

## **THE WATER ENVIRONMENT FEDERATION: RESPONDING TO THE CHALLENGES TO THE GLOBAL WATER ENVIRONMENT**

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Founded in 1928, the Water Environment Federation (WEF) is a not-for-profit technical and educational organization with members from varied disciplines who work toward the WEF vision of preservation and enhancement of the global water environment. The WEF network includes water quality professionals from 76 member associations in 30 countries. The basic mission of WEF is to advance science and technology and promote public education in water and water quality.

This presentation will highlight the many programs carried out by WEF to promote water quality and sound water management across the globe. These programs are as diverse as the general membership of the organization which includes professionals from water and wastewater utilities, industries, engineering consulting companies, governmental regulatory agencies, and the academic community, among others. The presentation also will highlight many of the products and services provided by WEF to the water quality sector to enhance the ability of water professionals to meet the challenges facing modern water and wastewater systems.

In recent years, WEF has taken on the advocacy of several programs designed to enhance our abilities to deal with global challenges to the water and wastewater sectors. These challenges include the issues of deteriorating or insufficient infrastructure systems and water infrastructure sustainability; the effects of compounds of emerging concern including endocrine disrupting chemicals in water systems; workforce demographics and the dwindling supply of skilled labor; and the effects global climate change. In particular, global climate change threatens the ability water professionals and water and wastewater systems across the globe to deliver adequate amounts of safe drinking water and provide for sufficient wastewater treatment, and hence, constitutes the most formidable future challenge. It is noted in particular that most global climate change models suggest that water supplies in many areas with chronic water shortages, including the Middle East and North Africa, are likely to become even more scarce. These predictions add a level of urgency and complexity that requires innovation in how water is used and how wastewater is treated and reused. For these reasons, WEF is in the process of implementing programs to educate the public and public officials on the need for timely responses to the challenges posed by global climate change and to prepare the water quality professional community for its effects.