

The Florida Water Environment Association gives the Earle B. Phelps Award annually to recognize the operation of outstanding wastewater treatment facilities. For those who do not know who Earle Phelps Award's namesake was, Earle Bernard Phelps was a chemist, bacteriologist and sanitary expert who served in governmental positions and as an academic in some of the leading universities in the U.S. He is known for his contributions in sewage disinfection, water chlorination, sewage treatment, milk pasteurization, shellfish control, and for describing the "oxygen sag curve" in surface water bodies.

He was born in 1876 in Illinois and ended up graduating from the Massachusetts Institute of Technology in 1899 with a bachelor's degree in chemistry. After graduating he worked as assistant bacteriologist at the Lawrence Experiment Station in Massachusetts, as a chemist/microbiologist with the Sanitary Research Lab at MIT and also taught at MIT. He investigated a typhoid fever epidemic at State Hospital in Trenton, New Jersey and also worked for the US Geological Survey as an assistant hydrographer. It was in 1910 to 1911 that he conducted groundbreaking research with Colonel William M. Black of the US Army Corps of engineers on the pollution of New York Harbor which established the first time dissolved oxygen concentrations in water was used to determine water quality in the harbor.

In 1913 he left MIT to lead the Chemistry Division at the US Hygienic Lab which was part of the US Public Health Service in Washington, DC. It was there that Phelps worked with H.W. Streeter, a sanitary engineer there, on the characterization of oxygen depletion in a stream receiving organic wastes. The Streeter-Phelps equation was the first quantitative model that was used to determine biochemical oxygen demand impacts on discharges to surface waters. He went on to teach at Stanford and Columbia universities and finally to the University of Florida where he was a professor of sanitary science until his death in 1953.

In 1964, the Florida Section of the WEF established the Earle B. Phelps Award, which is given annually to a wastewater treatment plant for outstanding operation.