

Duke | NICHOLAS SCHOOL *of* the ENVIRONMENT

Water Innovation and Leadership Development Program

2024 Program Fellows



Bethel Abate, Programs Manager, DC Water, Washington DC

Bethel Abate, P. E., PMP is a Civil Engineer/Program Manager at DC Water. She has a B.S in Civil Engineering and a Master of Engineering in Project Management. Ms. Abate has over 15 years of experience in the professional engineering field with expertise in civil project and program management. Her experience includes local and international project/program management and construction supervision on multimillion-dollar engineering projects. At DC Water, she provides engineering and program management support for the Department of Wastewater Engineering on planning, design, and construction projects, including facility planning, concept designs, development and updates Standard Specifications/SOPs and design reviews/shop drawings. She also serves as the technical committee vice chair for her local Water Environment Federation (WEF) and American Water Works Association (AWWA) association. In her spare time, she enjoys traveling and volunteering at the local women's shelter and with the children advocacy ministry.



Tirusew Asefa, Systems Decision Support Manager
Tampa Bay Water, Clearwater FL

Dr. Asefa is the lead for decision support group at Tampa Bay Water, the largest wholesale water supplier in the Southeastern US. He oversees the agency's work on surface and groundwater resources assessment, supply planning, demand forecast and management, and climate adaptation among other responsibilities. Currently, he oversees several Master Water Plan modeling efforts for projects collectively estimated at >\$2.9 billion. Dr Asefa is the recipient of the 2022 Outstanding Practitioner in Water Resources Engineering Award by American Academy of Water Resources Engineers and has written more than 40 peer reviewed articles on various areas of water resources management and water utilities business functions. Tirusew is also one of the Water chapter authors of congressionally mandated fifth National Climate Assessment. He is a registered professional engineer with the State of Florida, a

Diplomate of the American Academy of Water Resources Engineers, and a Fellow of the American Society of Civil Engineers. He currently chairs the Florida Water and Climate Alliance.



Esther Baptiste, Management Professional – Systems Planning
Great Lakes Water Authority, Detroit MI

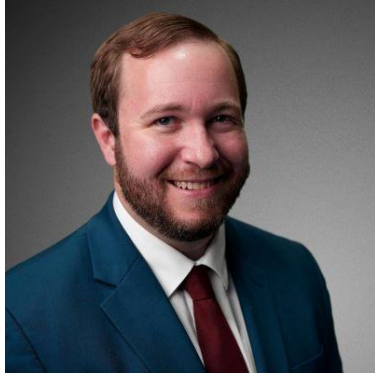
Esther Baptiste is a Management Professional-Systems Planning with Great Lakes Water Authority (GLWA) in Detroit, Michigan. GLWA, one of the nation's largest utilities, provides nearly 40 percent of Michigan's population with water of unquestionable quality. Understanding the profound impact of public water services on community vitality, Esther is focused on introducing water careers to both the public and underprivileged regions. Her pursuit aims to bridge disparities in workforce diversity, equitable water access, and treatment. Esther's commitment and achievements were recently recognized through receiving the 2023

Richard Husby Award bestowed by the American Water Works Association Michigan Section. This distinguished accolade acknowledges individuals for their substantial contributions in raising awareness and understanding of water supply issues through the development and implementation of impactful public education activities. Esther holds a Baccalaureate of Science and a Master of Public Administration from Tennessee State University. Additionally, Esther is a distinguished graduate of the 2023 inaugural cohort of the Transformative Water Leadership Academy, an esteemed program that is a joint initiative by the American Water Works Association and the Water Now Alliance.



Elvy Barton, Water and Forest Sustainability Manager
Salt River Project, Tempe AZ

Elvy Barton is the Water and Forest Sustainability Manager at Salt River Project (SRP). Elvy leads SRP's water conservation and forest health initiatives and partnerships. Before joining SRP, Elvy worked as a Senior Policy Advisor at the Arizona House of Representatives covering natural resource, water, and environmental policy issues. In addition to working at SRP, Elvy is an Academic Associate in the School of Sustainability at Arizona State University. She holds a Master's degree in Public Administration and an Executive Master's degree in Sustainability Leadership from Arizona State University.



William Bulloss, Assistant Director of Strategy, Innovation, and Sustainability
Western Virginia Water Authority, Roanoke VA

Will Bulloss currently serves as the Assistant Director of Strategy, Innovation, and Sustainability for the Western Virginia Water Authority, a combined utility serving approximately 300,000 citizens in the Roanoke region. His work focuses on external affairs, economic development, organizational performance management, and infrastructure investment. He has broad experience managing public infrastructure programs and implementing continuous improvement

thinking to teams. He has helped develop pathways for entry into the organization's workforce. He has overseen a variety of utility digital transformation projects including workflow automation, GIS, CMMS, and PMIS implementations. He works to find balance between reinvesting in aging infrastructure, extending service to a growing region, and maintaining affordable rates. He is a licensed professional engineer, holds a B.S. in Civil and Environmental Engineering from Virginia Tech, and is pursuing his master of public administration from the University of North Carolina.



Terence Byrd, Drinking Water Systems Program Manager
JXN Water, Jackson MS

Terence Byrd, a seasoned Water Operator with an impressive 19-year career, stands as a stalwart figure in the realm of environmental technology and water management. Born with a natural affinity for the environment, Terence embarked on his professional odyssey two decades ago, driven by a passion for preserving and enhancing water quality. As a seasoned Water Operator, he demonstrated unwavering resilience and leadership, orchestrating critical measures to mitigate impact during the Jackson water crisis. Terence's stellar performance reached new heights as he was bestowed with the prestigious American Water Works Association (AWWA)

Operator of the Year Award for the Mississippi/Alabama Chapter in 2017 and 2022. Terence remains at the forefront of the industry, navigating challenges with grace and determination. Beyond his professional endeavors, Terence is an advocate for environmental sustainability, often engaging in community outreach programs to raise awareness about water conservation. His multifaceted approach to environmental stewardship extends far beyond the technicalities of water management, reflecting a deep-rooted commitment to creating a lasting impact.



Indira Gonzales, Section Manager
Washington Suburban Sanitary Commission, Laurel MD

Indira is a Civil Engineer with more than 20 years of experience in design, construction, and project management of water/wastewater projects. She is currently manager for the contract services section in the Engineering and Construction Department of WSSCWATER in Laurel, MD. She is proud to work in a company that provides safe and reliable water to more than 1.9 million people.

Indira oversees the company's construction standards, cost estimating team and material evaluation process for water/wastewater products. She is also part of the Strategic Plan Development Team in her company. She enjoys giving back to the community, and supporting initiatives to make water a safe and sustainable resource for generations to come.



Kimberly Gupta, Director of Operations
Portland Water Bureau, Portland OR

Kimberly Gupta is the Director of Operations for the Portland Water Bureau. She is responsible for operating and maintaining the surface and groundwater systems, specifically the infrastructure related to water supply, treatment, transmission, and distribution facilities; ensuring compliance with drinking water regulations; operating an accredited drinking water laboratory; and managing the Bureau's Security and Technology Groups. Prior to joining the Water Bureau in 2010, she was an engineer at the East Bay Municipal Utility District for over 8 years. Kim has a master's degree in Civil/Environmental Engineering from the University of Nevada, Reno, and is a registered professional civil engineer in both Oregon and California. She is a certified water distribution and treatment operator in Oregon, holding D4 and T3 certifications, and serves as the Bureau's Direct Responsible Charge. Kim is also an active member of the American Water Works Association and serves as a Commissioner on the National Blue Ribbon Commission for Onsite Non-Potable Water Systems.



Patrick Jensen, Principal Civil Engineer
Metropolitan Water Reclamation District of Greater Chicago (MWRD)
Chicago IL

Mr. Patrick Jensen, P.E., is a Principal Civil Engineer in the Collection Facilities/TARP (Tunnel and Reservoir Plan) Section of the Engineering Department at the Metropolitan Water Reclamation District of Greater Chicago (MWRD) and has been working there 14 years on large infrastructure projects. As a Principal Civil Engineer, Mr. Jensen now serves as a project manager for flood and pollution control projects within its service area, oversees the MWRD's collection systems asset management plan as well as sewer rehabilitation design projects. He has a Bachelor of Science degree in Civil Engineering from Marquette University in Milwaukee, WI.



Khanh Kim, Managing Engineer
Houston Water Drinking Water Operations, Houston TX

Khanh Kim earned a Bachelor of Science degree in Chemistry in 2001 and he is currently a Professional Engineer in Civil Engineering. Mr. Kim has over 17 years of experience at the City of Houston, which encompasses water quality, hydraulic modeling, water demand planning, scoping capital improvement projects for water main replacement, and water main operations and maintenance. Khanh's team provides technical support to ensure safe drinking water for over 2 million customers within the City of Houston service area as well as wholesale/contract customers in neighboring cities.



Rochelle Larson, Principal Engineer
Albuquerque Bernalillo County Water Utility Authority (ABCWUA)
Albuquerque NM

Rochelle Larson serves as a Principal Engineer in the Planning and Engineering Division for the Albuquerque Bernalillo County Water Utility Authority (ABCWUA). She manages various capital improvements projects for the utility related to surface water, drinking water, wastewater, and groundwater. Throughout her career, she has been involved with projects at different phases including planning, design, and construction. She received her BSE Degree in Mechanical Engineering from Arizona State University and an MS Degree in Civil Engineering from the University of New Mexico. Rochelle is an active member of the American Water Works Association (AWWA) and is the current Rocky Mountain Section Past-Chair. She is also an involved member of the Society of Women Engineers (SWE) having held leadership positions at both the local, regional, and national level.



Jennifer Lee, Environmental Regulatory Compliance Manager
City of Burlingame, Burlingame CA

Jennifer Lee is a California native and works as the Environmental Regulatory Compliance Manager for the City of Burlingame located in the San Francisco Bay Area. Jennifer's main role is to ensure that the City complies with its NPDES stormwater permit and oversees inspection programs, conducts building plan review, and educates the public on stormwater pollution prevention. Jennifer also works on regulatory compliance for drinking water programs, such as the annual water loss audit, annual water quality report, and the Lead and Copper Rule. Prior to working for the City of Burlingame, Jennifer was a Water Conservation Analyst for the San Francisco Public Utilities Commission. Jennifer worked on public outreach and education programs to help the residents of San Francisco save water by promoting rebates, incentives, and public outreach programs. Jennifer has been working in local government since 2013 and believes that working for cities is a rewarding career path. She holds a Masters of Environmental Management from Duke University and a Bachelor of Science in Environmental Science and Management from University of California Davis.



Andre Miller, Utility Engineer/Project Manager Capital Projects
Orange Water and Sewer Authority, Carrboro NC

Andre is a licensed professional engineer registered both in Mexico and the US, currently in North Carolina. Throughout his career of more than 20 years as a civil engineer, he has worked in the public, private, and consulting sectors all around the United States and Mexico, delivering innovative and sustainable solutions for water and wastewater treatment and management. He started out working for the state of Jalisco, Mexico, where he was tasked with providing innovative, cost-effective solutions to meet the water and sanitation infrastructure needs for ten municipalities located in some of the more impoverished areas of Mexico. He has also had a variety of experiences in the US ranging from larger, higher resourced organizations like Orange County Sanitation District in Orange County, California, to lower resourced communities as a project manager for San Bernardino Municipal Water Department in San Bernardino, California. Now, as a Utilities Engineer / CIP Project Manager at Orange Water and Sewer Authority (OWASA) in North Carolina, he performs comprehensive and highly complex engineering and project management functions for major capital projects through all phases of the project management life cycle.



Andrew Moore, Director of Plant Operations
Lehigh County Authority, Allentown PA

Andrew Moore serves as the Director of Plant Operations for Lehigh County Authority in Allentown, Pa. In his role he is entrusted with providing leadership for the efficient operation and compliance of six wastewater and thirteen drinking water facilities, ultimately reflecting the organization's commitment to protect public health and the environment. Collectively these facilities provide a vital service to over 270,000 residents within the Lehigh Valley. Andrew has 13+ years of experience in the industry and holds a B.S. in Forensic Chemistry from York College of

Pennsylvania. He plays an active role in numerous water and wastewater industry committees and organizations, including the Lehigh Valley Pretreatment Information Exchange and PA American Water Works Association's Water Utility Council.



April Nabors, Superintendent of Industrial and Commercial
Accounts
Birmingham Water Works, Birmingham AL

Alabama native, April Nabors, has enjoyed serving her community as an Environmental Engineer for the largest water utility in the state, the Birmingham Water Works (BWW) for the last 16 years. In her current role, she is the liaison to administer contracts and meet the life-safety needs of over 50 industrial, commercial, and wholesale customers. Having held superintendent positions in both the Engineering and the Operations divisions, she lends a unique perspective on the dynamics of

the system. Fascinated by the authenticity and passion found in the water industry, she aspires to transfer that energy through her involvement with mentoring AWWA YP's and teaching classes at her utility and other statewide platforms. Dr. Nabors holds a B.S. in Biology and a M.S. in Environmental Management from Samford University, and a Ph.D. in Civil and Environmental Engineering from the University of Alabama at Birmingham (UAB). She has authored (or coauthored) over 40 academic presentations and is a licensed water treatment and distribution operator in Alabama. She passionately serves on several AWWA committees and looks forward to serving as the Chair for the AL/MS Section this year.



Crystal Tulley-Cordova, Principal Hydrologist
Water Resources for the Navajo Nation, Fort Defiance AZ

Crystal Tulley-Cordova, PhD, MWR is a Principal Hydrologist in the Navajo Nation Department of Water Resources - Water Management Branch. She is an enrolled member of the Navajo Nation, and currently works on securing water rights and developing water infrastructure projects. She has worked collaboratively with Navajo Nation partners on water-related research since 2013. Her past research consisted of three projects conducted in collaboration with the Navajo Nation Water Management Branch, Navajo Tribal Utility Authority, and Navajo Environmental Protection Agency. In 2021, she was awarded the American Indian Science and Engineering Society Professional of the Year Award and the University of Arizona Agnese Nelms Haury Tribal Resilience Leadership Award. She received a doctoral degree in Geology and an Interdisciplinary Graduate Certificate in Sustainability from the University of Utah. She has received a Master of Water Resources in Hydrosience and a Bachelor of Science in Earth and Planetary Sciences from the University of New Mexico.



Oscar Vasquez, Division Director W&S Operations
Miami-Dade Water and Sewer, Miami FL

With over twenty years of local solid engineering, management, budgets, and operations & maintenance (O&M) experience in the areas of master planning, modeling, design, permitting, procurement, construction, operations & maintenance, and commissioning for water and wastewater systems. Currently, he is the Division Director of W&S Operations for the wastewater transmission line division for the Miami Dade Water and Sewer Department. Oscar manages various types of inspection and evaluation activities designed to identify infiltration/inflow in sewer pipes ranging in size from 6" to 102" diameter with CCTV, smoke testing, flow metering, and manhole inspection providing data to identify defects in the sewer infrastructure. In addition, managing the duties of planning, directing, administrating, and coordinating a wide range of tasks which included installation, maintenance, and/or repair of the sewer infrastructure of the collection and transmission sewer system along all of Miami Dade County.



Andrea Yang, Deputy Executive Director
Greater Cincinnati Water Works, Cincinnati OH

Andrea Yang brings more than 20 years of legal, policy, and administrative experience in government, private, and nonprofit sectors to her current role as Deputy Executive Director of the Greater Cincinnati Water Works (GCWW). Andrea has served the City of Cincinnati in various roles in the Solicitor's Office and GCWW as chief counsel for real estate, infrastructure, and utilities, and as an economic and community development and real estate attorney.

Andrea graduated from the University of Cincinnati Law School and earned both a Masters of Regional Planning and Bachelor of Arts (Biology and Society) from Cornell University. She lives in the Clifton neighborhood of Cincinnati with dog Bowdie and her husband Rainer and enjoys hiking, travel and pottery.
