

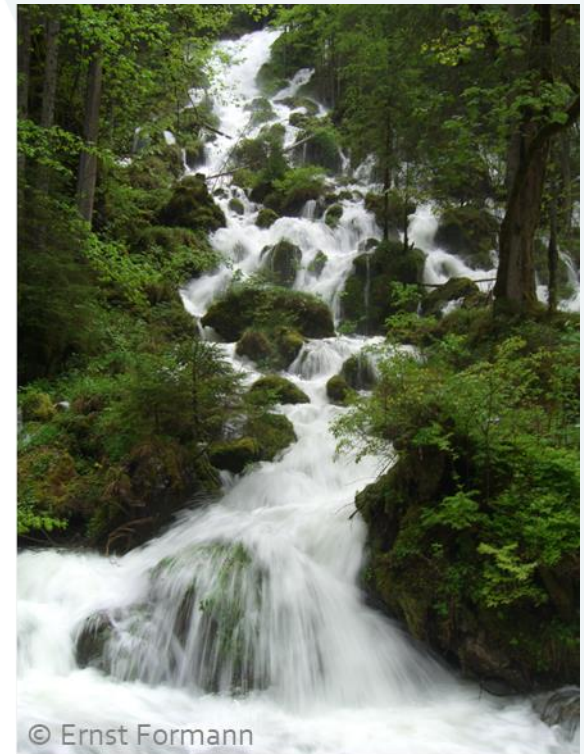
Wasserschatz Österreichs

(„Water treasure of Austria“)

Basic information for sustainable
uses of groundwater

Water assessment in a water rich country

21.09.2021

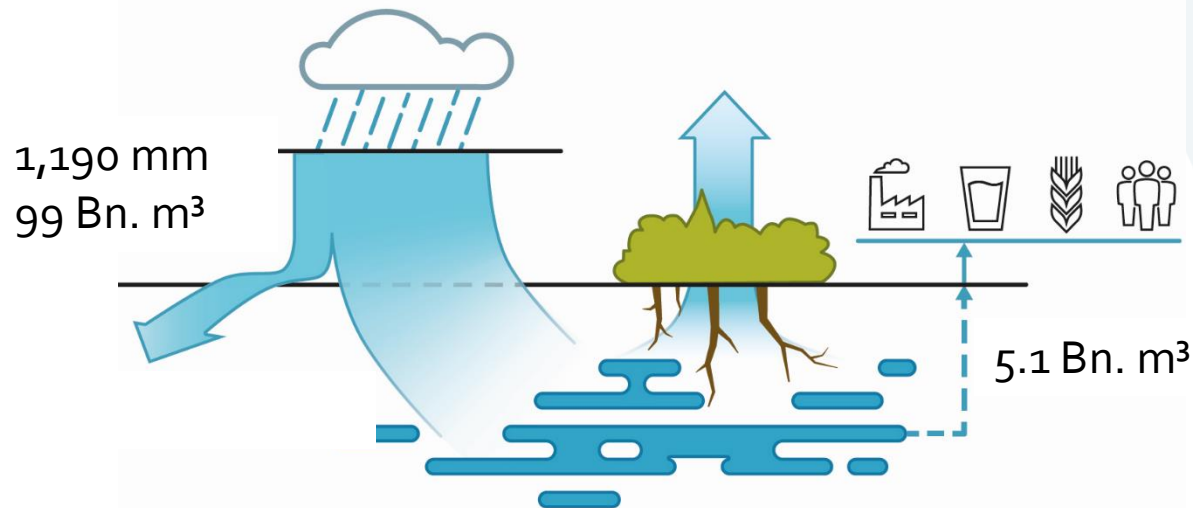


Scope of the study

Determine water demand and groundwater availability, covering current and all future interests in the best possible way.

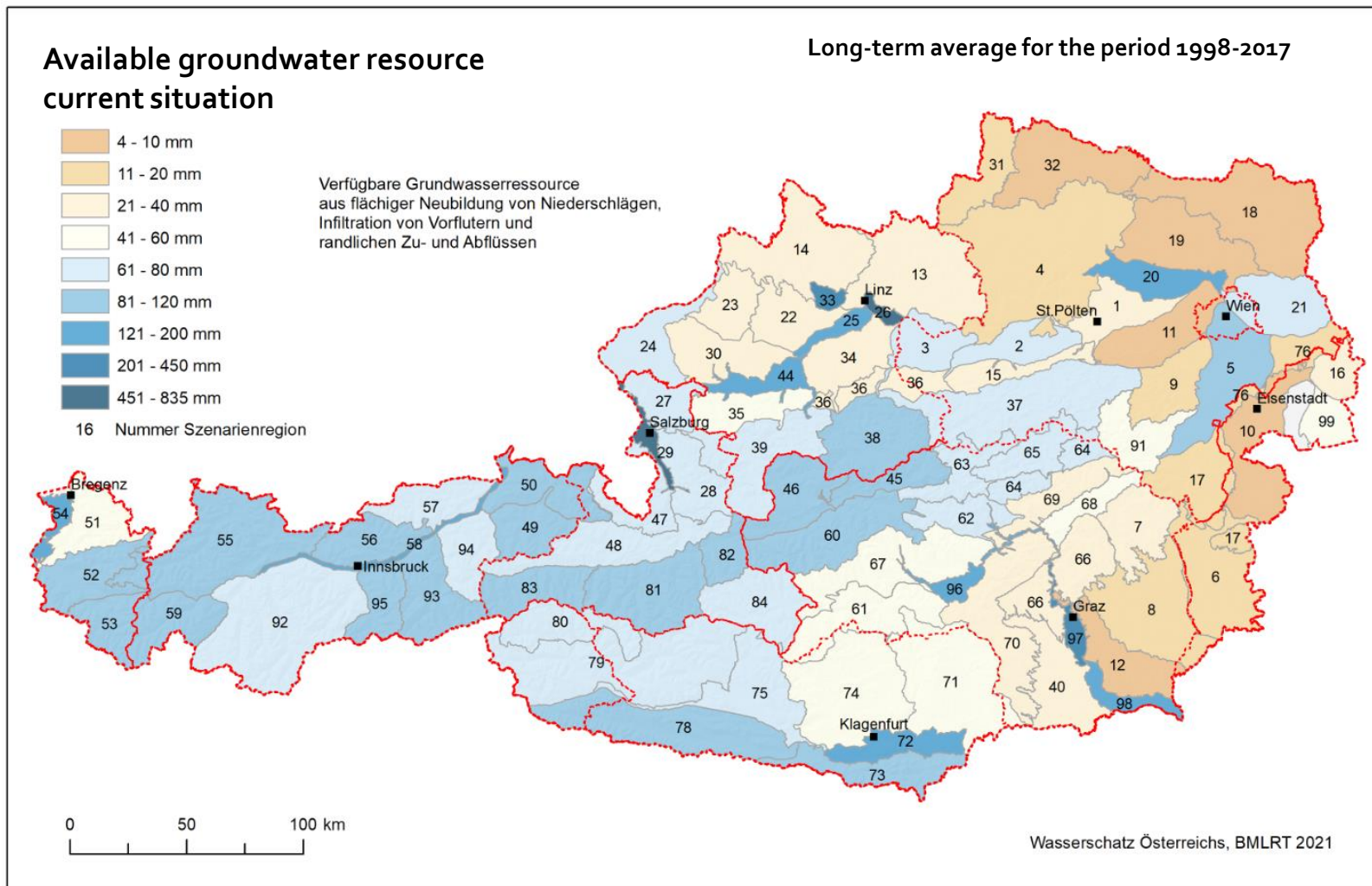
- Highest **water supply security** for the population
- Securing supply with agricultural products – **Food security**
- Securing the **business location**
- Securing the sustainable use and the **ecological functions of the water bodies** – adapted to the respective natural environment

How much groundwater do we have?

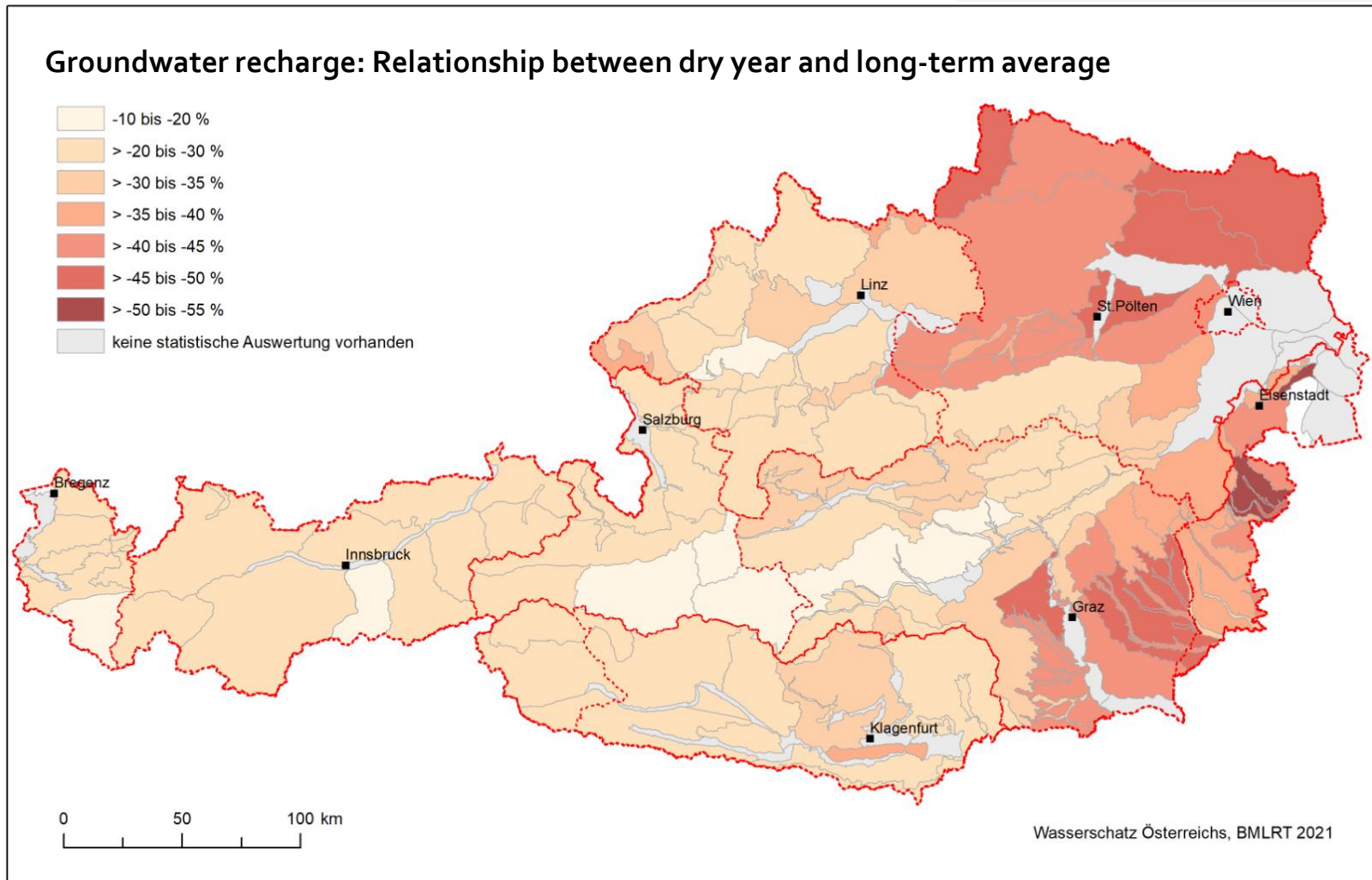


- The average precipitation of 1,190 mm for the whole Austrian territory corresponds to about 99 Bn. m³ of water.
- The available groundwater resource accounts for around 5.1 Bn. m³ (about 5 % of the precipitation).

Available groundwater resource – current situation

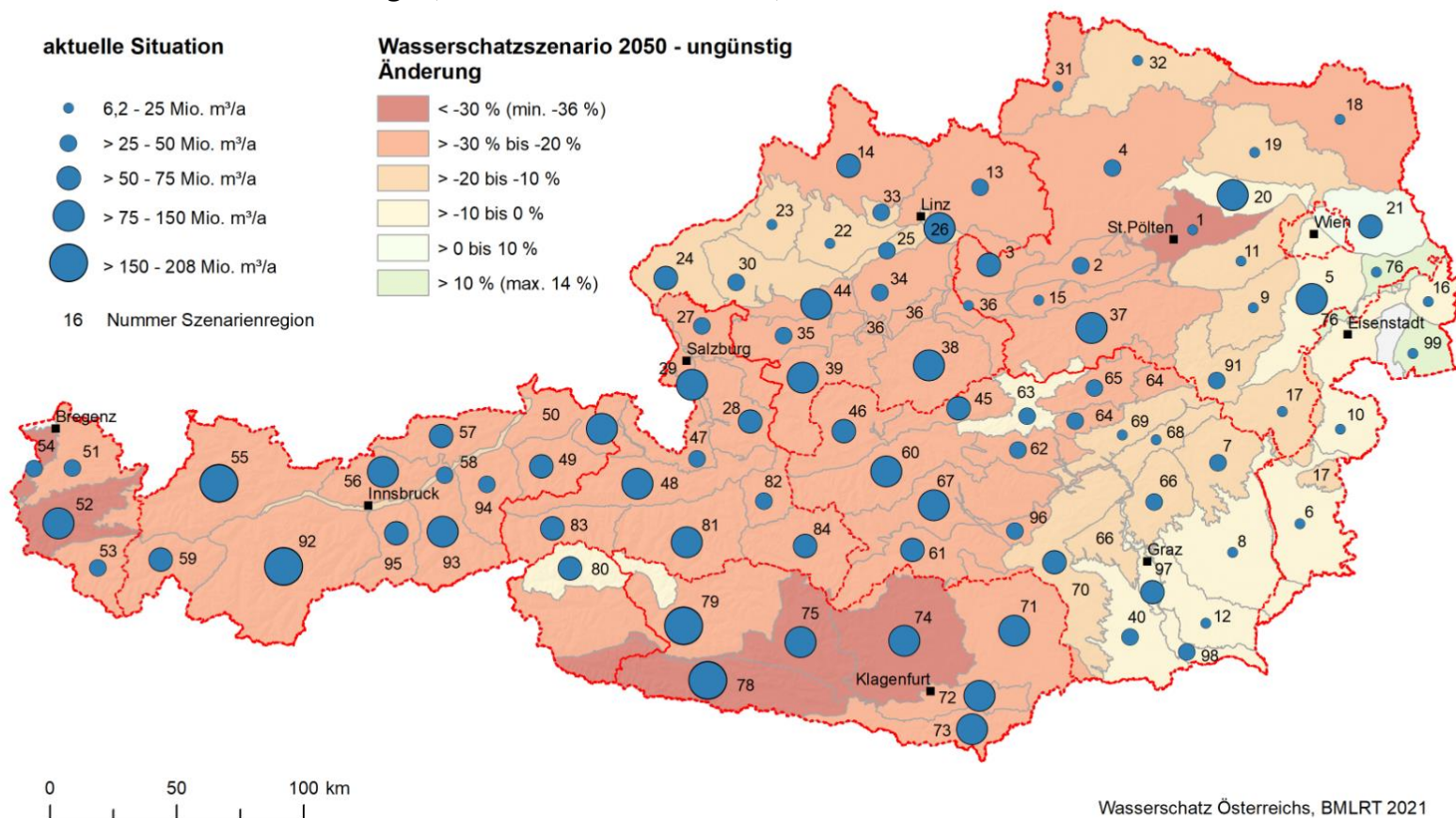


Groundwater situation in dry years for 1998-2017

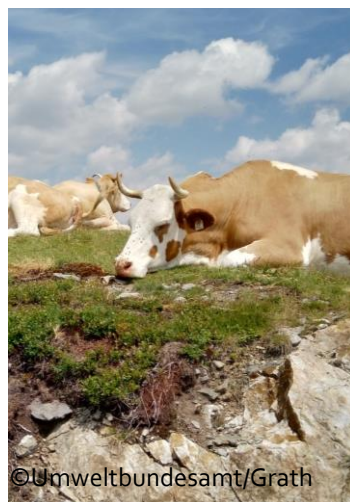


Available groundwater resource – now and 2050

Changes of the available groundwater resource.
Current situation vs. 2050 (unfavourable scenario)



Water demand – now and 2050



Summary of the results

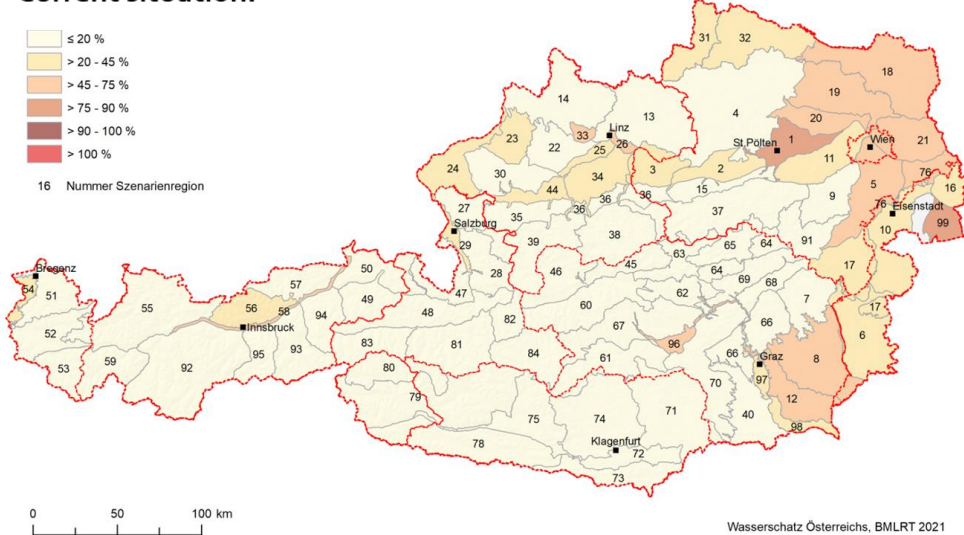
- Water demand from wells
in relation to
 - Available groundwater resource
- ➔ Expressed as „intensity of use“ at regional level

Groundwater intensity of use currently and 2050

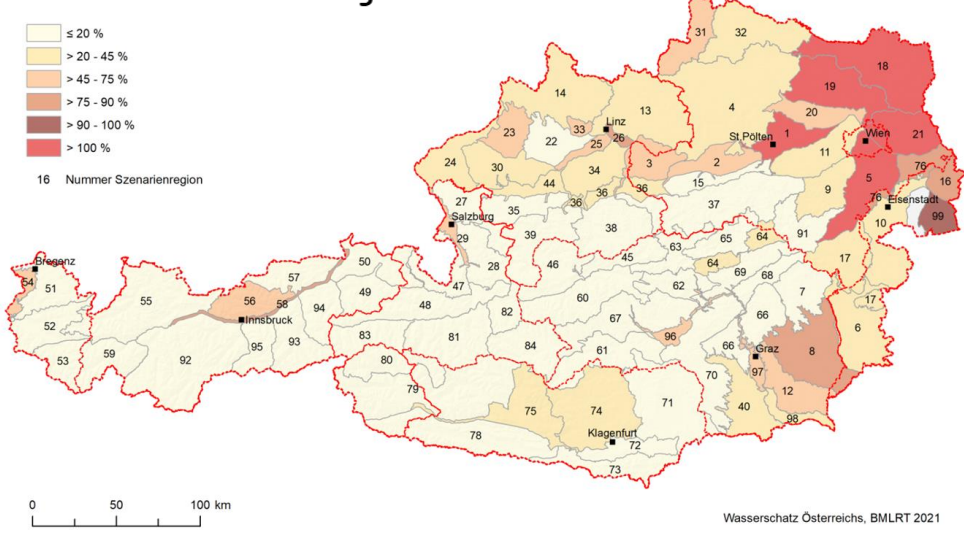
- Currently
 - Demand can be sustainably met
 - Higher use intensities in the East
- 2050
 - Use intensity increases
 - Favourable scenario: demand can still be sustainably met in all regions
 - Unfavourable scenario: Demand may regionally exceed the available resource
 - Both scenarios do not consider measures

Wasserschatz Österreichs

Groundwater intensity of use. Current situation.



Groundwater intensity of use. Unfavourable scenario 2050.



Outlook

- Planning basis is available at regional level
- Regions with higher to high intensity of use of groundwater from now on until 2050 were identified
- Specific chapters on climate change and water scarcity and drought of RBMP identify main future challenges
- Establishment of „WATER platform“

Wasserschutz Österreichs

The project "Wasserschutz Österreichs" provides an essential data basis for forward-looking long-term water management planning and serves as a basis for the discussion and development of specific measures, also at the regional level.

On behalf of the Federal Ministry of Agriculture, Regions and Tourism, the scientific work was carried out by Umweltbundesamt – Environment Agency Austria, the University of Natural Resources and Applied Life Sciences and the engineering office Holler.

<https://info.bmlrt.gv.at/themen/wasser/nutzung-wasser/wasserschutz-oesterreichs-studie.html>