Looking Down on Earth

The joint NASA/USGS satellite program provides up-to-date images of Earth's changing surface.

An artist's concept of Landsat 8 orbiting Earth.

LEARN MORE: nasa.gov/mission_pages/landsat/ main/index.html

Beginning in 1972, the Earth-observing Landsat fleet of satellites has provided the longest unbroken data stream of land cover changes viewed from space.

This series of satellites, with Landsat 8 being the most recent, has allowed scientists to detect and monitor our changing planet from a unique perspective.

Harmful algal blooms like the one shown here can kill fish and affect the safety of drinking water. With its high-powered Operational Land Imager, Landsat 8's color satellite imagery can help provide early warning indicators for algal blooms and other harmful events that can affect local populations. Given its near-polar orbit, Landsat 8 can monitor all of Earth over the course of 16 days.



A Landsat 8 image of Lake St. Clair near Detroit shows algal blooms, visible as swirls of green.