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Solaer TM

Solar Powered Lake Bed Aeration

The Cost Effective Environmental Solution for Lake and Pond Aeration



Patent Pending
Complete Turnkey Package has everything you need!

TURN KEY PACKAGE

Features

Compressor - Brushless DC motors / minimum Amp draw for continuous duty operation.

Cabinet - Low maintenance fiberglass outdoor housing unit with legs.

Solar Panels - Your Photovoltaic panels are sized to fit your system for maximum output

Diffuser - Patented Dura Plate TM diffuser circulates large volumes of water. Clog-free system requires no cleaning.

Polypipe - Strong yet flexible with a 25 year warranty.

Battery Back Up - Your system will benefit from 24 hour continuous run time.

Charge Controller - Operates and charges the system.

Sound Proofing - Significant noise reduction.

OPTIONS:

Autotracking Panel Rack - PV mount that follows the movement of the sun for maximum power output.

Self Weighted Tubing - Tough and flexible lead-free PVC tubing.

Dura Venturi TM For deep water applications.

*** Mounting pole not included ***

Lake Size (in acres)	Feet of Polypipe	Approx. Air Flow (CFM) @ 10' depth & 5 psi	No. of Diffusers (Dura Veturi)	HP	Price
1	200	0.45	1	1/16	\$5,025.00
2	400	0.45	2	1/16	\$5,875.00
3	600	1.8	3	1/3	\$8,810.00
3-5	800		4		\$12,125.00

Insulation package and timer included on all systems.

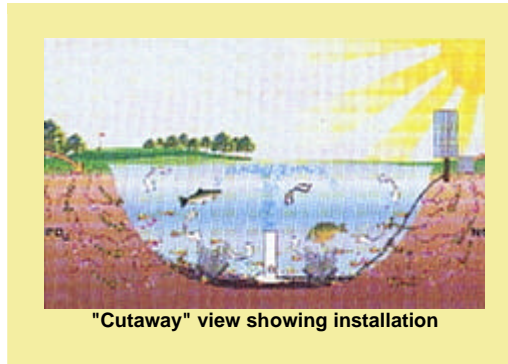
The Lake size coverage given for the various Lake Bed Aerators may vary according to depth, local conditions, degree of eutrophication, water quality conditions, and other biological site conditions.



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BENEFITS

- *Reduces Algae growth
- *Increases dissolved oxygen levels
- *Stimulates the natural microbes
- *Eliminates harmful gases
- *Destratifies the water column
- *Reduces nutrient levels
- *Keeps water open year round
- *Increases fish growth



ADVANTAGES

- *Low Maintenance
- *24 hour run time
- *No utility costs
- *Pays for itself

Lake Bed Aeration™

Aeration means adding air to the water. To restore a lake to health, it is essential to get oxygen down to the lake bottom. Lake Bed Aeration™ not only adds oxygen to the surface water but to the water at the bottom of the lake as well. Once the lake is full of oxygen near the bottom, beneficial aquatic insect larvae, snails, fresh water shrimp, and other fish food can begin to live on the bottom and littoral zone (light zone).

Lake eutrophication begins when the BOD (Biological Oxygen Demand) of a lake cannot be met. When too much pollution enters a lake, plant and algae growth dies and sinks to the bottom, resulting in an overload of organic sludge. Lower forms of life on the lake bed die and this debris rots. Anaerobic bacteria, which needs no oxygen, give off deadly poisonous gases, such as hydrogen sulfide, ammonia, and methane. These gases, as they rise through the water, unite with and bind up and dissolved oxygen remaining in the water. Fish will then die from lack of oxygen. By pumping compressed air out onto the lake bed diffuser, the rising air bubbles bring the bottom water to the surface. Large volumes of water release pollutant gases to the air and pick up more oxygen while on the surface. If oxygen is present at the lake bed, dead organisms will not accumulate but will quickly be consumed by aerobic bacteria, thus providing for a healthier lake environment.



Solar Powered Lake Bed Aeration in action

Aeration systems also:

- * Reverse lake aging and degradation
- * Prevent unnecessary fish deaths in the winter and summer
- * Reduce aquatic vascular plant growth
- * Clean up water and improve water clarity
- * Keep water open year round to water livestock
- * Oxidize phosphate, ammonia, and nitrite to reduce their levels
- * Stop buildup of organic and inorganic pollutants
- * Increase fish growth, production, and carrying capacity of your lake
- * Helps reduce unsightly green algae and planktonic algae blooms

Custom systems are also available in addition to our turnkey systems!

Please contact **SC Solar** for more information or to place an order:

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