

# Uranium in anthropogenic lakes of the new central German lake district (Leipziger Neuseenland).

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In Central Germany the largest anthropogenic-technogenic lake landscape of Europe will be formed up to year 2050 by flushing of the widely extended former open-cast lignite mines. This new Central German Lake district (Neuseenland) consists of many small and big lakes, which corresponding to its typology should be serve in future for various utilizations (landscape lake, recreation lake, water supply service lake see (Czegka et al. 2008)

Hydrogeology and geochemistry of the drainage basin were characterized by collecting numerous data. This study is focussed on the geochemistry of uranium. The investigated lake waters have low to intermediate U concentrations (from  $\leq 2$  to 12  $\mu\text{g/L}$ , mean 3.68 $\mu\text{g/L}$ ). Like in Lower Lusatia there is no definite correlation between pH and U concentration (Bozau, Stärk 2005). The study also contains data from Lake Zwenkau in a early stage of flooding – here the uranium content varies from 20 –87  $\mu\text{g/L}$ . A comparison with local background data (Müller et a. 2002; Czegka 2005) is given.

## References

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