

CEHR-E Engineer Pamphlet 690-1-11(07)	Department of the Army U.S. Army Corps of Engineers Washington, DC 20314-1000	EP 690-1-11(07) 25 May 1993
	Command-wide Recruitment and Outreach Materials CAREER PROFILE SUPPLEMENT - HYDRAULICS	
	Distribution Restriction Statement Approved for public release; distribution is unlimited.	

CREATE A WORLD OF DIFFERENCE...

WITH A CAREER IN HYDRAULICS

Jane McKee Smith will never forget the time she walked along a Louisiana beach in Grand Isle shortly after Hurricane Hugo swept through: "I saw children playing along the surf and was thankful they still had homes to go to thanks to the structures the Corps designed. We saved millions of dollars in damage."

In her capacity as a Corps Research Hydraulic Engineer who numerically models waves and currents, Jane has never been satisfied with just theory. She wants to solve critical and challenging problems such as protecting communities from hurricanes, flooding, and wave damage. She develops



"I do not want to be an engineer that applies standard cook-book solutions to a problem. I want to develop new solutions and advance the state of the art. That's why I work for the Corps of Engineers."

Jane Smith
Hydraulic Engineer

computer programs that calculate wave and current activity and then constantly asks questions:

"What happens if we dig a hole near the shore or build a mound? Will that make the beach grow or erode? Will a large storm overtop the dune?"

Jane is thankful for a camaraderie at the Corps that provides consistent interdisciplinary feedback on her work. According to Jane, "My colleagues are just as excited about what they do as I am, and we are always freely offering ideas on ways to solve a problem. Teamwork is the reason why Corps' projects are always so successful."

A highlight of Jane's career was her opportunity to work with a team of international experts during a two-month laboratory experiment in a large wave tank. She generated waves and measured the response of the currents and beach profile to study the erosion and recovery of beaches. She has also been involved with several large field experiments with similar objectives.

"I don't think of the Corps as a great job as much as a great education," says Jane. "Through the Corps' Graduate Program, I earned my masters and am currently working on my Ph.D. In private industry, I would have to do this outside my job. At the Corps, I can both learn and apply what I learn—the opportunities are fantastic."