

ASCE Issues Climate Change Statement, Urging UN Action

As the 2021 United Nations Climate Change Conference began in early November, ASCE issued a COP26 communiqué outlining actions and policies leaders should support to address climate change and encourage resilient and sustainable infrastructure.

“The imperative to act now to mitigate climate change is becoming more plain by the day,” said ASCE 2022 President Dennis Truax, Ph.D., P.E., DEE, D.WRE, F.NSPE, F.ASCE. “We as engineers play as critical a role as there

is in reducing carbon emissions from our infrastructure. With our COP26 communiqué, ASCE joins the chorus calling for action now to work toward achievable targets.”

ASCE’s Committee on Sustainability prepared the communiqué, aligning it with the Society’s Policy Statement 360 on climate change. The ASCE Board of Direction voted to approve the message during its quarterly meeting in October.

The communiqué calls for “developing a

new paradigm for engineering practice in a world in which climate is changing but the rate and extent of change and subsequent impacts cannot be projected with a high degree of certainty.”

The statement also urges “revisions to engineering design standards, codes, regulations, and associated laws that strengthen the sustainability and resiliency of infrastructure at high risk of being affected by climate change.”

KEYWORD: COP26

California Water District Moves Ahead With PFAS Treatment Systems

Beginning in 2019, multiple retail water providers in Orange County, California, elected to shut down several dozen groundwater wells because they were found to contain low levels of a class of contaminants known as perfluoroalkyl and polyfluoroalkyl substances. In a region that depends heavily on groundwater for its water supplies, the closures have proved expensive, as the affected water agencies have had to rely even more than they typically do on costly imported water from California’s State Water Project and the Colorado River.

Following an extensive study of various methods of removing PFAS from drinking water, the Orange County Water District recently began operations at the first of more than 30 planned PFAS treatment facilities. Buoyed by a large low-interest loan from the U.S. Environmental Protection Agency, the OCWD is moving ahead with its expedited program to design and construct the remaining treatment systems.

The substances collectively known as PFAS comprise a group of thousands of



human-made chemicals used in industrial processes, firefighting activities, and myriad consumer products, including makeup, clothing, food packaging, furniture fabrics, stain repellents, and nonstick coatings on cookware.

The most frequently studied PFAS variants are perfluorooctanoic acid, perfluorooctane sulfonate, and perfluorobutane sulfonic acid. The EPA and California’s State Water Resources Control Board have warned that exposure to certain types of PFAS, including PFOA and PFOS, may lead to adverse health outcomes in humans.

The OCWD manages the sprawling groundwater basin that provides drinking water for much of northern and central Or-

ange County, which extends from Anaheim in the north to Huntington Beach in the south. Although various investigations are ongoing to identify potential sources of PFAS to local groundwater, one likely source is thought to be infiltration to the basin from the Santa Ana River, which itself receives the contaminants from stormwater and wastewater from communities upstream of Orange County. As has been happening in a growing number of water supplies around the country, sampling of Orange County’s groundwater has detected PFAS in certain areas in recent years.

To return the closed wells to service, the OCWD entered into agreements with 10 of the water providers to design and construct treatment systems to remove PFAS from their groundwater supplies, says Chris Olsen, P.E., the director of engineering for the OCWD. The remaining provider, the city of Anaheim, is delivering its PFAS treatment system by means of the design-build process with oversight from the OCWD.

KEYWORD: PFAS

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