2007 CONSERVATION & RESOURCE STUDIES

MICHELLE WHITMAN

Like most of her classmates, Michelle Whitman accepted a rewarding and challenging job after graduation, in her case as a groundwater resource scientist at BESST (Best Environmental Subsurface Sampling Technologies), a San Rafael, California groundwater testing and service company that specializes in municipal and agricultural well production diagnostics.

But rest assured, Whitman's path through CNR and on to her first position was anything but typical. She came to Berkeley in 2005 as a 42-year-old reentry student with two teenage students and a couple of years of community college under her belt—and a bad case of imposter's syndrome.

"I was petrified," she says. "I felt intimidated and that I didn't belong." Whitman, the first member of her family to attend a four-year college, quickly realized that she did, indeed, belong. Her classmates welcomed her (even inviting her to their dorms for study sessions), she finished among the top 5 percent of her class and was chosen as a commencement speaker. So by the time Whitman began at BESST, she had gained so much confidence—as well as experience—at CNR that she hit the ground running.

"In her case, her age and experience were an advantage," says Noah Heller, the CEO/President of BESST who hired Whitman. "I was so impressed that she had raised a family successfully and at the same time went back to school. Her scientific skillwork, critical thinking ability, and outstanding knowledge has made her a tremendous asset to the company."

Whitman says that her coursework at CNR—in particular, professor **T.N. Narasimhan's** "Water in the Terrestrial Environment" class and professors **Gordon Frankie** and **Katharine Milton's** "Environmental Problem-Solving" class—fostered her interest in water resource management. Her semester paper was a grant proposal—for which she won $35,000 from the California Coastal Commission—to fund a storm water management project at a local school's campus.

At BESST, Whitman is one of several field analysts whose task is to measure water chemical composition and water flow data to determine whether a well is viable and can be maintained or rehabilitated. In recent years, as water resources have dried up, standards have become more stringent, and the cost of drilling has risen, water districts and agriculturalists have placed an emphasis on rehabilitating wells instead of drilling new ones. So Whitman and her colleagues use a USGS-developed technology that diagnoses wells at a cost roughly 80 percent cheaper than past methods, and with significantly less down time.

"To profile a well using the old technology, the water pumps had to be pulled out of the well with cranes, it generally cost around $100,000 per well, and the well was down for around two weeks," she explains. "But with this new technology—which is like catheterization and video arthroscopy used in human medical diagnostics—the cost is $10,000-$15,000 and the diagnostics can be done in a day."

The implications of this new technology are profound, says Whitman. In the past, poorer water districts have been forced to either decommission or abandon wells because they were potentially unsafe and they didn't have the funds to conduct the testing (in California alone, more than 4,000 public drinking wells have been shut down since 1984 due to groundwater contamination). As a result, those districts needed to buy water from another district, which meant giving up their water sovereignty, often at a great cost over the long haul.

"But now those districts have a cost-effective way to empower and enable water providers to make sure their wells produce better quality water," Whitman says. "I love the fact that I get to be part of this solution."

Whitman says she's thrilled to that her workday consists of such challenging considerations. As recently as 5 years ago she had a hard time envisioning a life beyond raising a family.

"After graduating from high school, I attended community college for a while and had a successful career as a general manager of an electronics distributor " says Whitman. "After I had my second child I became a stay-at-home mom for 11 years (Whitman and her husband John have two children, John, 16, and Hannah, 15).

"But all that time I was so haunted by the fact I had not finished my college degree that I literally had nightmares about it. And at the same time I was hanging out with a very ambitious group of women who are high achievers and had great educations. It made me feel inadequate, so I finally decided to go back to school."

Whitman attended Santa Rosa Junior College knowing she wanted to be in the environmental problem-solving field in some capacity. Around that time she had spearheaded a project to facilitate public access to a local timber company's property in her hometown of Occidental, California. The initiative was so successful that the property was bought by the California State Parks. In addition, Whitman wrote a grant for her children's school to launch an environmental education program.

When she accumulated enough credits to transfer to a 4-year college, Whitman defied conventional wisdom. The next logical step would have been to transfer to Sonoma State University, like most of the community college's reentry students.

"But a friend suggested that I apply to UC Berkeley instead," says Whitman. "That was so far out of my realm—I didn't think that sort of education was accessible to me."

It certainly was, and today Whitman—and BESST—are better for it.

Written by: Jackie Krentzman | Photo by: Molly DeCoudreaux