

Volunteers Contributing to Our Understanding of Water Quality



What is the Secchi Dip-In?

The Secchi Dip-In is an annual event in July where volunteer monitors across North America take to their local lakes and reservoirs to measure water transparency using Secchi disks and other turbidity instruments, as well taking measurements of water temperature and pH.

The data collected are used to assess trends in transparency of waterbodies in North America. Since 1994, more than 10,000 trained volunteers have generated 42,000 transparency records, giving a glimpse of lake water transparency at sites across North America and the world. Transparency trends serve as an

indicator of changing water quality.

A goal of the Dip-In is to increase the number and interest of volunteers in environmental monitoring. A volunteer monitoring program cannot long survive if information flows only from the volunteer to the agency. Volunteers need to be assured that their efforts are not only appreciated but are also a necessary part of the total monitoring effort. It is the premise of the Dip-In that this assurance is enhanced if the volunteer is a part of a national as well as the local effort.

How can I participate?

All you have to do is bring your
Secchi disk along when you visit your
local lake or reservoir during July,
Lakes Appreciation Month, take a
measurement and submit the data to our
website or with the Lake Observer app.
Data submission is not limited to July.
Any contributions are appreciated!



What Is a Secchi Disk?



The typical Secchi disk used in lakes is an 8-inch disk with alternating black and white quadrants. It's lowered into the water until the observer can no longer see it. The depth of disappearance, called the Secchi depth, is a measure of the transparency of the water.

The disk is named in honor of Father Pietro Angelo Secchi, astronomer and scientific advisor to the Pope, who tested this new instrument in the Mediterranean Sea on April 20, 1865.

Transparency decreases as the amount of particles in the water—such as algae and sediment—increases. The amount of algae depends on the amount of nutrients coming from sewage treatment plants, septic tanks, and lawn and agricultural fertilizer. Changes in land use may affect fertilizers coming into a waterbody, and therefore, transparency.

Do you live near a lake or reservoir? Join the volunteer effort to track changes in water quality!

