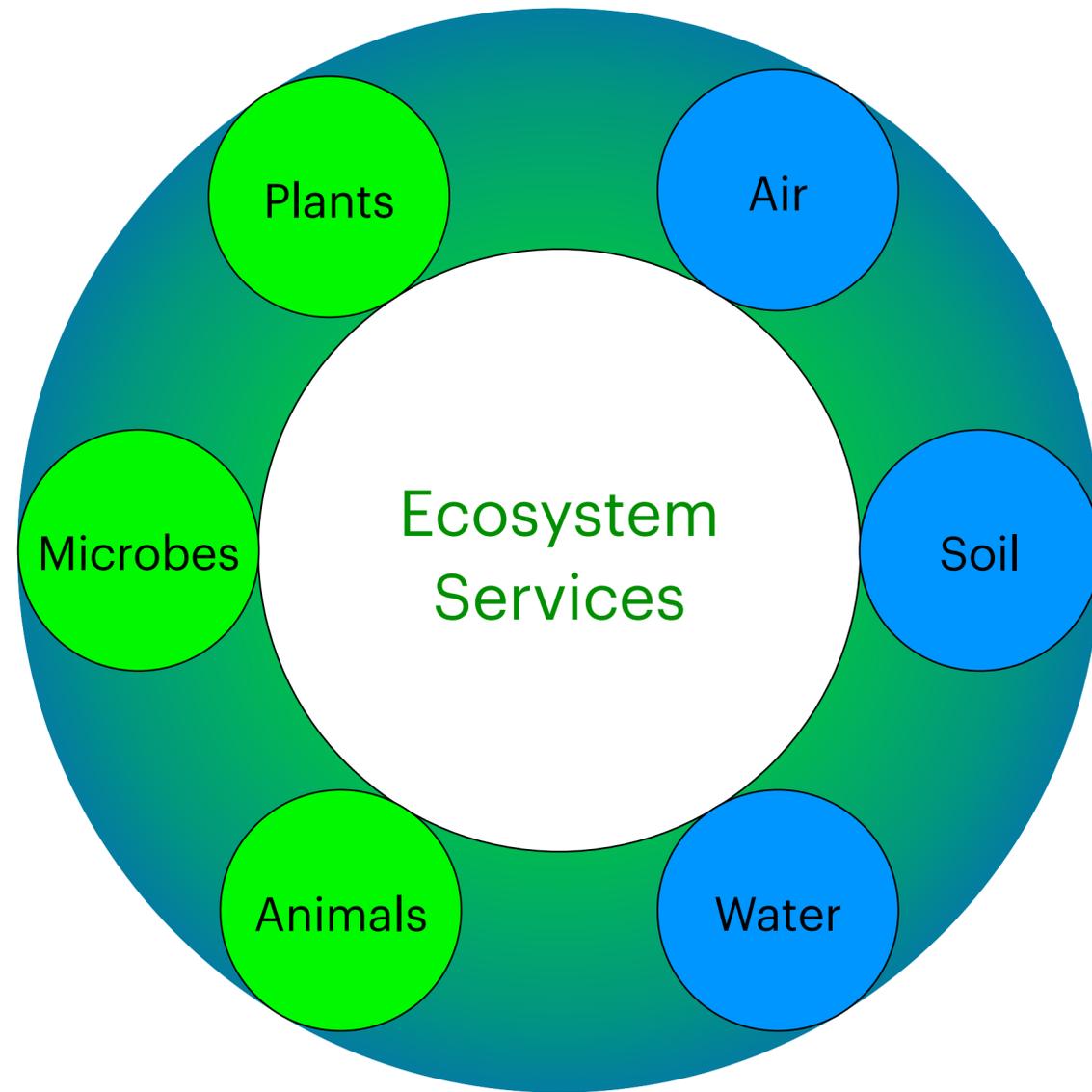


Contributing to a Vision for Cross-Disciplinary Informatics

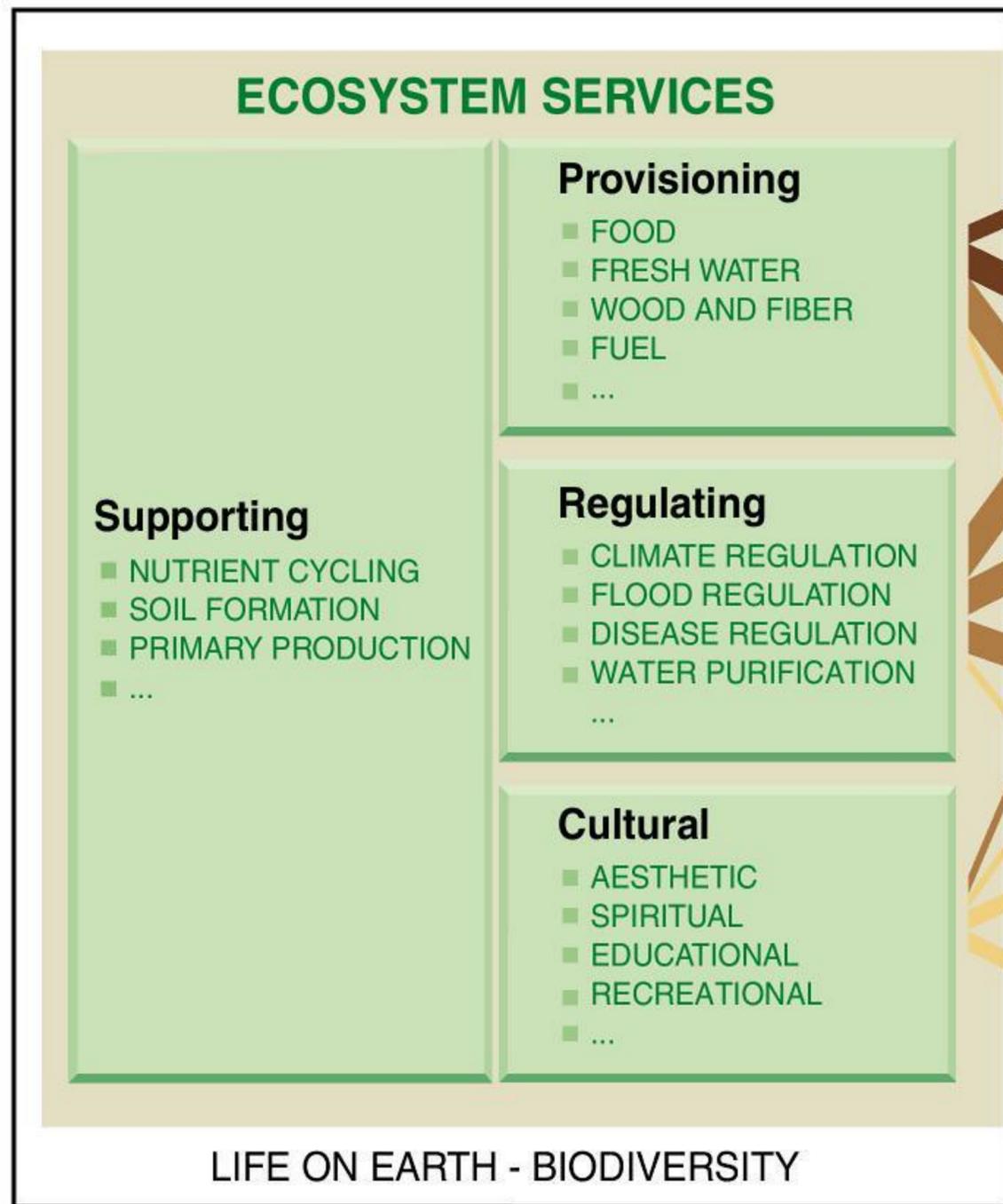
Ruth Duerr, December 2021

Humanity's well being depends on Ecosystem Services



Some ecosystem services:

- Fresh water
- Food
- Fiber
- Habitat
- Recreation and tourism
- Spiritual health
- Cultural identity
- Pollination
- Pest and disease management
- Erosion prevention
- Protection from natural disasters
- Carbon sequestration and storage
- Air and water pollution control
- Nutrient cycling
- Soil fertility



CONSTITUENTS OF WELL-BEING



Source: Millennium Ecosystem Assessment

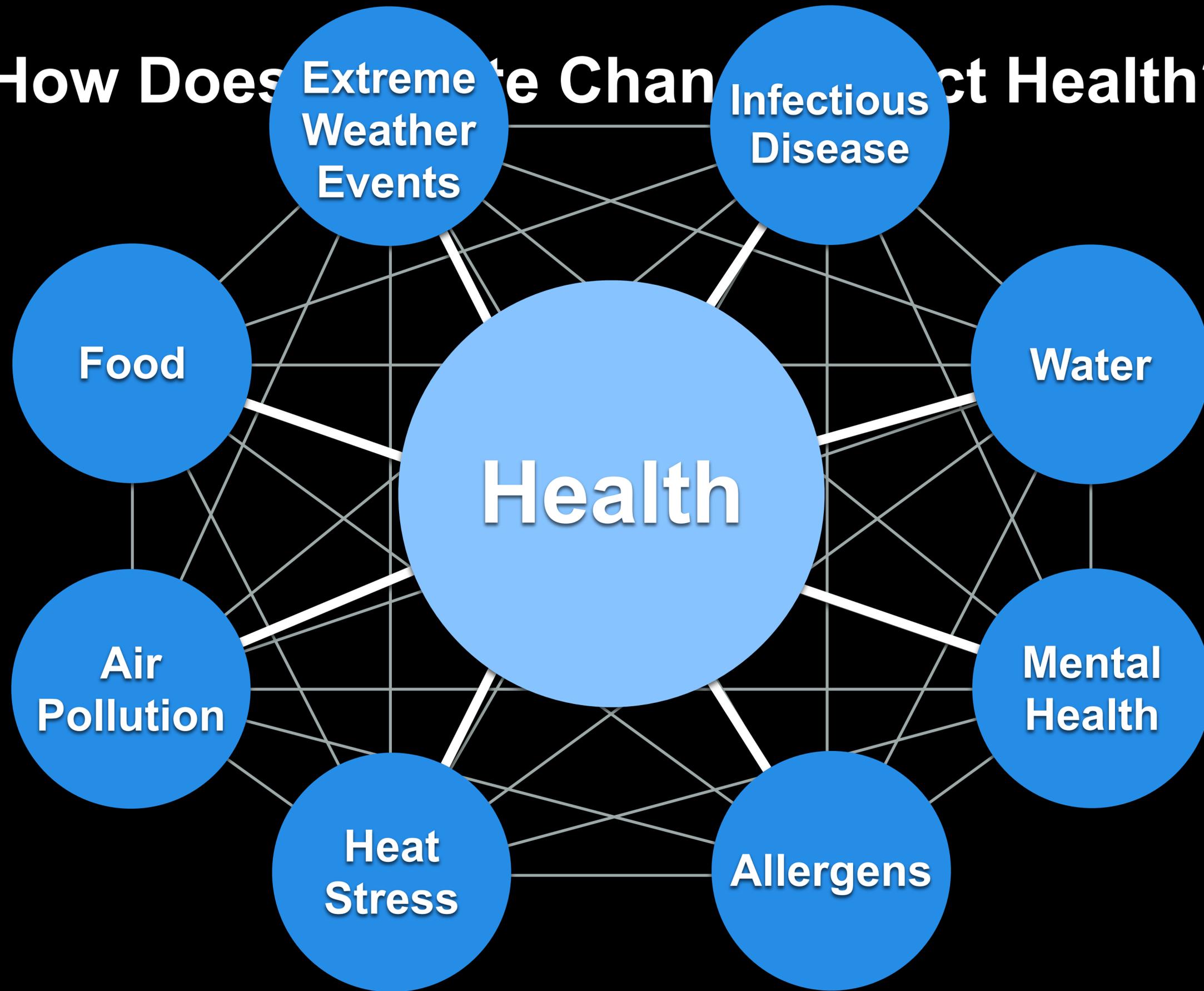
ARROW'S COLOR
Potential for mediation by socioeconomic factors

- Low
- Medium
- High

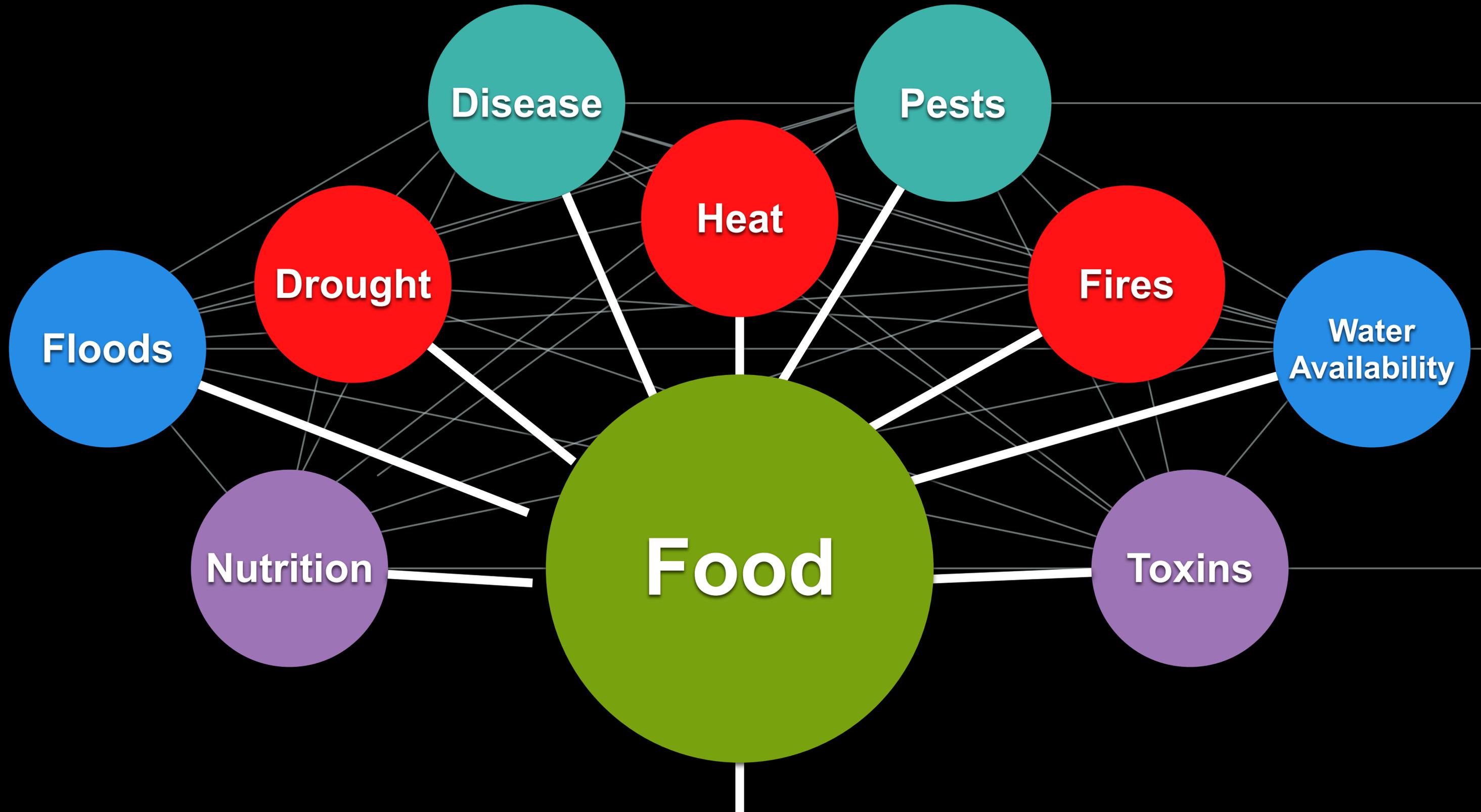
ARROW'S WIDTH
Intensity of linkages between ecosystem services and human well-being

- Weak
- Medium
- Strong

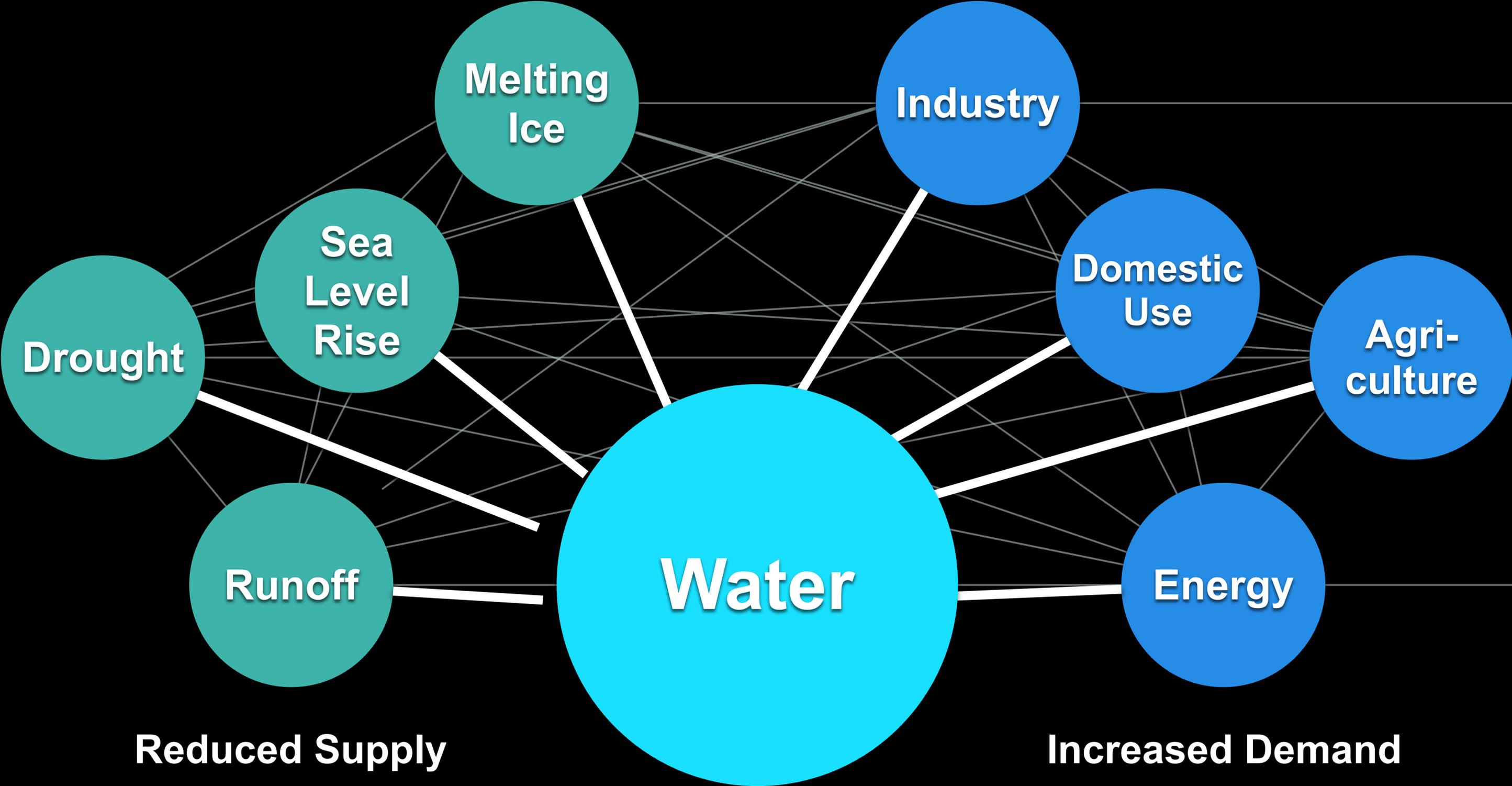
How Does Climate Change Affect Health?



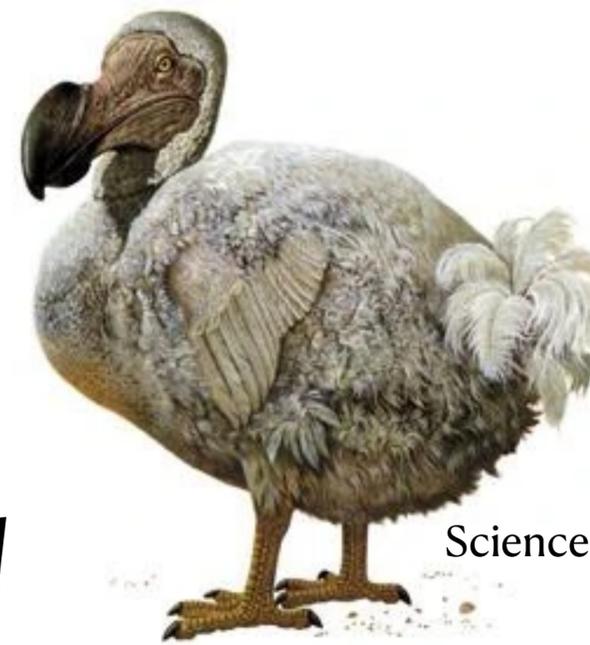
How Does Climate Change Affect Food Supply?



How Does Climate Change Affect Water Availability?



What future are you working towards?



Science Photo Library

What future are you working towards?

What Are the Climate “Tipping Points”?



Permafrost thaw
and methane
release



Coral reef
die-off



Amazon shift
from rainforest to
savannah



Boreal forest
northward shift



West African
monsoon shift



Indian
monsoon shift



Shutdown of the
ocean conveyor
belt

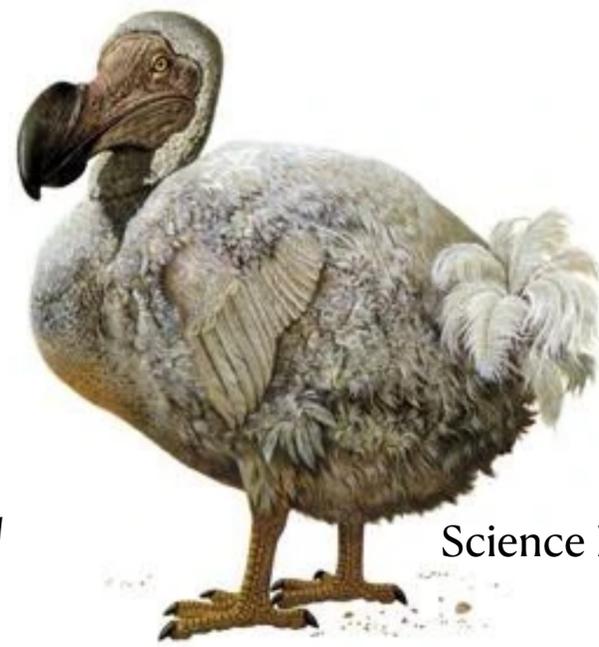
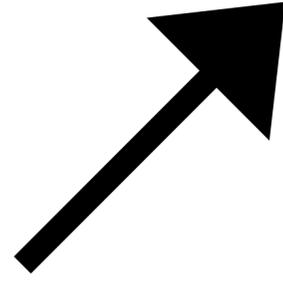


West Antarctica
ice sheet
disintegration

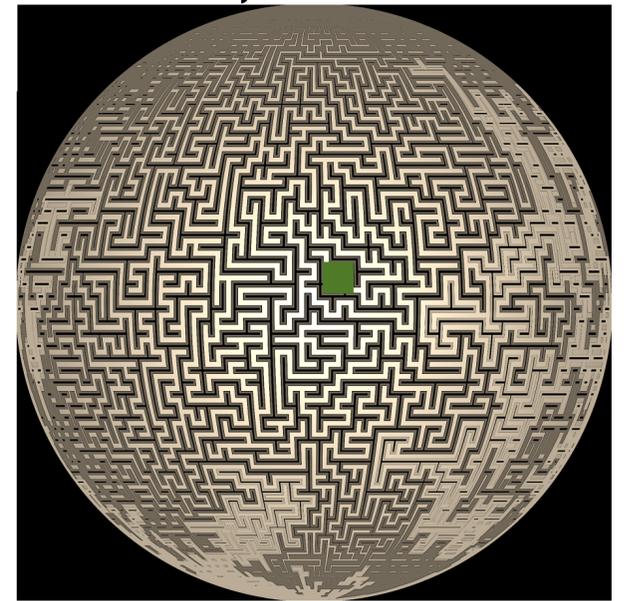


Greenland
ice sheet
disintegration

What future are you working towards?



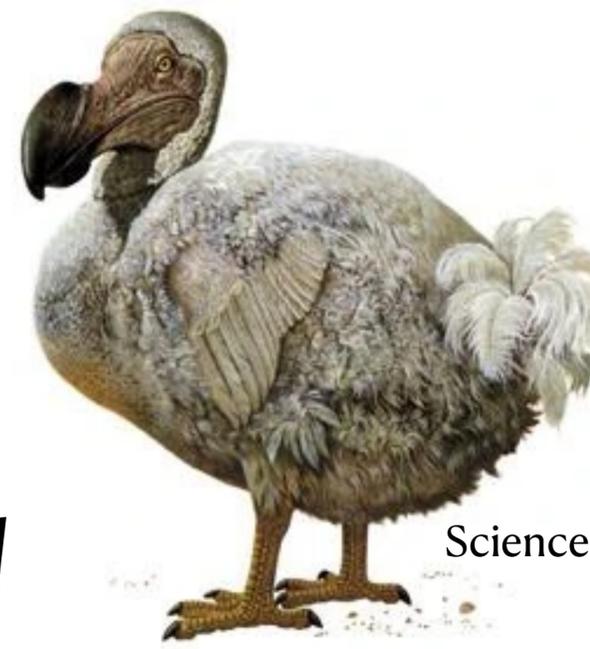
Science Photo Library



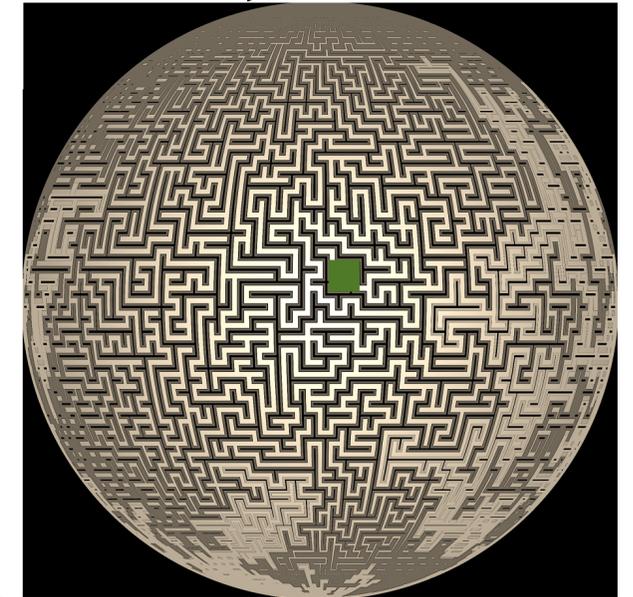
Trantor



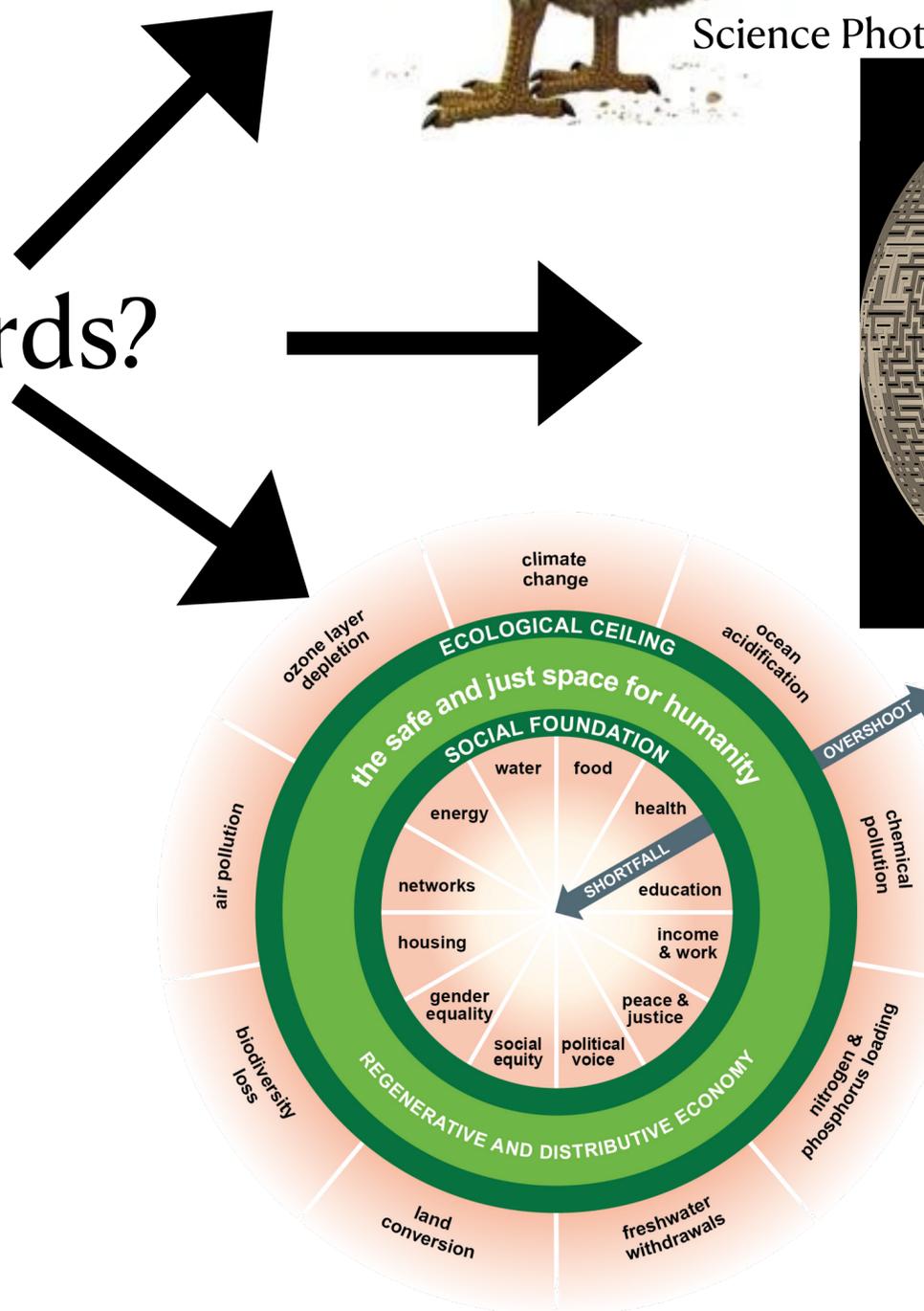
What future are you working towards?



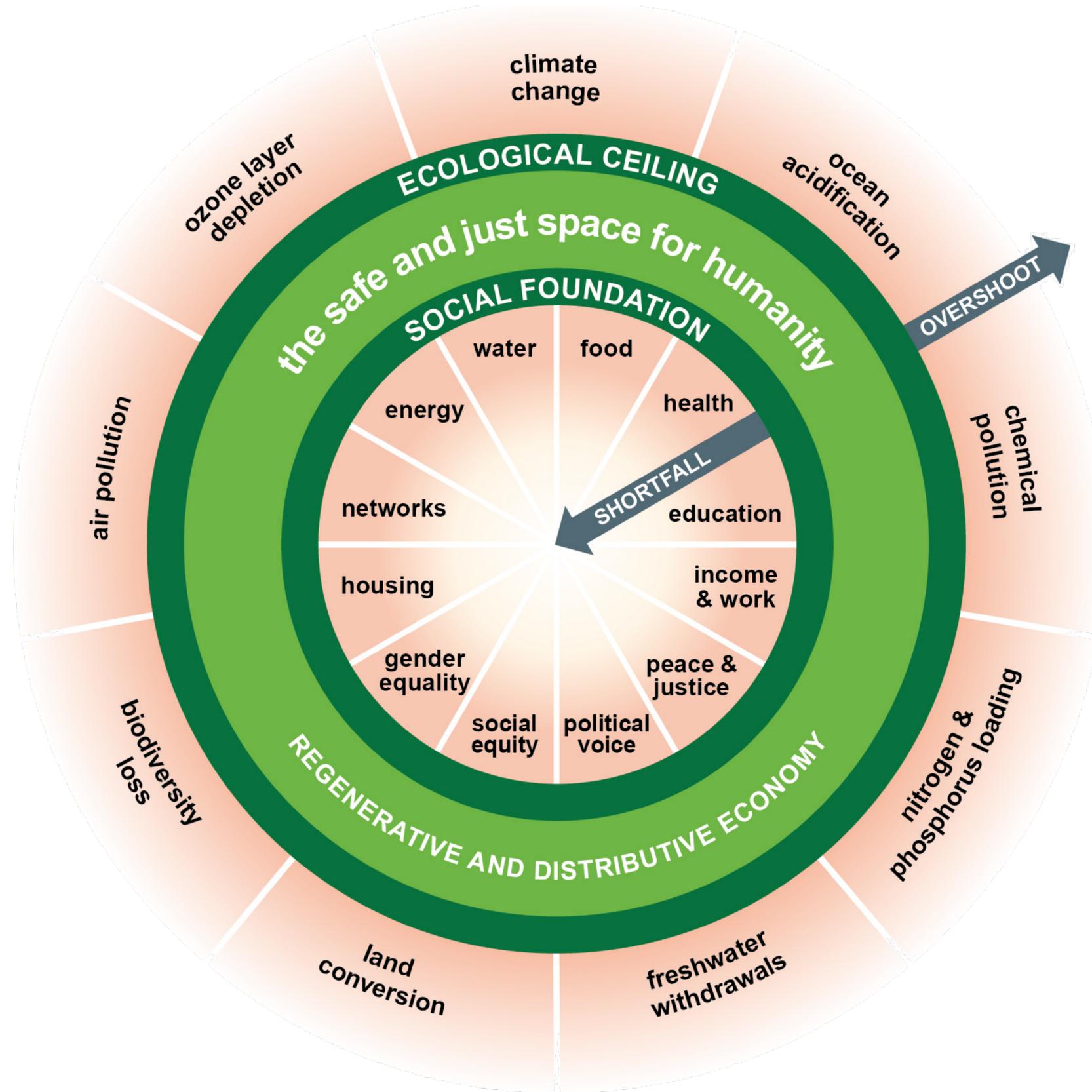
Science Photo Library



Trantor



The donut economy



More than just FAIR, you have to CARE



Language Matters

(Or is that Community matters?)



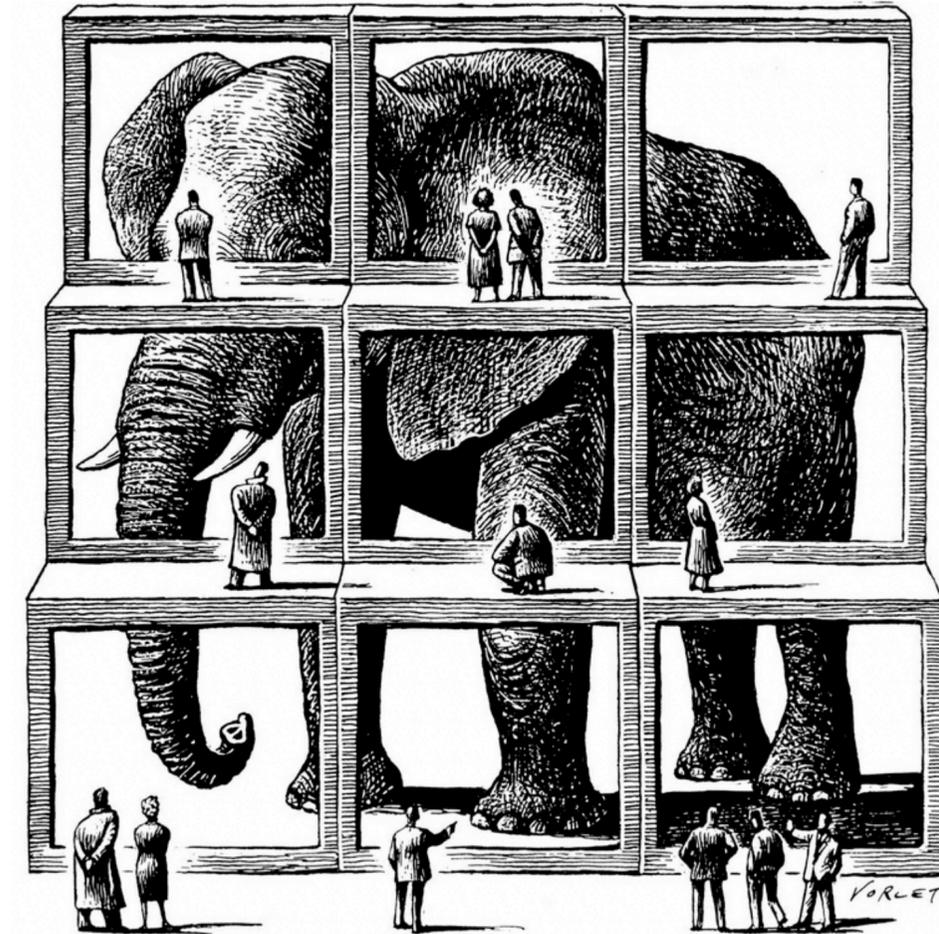
Content without context is useless!



Without context, a piece of information is just a dot. It floats in your brain with a lot of other dots and doesn't mean a damn thing. Knowledge is information-in-context ... connecting the dots.

- Michael Ventura

By ziliun.com - <https://teacherhead.com/2017/05/12/context-is-king-shortblog/>, CC BY-SA 4.0, <https://commons.wikimedia.org/w/index.php?curid=64372250>



by elizaveta anatskaya

There are no silver bullets!



In Summary

