20-year Masterplan for Denver Water’s 280 MGD Foothills Plant

Denver Water operates their Foothills WTP (280 MGD) as a baseload plant year round because of its ability to pressurize the distribution system without pumping. Built in 1983, the Foothills plant serves Denver well; however, at over 30 years old Denver Water needs to be planning for the future of this infrastructure. This project will determine the best way to utilize the current infrastructure at the Foothills site and consider upgrades that are needed with an eye on expected changes in source water and regulations.

The following areas will need to be addressed:

1) Source water planning
   a. Source water blending (WISE)
   b. Wildfire preparedness

2) Regulatory planning
   a. Algal toxin control
   b. Hexavalent chromium control
   c. Lead control

3) Infrastructure planning & Preliminary design
   a. Separation of treatment trains
   b. Filter-to-waste capability
   c. Long-term filter upgrades and advanced treatment planning

Why Students Should Choose this Project:
This is a comprehensive project on the largest water producing plant in Colorado (and probably the mountain time zone). The combination of problem statement and client will show well on a resume. You will tour the Foothills Water Treatment Plant and network with local water professionals. This project will also expand your skill set giving you the opportunity to work with CAD to produce design drawings.

Key Details

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<tr>
<th>Project Principal</th>
<th>Chris Corwin, Ph.D., P.E.</th>
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