

The Past



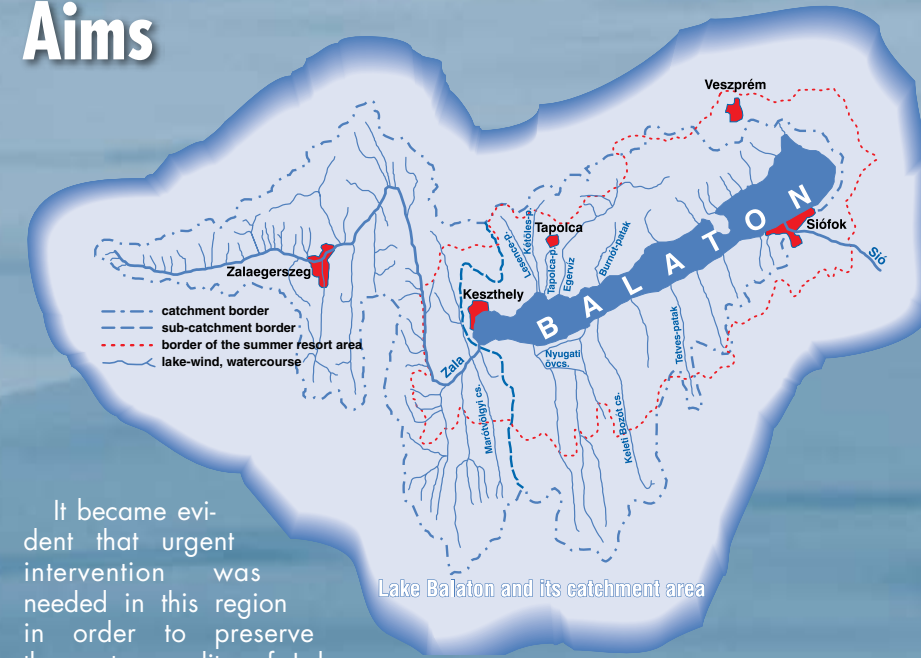
A considerable part of the recent Kis-Balaton (Small Balaton) area existed as a basin of Lake Balaton up to the end of the 18th century and was navigable even for streamers. At Balatonhídvég the Zala River "lost" in the marsh varied by reed-stands and open water surfaces, thus its water reached Lake Balaton properly filtered by this natural marsh of the Kis-Balaton basin.

Prior to the opening of the Sió-sludge in 1863, the water level of Lake Balaton was determined by the prevailing weather conditions. The fluctuation of water level could be as high as 3-4 meters which means that the "Hungarian Sea" had even floods. In the first part of the 19th century the water level of the lake was lowered in several steps which caused of the higher areas of the Kis-Balaton basin to dry out.

As a consequence of the regulation the Kis-Balaton and the other surrounding marshes lost their function of protecting the water quality of Lake Balaton. It was strengthened by the consequences of civilisation, i.e. intensive agricultural chemicalisation, increasing urbanisation, developing and spreading of holiday resorts in the region, which altogether resulted in the significant deterioration of quality of waters entering Lake Balaton.

The undesirable changes of water quality (algae blooms, siltation, eutrophication) were most pronounced in the Keszthely-bay.

Aims



Lake Balaton and its catchment area

It became evident that urgent intervention was needed in this region in order to preserve the water quality of Lake Balaton, since nearly half of the nutrient loads (mainly phosphorus) entered the Keszthely-bay, which represents about 5% of the total volume of the lake. These facts made the West-Transdanubian District Water Authority to work out the concept of the Kis-Balaton Water Protection System. Its basic idea is to flood again this former Bay of Lake Balaton, the marshy area of the lower Zala-valley in order to retain and utilise nutrients transported by Zala River at this partially reed-dominated marsh. Some parts of this unique water protection system have been operating already. With their operating the processes (e.g. eutrophication) that formerly characterised the Keszthely-bay are going to take place at the Kis-Balaton Water Protection System being constructed in the lower Zala-valley.

This solution provides a natural-like environment that takes after the conditions existing approximately two hundred years ago.



The Solution

Construction of the Kis-Balaton Water Protection System has been completed in two steps.

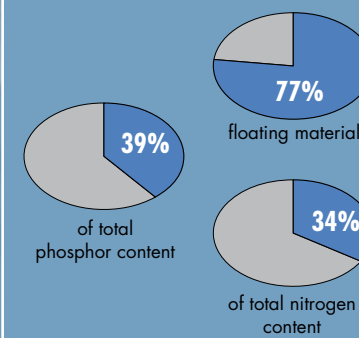
The Stage I, called **Lake Hídvég**, was constructed between 1981 and 1985. It takes approximately 30 days for the Zala River to flow through the lake where cleaning processes take place to some degree.

Construction of the Stage II, called **Lake Fenék**, started in 1984. The area of 51 km² provides special biotopes for its remarkable flora and fauna.

Lake Fenék decreases further the amount of pollutants and plant nutrients getting into Lake Balaton.



Efficiency of retention in the period 1984–1996



According to the daily water quality measurements, the semi-finished system retains 77% of the suspended solids' load, 39% of the total phosphorus, and 34% of the total nitrogen.

Complete construction of the Kis-Balaton Water Protection System is still in process.

With regards of the nature conservation and water aims, experts are trying to find a solution in which improvement of water quality continues, but the developed habitats remain too and broaden further.

The Visit



Kis-Balaton, which is under the regulations of Ramsar Convention, is a wetland of European importance too. Inner areas covered by water, under high protection, can only be visited on a specific route by bus in an organised form. In the Kis-Balaton House in Zalavár, visitors get information of the history and future of Kis-Balaton and its surroundings, get to know the function of the Water Protection System, its role in the water quality of Lake Balaton

and the unique flora and fauna of the particularly protected nature conservation area. Starting from the Kis-Balaton House a part of Lake Hídvég can also be visited by bike as far as the by-road of Zalavár – Balatonmagyaród, therefore guests can enjoy directly the beauties and calm of the nature. The Excursion Centre of the Kányavári Island is open for every visitor.

Places of interest at Kis-Balaton:

Kis-Balaton House, Chapel of Saint Stephen, Cyril-Method Memorial, Buffalos' Reservation in Kápolnaspusztá, Folklore Museum in Vörs, Spa of Zalakaros, Lake of Hévíz





Let's protect together the quality of water in Kis-Balaton and thus in Lake Balaton; let's preserve the natural beauties of this extraordinary landscape.

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Fauna



The fauna is extremely rich, we can find adder-flies, 32 different species of fish (among which 6 are protected), frogs, water-salamanders, grass-snakes, lizards and mud-turtles. Protected species of fish are the following: mud-minnow, common loach, spiny loach, thunder-fish, freshwater goby and gudgeons. Umbra and loach species living in oxygen-poor swampy waters are highly protected. The avifauna with its 232 species (among which 38 are highly protected) is considerable even comparing with other nature conservation areas. 13 of the highly protected species hatch in the Kis-Balaton region, they are: egret, little egret, heron, spoonbill, squacco, white stork, erne, white owl, lich-owl, landrail, bee-eater, whaup and a special kind of pochard.

Flora



In the Kis-Balaton region 29 protected and one highly protected species of plant can be observed. The most considerable and well-known species are: mud nettle, a kind of goldcup, cowslip, snowflake (highly protected), moor-grass, poison-flag and white water lily, the flower of canals.



"Water is the cradle of life"



THE KIS-BALATON Water Protection System

