

# STEM SPOTLIGHT

**Juanita Ford Boothe**

Environmental Engineer  
Memphis, Light, Gas and Water Division

Bachelor of Science, Civil and Environmental Engineering  
Christian Brothers University



**Q How did you select your college major?**

**A** I have always had an interest in math, science, real world, see and touch application. If my memory serves me correctly, I also completed a 'What Will You Be When You Grow Up' type survey in high school that told me that I was destined to be an engineer.

**Q What was the biggest influence in your selection of major/career?**

**A** Although I attended an engineering school, I did not totally settle on which type of engineering I wanted to major in until my sophomore year. After sweating through Circuits and Chemistry, Electrical Engineering and Chemical Engineering were removed as options. Back when I was at CBU, this only left Mechanical and Civil. After withdrawing from Dynamics and crying through Thermodynamics, Mechanical Engineering was eliminated...therefore, I declared my major as Civil & Environmental Engineering. Given my real-world, 'see and touch' application interests, Civil & Environmental Engineering proved to be a perfect fit.

**Q If you could go back to high school and select any elective course to take that would have better prepared you for college, what would it be?**

**A** Time Management. Oh...that is not a high school elective. It totally should be!

**Q What is your favorite aspect of your job?**

**A** It is something new every day. As an environmental engineer for the Division, my primary responsibility is to ensure the Division's compliance with applicable environmental regulations on a local, state and federal level. Our activities change daily and the regulations change often, so every day is different.

**Q How do you/your company make a positive impact on society/our community?**

**A** MLGW is actively engaged in the community. We have teams that volunteer in numerous local non-profits organizations. We are actively engaged in helping our customers use energy more wisely, energy conservation and utility safety. MLGW also produces a Community Outreach newsletter which reflects where we are in the community on a monthly basis.



**Q** What is the most interesting thing you have been able to do in your career?

**A** The most interesting thing that I have been able to do at MLGW is assist with the clean-up of a contractor's diesel spill on our property. Clean up efforts differ from each project depending on contaminant, soil type, weather conditions, geography, landscape, temperature and numerous other environmental factors.

**Q** What makes you get up each morning excited about your profession?

**A** My profession keeps me excited because it is always changing. Our service area expands across several towns and/or cities, and each town and/or city has its own regulations in which we have to comply. Each of our projects and day-to-day operations can vary. How we complete these projects in each town and/or city can also vary. Change is exciting to me.



**Q** What advice would you like to share with K-12 students who are considering your profession?

**A** A good understanding of science and math (engineering) is important, but excellent soft skills - communication and people skills are essential. Being able to communicate with everyone from engineers, drafters, heavy equipment operators, custodial crews and CEOs is essential for effectively leading a team and explaining your great design. You can have the greatest design in the world, but if you cannot communicate your idea and get your team's buy-in, you just have a great idea on paper.