

THE FIRST RUBBER DAM APPLICATION IN TURKEY FOR PROTECTING AND RESTORING THE AQUATIC ENVIRONMENT

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Büyük Menderes Rivers flow into the Aegean Sea and Bafa Lake on the left side of the Büyük Menderes Rivers, at the distance 22 km from the point that rivers flow into sea Fig 1. It is known that Bafa Lake anciently is a part of the Aegean Sea. Bafa Lake, anciently a sea inlet at the Aegean Sea, is cut the connection with the Aegean Sea in course of time with the reason of bringing alluvion of Büyük Menderes Rivers and is now Lake shaping.

When Bafa Lake waters pullout with reason of drought and extreme evaporation, fish potential at the Lake related to natural life damaged widely. Rehabilitation is necessary to bring early condition of Lake water level. It is necessary to providing water flow with Gravitation Lake from Büyük Menderes Rivers for holding +2 m water level at Bafa Lake. A way to solve this problem is to construct a rubber dam on the Büyük Menderes Rivers. Thus, fish species and fish potential can increase at the Lake.

With the construction of rubber dam, weir system will deflate automatically when flow conditions that will be come over normal flow or will be come the greatest overflowing flow condition. Thus, total flow will start to flow in bed and full capacity. With this operation, over +3 m level contour lands will not stay under water and agricultural actions will be continuing.

At the result of ebb and flow effect at the sea level rising, at rubber dam downstream will be rise salty water level. But rising water will not pass away from downstream to upstream. Because inflated rubber will be barrier for salty water inlet. Thus, suitable for agriculture lands, over +3 m level from Rubber dam axis will prevent from salinity problem.

At overflowing time, inflatable rubber dam built for automatically work and by self deflated. Thus, it permits to full capacity work of riverbed at overflowing time.

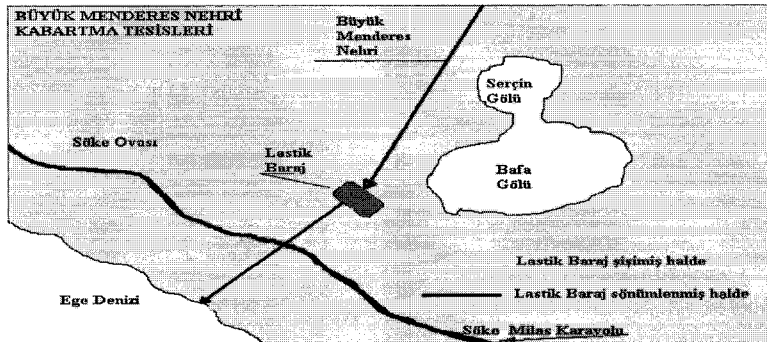


Fig. 1 Büyük Menderes, Bafa Lake and rubber dam.