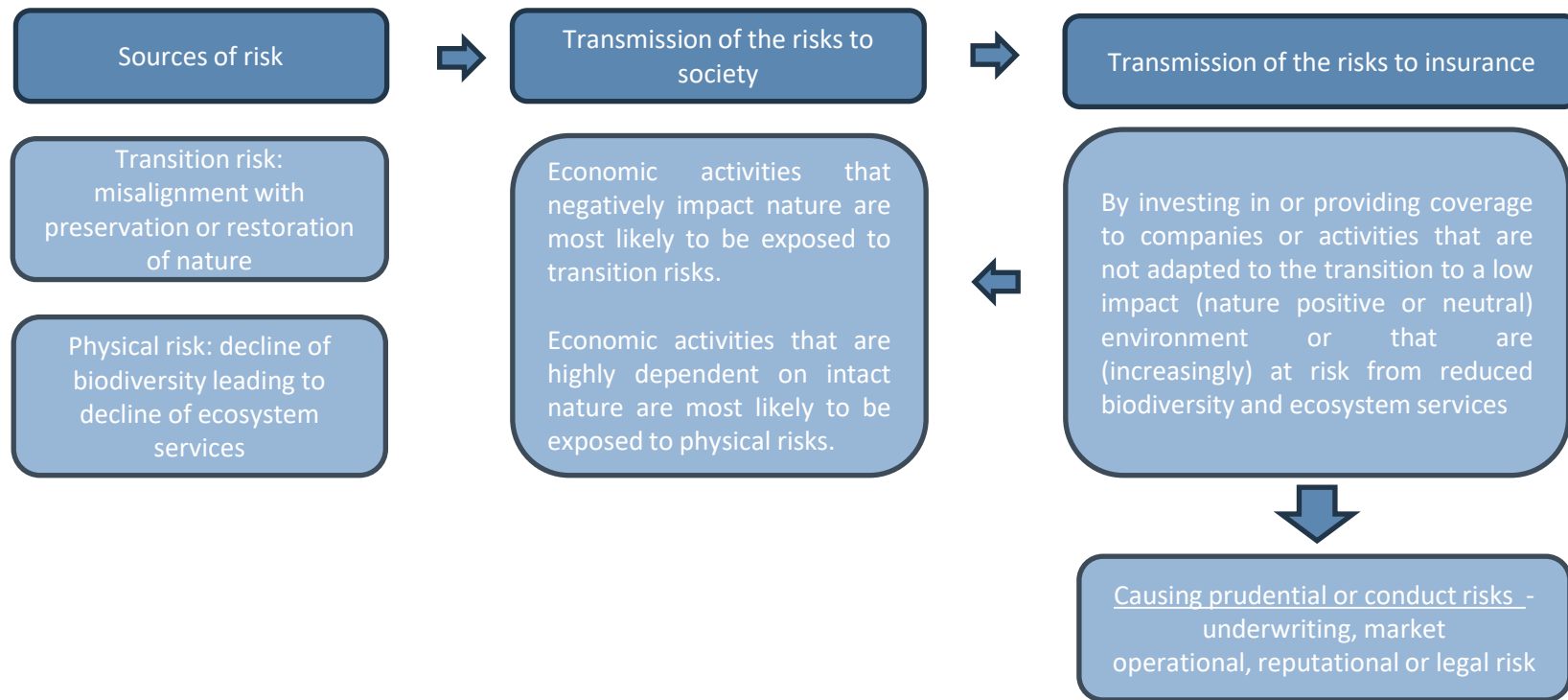
Risk restoration and conservation require more intricate action, often at regional level

Risk data more difficult to collect and model (multiplicity of pathways)

Nature losses are not easily connected with single events

Possibly more intensified risk concentration (local ecological processes); possibly wider systemic impacts of loss of systemically biomes (e.g. Amazon Rainforest)

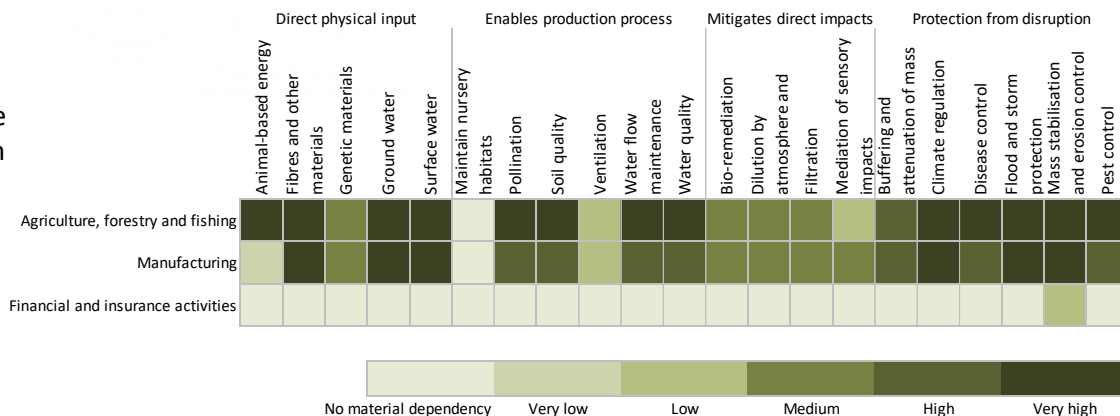
TRANSMISSION OF BIODIVERSITY-RELATED RISKS TO INSURANCE



RISK ASSESSMENT: DEPENDENCY ON ECOSYSTEM SERVICES

- The level of **dependency of economic activities on ecosystem services** related to a given asset serves as a **proxy of the assets' vulnerability to changes in the provision** of these services.
- EIOPA conducted a physical risk assessment in collaboration with ECB via the ESRB Project Team Climate based on ENCORE database, which provides a set of materiality scores for the dependency of economic activities on ecosystem services.
- **Approximately 30% of EEA insurers' direct investments in corporate bonds and equity are towards economic activities that highly depend on at least one ecosystem service.**
The major vulnerabilities are towards surface and ground water, as well as flood and storm protection.

Dependency scores of selected economic activities on ecosystem services



Source: Box 1.1 in [EIOPA June FSR 2023](#). ECB and own calculations based on Natural Capital Finance Alliance ENCORE database (2022). For more information on the methodology, please see [Ceglár et al. \(2023\)](#) - "Living in a world of disappearing nature: physical risk and the implications for financial stability".

THANK YOU

- [EIOPA staff paper on nature-related risk](#) published in March 2023.
- Box 1.1 in [EIOPA June FSR 2023](#) for direct dependencies on ecosystem services of corporate bonds and equity.