

# Safety Review: Frequently Asked Questions

## Boating and SolarBees in Lakes & Reservoirs



We are sometimes asked about the potential for accidents and owner liability regarding SolarBee® Lake Circulators. Since 2002, over one-thousand SolarBees have been installed in lakes & reservoirs that have water skiing courses, wake boarding contests, windsurfing lessons, sailing courses, rowing courses, heavy fishing activity, jet skis, and even seaplane landing areas. There have been no significant accidents or liability to any lake stakeholder. In short, recreational boating and SolarBees have coexisted very well in water bodies of all sizes.

### Top 10 Frequently Asked Questions

Equipment Information, Safety Features, & Other Considerations

#### 1) How big is a SolarBee® Lake Circulator?

A SolarBee® Lake Circulator is about 16 feet (4.9 m) in diameter (not much larger than a very small fishing boat).

#### 2) How is a SolarBee anchored?

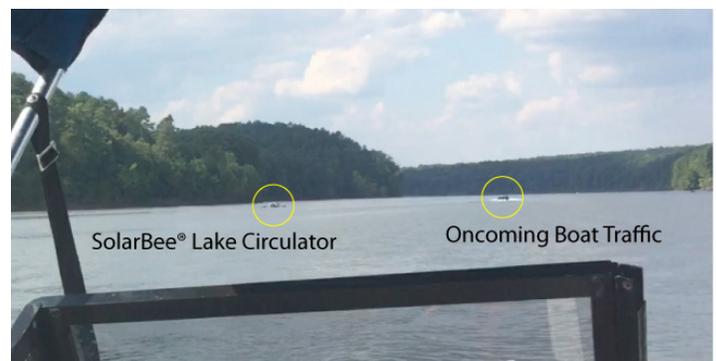
SolarBees are anchored much like a mooring ball with restricted movements determined by the anchor chain length. The standard anchor system has two 70 lb. poly-encapsulated anchor balls that lay in series on the bottom with a 7:1 anchor chain scope (ratio of chain length to depth). This scope can be reduced to less than 2:1 in certain situations depending on lake elevation fluctuations and potential ice issues. This anchoring system has proven effective for all types of lake conditions and machines seldom move (except in cases of large ice movement, high

flow-through “flood” events, or hurricane conditions). If a machine does move, it can easily be brought back into position after the event has ended.

This anchoring method results in little movement of SolarBee® machines and thus offers predictability for boaters. And in the off chance a SolarBee were ever to be nudged by a boat, it will simply move aside with minimal resistance.

#### 3) Do SolarBees have clearly visible safety/warning features?

Each SolarBee is equipped with 3 orange reflective pylons (one per float) and additional “Keep Away” warning signs affixed to the frame. An optional US Coast Guard approved flashing beacon light can be added if desired. Other water safety visibility enhancements required by local authorities may be incorporated as well on a case by case basis.



#### 4) Do SolarBees draw objects or boats toward it?

No. Water movement at the surface is away from the SolarBee. The outward radial flow of ~10,000 gallons (38,000 liters) per minute tends to push away canoe, kayak, or swimmers.



#### 5) What is the SolarBee spacing and visibility?

The distance between any two SolarBee Lake Circulators is usually 1,300 feet (approximately 400 meters or 0.25 miles) depending on lake shape and bathymetry. It is very easy for boaters to maintain a safe distance from them. Generally, only three SolarBee units are visible from any one place on the lake.

#### 6) Do the SolarBees have any safety certifications?

SolarBee machines have "CE" certification (see certificate below). CE is a process developed by the European Union involving an extensive safety evaluation to ensure the machines are safe for owners, maintenance personnel, and/or anybody apt to encounter a machine.

#### 7) Are there any legal liabilities associated with SolarBees?

Virtually all lakes in the US are deemed "Navigable Water" and maritime law applies to on-lake events. Our research indicates that as long as the lake owner follows the same jurisdictional procedures for placing an "aid to ecology" (i.e. a SolarBee®) as for placing an "aid to navigation" (i.e. a safety buoy), then the same immunities & protections apply. In maritime law, "the buoy is never in the wrong"; it is the boater's responsibility to be safe around both buoys and SolarBees.

#### 8) Do we need insurance coverage on the equipment?

Many lake owners do not insure their SolarBee machines. The insurance policies available are similar to those for docks and other improvements. If the SolarBees are under an Ixom Watercare Service Plan, there is usually very little reason to purchase insurance.

#### 9) Do SolarBees harm fish?

No, quite the opposite! SolarBee® Lake Circulators often become a "destination" for local fishermen. SolarBees produce up-flow circulation beneficial for zooplankton production which often lead toward fish congregating near the machines. Improved water quality through the prevention of cyanobacteria (blue-green algae) blooms provides a large benefit for the lake's fishery.

#### 10) Are any public education awareness campaigns needed?

Public awareness contributes to public safety and is always a good idea. When there is public access to a lake or reservoir with one or more SolarBees, we recommend a sign similar to the one shown be displayed for educational purposes.

A frequent observation from the public when multiple SolarBees are installed is how they are much less obtrusive compared to what they had originally imagined. Local boaters are typically very appreciative of the water quality & fishery improvements provided by the SolarBee® Lake Circulators and they are very aware of where the machines are deployed.



SolarBee® Lake Circulators have a long track record of safe deployment across the United States and the world. In the end, toxic cyanobacteria blooms in your lake pose a much larger safety threat to humans & pets. SolarBee® is a leading solution for combatting cyanobacteria problems in lakes, reservoirs, ponds, and stormwater.

For more information, please visit us at  
[www.ixomwatercare.com](http://www.ixomwatercare.com)