
The Kapppe Lecture Series

AMERICAN
ACADEMY
OF ENVIRONMENTAL ENGINEERS & SCIENTISTS®

2022

Sharing the
knowledge
of today's
practitioners
with tomorrow's
engineers and
scientists.

The 2022 Kappe Lecturer

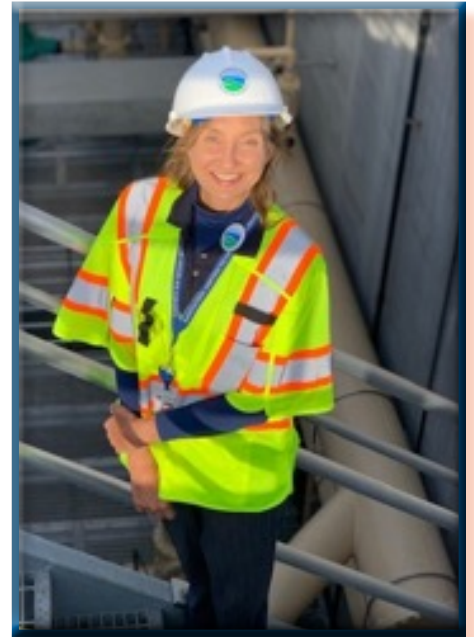
Wendy A. Wert, P.E., BCEE

2022 Vice President, AAEES

Wendy is a Board Certified Environmental Engineer with the Los Angeles County Sanitation Districts. For the past 21 years, she has been working on programs that rely on public participation to integrate water supply, water reuse wastewater facilities planning. She received a B.S. in environmental engineering and an M.S. in water resources engineering from the University of Central Florida (UCF).

Her studies gave her opportunities to collaborate with others. It was during this time that Wendy developed an interest in effectively communicating math and science to diverse groups. Today, she uses her position as an engineer to support outreach and education programs that explain how the work of the Sanitation Districts identifies community needs then applies engineering and scientific principles to meet them. Wendy is an award-winning transformative leader anchored in integration, innovation, and inclusion.

Wendy's journey started on a farm in Pennsylvania. Her father was a Navy veteran, and her mother is a retired school teacher. Wendy's mentor Debra Reinhart, Ph.D., P.E., BCEE, encouraged her to join the Academy. Wendy joined in 1997 and discovered a network of peers to help meet the challenges of our field. Family and mentors continue to inspire her career.



EDUCATION

- BS, Civil Engineering, University of Central Florida, 1998
- MS, Environmental Engineering, Water Resources Specialty, University of Central Florida, 2005

CREDENTIALS

- Licensed Professional Civil Engineer in California, Colorado, and Pennsylvania (PE)
- Project Management Professional (PMP)
- Board Certified Environmental Engineer in the Water and Wastewater Specialty (BCEE)

AFFILIATIONS

- California Water Environment Association, President 2021
- Water Environment Federation, Government Affairs Committee, 2021
- American Academy of Environmental Engineers and Scientists, Vice President, 2022

AWARDS

- Los Angeles County Sanitation Districts' Science Education Program was selected by the Water Environment Federation as the recipient of the Public Communication and Outreach Program Award, October 2020.
- Stanley E. Kappe Award recipient for contributions to the field of Environmental Engineering by the American Academy of Environmental Engineers and Scientists, April 2020.
- WEF Utility of the Future for advances in partnering and engagement, September 2019.
- NACWA National Environmental Achievement Award for public information and education, February 2020.
- WEF Recognition of Outstanding Service, April 2018.
- Metropolitan Water District Outstanding Contributions to the World Water Forum, 2017.

Abstracts of Lectures Offered

Converting Waste Into Resources: Environmental Challenges and Sustainable Solutions

Water scarcity, population growth, and aging infrastructure are impacting water security around the world. Experiencing severe drought during the COVID-19 pandemic, California faces all of these challenges. Utilities must not “waste” resources, rather environmental engineers and scientists are challenged to imagine, research, design, and build a better future. One agency, the Sanitation Districts of Los Angeles County (Sanitation Districts), are fortunate to manage several historical “waste” streams including: sewage, trash, and stormwater. Come

discover the synergies among these sources that help amplify resource recovery, thereby, contributing to sustainable regional solutions in Southern California.

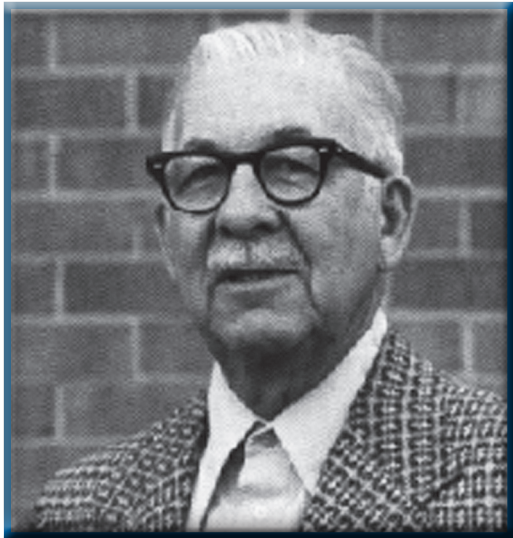
Annually, the Sanitation Districts of Los Angeles County (Sanitation Districts) turn wastewater trash, and stormwater into:

- 49 Billion Gallons of Recycled Water
- 77 Megawatts of Electricity
- 177,000 Tons of Recycled Commodities
- 145,000 Tons of Compost

Reducing Our Carbon Footprint: Sustainable Green Fleet

As part of its mission to convert waste into resources, the Los Angeles County Sanitation Districts (Sanitation Districts) operates a biogas purification system to recycle food waste into renewable vehicle fuel. Food waste includes dinner scraps, spoiled fruit and vegetables from grocery stores and restaurants. The program provides a regional solution to global challenges. Methane emissions resulting from the decomposition of organic waste in landfills can be a source of greenhouse gas (GHG) emissions, which contribute to global climate change. In California Senate Bill (SB) 1383, establishes methane emissions reduction targets in a state-wide effort to reduce emissions.

The Sustainable Green Fleet program demonstrates the feasibility of using an innovative biogas purification system, to not only provide renewable natural gas but also help many cities cost-effectively achieve state requirements for organics diversion. The Sanitation Districts’ Green Fleet program has three main initiatives: (1) increased use of alternative fuels, such as renewable natural gas and renewable diesel, that have cleaner emissions; (2) production of more renewable natural gas, especially from food waste; and (3) transition to an electric vehicle fleet. Over the past five years, the agency’s total fuel consumption is down 25% and in 2020, use of fossil fuels dropped 43% compared to the previous year.



“A man’s debt
to his profession
is to help
those that follow.”

STANLEY E. KAPPE, P.E., DEE, a successful environmental engineer, believed he owed a debt to the profession that rewarded him so well. During his life, he gave of himself to his university and to his profession through countless hours of volunteer activity. And through this Lecture Series, he continues to share his good fortune with tomorrow's environmental engineers and scientists.

He graduated from Pennsylvania State University in 1930 with a bachelor's degree in sanitary engineering. He served with the Pennsylvania State Health Department and the U.S. Army Corps of Engineers before joining the Chicago Pump Company as its Eastern Regional Manager in 1935. In 1945, he founded Kappe Associates, Inc., a water supply and wastewater equipment company headquartered in Rockville, Maryland, and continued as its Chief Executive Officer until his death in 1986.

His peers recognized his contributions to the profession by numerous awards, including the AWWA Fuller Award, the WEF Arthur Sidney Bedell Award, the WPCAP Ted Moses and Ted Haseltine Awards, and the AAEEES Gordon Maskew Fair Award. In 1985, Pennsylvania State University named him Outstanding Engineer Alumnus.

Stanley E. Kappe was an activist member and leader in several national and Chesapeake region professional societies. He served as the Executive Director of the American Academy of Environmental Engineers (now the American Academy of Environmental Engineers and Scientists) from 1971 to 1981.



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147 OLD SOLOMONS ISLAND ROAD, SUITE 303, ANNAPOLIS, MD 21401 • (410) 266-3311

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