

# The Ohře River Basin district

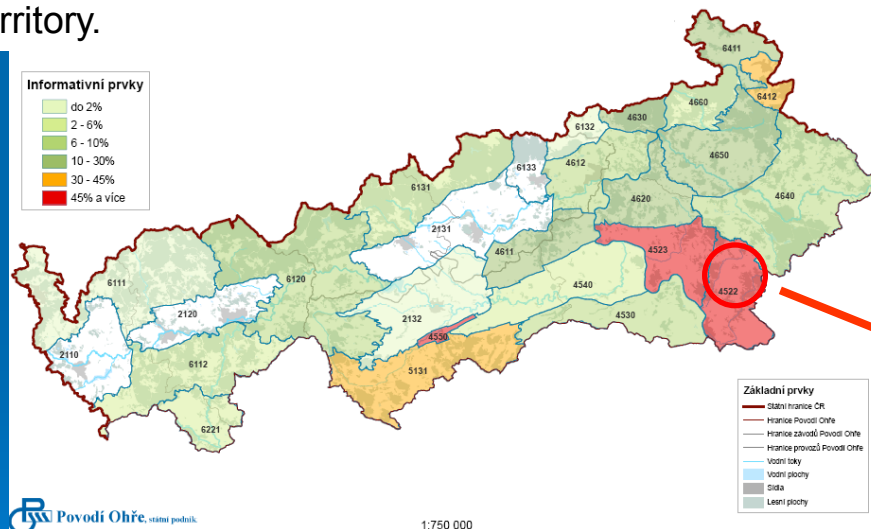
## Significant problems with water management in groundwater

4 Examples of practice concerning

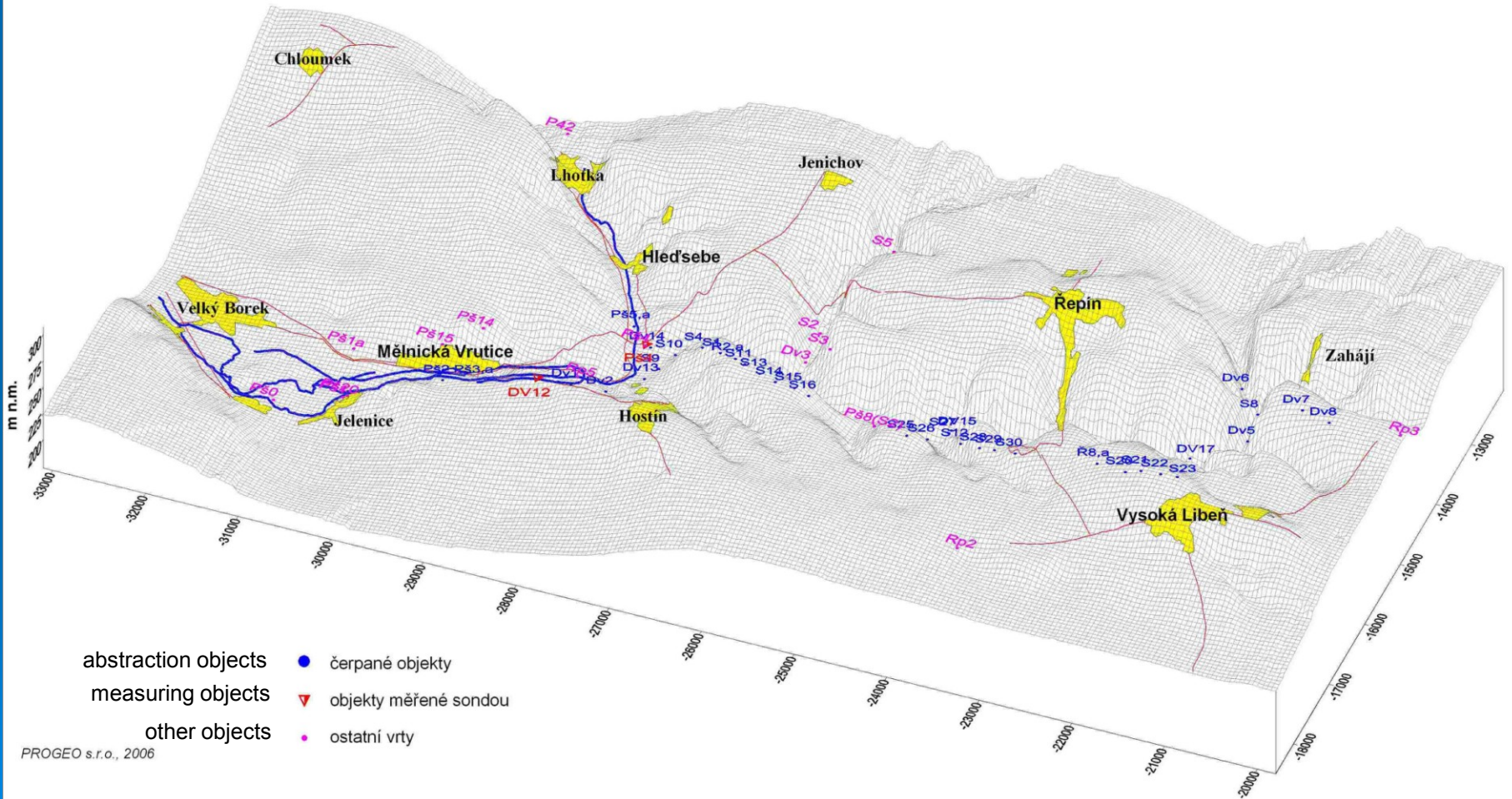
- professional proposals and opinions
- professional support for state administration bodies

# 1. The influence of high groundwater abstraction in Řepínský valley on watercourse Pšovka (and other tributaries of the Elbe right)

The balance assessment of groundwater bodies in the Ohře river basin district territory.

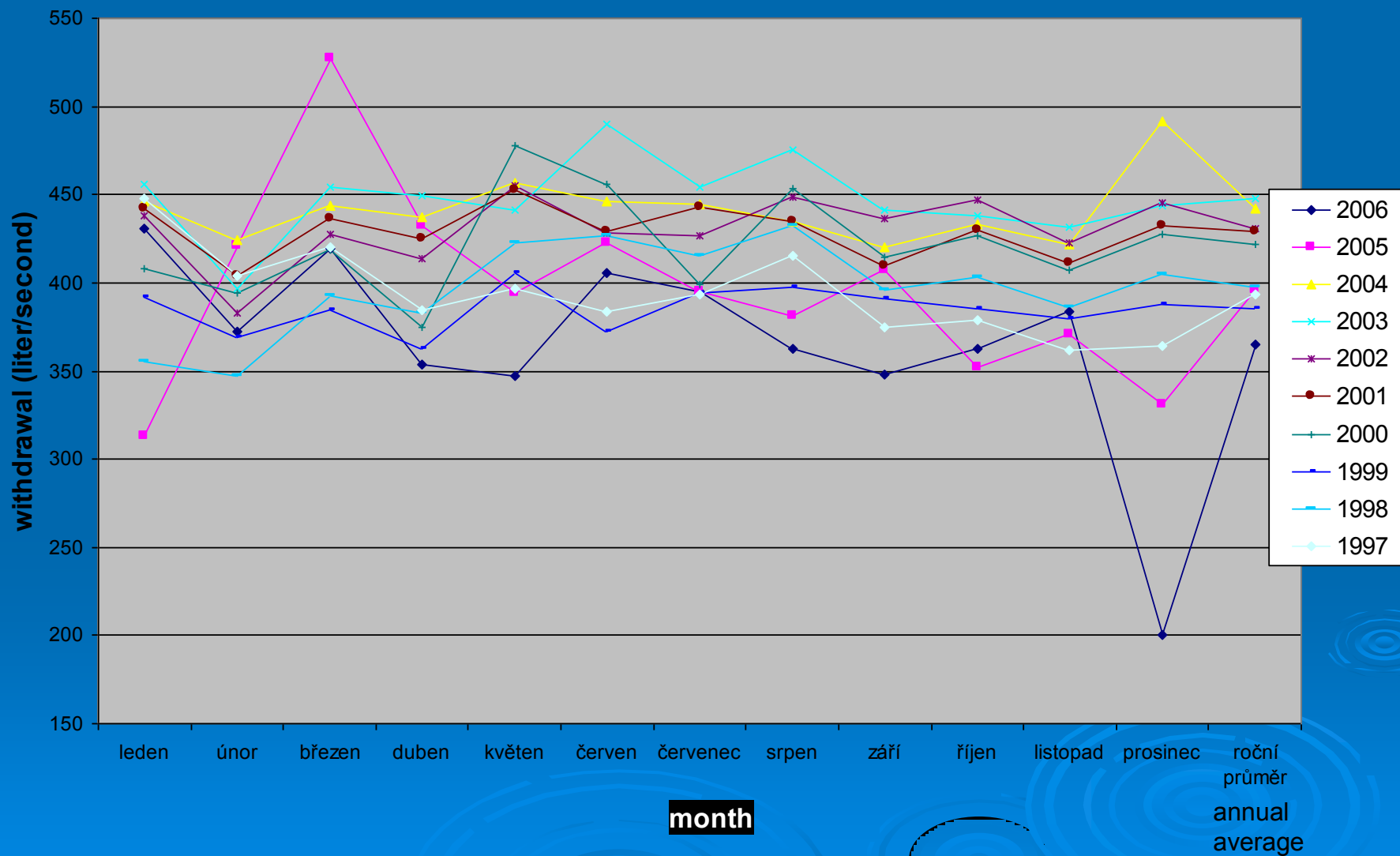


## Situation of the abstraction and measuring objects in Řepínský valley.





# Withdrawal in Řepínský valley



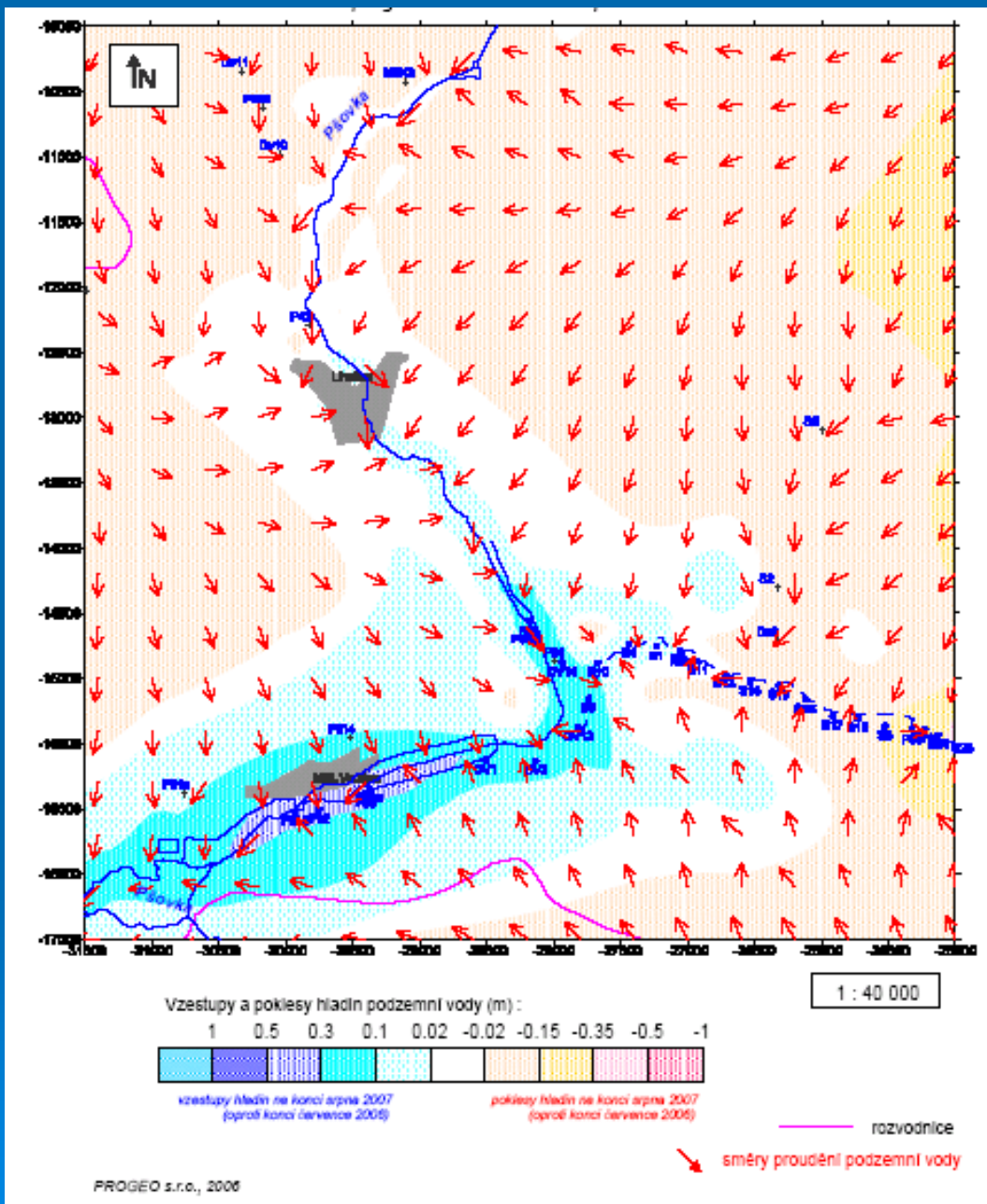
Another problems in the  
Pšovka basin



The breach bank of watercourse  
Pšovka (the creation of wetland)

Unauthorized water use - pond





The prognosis of groundwater level

*Transient model resolution until July 2006:*

*- real abstraction of groundwater and irregular rainfall infiltration,*

*From August 2006 until the end hydrological year 2007:*

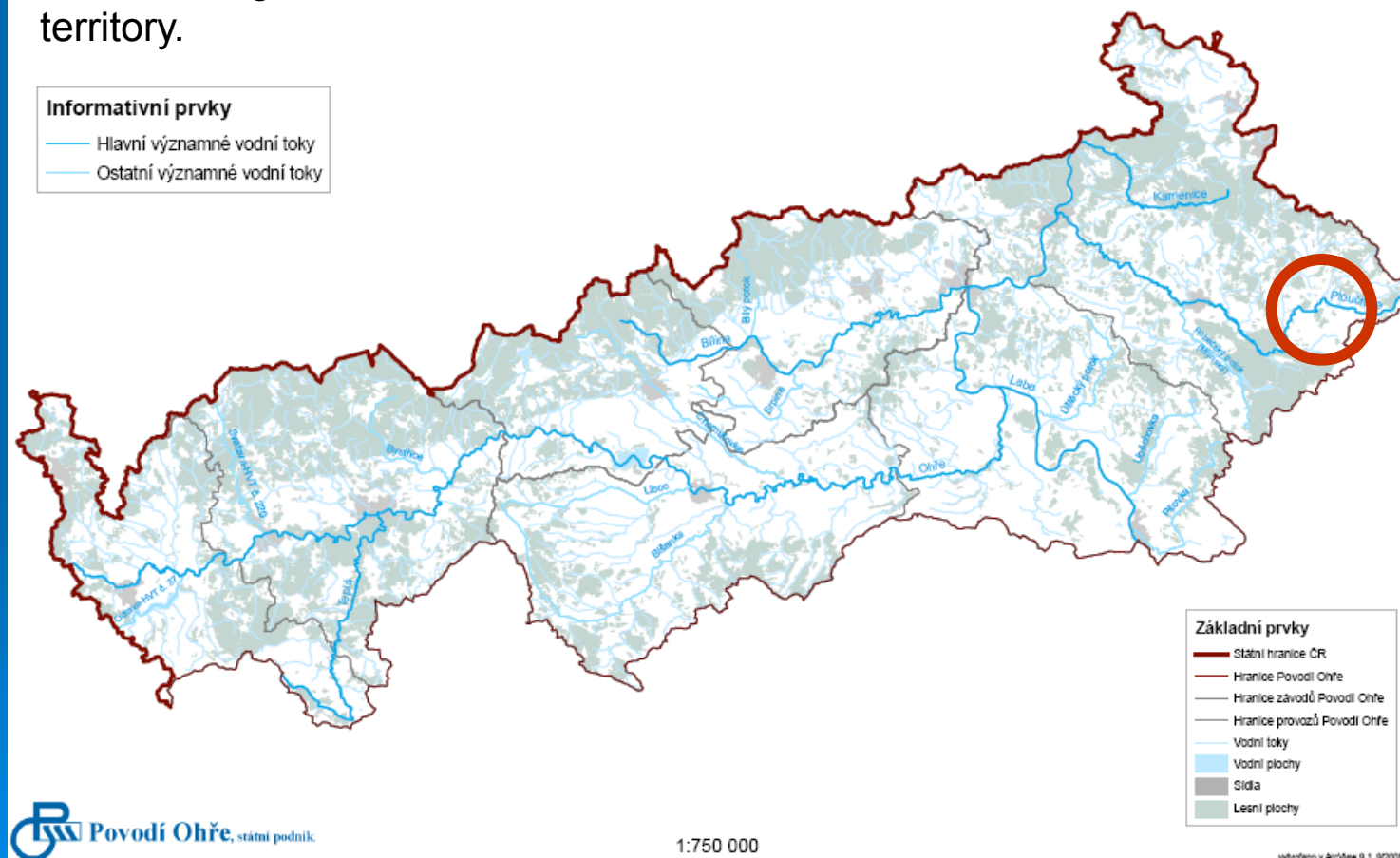
*- the prognose abstraction 370 l / s and average rainfall infiltration*

The solution -

Cooperation and compromise

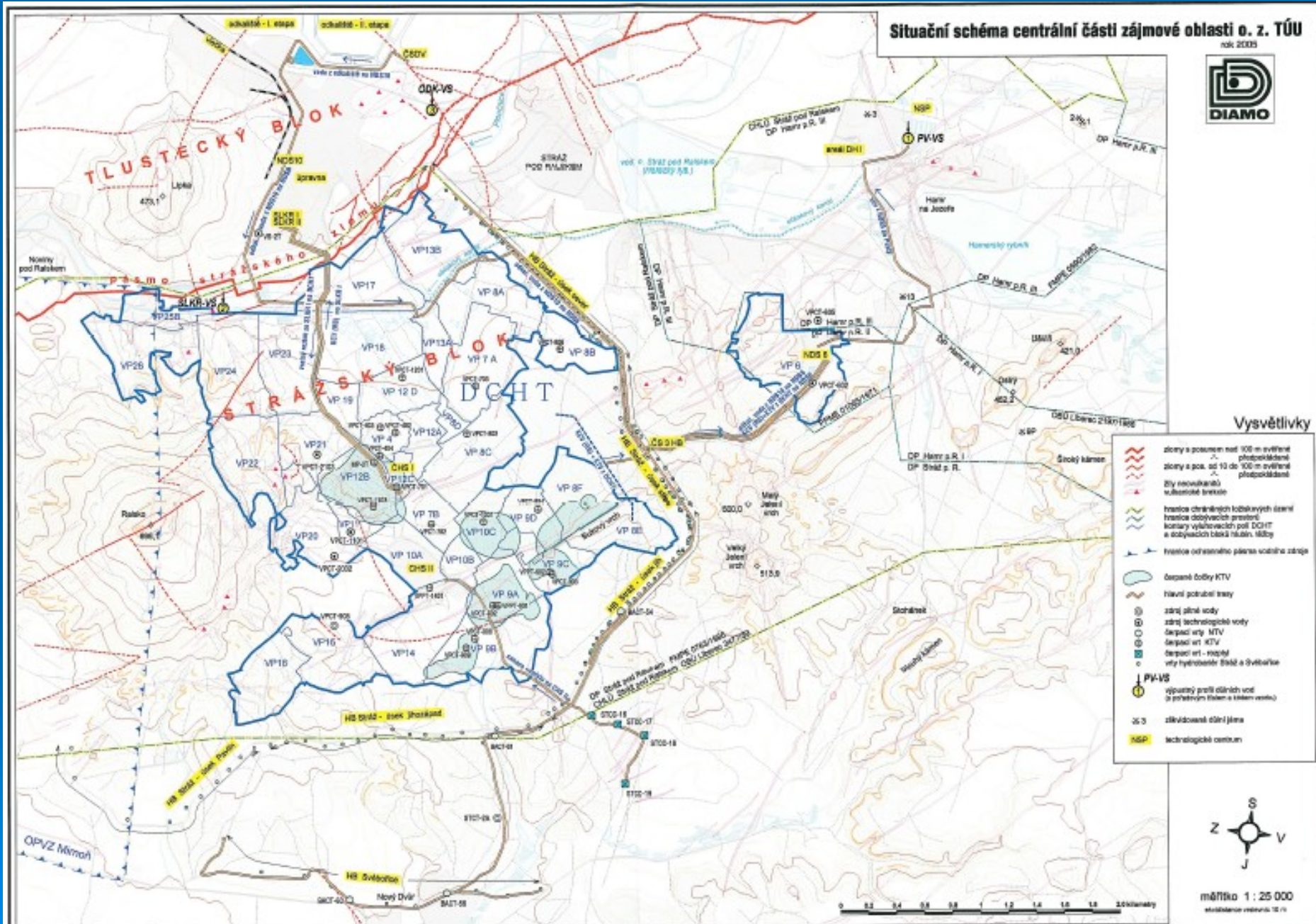
## 2. Elimination of pollution of groundwater affected by uranium abstraction Diamo, s.p. Stráž pod Ralskem

The most significant rivers in the Ohře river basin district territory.



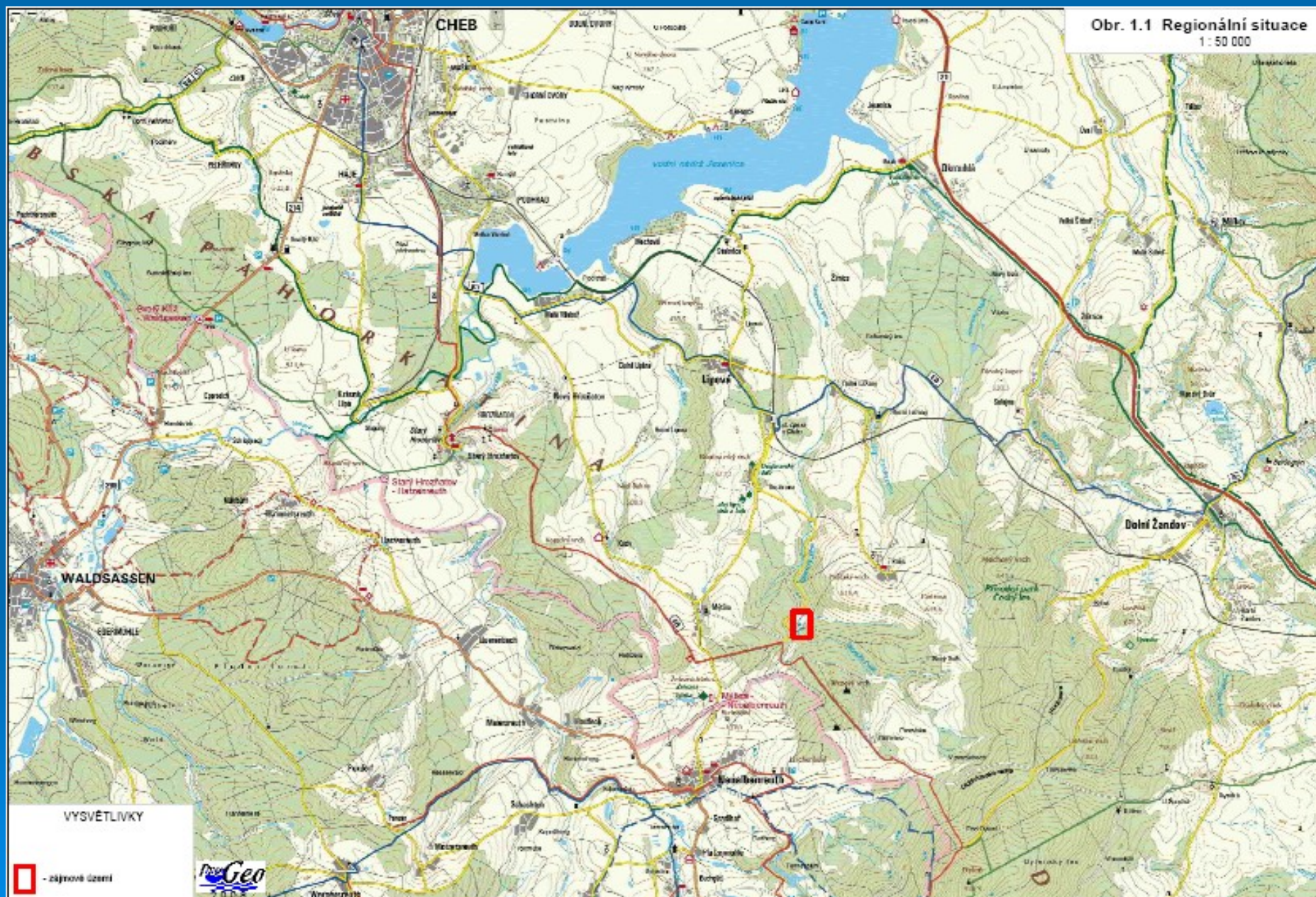


## The situation chart of the central part of interest area





### 3. Transfrontier propositions – abstraction of groundwater in Kyselecký Hamr











Delegation – ČR, SRN

The spring area





Actually there are in progress various negotiations of interested institutions of both countries:

...

LfU Sibyllenbad

Technical university of München Dr. T. Baumann

...

Water authority – MěÚ Cheb

Czech Inspectorate of spas and springs

Czech Ministry of Environment

...

common committee - Ständiger Ausschuss Bayern

In progress is an exchange of data between professionals. Contact persons are:

ProGeo

x

Dr. Baumann

- The negotiations will result in setting-up the length of pumping tests and the extent of monitoring (frequency, quality parameters)

## 4 - Transfrontier propositions

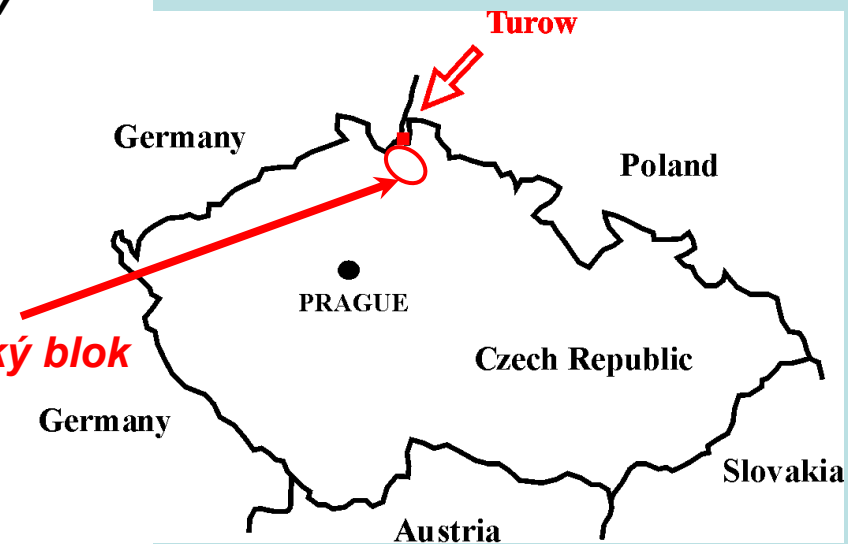
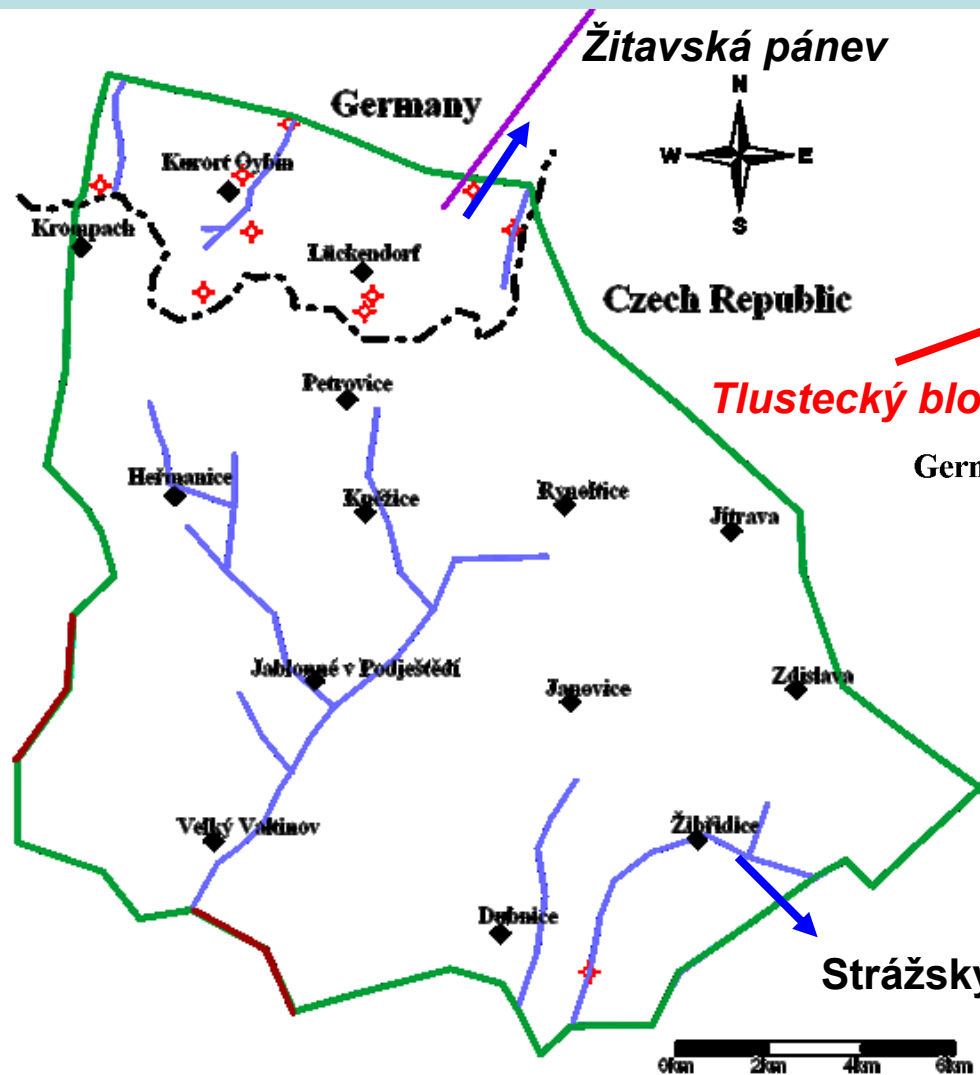
### Lückendorf – the plan to increase the groundwater abstraction

until 1991	3 600 m <sup>3</sup> /day	→ decreasing of groundwater level on the Czech side
after 1991	300 m <sup>3</sup> /day	→ sequential decreasing of groundwater level
actual plan	2 000 m <sup>3</sup> /day	→ Czech side is apprehensive for status of groundwater level

Common committee - Ständiger Ausschuss Sachsen - on the 10. meeting ordered the task for both sides – to make a report on the state.

In progress is an exchange of data and information between professionals:  
(Workshop - Dresden 14.10.2008)

- The firm AQUATEST, a.s., in the monitoring issues concerning the Polish mine Turów provides a modeling of groundwater flow in Tlustecký block.
- Peter Börke („Allgemeine hydrologische Situation im Vogtland und anderen Teilen der deutsch-tschechischen Grenze)





## *Results from model*

- Decrease of groundwater level in the area Petrovice - Lückendorf was caused mainly by groundwater abstraction in Zittau cretaceous basin. The impact of other anthropogenic activities has not been detected.
- The decrease in quantity of abstracted groundwater from 160 l/s to 86 l/s (data of 2001) after 1990 allowed an increase in groundwater level.
- Hydraulic model can also be used for current needs. For the evaluation of the impact of the newly planned use of groundwater in the German part of Zittau cretaceous basin.

On the 5. meeting of expert coordination group of the common committee (Ständiger Ausschuss Sachsen) (4.11.2008) stated:

The issue of groundwater remains open until the addition of professional background, which then become the basis for the definition of cross-border groundwater body. This is, however, passed up to work at the 2nd Plan of the river basins.

Thank you for your attention!

