

We make your lake feel better

LakeAlive's holistic healing process transfers your polluted natural water body into a natural enjoyable ecosystem



Contaminated water systems

Our industries and agriculture as well our households discharged their waste to our rivers, lakes and seas in the past.

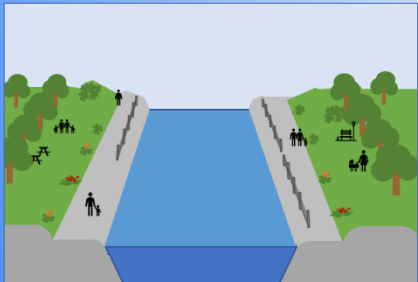
The pollution has slowly changed the life in the water and finally killed the fish and other aquatic life. Unwanted weeds have got the possibility to grow and take over the living space from other plants.

Often the polluted lakes or rivers cause uncomfortable smell and disable the usage of the water.

Waters need oxygen to stay healthy

The dissolved oxygen level of a healthy lake is around 6 - 11 mg/L. When the level of dissolved oxygen is low, higher is the need of dissolved oxygen in the water.

Healthy life: plants, fishes and microbes, in water requires minimum level of dissolved oxygen



The LakeAlive water systems restoration solution

LakeAlive does not only recover the water, but recycles the extra materials drawn from the water body for energy and other utilities

The fishes and other type of aquatic life returns to the water body which can be used as a reservoir for potable water. The healthy water body allows recreational usage as well. Land scaping the waterfront enables utilization.

LakeAlive

The unique sustainable LakeAlive water body restoration solution is based on the development work and combined expertise of two companies, FimusKraft and Sansox, both forerunners in their business segment.

FimusKraft Oy brings the expertise of bio-technology: bio-fermentation with its unique modular fermenter producing biogas. Sansox Oy brings the expertise in water treatment: aeration and separation. Other experts will be used per case.

Our mission in LakeAlive is to keep the waters sustainably clean and handle the waste environment friendly way.



The unique sustainable LakeAlive water reservoir restoration solution



Sustainable LakeAlive restoration solution for water reservoir

It is important that restoration process is a long-term solution, not only quick fix. The target is to reclaim the natural water body and keep it clean. The following environment friendly process will enable the restoration of any water body: lake, river, reservoir or sea.

Initial condition analysis and stopping the pollution of the water

The initial analysis of the water is the starting point for the restoration process. The solids in the bottom of the water body should be analysed as well. At the same time special sensors that follow the changes in the water body are installed. These sensors monitor the water throughout the restoration process.

Effective aeration of water is important in the start and continues throughout the process.

Naturally the instances that pollute the water body are identified and action will be taken. All the wastewaters have to be treated in wastewater treatment plant and any extra materials entering the body must be stopped.

Energy production from the bottom layers and water weeds

The next step is that the bottom layers will be dredged. All floating waste of plastics, wood and other solid materials will be removed from the water. The unwanted water weeds such as water hyacinths will be harvested.

The organic material can be utilized in bio-fermenter in order to produce biogas. The biogas can be used to produce electricity and heat with the microturbines. The electricity is possible to use in the lake restoration process.

Our fermenting system is modular and packed into a container which makes them easy to transport and handle. Modular containers are also easy to operate.



Fertilizer and landscaping

After bio-fermentation the organic solid material is rich in nitrogen, phosphorus and potassium. This material is very good natural fertiliser for farming and for landscaping.

Utilization of the water and the waterfront

Increasing the level of dissolved oxygen in the lake water during and after restoration will return healthy life to the lake. The continuous follow-up of water condition is key for keeping the water clean in the future as well.

The clean water and good-looking landscape around it can be utilized for leisure time activities.

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