



Nature-Based Solutions: Klima- und Biodiversitätsschutz zusammendenken

Mit Vegetation und Böden die kleinen Wasserkreisläufe stärken und das Klima kühlen *

* und dabei die Biodiversität fördern (und noch vieles mehr)



Sommertrockenheit

erhöhte Temperaturen

trockene Böden

km³

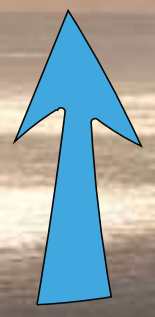
60.000

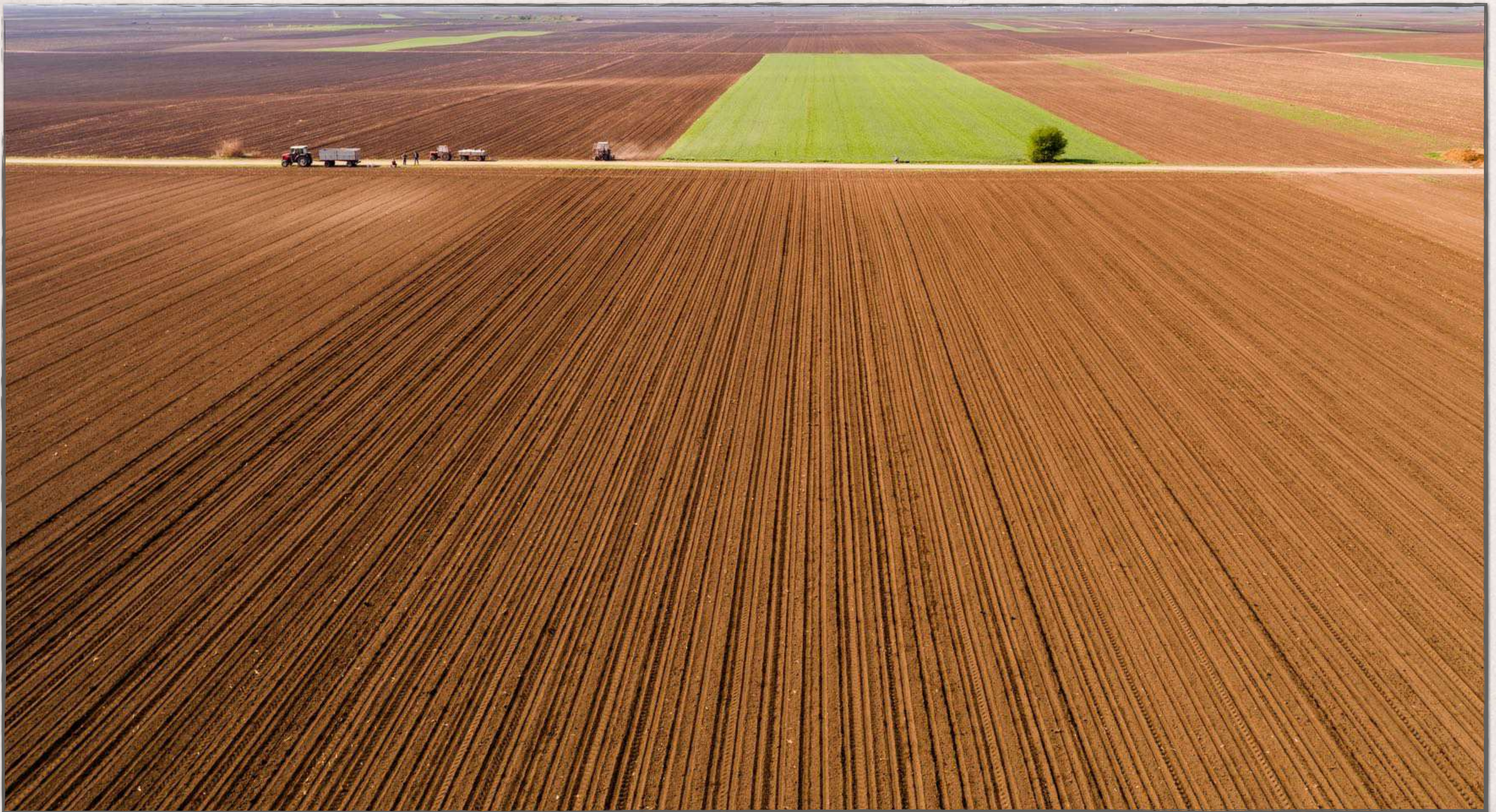
+

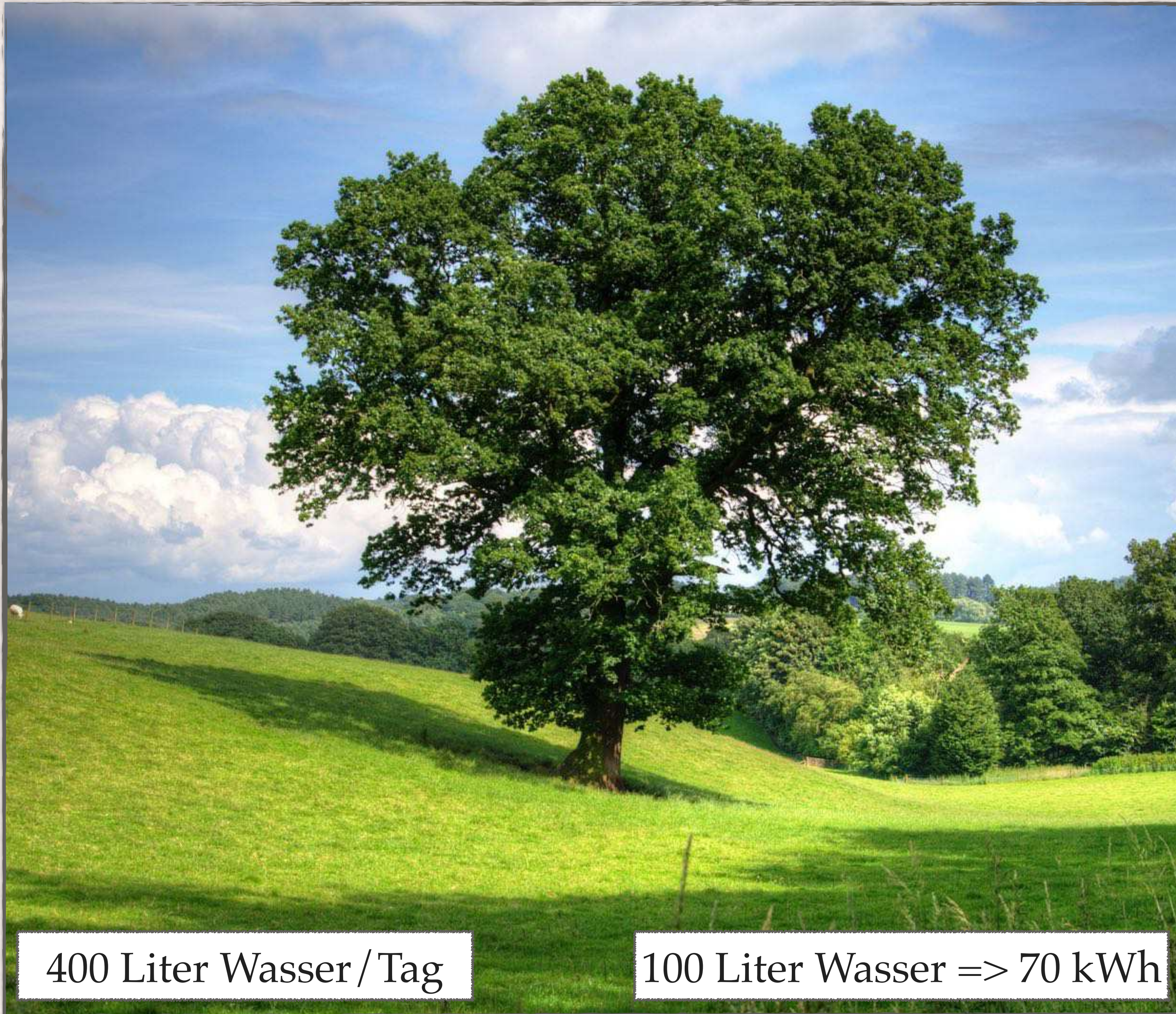
60.000

=

120.000







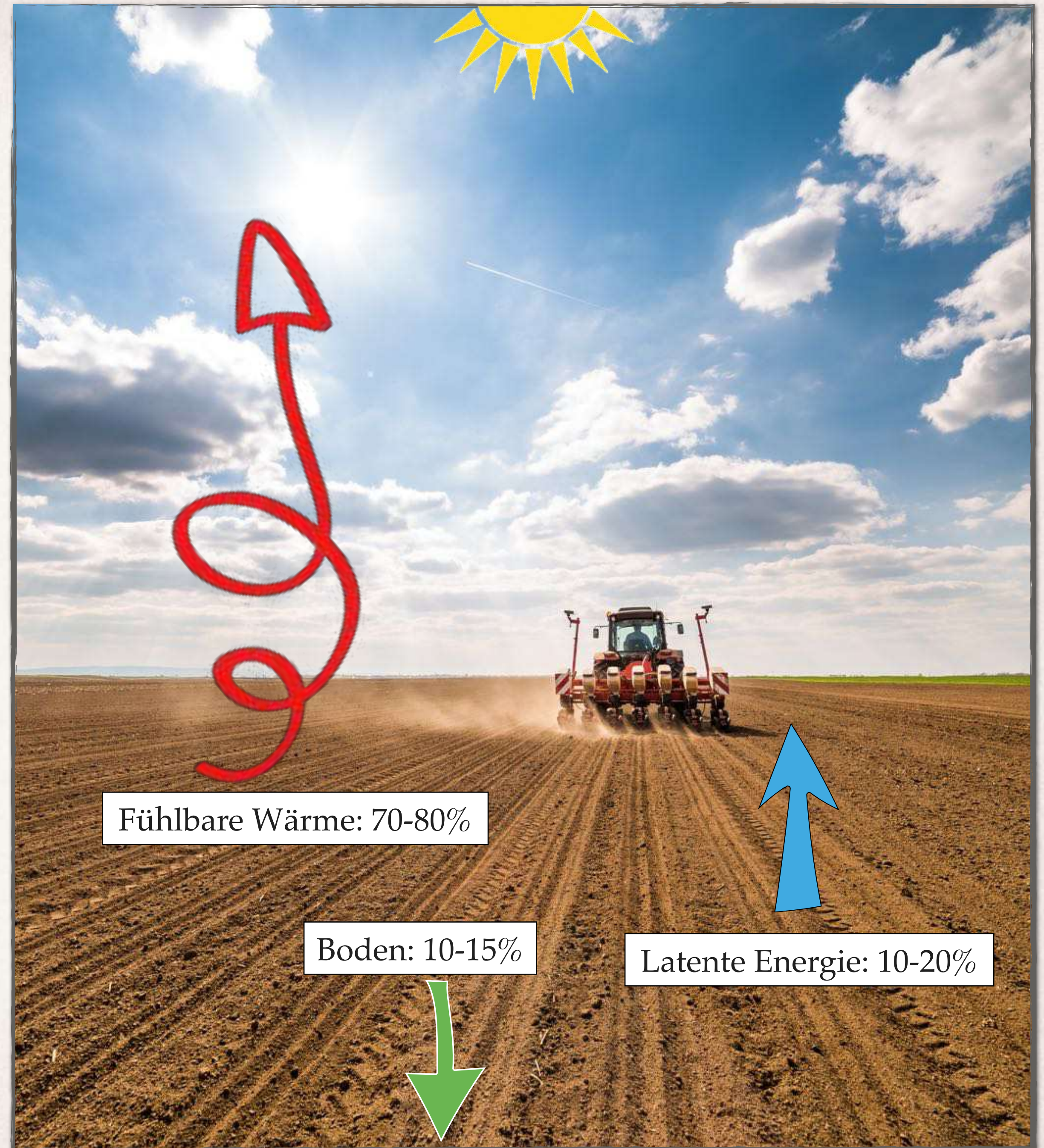
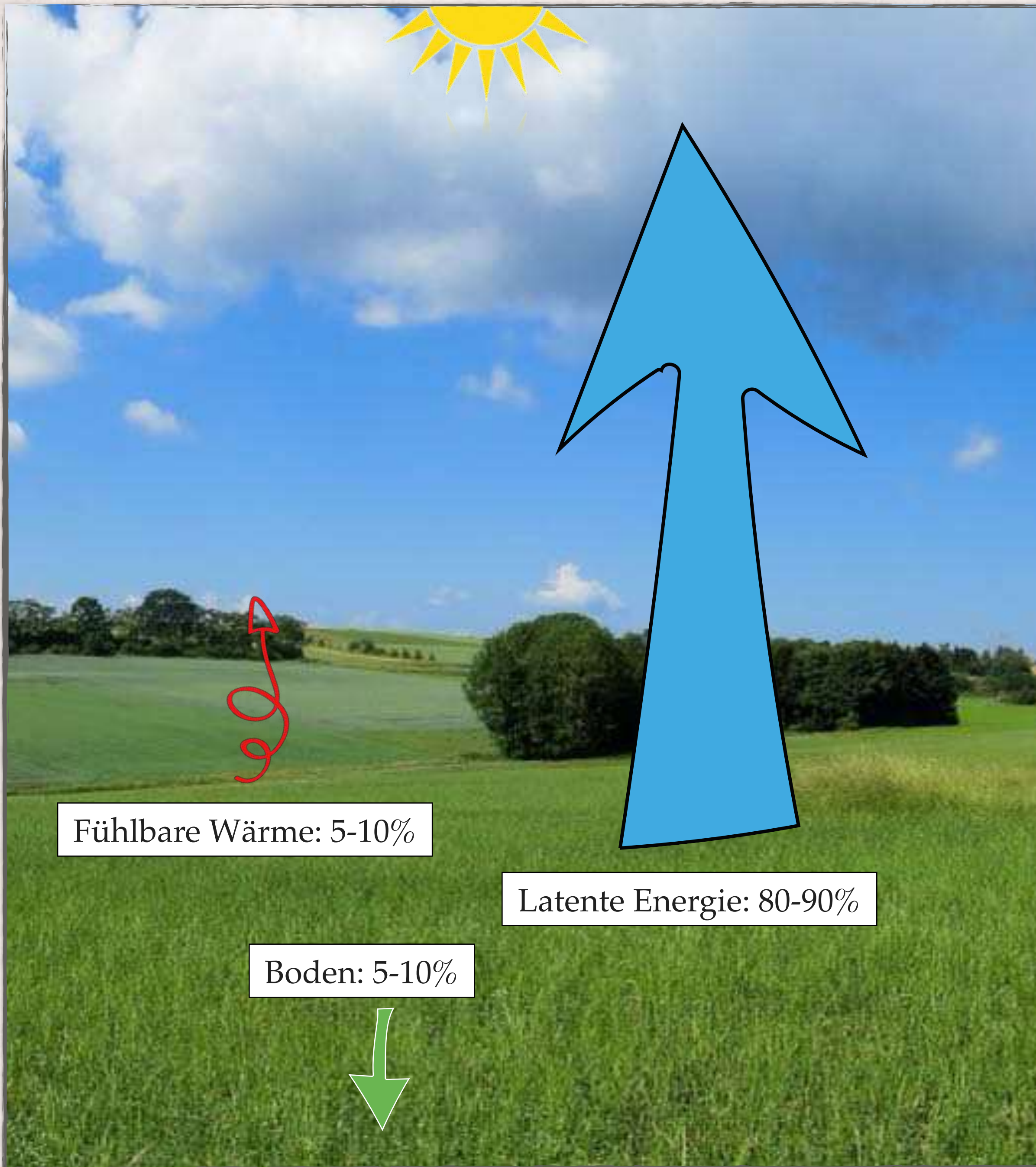
400 Liter Wasser / Tag

100 Liter Wasser => 70 kWh



5 Klimaanlage à 24h

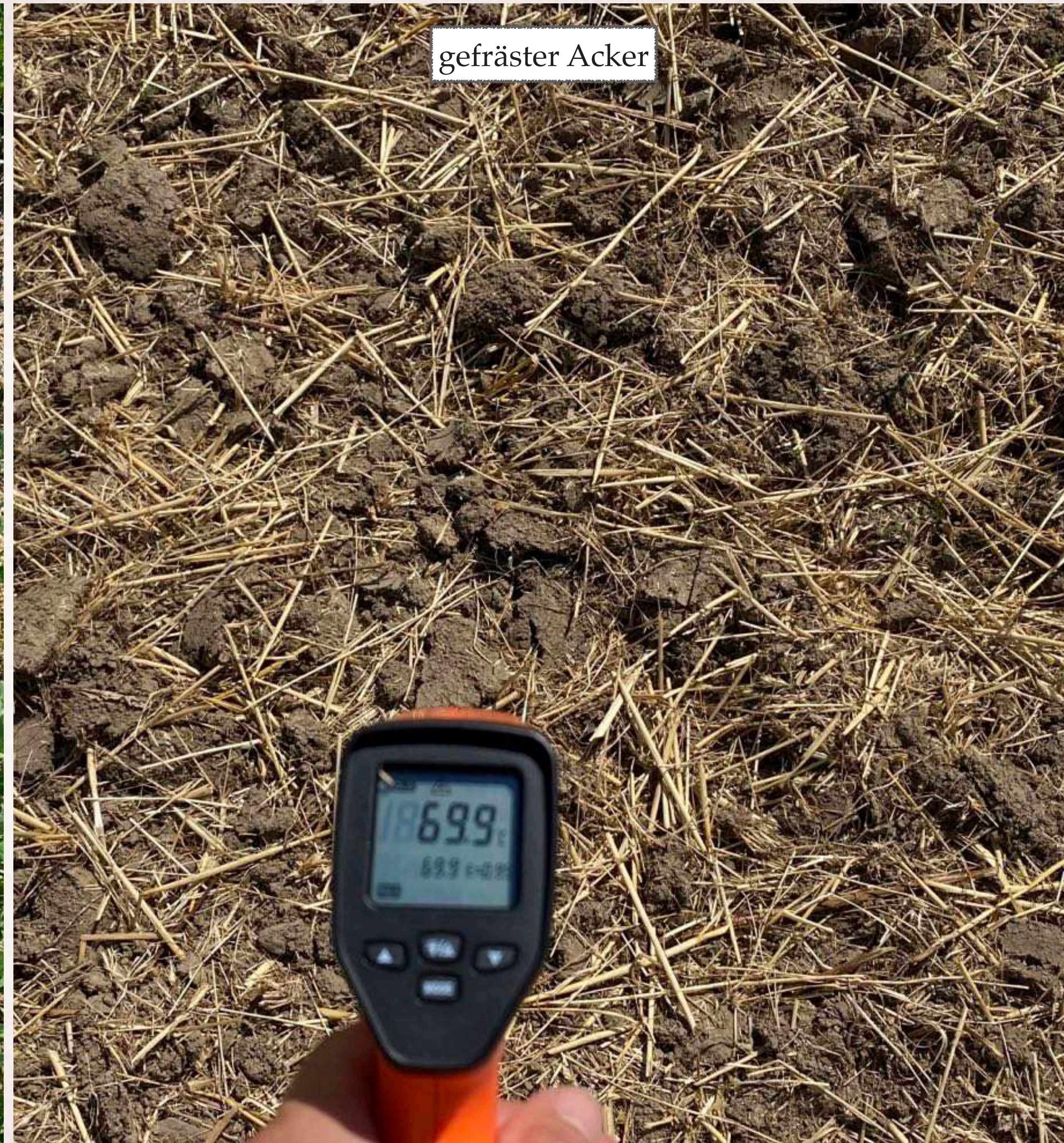


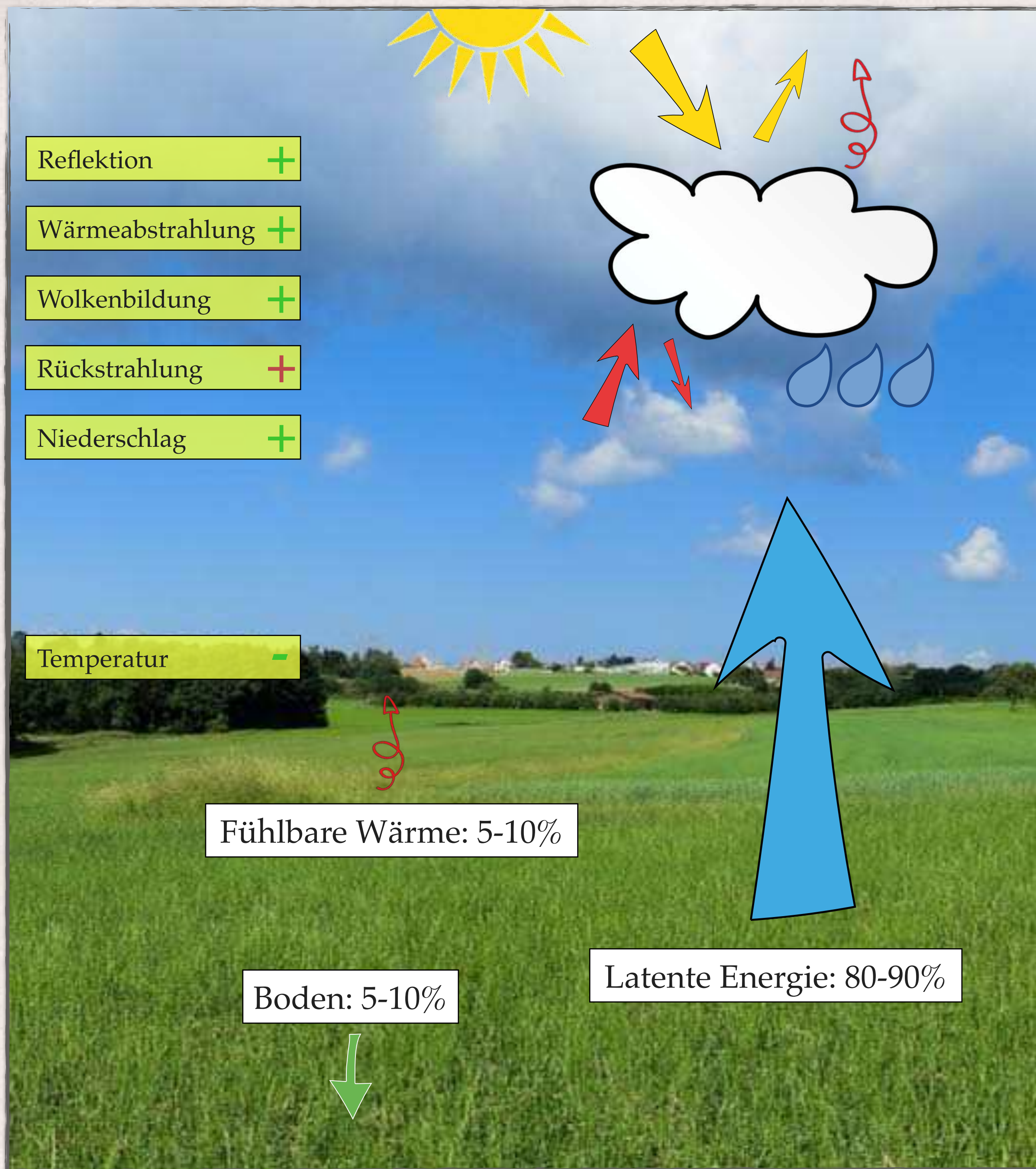


Klee gras



gefräster Acker





Vegetationsindex (NDVI), 8.8.2022

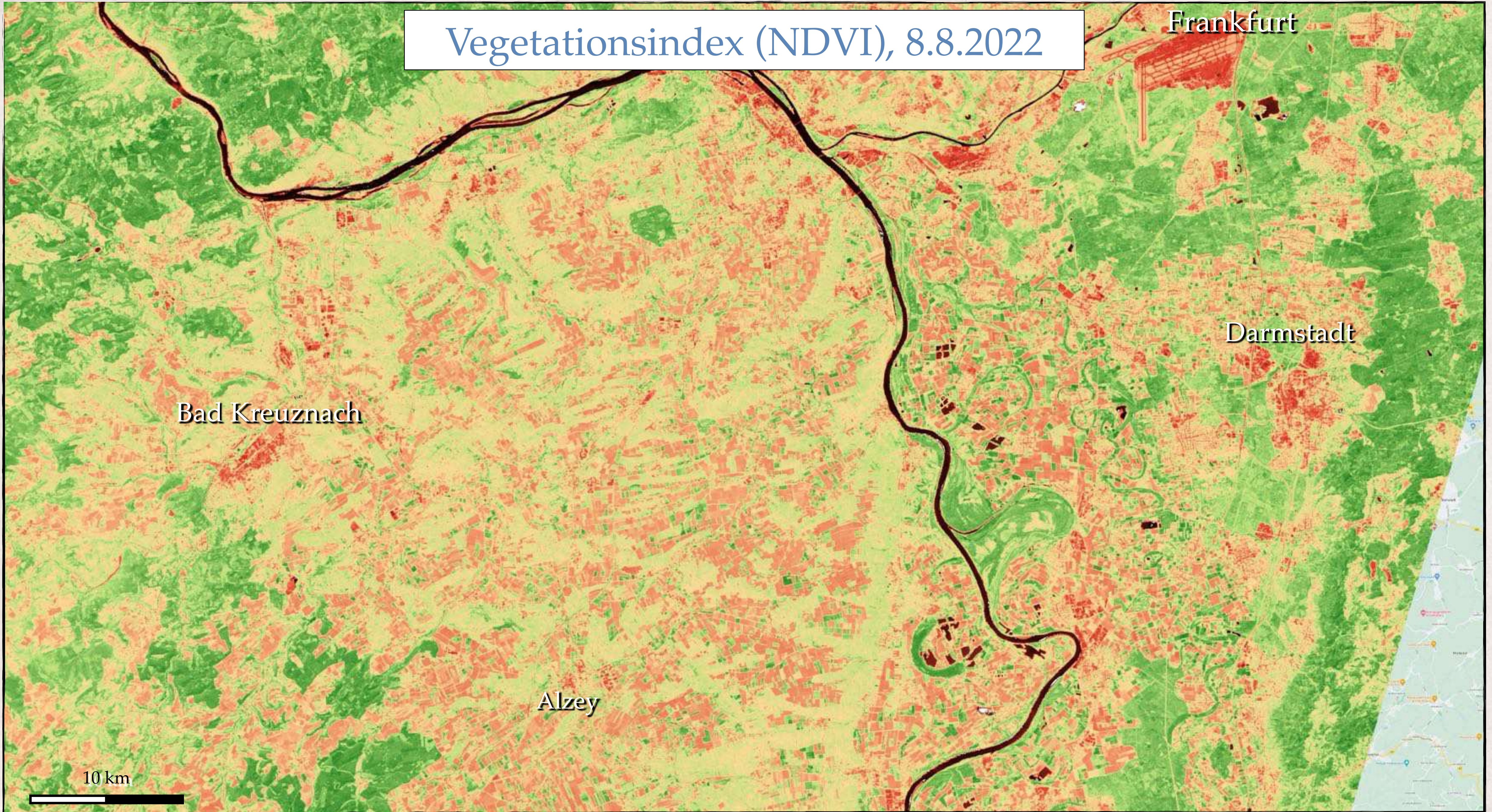
Frankfurt

Darmstadt

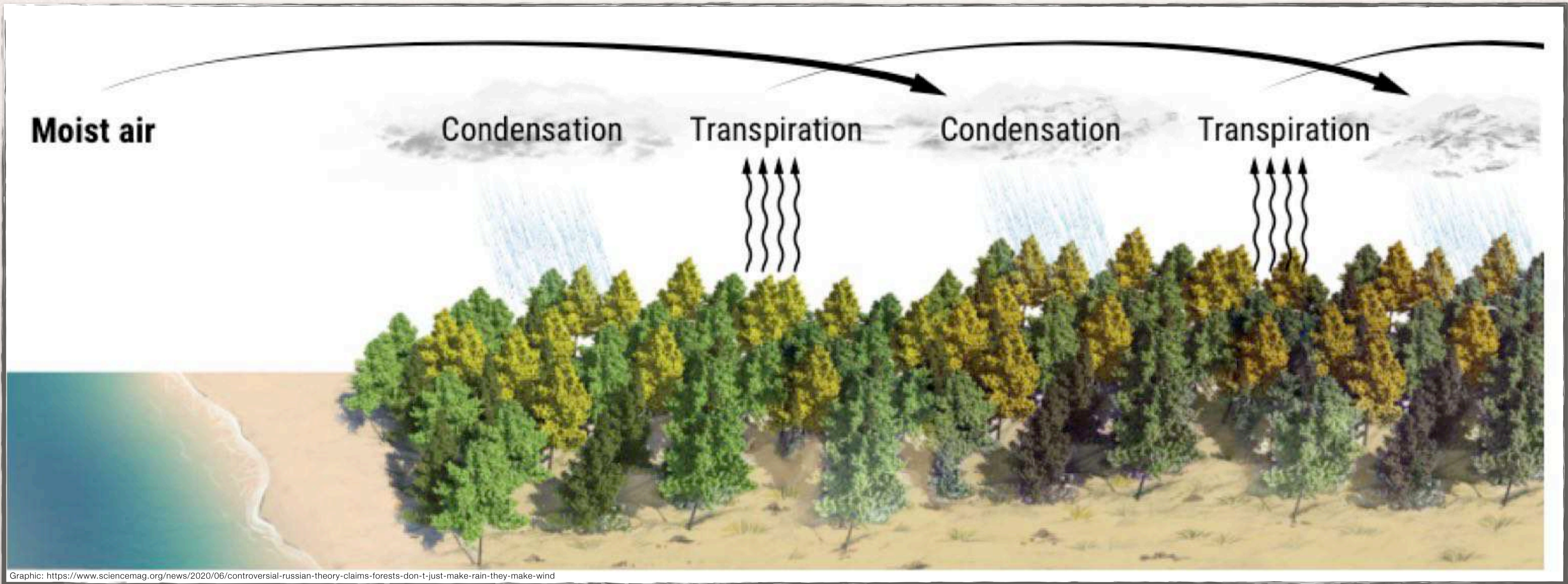
Bad Kreuznach

Alzey

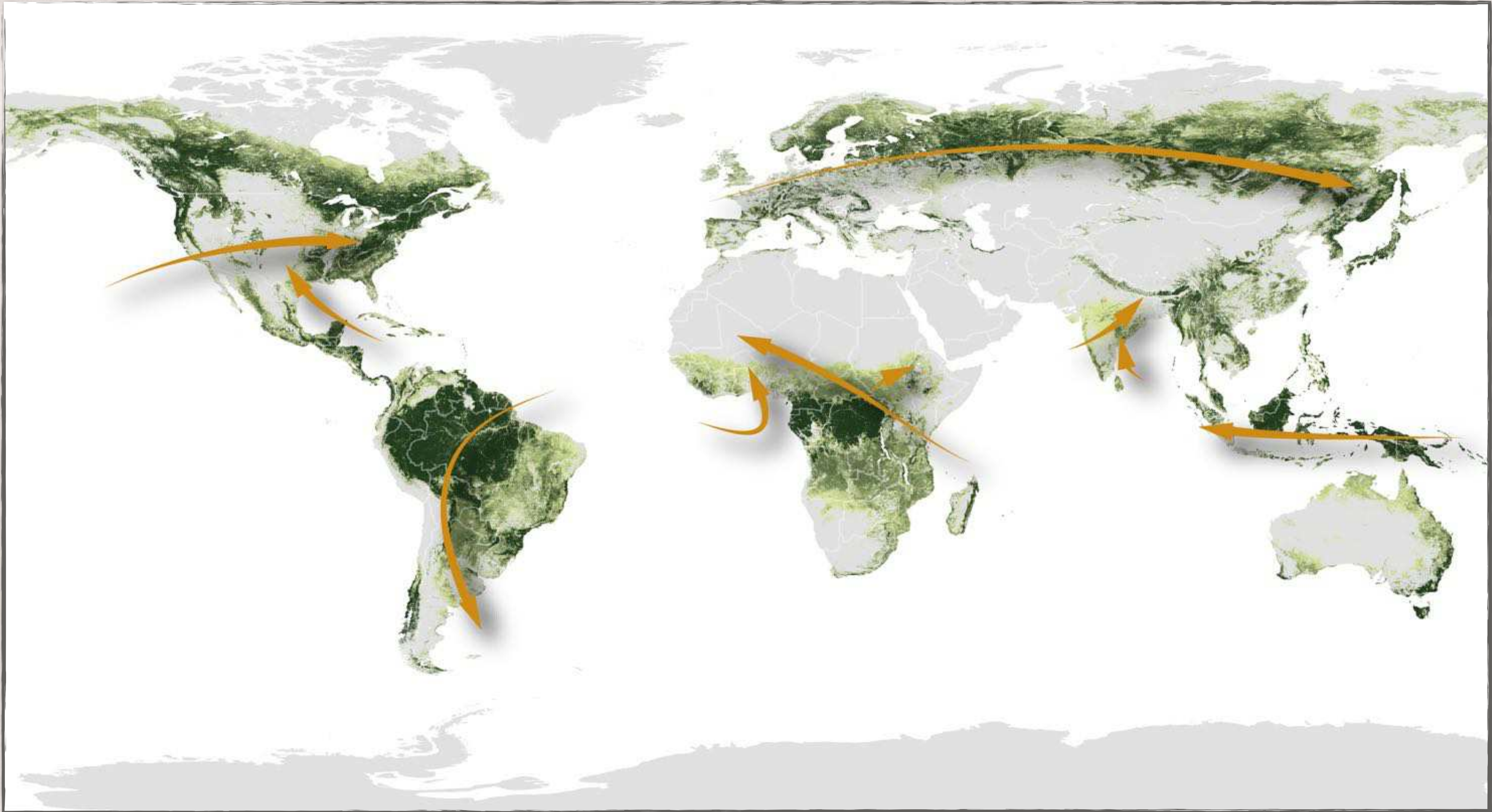
10 km



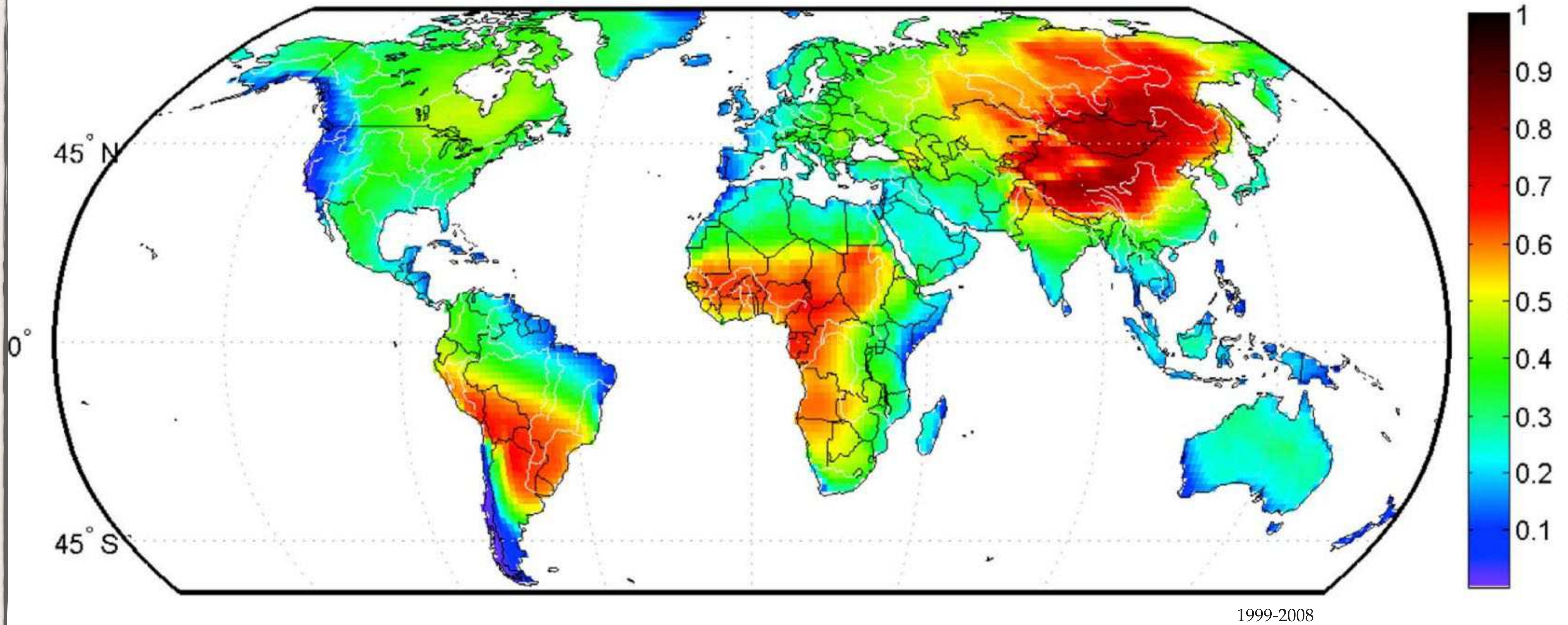




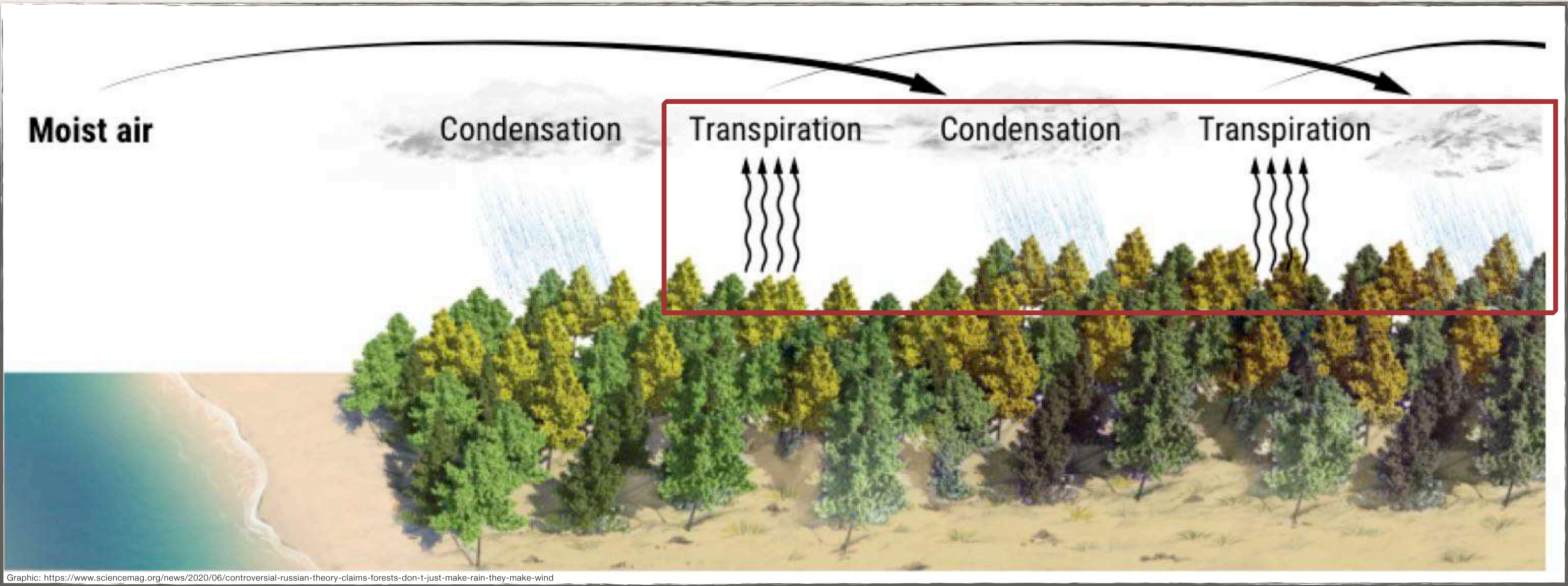
Graphic: <https://www.sciencemag.org/news/2020/06/controversial-russian-theory-claims-forests-don-t-just-make-rain-they-make-wind>



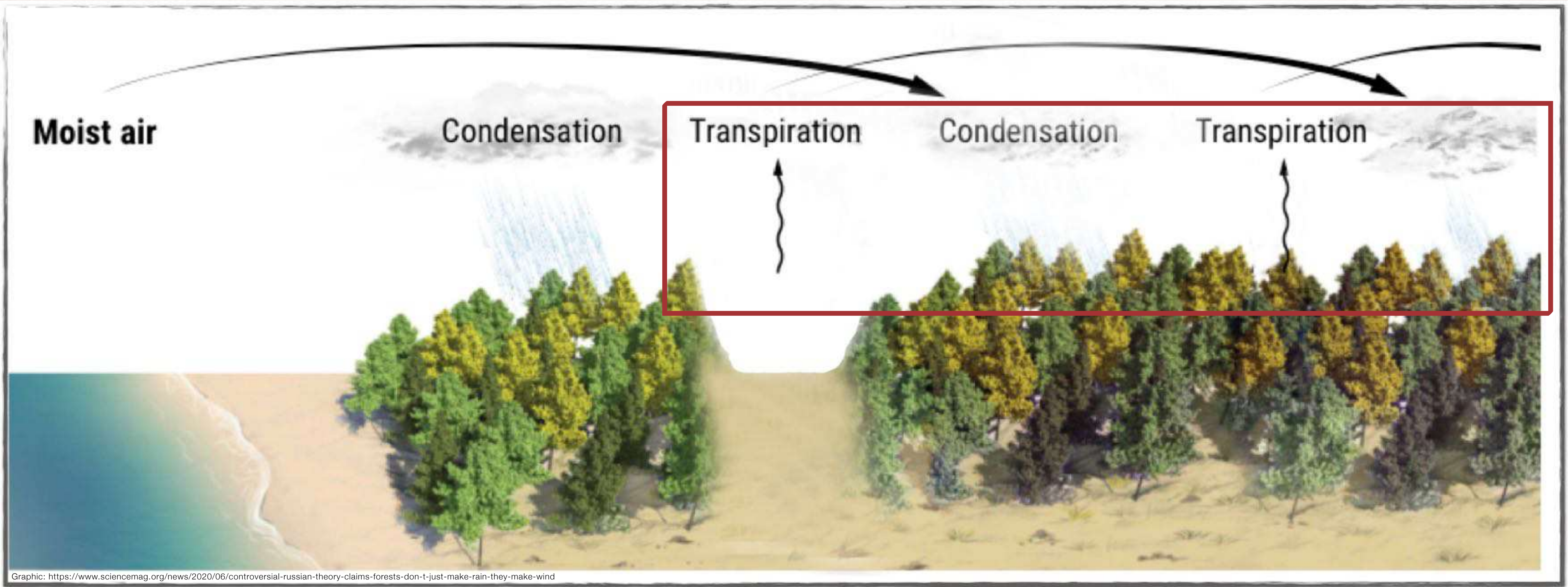
Niederschlags-Recycling-Verhältnis



1999-2008



Graphic: <https://www.sciencemag.org/news/2020/06/controversial-russian-theory-claims-forests-don-t-just-make-rain-they-make-wind>



Graphic: <https://www.sciencemag.org/news/2020/06/controversial-russian-theory-claims-forests-don-t-just-make-rain-they-make-wind>



Trockenheit in Ostdeutschland:

50% Klimawandel

50% falsche Landnutzungsmaßnahmen

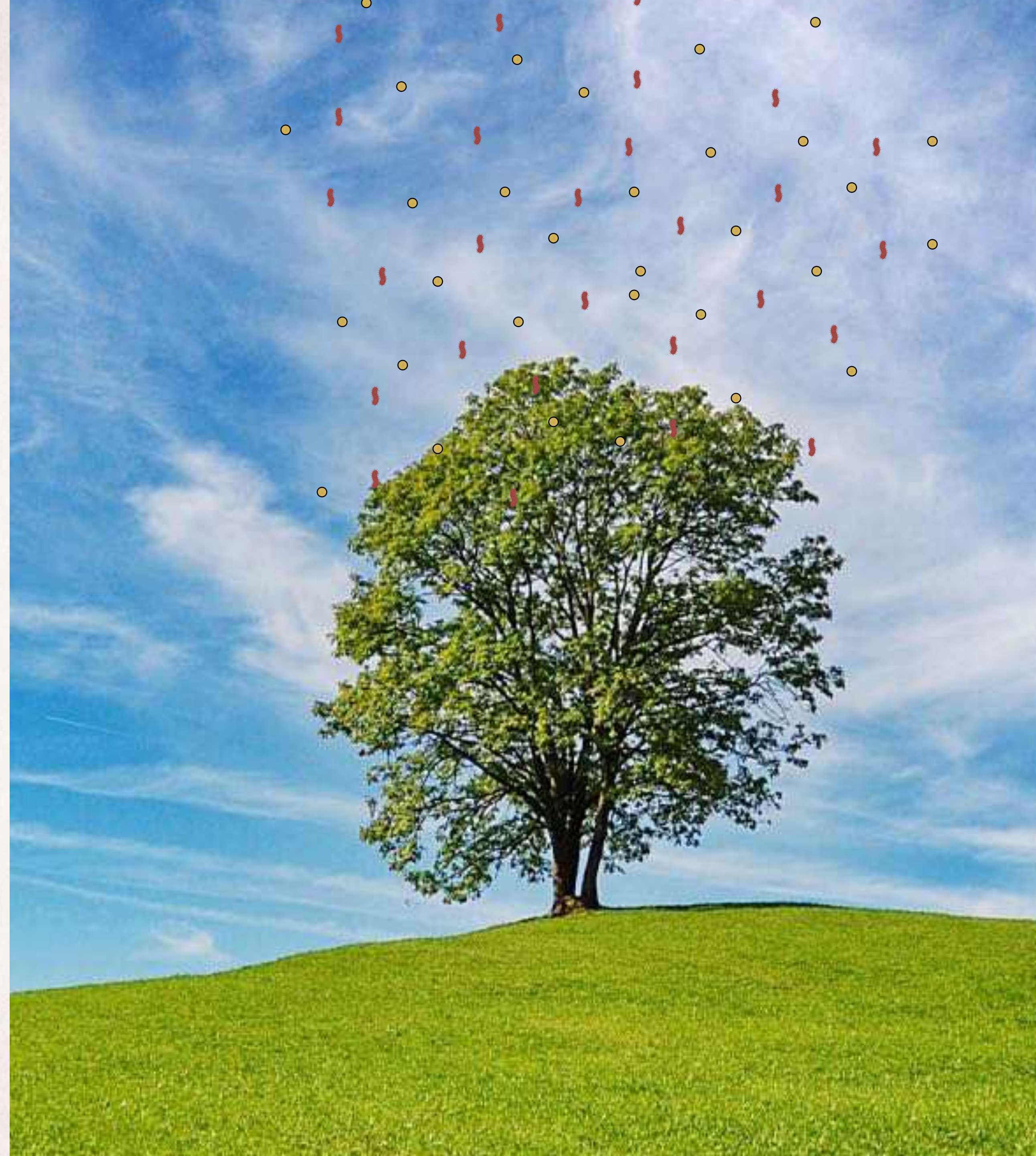
Dietrich Borchardt, UFZ, Dürre-Monitor

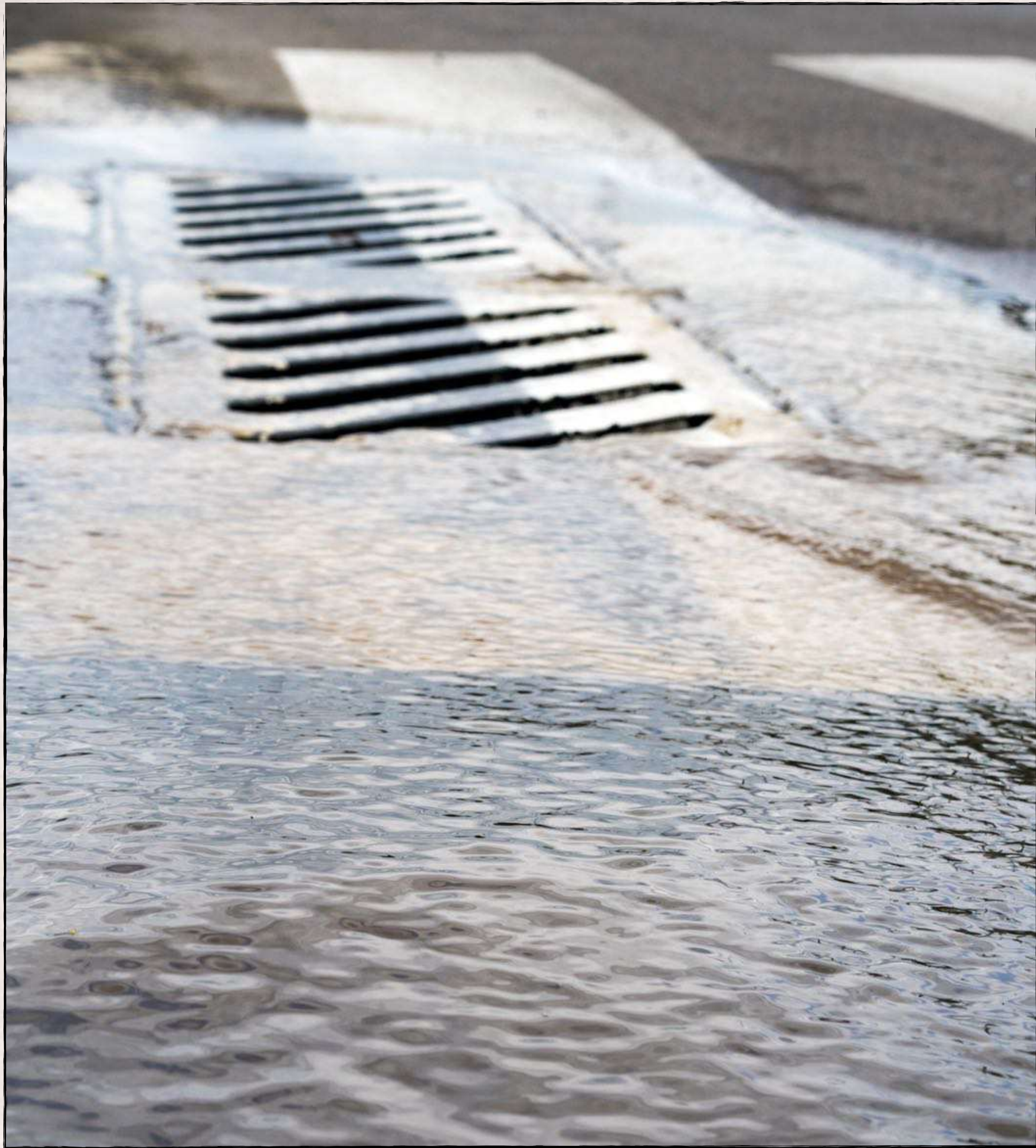
VOC* & Mikroorganismen

* flüchtige organische Verbindungen

Bigg, E.K., Soubeyrand, S., Morris, C.E., 2015. Persistent after-effects of heavy rain on concentrations of ice nuclei and rainfall suggest a biological cause. Atmospheric Chemistry and Physics

Joung, Y.S., Ge, Z., Buie, C.R., 2017. Bioaerosol generation by raindrops on soil. Nature Communications





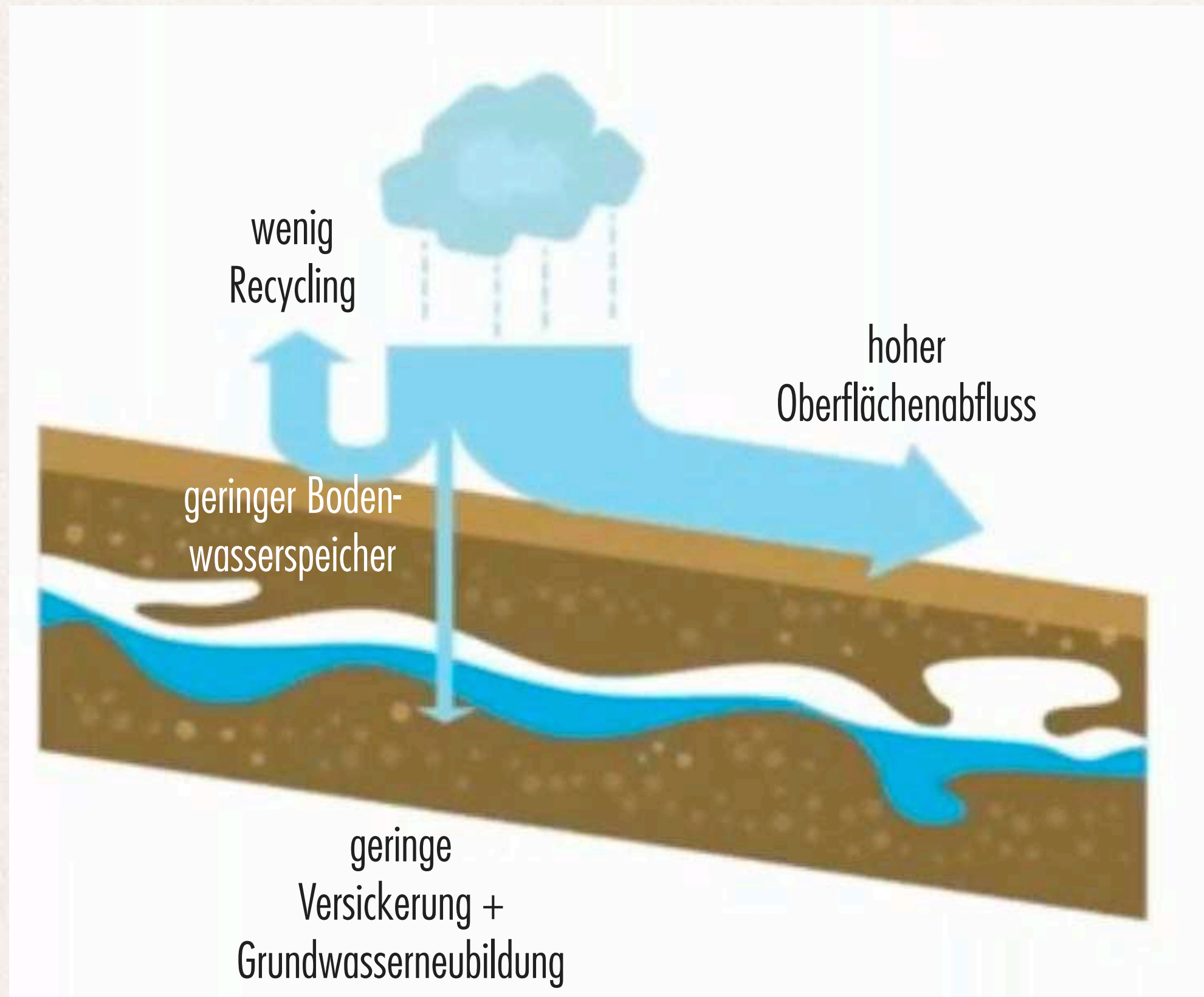
Klimawandel

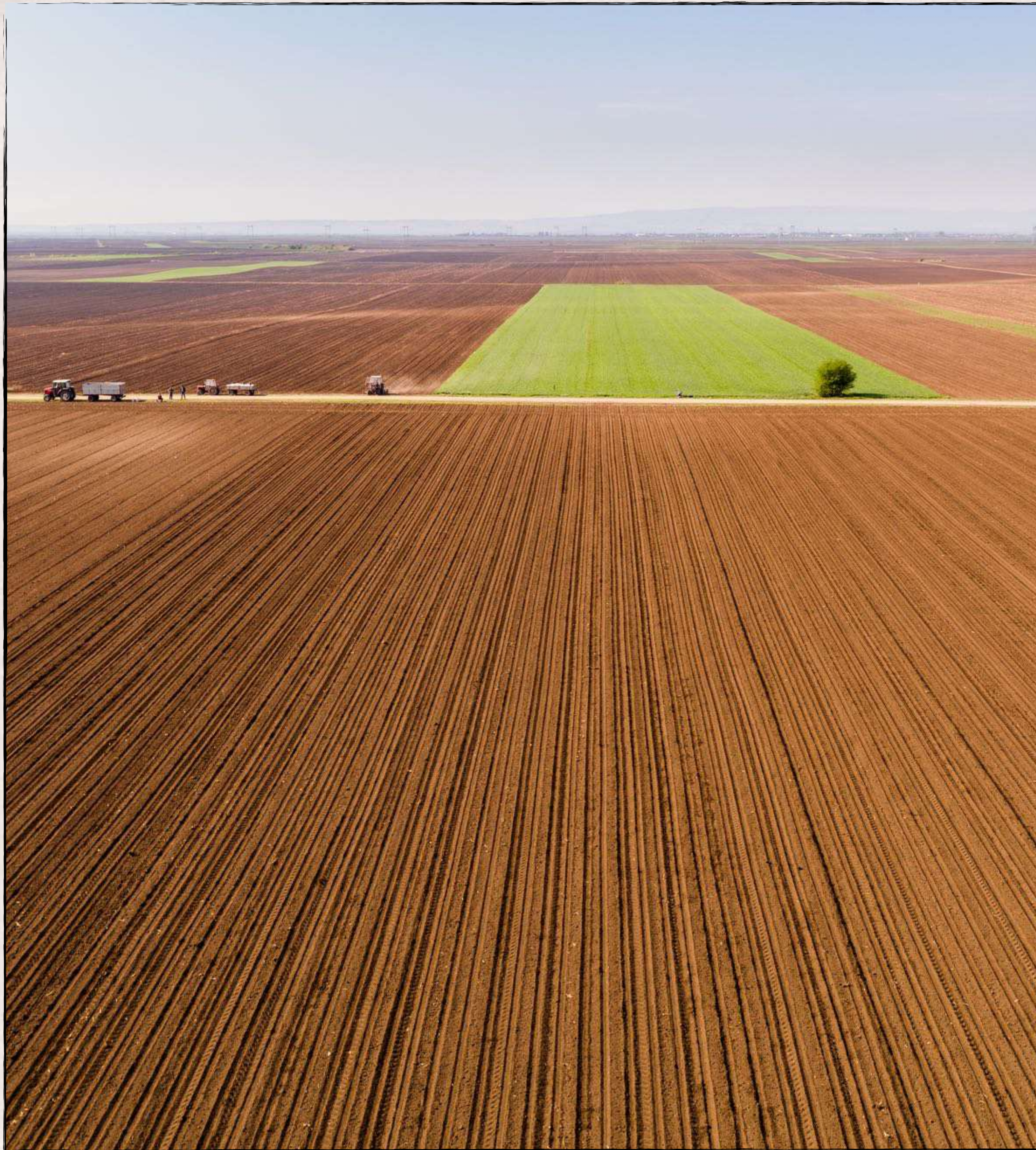
Bundesamt warnt vor Trinkwasserknappheit in Deutschland

Sinkendes Grundwasser und der Verbrauch in der Landwirtschaft könnten mittelfristig die Versorgung mit Trinkwasser gefährden: Laut Bundesamt für Bevölkerungsschutz muss schon jetzt vorgesorgt werden.

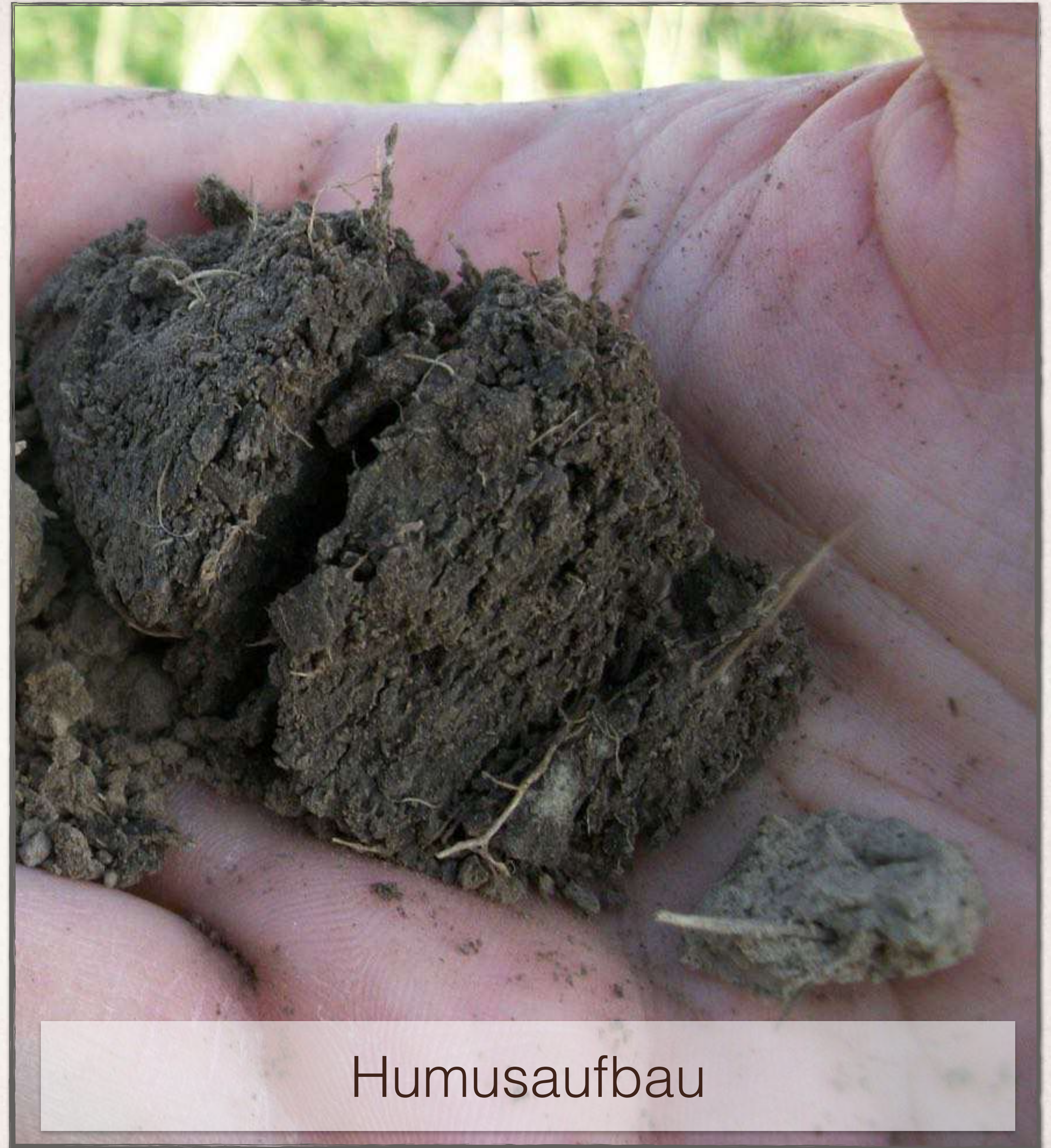
18.05.2021, 03.40 Uhr

Altes vs neues Wasserparadigma





Wir müssen mehr Wasser verdunsten,
damit es feucht bleibt.



Humusaufbau

7250 TTV Warrior



500 PS

LIMITED EDITION.
UNLIMITED PERFORMANCE.

Spüren Sie die Macht. Übernehmen Sie das Kommando.

veränderte Beziehung zu Natur (Technik)



Achslast reduzieren



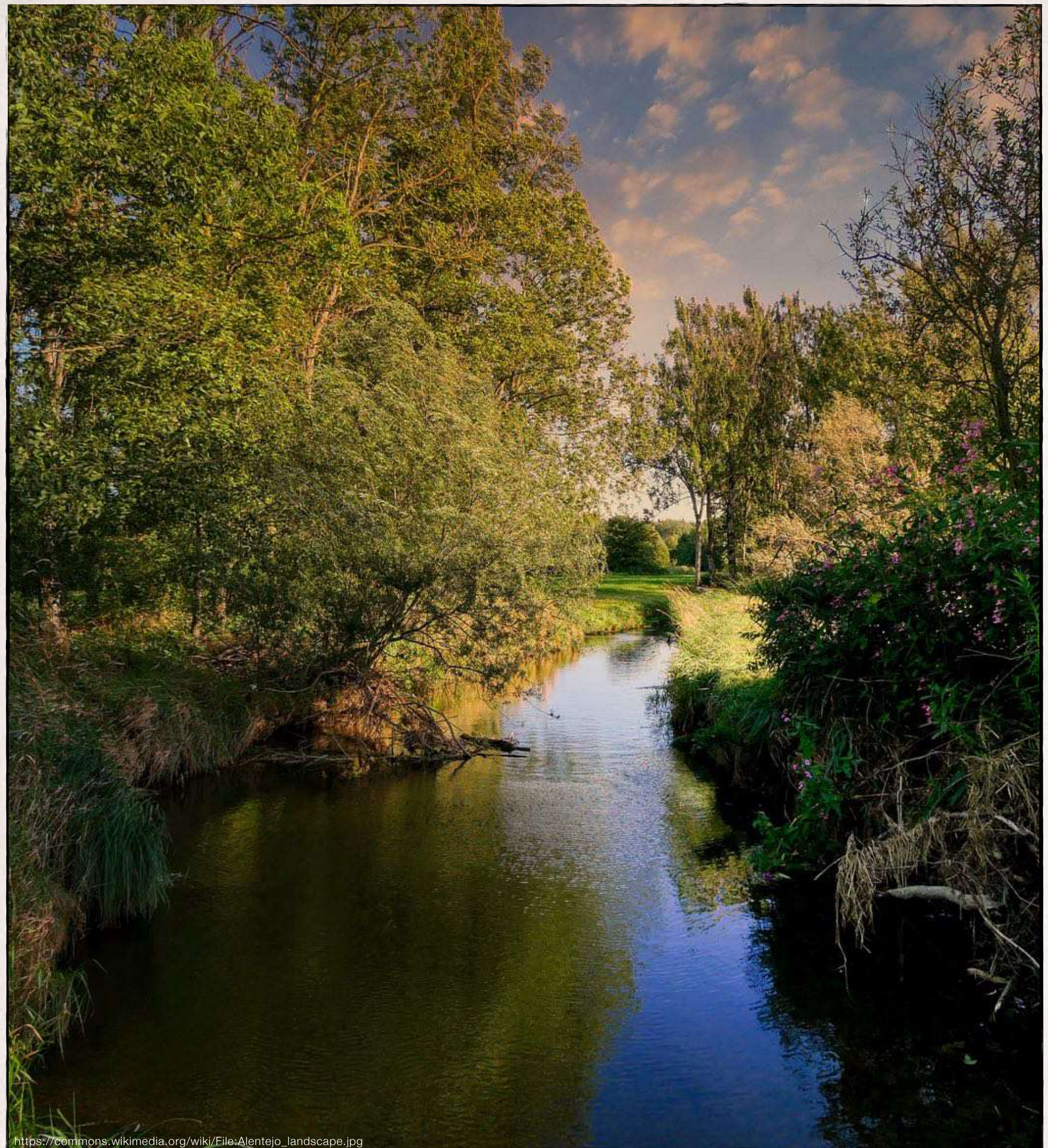
Minimal-Bodenbearbeitung



Untersaaten



Zwischenfrüchte



https://commons.wikimedia.org/wiki/File:Alentejo_landscape.jpg

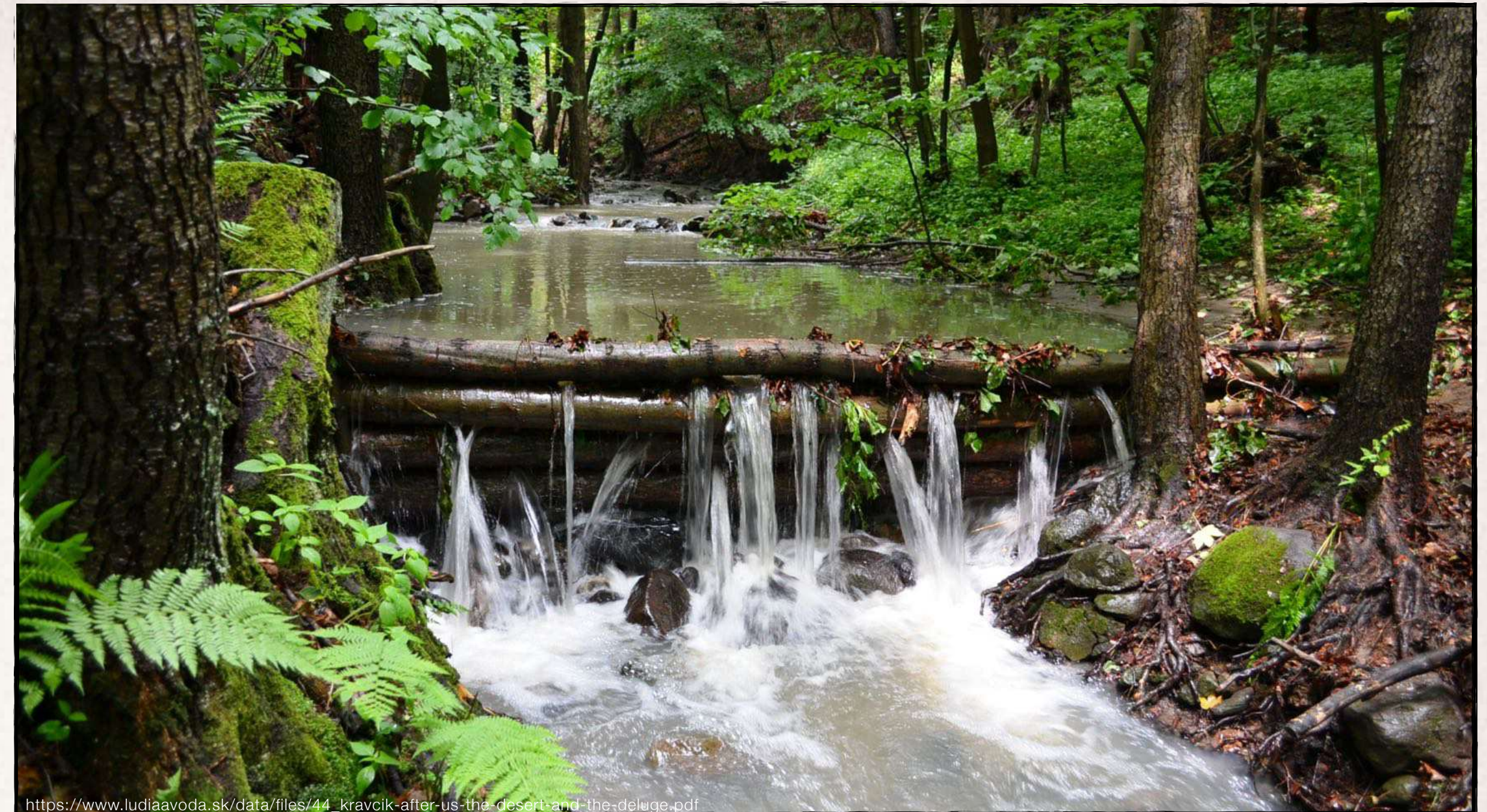


Biberdämme

https://fisheries.warmsprings-nsn.gov/wp-content/uploads/2017/09/IMG_4563.jpg



https://commons.wikimedia.org/wiki/File:Alentejo_landscape.jpg



https://www.ludiaavoda.sk/data/files/44_kravcik-after-us-the-desert-and-the-deluge.pdf

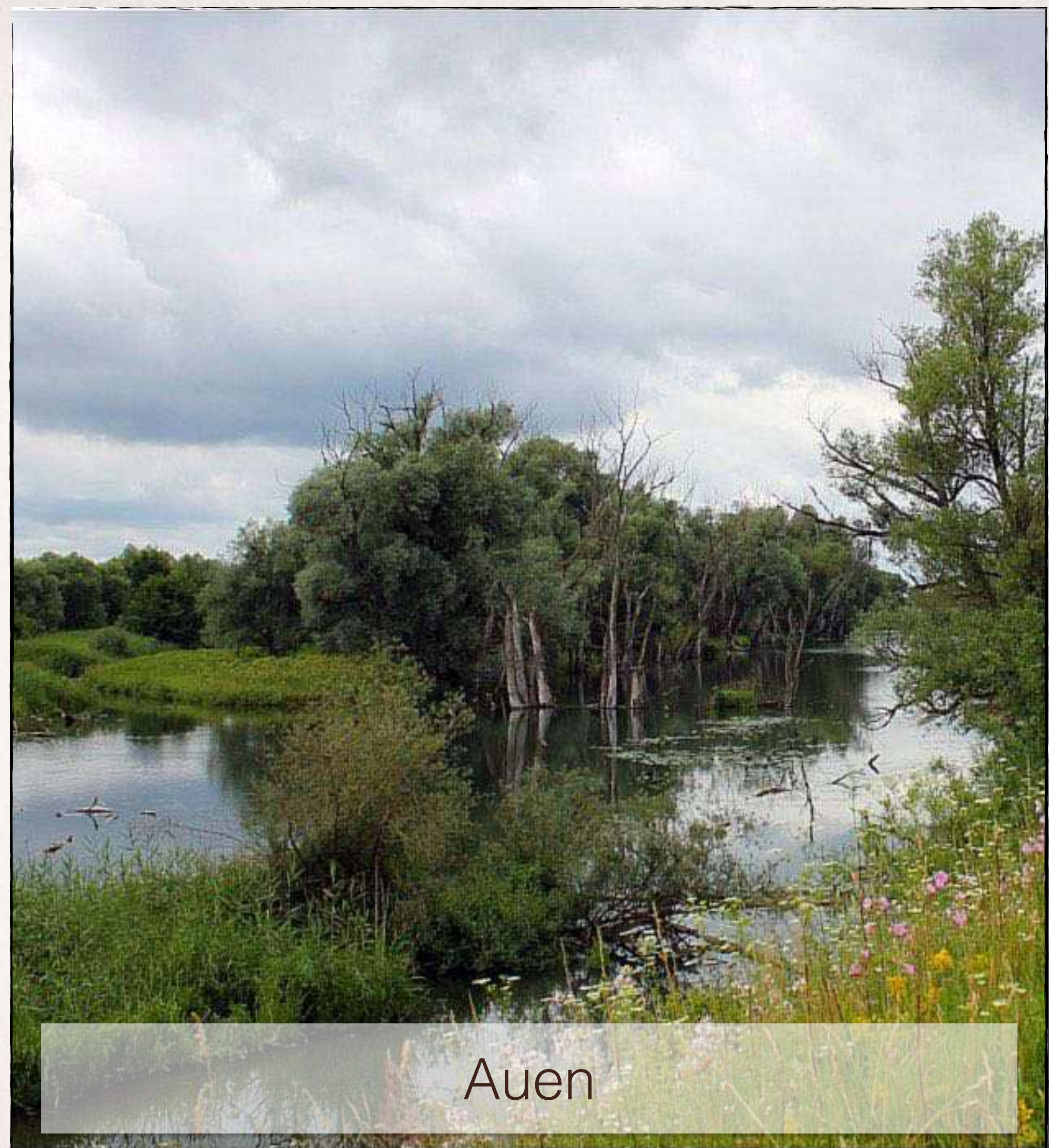


https://www.ludiaavoda.sk/data/files/44_kravcik-after-us-the-desert-and-the-deluge.pdf

Kleine Rückstaubecken



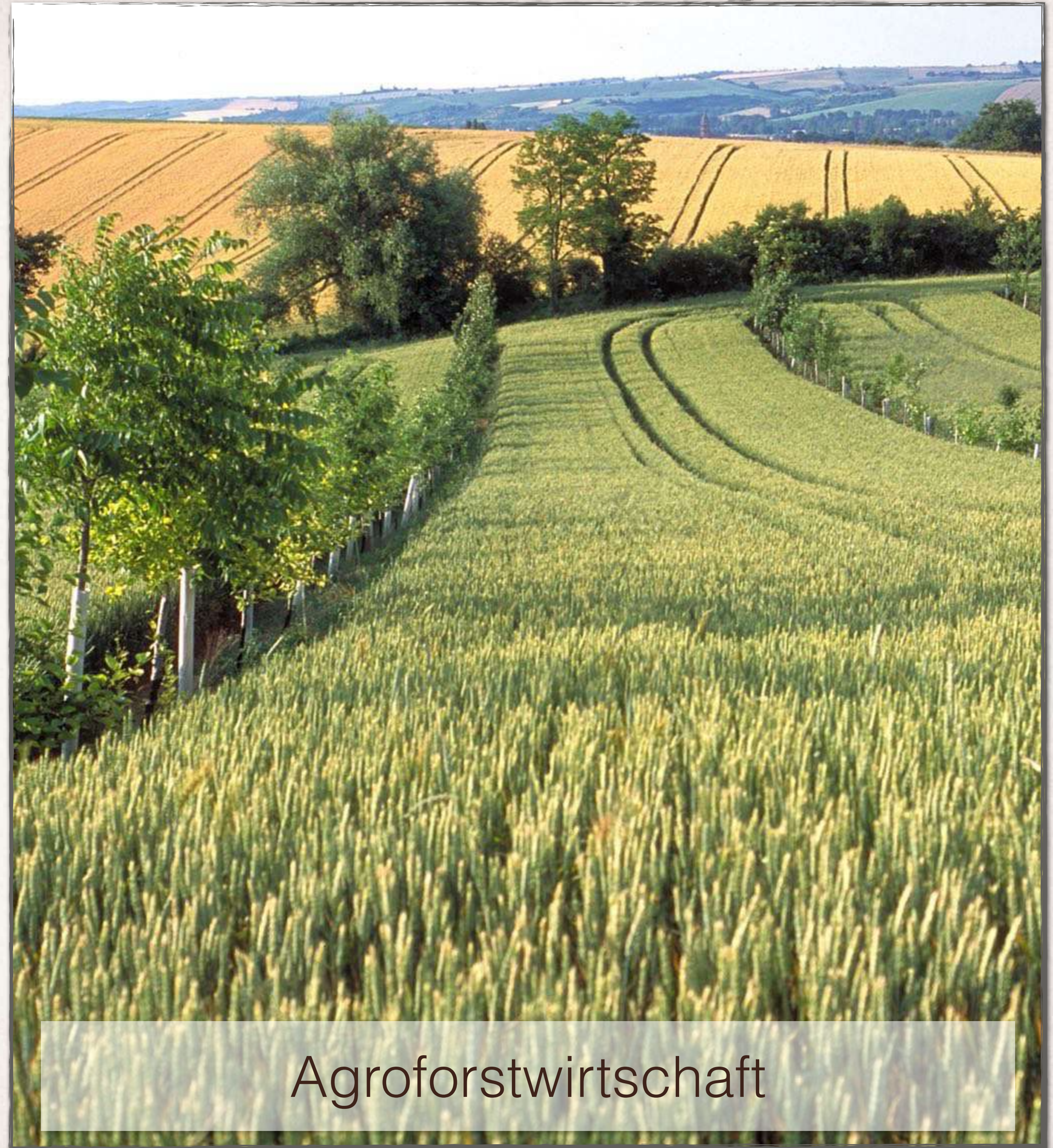
<https://eike-klima-energie.eu/2022/08/30/die-trockenlegung-der-landschaft-und-die-bebauung-machen-die-sommer-heisser-und-erzeugen-hochwasser/?print=print>



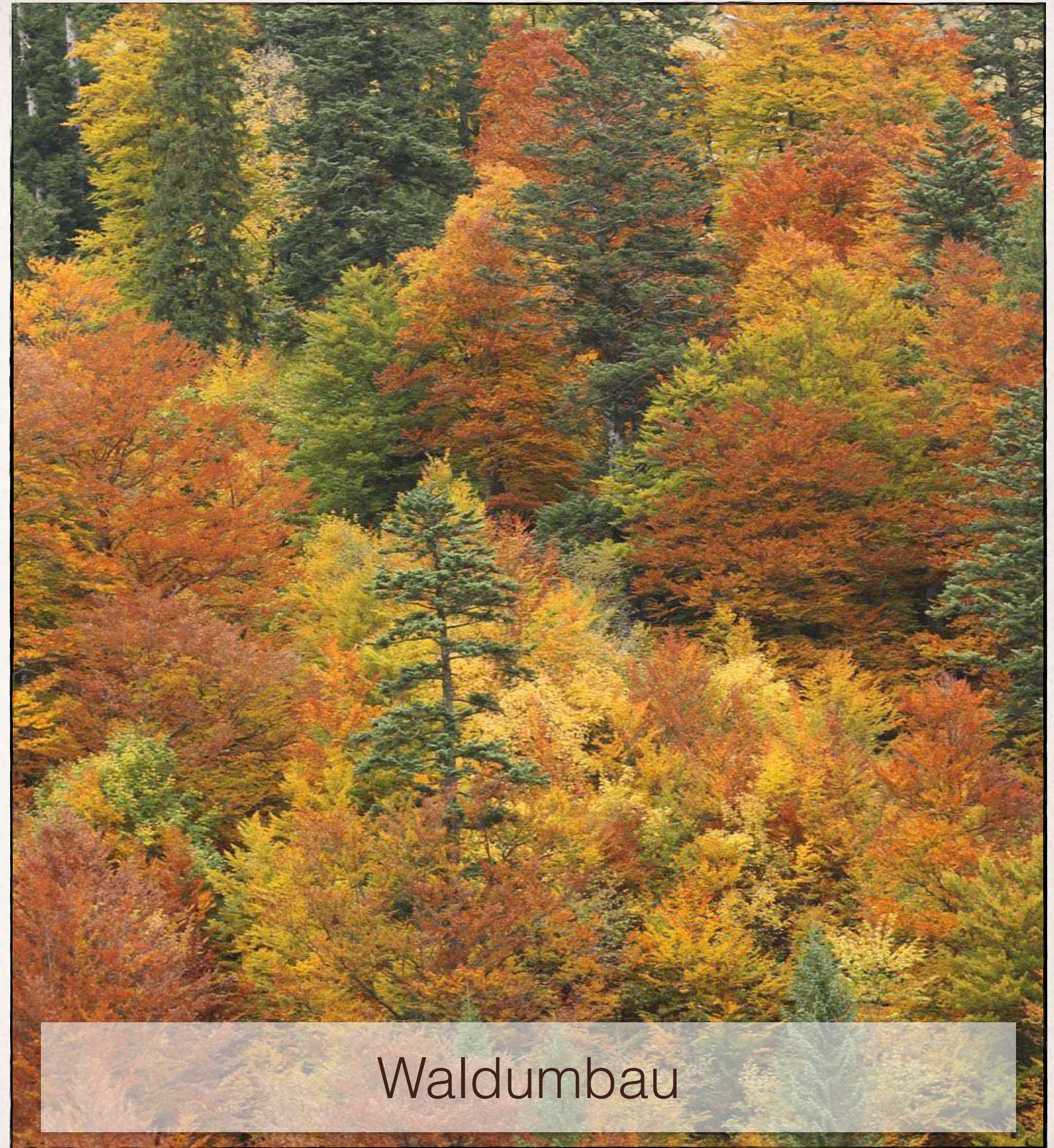
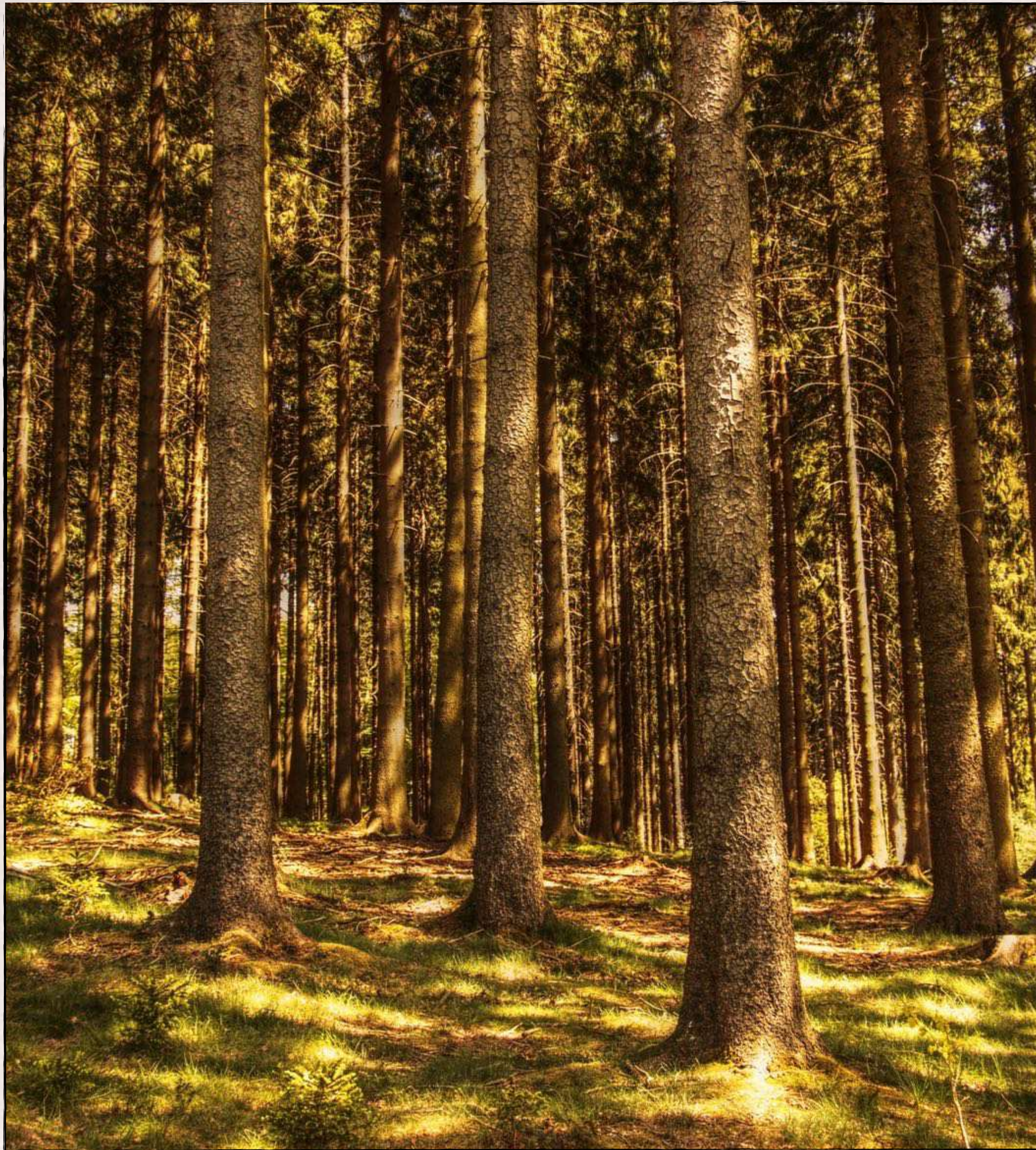
Auen



Integration von Tieren in den Ackerbau



Agroforstwirtschaft



Waldumbau

Slow it, spread it, store it, sink it

Plant it, cover it, keep it

the soil

the water

