

Engineering the Future

If the future is as bright as the two students who recently earned WSSC Water's 2021 Commissioners Engineering Scholarship, we're in great hands. Grace Pooley and Kyle Dalrymple are environmentally-minded engineering majors, who are keenly aware of the need to protect our waterways and ensure there is clean, safe water for all.

A lifelong resident of Prince George's County, Grace grew up less than one-quarter mile from the Anacostia River and still lives nearby in Riverdale Park. She considers the river a treasure and has devoted many hours to help clean it up. That same river is the focus of her thesis as a civil engineering Ph.D. student at The Catholic University of America with a concentration in environmental engineering.



"My constant proximity to the Anacostia River is what made it feel like it is where I was meant to be," says Grace, whose doctoral research focuses on how microplastics enter the river. Grace also earned her bachelor's degree in Environmental Science and her master's degree in Material Sciences and Engineering from Catholic U.

"As an undergrad, I researched new methods of extracting Uranium from sea water," says Grace. After graduation, she worked as an analytical instrumental chemist at a nuclear waste research & development lab in Washington, D.C. There, she met the Catholic University professor who recognized her "extreme passion for the environment," and encouraged her to pursue a Ph.D.

For budding engineer, Kyle, of Montgomery County, his collegiate studies are just beginning. He enters The Johns Hopkins University later this month as a freshman in mechanical engineering. But don't let that fool you into thinking he's new at this research and environmental engineering game.



"For a long time, I've looked for the intersection between mechanical engineering and environmental systems," says Kyle. "I've been actively working to mesh these two subjects together."

A high achieving physics, engineering and math International Baccalaureate (IB) student in high school, Kyle says he's not only learned but also researched environmental systems outside of class.

"Being an IB learner, I have the ability to connect things that might seem quite disconnected," he says. "I'm able to think about the big picture and apply myself in the small and very technical aspects of engineering and design."

In a world dealing with multiple crises simultaneously, says Kyle, “I’m able to be a thought leader in critical fields such as water development and engineering.” Oh, and did we mention he’s a classically trained violist, too?

Grace and Kyle were awarded \$2,000 each and are eligible for an additional \$2,000 each year for up to four consecutive years. In addition to submitting a video application, the two winners were asked to address, in an essay, the initiatives WSSC Water can undertake to address climate change’s challenges and ensure a sustainable water supply. You can read their essays [here](#).