

ENGINEER PROFILE

Name: Adam Feffer

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 spend in the field is usually to coordinate special water sampling analyses, observe operating conditions, and oversee projects that are being implemented. Recently, I've gotten to oversee putting three new tank mixers into three of our water storage tanks, and I coordinated an inspection of some of the filters at our water treatment plant, and installed some supplemental filter media. In the office, I spend a lot of time analyzing test results on spreadsheets from our database. SJWC monitors lots of parameters, so I have a tremendous amount of data to look at and interpret. Whenever some kind of trend or connection between different factors is established, I may set up a study to understand how the connection works, and how we can change our operation or system to improve. Also, I review regulatory updates to make sure that we are in compliance with state laws with regard to our water quality, our test procedures, and reporting of our results to the different regulatory agencies.

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

I have a Master's degree in Science in Civil and Environmental Engineering with a concentration in water resources. Before working at SJWC, I was a project coordinator for an organization managing water development projects in East Africa. Additionally, within a short time after becoming employed at SJWC, I attained my Professional Engineering license.

3. What do you like best about your job?

Water is an essential human need. Providing high quality water with at a high level of efficiency better our society and I enjoy being part of that provision. Additionally, I enjoy trying to figure out the best way to address different problems we encounter.

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

Currently I am conducting a study to understand, and figure out how to better manage the risk of nitrification in our distribution system. It is a very complex problem that has tied together water chemistry and logistical planning on a very large scale. Already I've been able to streamline our data collection practices and have been able to reduce recording error and workload for some of our staff. If I can come up with a practical and effective strategy for addressing this problem it will be very satisfying.

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

To be successful as a water engineer, you must be prepared to work in a collaborative team. You need discipline and responsibility to meet deadlines, and analytical thinking skills to solve problems. To do my job, flexibility, ingenuity, and an ability to learn quickly are essential skills.

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

I have an interesting satisfying job. Everyone needs water. Especially in California, there will always be a need for water related professionals. If you want a leg up in this field, things that will give you an edge are a) experience- get an internship somewhere you'd want to work, b) specialty knowledge- having deep understanding of a specialized topic like water chemistry or hydrogeology, and C) hard work- if you work harder than your peers you can usually succeed even under difficult conditions.