Joseph Lohmann, E.I.T.

OBJECTIVE

Dedicated and diligent engineer seeking an entry-level position to further improve my engineering skills. I am eager to work and learn from industry professionals and advance my career along the way.

- Real-world experience working as an intern with the engineering team at South Platte Water Renewal Partners.
- Experience with modeling and programming through my internship, coursework, and self-study.
- Passionate about the environment and working towards being an impactful engineer.

EDUCATION, TRAINING, AND SKILLS

• B.S. Ecological and Environmental Engineering, Oregon State University. (June 2019)

- Senior Design Project: Roof runoff metals filtration system. Designed a portable filtration system and put together technical memos and final report for our client in Portland, OR.
- Awarded Engineering in Training (E.I.T.) March, 2020. EI.0077011
- Skills: Python, MATLAB, ArcGIS, HEC-RAS, HEC-HMS, Microsoft Excel, Word, and PowerPoint

PROFESSIONAL EXPERIENCE

South Platte Water Renewal Partners (Now South Platte Renew) | Englewood, Colorado (September 2019 – March 2020)

Engineering Intern

South Platte Water Renewal Partners is the 3rd largest wastewater treatment facility in Colorado, treating approximately 20 MGD of residential and industrial waste for a service area of 300,000 people.

Engineering Intern General Duties

- Worked on a team of five
- Exercised time management and multi-tasking with multiple projects at a time
- Close coordination with vendors, operations and maintenance, and engineering to complete projects

Facility Record Drawing Improvements – Project Manager

- Successfully organized CAD drawings from all major projects into a common directory
- Programmed several Python scripts to assist in file renaming and directory organization

Stream Temperature Modeling and Visualization - Project Manager

- Developed a Python script to compile data from stream temperature loggers and create a visualization for current stream temperature based on a regression model
- Researched and coordinated with model authors to determine the best fit model to use
- Utilized QUAL2Kw to evaluate the concern for future violations of a stream temperature permit

Nitrification Rate Study and Jar Testing – Engineering Support

- Conducted a lab experiment to determine our nitrifying bacteria's maximum nitrification rate
- Assisted in jar testing for several projects including coagulant testing for chemical phosphorus removal and using beer waste for denitrification

Disinfection Chloramine to Chlorine Investigation and Implementation – Engineering Support

- Authored a technical report to detail chloramine and chlorine disinfection chemistry, and the switch of processes complete with a cost analysis
- Led the effort to purchase and install chlorine analyzers for the process change
- Oversaw coordination with maintenance, vendors, and engineering to determine logistics

HydroFLOW Pilot for Struvite Mitigation – Project Manager

- Headed the pilot project to test the effectiveness of HydroFLOW in preventing struvite scaling
- Authored a technical memo summarizing struvite chemistry and results from the pilot