



# Transboundary Groundwater Body Karavanke/Karawanken Between Slovenia and Austria - Management and Governance

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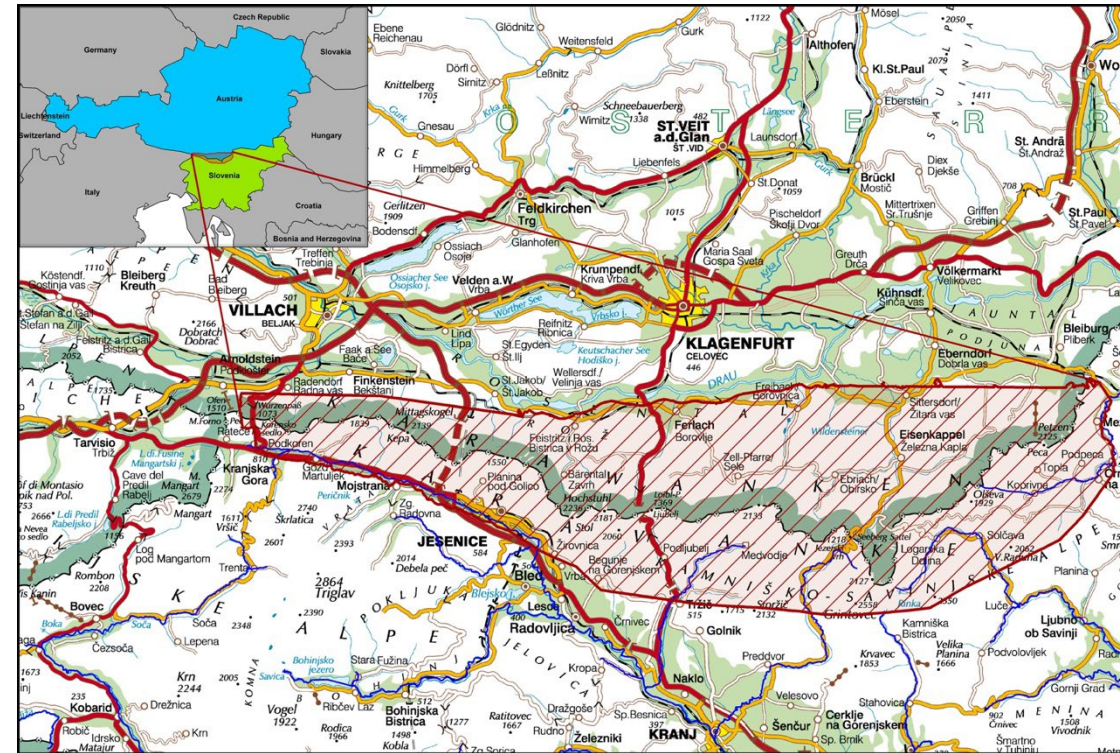
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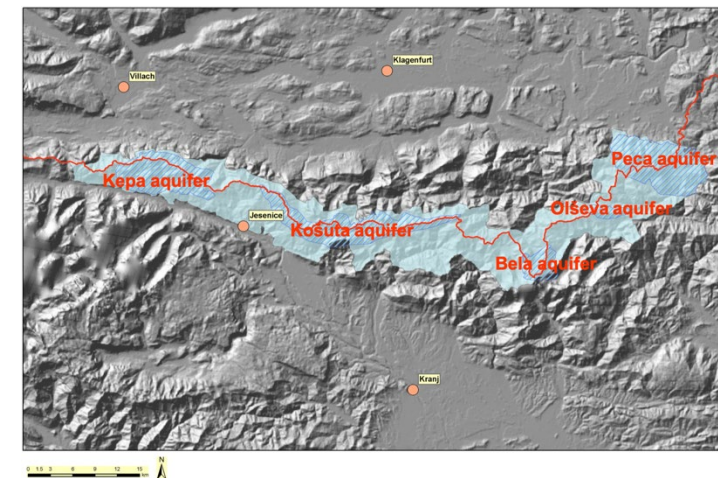
# SETTING THE SCENE

- Karavanke/Karawanken is narrow mountainous range stretching along the border between Republics of Austria and Slovenia (Central Europe):
  - Good water balance in surface water and groundwater.
- Cooperation on hydrogeological / hydrological issues started in 80's of 20<sup>th</sup> century as a consequence of common investment in infrastructure:
  - First step – extensive investigations,
  - Latter stages – management issues.



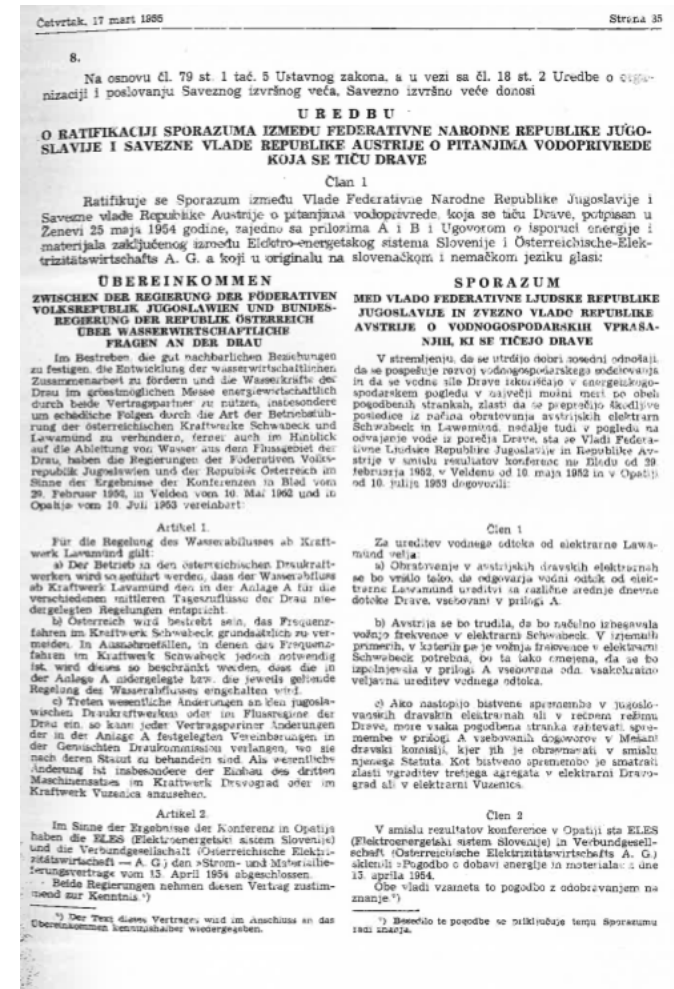
# CWM IN TRANSBOUNDARY SETTINGS

- Karavanke/Karawanken mountain range is predominately formed by calcareous rocks forming large karstic aquifers:
  - Big karstic springs recharge rivers and creeks,
    - Recharge areas of several springs are transboundary.
  - Sometimes no visible springs are developed:
    - Thorough surface water investigation are needed to understand groundwater occurrence.
- Natural conditions in Karavanke/Karawanken mountain range are such that is not possible to consider separately surface water and groundwater.
- Conditions in the area are fostering Conjunctive Water Management:
  - It is self evident and taken for granted.



# LEGAL ASPECTS – CONVENTIONS

- Republics of Austria and Slovenia proclaimed Transboundary groundwater body - *TGWB* under the EU directive called Water Framework Directive – *WFD*.
  - There is no special (separate) legal document defining *TGWB*.
  - However, *TGWB* is legally binding.
- States are cooperating through Drava/Drau Commission which was established by international agreement signed in 1954 in Geneva between Socialist Republic of Yugoslavia and Republic of Austria:
  - In the accession Republic of Slovenia accept this agreement as a valid and obligatory international contract.



# LEGAL ASPECTS – CONVENTIONS

- Drava/Drau commission is responsible for all mutual bilateral water management and governance issues.
  - Meetings of commissions are regular – once per year.
  - Meetings are taking place under the ministries responsible for environment – indirectly also foreign ministries are involved.
  - Commission lead authorized representatives of both sides:
    - Experts are involved in preparation and meetings.
- TWB Karavanke/Karawanken was proclaimed under the Drava/Drau commission protocols and therefore it is binding.

# LEGAL ASPECTS – CONVENTIONS

DRAVA/DRAU COMMISSION IS RESPONSIBLE FOR ALL  
BILATERAL WATER ISSUES -> CONJUNCTIVE WATER  
MANAGEMENT IS ITS CORE DUE TO NATURAL  
CONDITIONS IN THE REGION

# KEY MESSAGES

- Cooperation in transboundary water bodies is necessary and crucial:
  - It can foster many aspects of good and mutual cooperation between states involved:
    - Effective sharing of water resources, knowledge exchange, upbridging political divergences, ...
- Water cycle must be comprehend as a whole:
  - Influences on one part influence other parts and vice versa,
  - Holistically understanding of water cycle is crucial for better knowledge.
- Conjunctive water management is not only about efficient water usage it is crucial for water protection and sustainable development.

