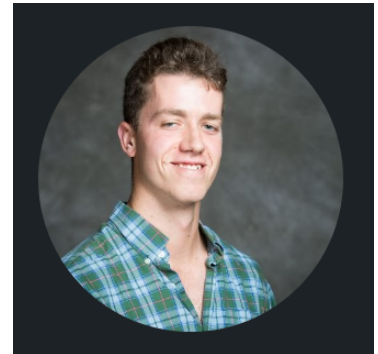


Isaac Mudge, EIT, MS

Hydrology, Hydraulics, and Coastal Branch

U.S. Army Corps of Engineers - New Orleans District (MVN)

Isaac Mudge is a hydraulic and environmental engineer in training in the Hydrology, Hydraulics, and Coastal branch (EDH) of USACE-MVN. He is also a research assistant with the Environmental Laboratory (EL) at the U.S. Army Research and Development Center, working under Dr. Todd Steissberg to help develop water quality modeling software in Python. His work with the New Orleans District is mainly on flood management studies, using HEC-HMS and HEC-RAS models to estimate flooding impacts in the New Orleans and Lafayette metro areas. With the EL, Isaac has worked on the 2D water quality model CE-QUAL-W2, which simulates flow and water quality through reservoir systems. He developed a python-based graphical user interface and helped deliver a tutorial to USACE districts.



Isaac started at USACE-MVN in September 2020 and spent his first 18 months in the Army Fellows rotational program. He rotated through many USACE-MVN offices, including Civil Branch (Engineering Division), Operations Division, and Regulatory Division. In that time, Isaac participated in levee monitoring during the 2021 Mississippi River flood-fight, as well as the Hurricane Ida temporary housing mission. After a rotation with Dr. Steissberg in early 2022, Isaac exited the rotation program and returned to MVN-EDH as a full-time employee. He plans to continue working with Dr. Steissberg's team on water quality model development and hopes to help create opportunities for USACE-MVN and ERDC-EL to work together.

Isaac graduated from Tufts University in 2020, obtaining both a BS and MS in water resources and environmental engineering. He recently passed his PE exam in water resources and environmental engineering and will be a licensed PE in September 2023.