

Marcella Landis: Big Projects at MWRD of Chicago

She interned near the start of a 40-year project, and now she's working to finish it

MARCELLA LANDIS IS ASSISTANT director of engineering at the Metropolitan Water Reclamation District of Greater Chicago. She heads two of the district's three engineering divisions: Process Facilities Design and Construction. In those divisions, "We have more than 150 engineers working on designs and construction oversight of the contractors working on our capital improvement projects," she reports. "The process facilities design group does the design in the office and prepares contract design documentation, including plans and specifications. The construction group engineers are the boots on the ground in the field overseeing the contractors' work. They're the department's day-to-day contact with the contractors."



Marcella Landis

Doing environmentally significant work at MWRD.

"We have a lot of exciting things going on here, including completion of the Deep Tunnel and reservoir project," Landis says. "The district has been working on the project for 40 years. More than 100 miles of tunnels were completed in 2006 and now we're completing the reservoirs. The 7.9 billion-gallon Thornton Reservoir is coming on line this year; it will serve more than a

half million people living in the southern area of Cook County and parts of the City of Chicago, providing about \$40 million in flood relief benefits each year."

The district is also developing interesting projects in resource recovery, Landis adds. "The process design group is in the middle of a project that will harvest phosphorous from the waste stream to be sold back to fertilizer companies. It's a very innovative technology, and we hope to

have it up and running in 2016."

Growing up in North Chicago, Landis says her parents were her role models. "My father was an attorney and my mother was a school teacher. They were also community activists and worked hard to improve our neighborhood. My mother was a reformer. She was one of the first three female aldermen elected to the city council," Landis adds with pride. She is pleased to be doing environmentally significant work herself with MWRD.

Landis attended the University of Illinois at Urbana-Champaign, where she earned a bachelor's in civil engineering in 1988 and a master's in geotechnical engineering in 1990. "I was encouraged and mentored by some wonderful science and math teachers in high school," Landis remembers, "but it was in college that I really got exposed to engineering. I wanted to make it in the world on my own, and I realized that engineering was interesting and would bring me a good salary."

In college, she worked as an engineer trainee at MWRD during the summers of 1988 and 1989. "I liked the work and I liked the people," Landis says. "I could have taken a civil service test back then and stayed on, but I decided I wanted to try something different." After she finished her master's, Landis accepted a position in Chicago at Envirodyne Consulting, now a subsidiary of AECOM. "It was a great experience and I got to do lots of design work," she says. "One of the projects I worked on was one of the Deep Tunnels for MWRD."

Two years later, in 1992, she joined MWRD. "Working on that Deep Tunnel project convinced me that I wanted to continue working on big projects. When I started here, I was working in the local sewer system permit area, putting together geographic information system databases. I also did field inspections and permit reviews." A few years later, Landis moved into the tunnel and reservoir planning area, doing sewer design and construction work. In 2010, she took on oversight of the construction administration group, and added the process facilities design group responsibilities in 2012.

Landis holds a PE license in the State of Illinois, and she's a member of the national Water Environment Federation. She's been too busy to even think about her next career step, she says. "We have too many exciting things going on right now." —D.M.