



## GUIDED TOURS

You are welcome to visit us

Water is our most important foodstuff. We will be happy to take you through our technical facilities and explain how purest drinking water is gained from lake water. Touring the purification plant on Sipplinger Berg takes about one and a half hours and is free of charge.

### Guided tours for groups – prior registration required

Monday to Saturday: 9 am, 11 am, 1.30 pm, 3.30 pm.  
There will be no tours on Sundays and holidays.

### Please contact:

Tel.: +49 7551 833 1157

E-mail: [uk-besucher@bodensee-wasserversorgung.de](mailto:uk-besucher@bodensee-wasserversorgung.de)

### Tours are also offered for individuals and small groups

Scheduled weekly from May to October

### Registration (urgently required):

Tourist-Info Sipplingen: +49 7551 94 99 37

Tourist-Info Bodman-Ludwigshafen: +49 7773 93 00 40

[www.bodensee-wasserversorgung.de](http://www.bodensee-wasserversorgung.de) > Service > Besichtigungen

For further information on our company, please contact our Public Relations offices in Stuttgart, Tel. +49 711 973 2252 or in Sipplingen, Tel. +49 7551 833 1156.



Regular control



Drinking water reservoir



Steel pipes

## OUR FUTURE

Commitment and Research

### Water Protection for Lake Constance

Due to the ongoing involvement in international committees, Lake Constance Water Supply considerably contributed toward the success, internationally unparalleled, of water protection for Lake Constance.

### Climate Change

Lake Constance Water Supply participates in research projects to be able to react early to possible tendencies as well as climatic conditions.

### Energy

For the annual supply of 125 million cubic metres of drinking water about 156 million kilowatt hours of energy are required.

Having 16 turbines in their grid, as well as installations for regenerative energy generation and an intensive energy management, Lake Constance Water Supply was able to reduce energy consumption continuously.

## ADMINISTRATION UNION

Municipal Solidarity

On 25 October 1954 the administration union Lake Constance Water Supply was founded by 13 cities and municipalities in order to permanently solve water shortage in large parts of Baden-Württemberg. Above all, the choice of an administrative union as a municipal legal form was the basis for the distribution of the rights and duties of the members according to the principles of solidarity and a democratic structure of the organization.

147 municipalities as well as 34 other water supply organizations are members of Lake Constance Water Supply. On the one hand, these are supplied with water, they are customers, on the other they are financing the Association by providing capital and payment for the water received, and therefore they are owners. This double function of ownership and customers helps keep water rates charged by Lake Constance Water Supply low. According to the principle of solidarity all members pay the same water rate, an annual fee. This price was fixed in a way to cover the Association's costs. Therefore, no profit will be made.



# 500,000

cubic meters of drinking water in reservoirs

## RELIABLE WATER SUPPLY

Safety is high on our list

Approximately 4 million people get their daily drinking water from Lake Constance Water Supply. Extensive monitoring is of importance to us. Thus, for example, permanent on-line checks of the water in all of the pipeline system provide monitoring and control at any time.

Central control rooms at Stuttgart and Sipplingen operate round the clock. Qualified personnel monitor and control the flow of the water, assisted by state-of-the-art engineering.

The protection zone at Sipplingen where the water is drawn off, and the facilities of Lake Constance Water Supply throughout the State are protected day and night using the most modern equipment.

Efficient personnel on stand-by duty, highly motivated employees, private cable and radio systems, a dual system of all important installations and equipment, precautionary maintenance and a high degree of organizational safety, are all features of the safety measures of Lake Constance Water Supply.

Zweckverband  
Bodensee-Wasserversorgung



Postfach 80 11 80  
70511 Stuttgart

Hauptstraße 163  
70563 Stuttgart

Telefon +49 711 973-0  
[info@bodensee-wasserversorgung.de](mailto:info@bodensee-wasserversorgung.de)  
[www.bodensee-wasserversorgung.de](http://www.bodensee-wasserversorgung.de)



## LAKE CONSTANCE

Europe's Drinking Water Reservoir

The good quality of Lake Constance water is ideally suited for obtaining drinking water. Four million inhabitants of Baden-Württemberg get their drinking water from Lake Constance.

The Rhine is the main tributary river of Lake Constance. It carries large amounts of natural melt and rainwater from the Alps.

11.5 billion cubic metres of water pass through Lake Constance annually. In comparison to this, drinking water extraction of 125 million cubic metres is negligible; it is slightly more than 1 %. Evaporation is approximately double the extraction.

The large volume of water of 50 billion cubic metres, as well as thermal stratification forming in the lake provide sufficient protection for water extraction from a depth of 60 m.

Lake Constance is well protected. There is a longstanding tradition of cross-border collaboration. International institutions and agreements, among others regulate fishing, shipping and economic development on the lake.

## WATER QUALITY

Best Drinking Water at any time

Lake Constance Water Supply provides water of excellent composition. The very good quality of lake water, an effective and safe treatment and numerable measures of quality control guarantee that the measuring results of the drinking water from Lake Constance are clearly below the strict limits set by the German drinking water standards (TrinkwV 2001).

More than 15,000 physical/chemical and about 20,000 bacteriological tests annually are carried out and documented by our own lab. The State Health Department of Baden-Württemberg is the supervising authority of Lake Constance Water Supply.

Calcium carbonate content of drinking water from Lake Constance is of medium hardness: 1.61 mmol/l of calcium carbonate (corresponding to the former 9° of German hardness dH). The mineral content of the water is balanced, it tastes good.

Having a low nitrate content of 4.2 mg per litre, drinking water from Lake Constance is highly suitable for the preparation of baby food.



# 35,000 tests annually

## WATER EXTRACTION

Water from a depth of 60 m

Lake Constance Water Supply draws raw water from the lake near Überlingen at a depth of 60 m. There it is pure and clear, having a constant temperature of 5° C it is refreshingly cool.

Three intake towers are located 70 m deep at the bottom of the lake. They are 10 m high, carrying intake-structures covered with perforated metal sheets. This prevents coarse impurities from entering. Via 3 intake pipes the water is transported by natural gravity to the pumping station.

Three large pumps each, located in two pump houses lift the water 310 m up to the purification plant on Sipplinger Berg. Up to 9,000 litres per second can be pumped.



Raw-water basin on Sipplinger Berg

## WATER TREATMENT

From Raw Water to Drinking Water



Micro-strainer

In the raw-water basin on Sipplinger Berg the water from the depth of the lake for the first time comes to light. Raw water from Lake Constance with reference to its physical/chemical composition meets the strict requirements of the German drinking-water regulations. In three close-to-natural treatment steps best drinking water is obtained from lake water.

- With the help of 12 micro-strainers, having a mesh width of 15 micron, minute algae and suspended matter are removed.
- By adding highly active oxygen (ozone), the water is disinfected. Through ozone micro-organisms still existing will be destroyed respectively inactivated.
- Multi-layer filters supported by the addition of small amounts of ferric chloride (FeCl<sub>3</sub>) completely clear the water of turbid matter.

Before the water is sent on its long journey to the consumers, a small amount of chlorine is added.

## WATER DISTRIBUTION

Steel and Concrete Arteries

Via a pipeline system of 1,700 km in length Lake Constance Water Supply annually distributes about 125 million cubic meters of drinking water in Baden-Württemberg. Pipelines of steel and concrete having a diameter of up to 2.25 m are used to transport the precious liquid safely from Lake Constance to the northern border of our State. Well protected and constantly monitored this takes up to 7 days.

### Pipeline 1

Since 1958 drinking water has been transported 154 km from Lake Constance to Ludwigsburg. From the purification plant Sipplinger Berg water is lifted to the Liptingen summit-level tank, 735 m above sea level, just south of Tuttlingen. From there up to 3,300 litres of drinking water per second by natural gravity run along the Swabia Jura to the central Neckar region.

### Pipeline 2

Since 1971 Pipeline 2 has been the connection between the purification plant Sipplinger Berg and Stuttgart respectively the north of our State.

Its prominent feature, the Alb gallery, having a diameter of 2.25 m and a total length of 24 km, cuts through the Swabian Jura. Up to 3,600 litres per second can be transported by natural gravity which is an energy saving. Using booster pumps, throughput can be raised to 5,000 litres per second.



29 water reservoirs with a total volume of close to 500,000 cubic metres guarantee that a sufficient amount of drinking water will be available at any time.

37 pumping stations provide the necessary pressure in the pipeline system and elevate the water to towns and communities located higher up.

19 permanently installed emergency-power-supply units in case of power failure guarantee transport of the drinking water to the members of the Association.