

Where Are They Now? – Inspiring the Next Generation of Water Professionals

Celebrating 8 Years of the Student Design Competition and the Impact of Its Alumni

Message from Paul Solanics - Co-Founder, SDC

I get great satisfaction witnessing the development and success of the NESOWEA Student Design Competition. I remember during my term on the NESOWEA Executive Committee (2012 – 2018), I was asked by the OWEA President, Ted Baker to expand our public outreach in local schools and universities. He also expressed his desire to send a team to the national Student Design Competition at WEFTEC. We spent a few years meeting with the Deans and professors at local universities to promote the vast career opportunities in our profession and to express the need to fill these positions because of the large amount of retirements projected in the upcoming years.

The Student Design Competition was presented as an educational opportunity that would provide a learning experience well beyond the classroom. Students would gain real life experience in finding solutions for sanitary and storm water problems that water professionals are facing every day. In addition, the students would be networking with local professionals in our area. What a great addition to one's resume.

In 2017, the first successful local Student Design Competition was piloted with three teams from Cleveland State University. In 2018, additional teams participated from Case Western Reserve University (CWRU). The OWEA approved our request to send the winning team from CWRU to present at One Water Conference and WEFTEC 2018. This contribution has continued to date.

It is evident from reading the student testimonies that the objectives of the competition have been successful and that it continues to grow. It is especially satisfying to see how many students have been recruited for jobs in the water profession right here in Northeast Ohio and are paying it forward with their involvement with the OWEA. Sustainability for our profession and our organization is a win in my book.

Congratulations to Krishna Chelupati and the team of volunteers that continue to promote and support this competition.

Paul Solanics

Director, Solon Water Reclamation Facility NESOWEA, Past President

Message from Muralikrishna Chelupati – Co-Founder and Past Chair, SDC

Since its inception in 2017, the Student Design Competition has served as a platform to nurture young talent and prepare aspiring engineers for the challenges of the professional world. As the founding member and chair of this initiative, I have had the privilege of witnessing the incredible growth, creativity, and determination of hundreds of participants. Over the years, this competition has become more than just an event – it is a launchpad for careers, a training ground for innovation, and a celebration of what's possible when bright minds come together to solve real-world problems.

The return on investment (ROI) for our industry has been remarkable. Many students who participated in this competition chose our industry as their career path and have remained in the state after graduation, contributing directly to the local workforce. Several of these former participants have become active members and volunteers in professional organizations, lending their voices to advance the industry.

Some participants are now thriving in their careers and often express gratitude for how the competition shaped their professional journeys. It is not uncommon to run into these alumni – now accomplished professionals – at state and national conferences, where their enthusiasm and passion for the industry remain palpable. These individuals have become ambassadors for the competition, encouraging future participants and students from their alma maters to join, further increasing the visibility and impact of the program.

We are particularly proud that some alumni have joined the workforce as municipal and utility employees, bringing their experience full circle by offering real-world case studies from their organizations for future competition projects. Their continued involvement strengthens the bridge between academia and the water industry, fostering a culture of collaboration and innovation.

In this edition of the Buckeye Bulletin, we are excited to bring you a "Where Are They Now?" series, spotlighting the journeys of past participants who have made remarkable strides in their fields. Through their stories, we hope to inspire current students, demonstrate the value of this competition, and highlight the profound impact it has had on shaping the future of engineering.

As you read these stories, you will see common threads: the power of teamwork, the importance of perseverance, and the lasting value of the skills developed during the competition. These reflections serve as a reminder of why this initiative was started and why it continues to be such a critical opportunity for undergraduate and graduate engineering students.

Thank you for supporting this program and helping us celebrate the successes of these talented individuals. Together, we are building a stronger future for engineering, one competition at a time.

Muralikrishna Chelupati

Senior Associate, Stantec NESOWEA, Past President

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Our OWEA Student Design Competition Alumni – and their Perspectives on Participating in the Competition

Looking back on eight years of participation in the Water Environment Federation's Student Design Competition (SDC), alumni of the competition share thoughts on the competition and how it prepared them for their current careers in the water industry.

Meet the Alumni

Saisantosh Vamshi Harsha Madiraju

Environmental and Energy Manager, Brembo North America, Inc. University of Toledo, PhD in Environmental Engineering (2022) Year of Participation: 2017

McCallah Cooper

Civil Engineer I, AECOM
University of Akron, Civil Engineering (2024)
Years of Participation (2021 & 2022)

Abby Slates

Entry Level Environmental Engineering, Jacobs
Case Western Reserve University, Civil & Environmental Engineering (2023)
Years of Participation (2021 & 2022)

Sofi Iwamasa

Process EIT, Stantec
Case Western Reserve University, Civil & Environmental Engineering (2023)
Years of Participation (2021 & 2022)

Kevin Pataroque

PhD Candidate, Yale University
Case Western Reserve University, Chemical Engineering (2021)
Year of Participation (2016)

Aaron Mann

Graduate Student, North Carolina State University
Case Western Reserve University, Civil & Environmental Engineering (2020)
Years of Participation (2018 & 2020)

Christopher Metzinger

Project Manager, A.P. O'Horo Company Youngstown State University, Civil Engineering (2019) Year of Participation (2019)

Nick Merchant-Wells

Process Engineering, Northeast Ohio Regional Sewer District
Case Western Reserve University, Civil & Environmental Engineering (2018)
Year of Participation (2018)

In these roles, our alumni are contributing to the water industry as researchers, consultants, and utility engineers in the fields of sanitary, stormwater, and treatment infrastructure. From project management to technical design, and from research on RO membranes to operating a biosolids incinerator, our former SDC participants represent a new and exciting generation of engineers and leaders in the water industry!

A Snapshot of Feedback from the Participants

This is among the best ways to learn what opportunities are available in the water sector.

I believe that my participation in this competition set me up for success in my current role. My experience in the competition helped me develop confidence in myself, as I felt that I had a leg-up on my peers. The competition involved tasks such as touring a WWTP, reaching out to vendors, creating cost estimates, and presenting to professionals. As an entry-level engineer, these tasks are part of what I do, and having this experience was really helpful.

This competition was the number one reason I was able to line up for a job before graduating from college.

The SDC gives you a glimpse into what the consulting world is like - you are presented with a problem and are tasked with making a recommendation to defend to your client. Great experience to have a chance to explore real-life engineering problems and receive guidance from mentors in the field.

The competition provided invaluable preparation for real-world challenges in engineering by fostering critical skills such as problem-solving, teamwork, and effective communication. It pushed me to think creatively under pressure and apply theoretical knowledge to practical situations, closely mirroring the challenges faced in professional engineering roles. Additionally, collaborating with a diversely skilled team to overcome technical obstacles taught me the importance of adaptability and cooperation, both of which are essential in tackling complex real-world projects.

Participating in the competition most impacted me by introducing me to experienced engineers and the diverse group of professionals that make up the industry. I was confident in my ability to connect with clients and colleagues when I entered the workforce.

The superintendent at the plant where I was working approached me because he was experiencing issues with excessive solids throughout the facility. He wanted my input on what I thought was causing this solids buildup. It reminded me of this competition, and I reflected on the approach I had used then. I reverted to asking more questions to better understand the problem and gather useful information. By doing so, I was able to help the superintendent determine the cause of the solids issue and develop a solution.

Prior to my senior year, there were no courses in my curriculum that had any sort of alternative analysis portion to them. Yet, alternative analyses are a large portion of my current job. I think it was an excellent opportunity to work on the student design competition my sophomore year and junior year because it gave me real life experience with this type of work.

... I made valuable connections during the competition that have continued to benefit my career. Networking with industry professionals, and fellow participants opened doors to mentorship opportunities, collaborations, and insightful guidance. These relationships have provided support, professional advice, and sometimes even recommendations that have been instrumental in advancing my career.

This experience was beyond any other student design team that I have been a part of. Not only was it beneficial to my technical skills, but it was honestly a lot of fun! Being able to go to One Water and WEFTEC was awesome, and it helped me solidify that this was what I wanted to do for my career.

A Detailed Q&A with our OWEA SDC Alumni

Question:

How did participating in this competition contribute to landing your first position in the field? Were there any specific skills or connections from the competition that helped?

- Participating in and winning this competition played a significant role in helping me secure a funded PhD position at the University of Toledo. It allowed me to showcase one of my most notable achievements during the recruitment process, which made a strong impression. Additionally, this accomplishment consistently stood out as one of the top highlights on my resume, further solidifying my qualifications.
- I believe that my participation in this competition set me up for success in my current role. My experience in the competition helped me develop confidence in myself, as I felt that I had a leg-up on my peers. The competition involved tasks such as touring a WWTP, reaching out to vendors, creating cost estimates, and presenting to professionals. As an entry-level engineer, these tasks are part of what I do, and having this experience was really helpful.
- I applied for a summer internship with my current employer, Jacobs Engineering, during the spring of 2021 while I was participating in the SDC for the first time. During the interview, I was able to discuss the project and my team's thought process for analyzing our alternatives.
- This competition was the number one reason I was able to line up for a job before graduating from college. I had applied to over 100 jobs during my last semester at college; I got ghosted by most of them, rejected by a handful, and interviews with a couple. After this, I decided to contact my mentor, Dr. Mark Loria, from the competition who put me in touch with Krishna again. With the help from both of them, I received recommendations and an interview at the Stantec Cleveland office.
 - Since then, I have been very happy at my job, socially and professionally. Knowing the character of Krishna and Mark made me feel like I would fit in and make friends in the office. In addition, I felt adequately prepared for my job since the competition was a very good representation of the types of tasks I am now assigned on a day-to-day basis. Overall, I strongly believe that the student design competition was a major part in landing my first full time job.
- At the time, I was a chemical engineering undergraduate student who had little exposure to
 environmental engineering. Performing mass balance calculations for the biological cell [with] our
 team developed helped me realize the connections between traditional chemical engineering
 coursework and environmental engineering applications. That early exposure to environmental
 engineering helped me pivot towards the position I have now.
- My student competition experience stood out to my first employer because it demonstrated a real
 passion for water and a connection with the industry. Notable skills included presenting technical
 content, working with clients and their data, and working on a team to deliver a conceptual design.
- Participating in this competition did not directly land me my first job. However, having on my resume
 that I participated and won a student design competition, presented at the OWEA state conference,
 and presented at WEFTEC were amazing things to have on my resume and definitely helped me land
 my first job. The person who interviewed me at my original employer was highly familiar with the
 OWEA and attended WEFTEC yearly.

 I was connected to the network of wastewater professionals and gained insight and better working knowledge of the water sector and how it operates. All stages of the competition were really valuable: preparing our project, visiting a real working treatment facility, and presenting the project in multiple venues. I developed experience and skills that I used during job interviews and performing myself in my job after hiring.

Question:

Looking back, what are some ways the competition prepared you for real-world challenges in engineering?

- The competition provided invaluable preparation for real-world challenges in engineering by fostering critical skills such as problem-solving, teamwork, and effective communication. It pushed me to think creatively under pressure and apply theoretical knowledge to practical situations, closely mirroring the challenges faced in professional engineering roles. Additionally, collaborating with a diversely skilled team to overcome technical obstacles taught me the importance of adaptability and cooperation, both of which are essential in tackling complex real-world projects.
- One thing that sticks out to me as a way this competition prepared me for the real-world challenges of engineering is the timeline. The first year we did the competition, my team did not have the experience to budget time properly between tasks, and our final product did not score very highly. The second year, we looked at this as [an] opportunity to improve and made sure to include time to make changes after showing it to our mentors for review. I carry this with me in my career, and I try to begin tasks with the end in mind to accomplish my goals in a timely manner.
- The SDC showed me that engineering is not straight forward there are always alternatives available, and it is our job to consider each one and what makes sense financially and efficiency-wise. Engineers have to look at current conditions, what has been tried in the past, limitations, and what the end goals of the project are.
- Engineering research is always tailored towards real-world issues. Participating in this competition helped me understand how different technologies can be adapted in a treatment train to meet a regulation limit. It also exposed me to limitations in current technologies for wastewater treatment, leading me towards a research-heavy career.
- Participating in the competition most impacted me by introducing me to experienced engineers and the diverse group of professionals that make up the industry. I was confident in my ability to connect with clients and colleagues when I entered the workforce.
- In this field, you will encounter problems and challenges that do not have clear answers. I learned during this competition that you must think logically through the problem and follow the engineering process to arrive at the best solution.
- During the competition, we had to figure out how to implement a solution for an existing facility, looking at drawings, discussing with plant operations staff, and anticipating how our proposed solution would fit into the facility. This process was something I had not been exposed to before and it matches what I do on a day-to-day basis in my current role.

Can you share an example of a project or challenge you have faced in your career that reminded you of something from the competition?

Answers:

- One project that reminded me of the competition was during my PhD, where I had to provide an
 optimal solution for a real-time industrial issue under tight deadlines. Similar to the competition, this
 required creative problem-solving, quick decision-making, and applying theoretical concepts to a
 practical scenario. Just like in the competition, I had to collaborate with a team to troubleshoot
 technical issues, and we had to adapt our approach multiple times to meet the project's goals. The
 experience from the competition helped me stay composed and resourceful, ultimately leading to the
 successful completion of this and various other projects in my career.
- In the NESOWEA competition, I needed to determine BOD concentrations from our process in the influent and effluent, using average flowrates given by our client. Performing these rough calculations using theory helped me later in the modeling work I do in my current career. As a PhD student, I develop MATLAB or Python scripts to model the performance of my membrane materials. These scripts use the theory in our field to make predictions on membrane performance, from water flux to salt rejection.
- The superintendent at the plant where I was working approached me because he was experiencing issues with excessive solids throughout the facility. He wanted my input on what I thought was causing this solids buildup. It reminded me of this competition, and I reflected on the approach I had used then. I reverted to asking more questions to better understand the problem and gather useful information. By doing so, I was able to help the superintendent determine the cause of the solids issue and develop a solution.
- Early on in my full-time role at the Sewer District, I was asked to learn about the incineration process at our facility to assist with projects and operations support. I had to dive in and proactively learn about a topic which was entirely new to me something I had done during the competition.

Question:

Which specific skills did you gain or strengthen through the competition, and how have they helped you in your professional journey?

- Teamwork, collaboration, and motivation were pivotal during the competition and in my career. Working in a team enhanced problem-solving, divided tasks effectively, and fostered interdisciplinary learning. Collaboration built strong relationships and communication skills, while motivation instilled resilience and a goal-oriented mindset, helping me overcome challenges and thrive in team-based environments.
- I became a better modeler through this competition, and I gained exposure to other skills that environmental engineers use, such as GIS. NESOWEA was my first time working in a team, as well, to design an engineering process.
- Preparing and delivering technical presentations has been a hallmark of my work. I learned that
 effective communication relies on telling a compelling story with relevant visual aids. Project
 engineers have specifically sought my assistance on projects because of this skill I first developed in
 the student competition.

 My communication skills in interacting with plant personnel and engineers improved drastically during this competition. Communicating is probably the most important part of my job. I learned the value of asking probing questions and listening intently to the answers given.

Question:

What technical or soft skills from the competition do you feel set you apart from your peers who may not have had a similar experience?

Answers:

- The competition honed my adaptability, setting me apart from peers without similar experiences. Facing unexpected challenges and tight deadlines taught me to quickly adjust strategies, embrace change, and stay effective under pressure. This skill has proven invaluable in dynamic professional environments, allowing me to tackle complex problems with confidence and resilience.
- I think that NESOWEA enabled me to collaborate with team members with different skillsets. As a researcher, I think that identifying strengths among my collaborators, and finding my own place in a team, helps streamline the projects that I work on.
- I felt comfortable in the industry before I started working. I was familiar with some major issues facing water utilities and the technologies developed by engineers to solve those problems. I think I was given a head start in my ability to relate with clients and follow engineering discussions.
- One of the biggest technical skills I learned was deciphering complex data sets and determining
 which information was important and which was not. This is a skill that none of my peers in my class,
 who did not participate in the competition, developed because they were never placed in a position to
 do so.
- I was very open to learning from the network of professionals and I think I took full advantage of the opportunity provided by the conference attendance, staying for as many sessions and networking events as I could. I think I learned quickly the value of being a full participant in the sector and some peers are focused more exclusively on their day-to-day job and are not aware of the opportunities that exist.

Question:

How did the competition help you understand industry expectations, standards, or trends in the field?

- The competition provided valuable insights into industry expectations, standards, and trends by simulating real-world engineering challenges. It emphasized the importance of innovation, efficiency, and collaboration which are key traits sought after in the field. Additionally, engaging with working professionals as mentors and applying practical solutions helped me align my skills with current technological advancements and workplace demands.
- Having gone through the competition twice, we learned a lot after the first year and got feedback from the judges about our final product. This helped us understand what the expectations were for engineering projects and we were able to use that feedback to win the competition the following year.

- Prior to my senior year, there were no courses in my curriculum that had any sort of alternative analysis portion to them. Yet, alternative analyses are a large portion of my current job. I think it was an excellent opportunity to work on the student design competition my sophomore year and junior year because it gave me real life experience with this type of work. I was lucky to have a mentor that had also been in the consulting industry before, so he was able to guide us through the thought process of scoring and presenting that is typically used within consulting. My team, then, took his advice and created our own decision matrix, ranking system, and presentation. It was very impactful to work through the logistics from the ground up. Now, I use these skills daily and am able to understand and communicate better with everyone.
- Working in this competition familiarized me with how industry works with theory from academia and regulations from industry towards design. It was helpful to see how interdisciplinary design work can be.
- I think that presenting at WEFTEC and seeing some of the other presentations from people all over the country made me realize the level to which I had to raise my work to truly reach an elite standard. It was a humbling experience, but it was necessary to open my eyes to the brilliant minds across the country.
- Attending the professional conferences, the facility tours, and interfacing with the judges during the competition were the most impactful for me in these respects. I learned so much in a very quick period of time from being immersed in the environment of the wastewater field.

Did you make any connections during the competition that have continued to benefit you in your career?

- Yes, I made valuable connections during the competition that have continued to benefit my career.
 Networking with industry professionals, and fellow participants opened doors to mentorship
 opportunities, collaborations, and insightful guidance. These relationships have provided support,
 professional advice, and sometimes even recommendations that have been instrumental in
 advancing my career.
- Yes! I have met professionals through OWEA that I work closely with. It is a huge benefit to have a network as you start your career.
- Yes! I am still connected with my NESOWEA team (Aaron Mann and Peter Thompson), both of which
 now work as environmental engineers in design companies. Krishna Chelupati, one of our mentors, is
 also still a great resource to me.
- Yes, I am in recurring contact with my teammates and have gone to subsequent WEFTECs together.
- I still talk to and work with equipment reps every day that I met while at WEFTEC. It has been a great experience, first meeting them as a student and now working alongside them professionally.

Was there any mentor or feedback you received during the competition that you found valuable as you advanced in your career?

Answers:

- One piece of feedback I received was: "Keep pursuing the field you are passionate about, and you will achieve great heights."
- I am thankful for the mentorship I received from Krishna Chelupati during this competition and afterwards. I was interested in how transferrable the skills I am obtaining during my PhD are towards industry, so we have had several conversations on this topic.
- Our faculty advisor Dr Kurt Rhoads pushed us to find the story in our presentation.
- After we finished presenting at the competition, one of the judges, who was also a plant superintendent, pulled me aside and said, "I don't know if you are going to win, but I liked your presentation the best. Your solution was simple and had common sense behind it. So many of these other groups had expensive, highly theoretical solutions to the problem." I use that same thought process now when plant personnel come to me with issues: I try to think of a cost-effective and simple solution to the problem presented.
- The feedback that we gained from our mentor and others when we practiced our presentation has stuck with me and helped build my sense of what goes into a good presentation.

Question:

How did participating in the competition help you gain confidence in your abilities as an engineer?

- Participating in the competition significantly boosted my confidence as an engineer by allowing me to apply my skills in a real-world, high-pressure environment. It demonstrated that I could contribute meaningful solutions and thrive in competitive settings, further strengthening my self-assurance in my engineering capabilities.
- Participating in this competition made me realize that my abilities as a chemical engineer were transferable towards environmental engineering. By working with a client, it also made me apply the skills I learned in my coursework towards a real-world application.
- I remember feeling overwhelmed when we were first presented with the problem statement and subsequent data, as I had never faced such a complex issue before. As my teammates and I worked through the problem and ultimately won the competition, I learned that I would encounter challenges that I may not initially believe I could solve. However, I gained confidence that if I take a step back to think about the problem and work hard, I can overcome any challenge I face.
- Presenting in front of an audience and fielding questions was a key moment in building my confidence.

Why do you think it is important for undergraduate and graduate students to participate in this type of competition?

Answers:

- Exposure to identifying real-life environmental challenges and providing creative technical solutions is
 a major asset to a student's career success. It allows students to apply theoretical knowledge to
 practical problems, fostering critical thinking, innovation, and problem-solving skills. This hands-on
 experience not only enhances technical expertise but also prepares students to tackle complex
 issues in their future careers, making them more competitive and valuable in the workforce.
- If I had not participated in this competition, the first time I would have seen an engineering problem like this would have been my senior design project (my last semester of undergraduate). By the time I graduated, I had been exposed to more real-world problems than my peers who had not competed in this competition and I believe that helped me get job offers.
- Absolutely! The SDC gives you a glimpse into what the consulting world is like you are presented
 with a problem and are tasked with making a recommendation to defend to your client. Great
 experience to have a chance to explore real-life engineering problems and receive guidance from
 mentors in the field.
- I would advise anyone thinking about participating in the student design competition to do it. My first year participating I was worried, as many are, about the time commitment in addition to being a student. Now, I can say that it is a highly tailorable experience, but a highly valuable one at any level of commitment. Whether your solution is detailed out or high-level, you will get very valuable feedback at the end from the judges and along the way from your mentor. In addition, it is a great way to begin networking with professionals with experience in the industry. Obviously, the more you put it, the more you will get out of the experience. For example, giving it your all in the design process will teach you more about engineering and the industry. It could also impress the judges and help you win the competition, which is a huge step towards an internship or full-time job. All that is to say that I advise anyone thinking about participating to give it a shot because no matter what, you will learn so much and make connections.
- I think these types of competitions are important to gain real-world experience into environmental engineering. It is important to see how environmental engineering technologies are used, and how environmental engineers are solving modern-day issues.
- The design process is rarely practiced in coursework, so this is an opportunity to develop essential skills and the grit to see a project through to completion.
- Participating in a competition like this offers invaluable real-world experience that classroom learning cannot fully replicate. You are faced with actual water/wastewater challenges that plants encounter daily, requiring you to apply the engineering process to develop tailored solutions. This hands-on approach mirrors the professional environment, where engineers are called upon to solve unique problems for each facility.

While textbooks provide a foundation, it is the practical application of knowledge that truly elevates your skills. By engaging in this competition, you are not just reciting facts; you are learning to think critically, problem-solve, and innovate - essential skills for success in the water/wastewater field.

This experience bridges the gap between theory and practice, preparing you for the dynamic nature of the industry. It is an opportunity to showcase your ability to adapt, collaborate, and deliver results in a real-world context. Ultimately, this competition is a stepping stone to becoming a more competent and confident engineer, ready to tackle the diverse challenges of the water/wastewater sector.

• I think if students have any interest in working in the water sector, the competition is a great way to learn more about the sector, if it is a good fit, and build a foundation if they do wish to pursue a career in the field. It helps bridge the gap between school and employment.

Question:

What advice would you give to students preparing for the competition today?

Answers:

- Always say "Challenge Accepted!"
- Budget your time efficiently and meet with your mentors often to check in.
- I would advise students not to be afraid to call people. During my competition, I called many vendors and municipalities who had the technology we were proposing. Not only did I learn a lot from each individual I called, but I also have found myself doing this at my full-time job. It is an excellent skill that will give you an edge during interviews. Not many students have experience cold calling, but it is a frequent need in the industry.
- Do not be afraid to reach out to your mentors! Especially if you are an early career engineer, lean on others who are more experienced to develop skills.
- Organize your project timeline with clear milestones. Ask your mentors lots of questions and listen closely. Do not give up until you fully grasp what they are saying.
- When tackling a plant problem, remember: the operators are your secret weapon. Every facility has its own unique operational rhythm, and the people who work there daily are your best source of insider knowledge.

The plant personnel understand the plant's quirks in ways no manual can capture. They might even have an innovative solution without realizing it. Ask smart questions, listen actively, and build a collaborative relationship.

• Take full advantage of the opportunity to attend a conference and learn as much you can from the experience (technically and about people/organizations).

Question:

How can students make the most of their competition experience to prepare for a successful engineering career?

Answers:

Stay confident and draw motivation from success stories while learning valuable lessons from stories
of failure.

- Take this as an opportunity to network! Make sure your LinkedIn profile is updated because you will meet SO many people.
- Continue to reach out even after the competition to people that you have met. I participated during COVID, and especially then when things were more isolated, the people I met through this competition were helpful when I was not sure what I wanted to do after my undergraduate career.
- Cherish the time and wisdom afforded by your mentors.
- Connecting with local water/wastewater engineers is a great first step in this process. By networking, you are not just building professional relationships, you are gaining insider perspectives on problemsolving in this specialized field.

The competition's problem statement is likely unlike anything you have encountered before. It can feel overwhelming, but reaching out to experienced professionals provides a critical roadmap. These engineers can help demystify complex challenges and offer insights that transform your approach.

Think of it as gaining a professional mentor who can help you navigate uncharted technical territory. Their guidance can be the difference between feeling stuck and developing an innovative solution.

Engage fully with the project and attend an in-person facility visit if possible.

Question:

What are some key takeaways you would like future participants to know about the value of this experience?

- Always choose the challenge that cannot be easily solved in order to stand out in the competition.
- This experience was beyond any other student design team that I have been a part of. Not only was it beneficial to my technical skills, but it was honestly a lot of fun! Being able to go to One Water and WEFTEC was awesome, and it helped me solidify that this was what I wanted to do for my career.
- This competition will help with your engineering skills, such as performing TEA analysis, GIS, and technical calculations, but it will also help with soft skills such as working with a team or a client, scientific presentations, and writing a formal report. Definitely participate!
- This competition was my first taste of the high quality my professional work needs to achieve. When presenting to experts in the field, you quickly realize that you must understand and communicate your knowledge at a level you have never reached before. After presenting at the competition, the OWEA conference, and WEFTEC, I recognized the standard to which I needed to elevate my work in order for it to meet professional expectations. This is a standard that I still hold myself to today as a young professional in the industry.
- This is among the best ways to learn what opportunities are available in the water sector.