

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

With a surface area of 13.2km<sup>2</sup>, Schwielochsee is one of the largest natural lakes in Brandenburg. It is situated 80km south east of Berlin on the Beeskow Plateau, a mainly flat, slightly undulating ground moraine area where sandy ground or loamy sandy ground are predominant. An arm of the River Spree flows through the northern part of the lake and forms the central part of the system of channels and lakes which flows between the Baruth and Berlin-Warsaw glacial valleys.

Schwielochsee stretches over 8.5km in a northerly direction from Goyatz in the south and is a maximum of 2.6km wide between Ressen-Zaue and Speichrow. Due to a narrow point of several hundred metres north of Goyatz, its basin is divided into the Grosser (large) and Kleiner (small) Schwielochsee. While the body of water in Grosser Schwielochsee, which has a maximum depth of 6m, is regularly mixed, the 1km<sup>2</sup> and at 7.5m somewhat deeper Kleiner Schwielochsee features stable temperature layering during the summer months.

Only part of the River Spree ends up in Grosser Schwielochsee via the old Sawall meander, the majority flows into the connection between Schwielochsee and Glower See which borders to the north and therefore does not influence Schwielochsee. Additionally, the lake receives an inflow from seven smaller flowing waters. Schwielochsee's very large catchment area is 5,500km<sup>2</sup> and third of it is used for agriculture, predominantly arable land. Forested areas make up around a 23% the catchment area and around 10% of the area is built-up. The wetland area from the old inflow into the Spree on the old Sawall arm up to the connection with Glower see was declared as a nature protection area in 1990.

Schwielochsee is a popular holiday destination and local recreation area. Around the lake there are numerous camping sites and bungalow estates. The lake, which is farmed for fish, is also popular among anglers. The main species of fish are eel, zander, pike, wels catfish and carp, but roach, carp bream and chub are also present.

Due to its very large catchment area the natural state of Schwielochsee, which is monitored by the Brandenburg State Office for Environment as part of a long-term environmental programme, is therefore a relatively nutrient-rich lake with comparatively low transparency levels, however with a biocoenosis which is rich in species in terms of shoreline vegetation and plankton. In actual fact, the nutrient contents in the lake are only slightly above the potential natural state. However, because the biocoenoses of the plant plankton are still very impoverished due to the excess of nutrients received in the past and the fact that blue-green algae are prevalent in the summer, its ecological state can currently only be categorised as unsatisfactory.

The Goyatz bathing area at Schwielochsee, 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. Blooms of blue-green algae have not been observed.

Text: Kerstin Wöbbecke, enviteam office

### Sources

Arp W. & B. Koppelmeyer (2010): Maßnahmevorbereitendes investigatives Monitoring am Schwielochsee. – report on behalf of the Brandenburg State Office for Environment, Health and Consumer Protection

[www.schwielochsee.de/fischerei-klemm/](http://www.schwielochsee.de/fischerei-klemm/) Klemm Fishery, Trebatsch