BSAP Fund

Actions against internal loading, removing of phosphorus rich sediment from lake Öljaren

Foto: Johan Hammar

Municipality of Katrineholm

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1. Executive summary of the project

Municipality of Katrineholm (KAT) has carried out a low-flow dredging project in Lake Öljaren to improve water quality and reduce internal loading from the eutrophic lake bottoms. Lake Öljaren is suffering from overload and has its outflow to lake Hjälmaren which is Swedens fourth largest lake. Lake Hjälmaren is also suffering from heavy overload. Low-flow dredging is a relatively new technique where the top layers of fluffy sediments are gently suctioned up and pumped onto land for either dewatering or direct application as fertilizer. The main project has been LIFE IP Rich Waters, but with co-financing from the BSAP Fund, among others, it has been possible to dredge a larger area and obtain more data for evaluating of the method and technology. The funding from the BSAP Fund made it possible to dredge an additional 20,000 square meters of the lake bottom, thereby removing more phosphorus, nitrogen, and other nutrients. The organic phosphorus-rich sediments consume oxygen when they decompose, so an additional positive effect has been the local reduction of oxygen-consuming sediments in the lake. The project has also led to that oxygenated and purified water has been led back to the lake after the separation and dewatering of the sediments. The sediments that has been gathered up by BSAP funding is going to be spread on arable land in 2025 as a fertilizer.

The project has attracted significant interest, both from the media and through study visits, both nationally and from other countries.