## General description of the bathing water in non-technical language

Ziestsee is a lake situated around 9km south-east of Königs Wusterhausen in the Dahme Lake District, a landscape which has numerous lakes and which was formed by glaciers and meltwater during the last ice age.

The oval-shaped basin of Ziestsee has a surface area of 55.6ha and a maximum depth of 9.3m. The deepest point is in the northern part of the lake. During the summer stable temperature layering forms.

Ziestsee is fed by groundwater. The outflow in the south west drains into the River Dahme just 500m away. The catchment area is very small at only around 2km<sup>2</sup>. 54% of it forested and almost 20% is occupied by the Bungalow estates in the locality of Bindow.

Ziestsee has an extensive reed population, which is thick and enclosed in the unpopulated area of the eastern shore. In the populated shore areas the reeds are constricted to a greater or lesser extent due to vistas and jetties. The thick reed belt offers a habitat to numerous aquatic birds. Besides ducks, rails, herons, and great crested grebes, the rare bittern can also be found here.

Due to the lack of a surface inflow and its very small catchment area, Ziestsee has a good set of conditions for having a nutrient-poor, clear water state. Due to waste water from the bungalow estates and intensive fish farming, it had a heavy excess of nutrients in the past. In the 1990's is was still categorised as nutrient-rich, but since then it has constantly improved due to the renovation of the waste water treatment facilities. It is now very close to its ideal state. The nutrient content has been greatly reduced and the water transparency levels during the summer are now between 1 and 2m in open water (mean value: 1,9m). The plankton and underwater vegetation biocoenoses are once again rich in species and tend to be typical for nutrient-poor lakes.

The "Bindow" bathing area at Ziestsee, which is tested every four weeks by the local Office for Health as per the Brandenburg Bathing Water Regulations, there were no exceedances of single values of the microbiological parameters e.coli and intestinal enterococci. Sometimes blue-green algae can be observed. People who are sensitive to the algae should refrain from bathing.

Text: Kerstin Wöbbecke, enviteam office

## Sources

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