

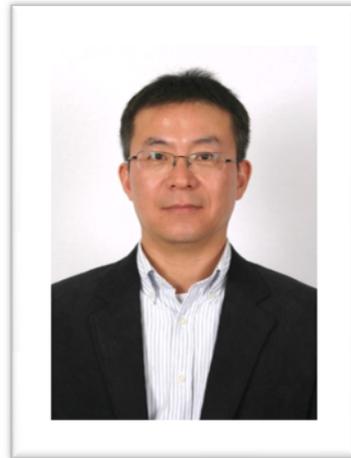
Mark Jensen, M.S.
Senior Hydraulic Engineer,
Hydrologic Engineering Center – U.S. Army Corps of Engineers

Mark Jensen is a senior hydraulic engineer at the Hydrologic Engineering Center (HEC). With 20 years of experience, he is one of the primary developers of the center's River Analysis System (HEC-RAS) and provides technical leadership in steady and unsteady flow river modeling, floodplain mapping, and water quality analysis.



Jay Pak, Ph.D., P.E.
Senior Hydraulic Engineer
Hydrologic Engineering Center – U.S. Army Corps of Engineers

Jay Pak is a senior hydraulic engineer at the Hydrologic Engineering Center (HEC) of the U.S. Army Corps of Engineers. He is responsible for implementing the sediment transport module in the Corps' hydrologic modeling system, HEC-HMS. Jay has 17 years of civil engineering experience working on a wide variety of projects and works including surface hydrologic process, groundwater modeling, fluid mechanics, sediment transport, environmental restoration, water resources, geotechnical engineering, and construction management. Jay has researched and developed methods to predict watershed sediment yield for the hydrology model (HEC-HMS) for use in sediment assessments or mobile boundary hydraulic and sediment studies. Jay researched methods to estimate the debris yield and infiltration rate under the burn conditions. Jay is a registered professional engineer and received a Ph.D. and a M.S. in Civil Engineering and Environmental Engineering from University of Southern California, and a M.E. and a B.E. in civil engineering from Kyung Hee University, Seoul Korea.



Todd Steissberg, Ph.D.
Research Hydraulic Engineer
Hydrologic Engineering Center – U.S. Army Corps of Engineers

Todd Steissberg specializes in water quality, spatial data, remote sensing, and software development. At the Hydrologic Engineering Center (HEC), he leads the development and application of software for integrating water quality models (HEC-5Q and CE-QUAL-W2) with HEC-ResSim (Reservoir System Simulation) and HEC-WAT (Watershed Analysis Tool). These tools enable integrated watershed-scale modeling of water quality in an operational context. Todd is currently working on HEC-RAS water quality model optimization. He served as the technical lead and coordinator for water quality modeling and analysis of Alabama-Coosa-Tallapoosa (ACT) and Apalachicola-Chattahoochee-Flint (ACF) watersheds (Alabama-Georgia) using the integrated HEC-ResSim and HEC-5Q modeling system. He served as a technical advisor on water quality and data analysis for Mobile District and Northwest Division. Todd is the technical lead of HEC-GridUtil, for managing, visualizing, and analyzing spatial data, and contributes to the development and testing of HEC-ResSim, the Corps Water Management System (CWMS), and HEC-DSSVue. Todd has a Ph.D. and M.S. in Civil and Environmental Engineering from UC Davis.



Bill Scharffenberg, Ph.D.
Senior Hydraulic Engineer
Hydrologic Engineering Center – U.S. Army Corps of Engineers

Bill Scharffenberg specializes in watershed and urban hydrology, water resource systems, and the design of software for hydrologic simulation. He has been working on the development of the Hydrologic Modeling System (HEC-HMS) since 1998. Today he is the lead developer for HEC-HMS and coordinates all aspects of the development process in addition to conducting applied research, writing program code, designing interface components, and providing technical support. He has coordinated and presented many training courses and workshops on the use of HEC-HMS in floodplain hydrology studies, and consults on projects to develop flood forecasting models. His recent work has included the design of new components in HEC-HMS for adding surface erosion, sediment transport, and water quality capabilities to the established framework of hydrologic process simulation. He holds a doctoral degree in water resources engineering from the University of California, Davis.

