

Goldberg Lake freed from algae



Initial situation

In the Goldberg Lake in Reisenberg, Austria, there were many thread algae and green algae, especially during the summer months. The bathing lake around the Goldbergsee used by local residents felt impaired when swimming and in 2009 were looking for a permanent and ecological solution. The 9,000 m³ lake is 200 m long, 50 m wide and 4 m deep. It is fed and drained via the nutrient-rich contaminated groundwater from surrounding agriculture.

Consulting & Analysis

With the information for the assessment of lakes and small water bodies the conditions for optimal success could be examined:

- Morphometric data: shape, volume, area, average and maximum depth
- Hydrological data: Water flow, inflows, outflows, ice cover in winter
- Chemical, physical parameters: oxygen, PH value, acid binding
- nutrient concentrations: phosphate, total phosphorus, nitrate, N-total, nitrite

Solution

Installation of three G-Sonic 50 Algae removal devices to provide a complete click sound system for the lake. Two G-Sonic 50 (50m) and one G-Sonic 100 (100m).

Results

The water is now crystal clear in spring and in summer, during the main algae season, 90% of thread algae and green algae have disappeared. Plankton studies have clearly shown that blue, pebble, yoke and floating algae have been significantly reduced and visibility has improved. Dangerous Escherichia coli bacteria were reduced from 93 to <15 per 100ml.

Follow-up inspection

The algae-free devices are still successfully in use today. The residents around the Goldberg Lake are mostly owners and look forward to swimming in the clear water.

Click generator positions

With a range of 50m - 100m each, the click generators were mounted under water.



G-Sonic 100

On the longest side the G-Sonic 100 with 100m range (top right) was installed.

