

## ENGINEER PROFILE

**Name:** Bill Tuttle

**Organization:** San Jose Water Company

**Engineering Discipline (Check one below):**

- Civil
- Mechanical
- Electrical
- Environmental (including Process)
- Structural
- Information Technology
- SCADA
- Other

1. Please describe the work you do:

I am an engineering director at the water company. I am in charge of the engineering design of pipelines and other facilities that are funded from sources outside the company. I am also in charge of the planning group, which performs numerous studies and analyses.

2. What combination of education, experience, and skill was required in order for you to obtain your job?

You must have a Bachelor's degree in an engineering related field, along with a Professional Engineer's license in the State of California. You must also have experience being a supervisor in an engineering setting, so you kind of have to work your way up to it.

3. What do you like best about your job?

I enjoy seeing the larger jobs through to completion, and the challenges and everyday learning experiences associated with the planning and design of projects.

4. Please tell us about the water or wastewater engineering project you enjoyed working on the most, and what made it rewarding,

I really enjoyed working on our cutting edge pipe replacement program. We could not find any other agency that was predicting which pipes were most likely to fail in the future, so we have been and continue to develop a method so that we can prioritize our pipe replacements.

5. What qualities and capabilities are needed in order for an engineer to be successful in the water/wastewater industry?

Engineers that are successful strike a good balance between getting jobs completed and being detail-oriented. Engineers are famous for doing research and paying attention to the tiniest of details when putting together plans. That is why it takes us 3 months to buy a TV!

6. Do you have any advice for an individual who is considering pursuing a career as an engineer in the water/wastewater industry?

Take a variety of classes to find out which aspect seems the most interesting to you. A better idea is to work part time or in the summer for an engineer or agency. Probably the best will be a small engineering firm that allows you to work on a wider variety of projects. You will soon know which interests you the most. There is more to water/wastewater than just treatment plant design. I currently do not do any of that kind of work. There is also planning, hydraulic modeling, groundwater and well design, stormwater, pipe design, and utility design for developer jobs such as new shopping centers and subdivisions.