

Ellen Richards

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EXPERIENCE

Senior Environmental Engineer, *AECOM*, Coral Gables, FL Aug 2024 - Present

- Help plan and design wastewater treatment upgrades for South Florida utilities.
- Work with city and state agencies to review treatment options such as membrane systems, advanced oxidation, and nutrient recovery.
- Build treatment models and hydraulic layouts using BioWin and GPS-X to ensure plants meet nitrogen, phosphorus, and solids limits.
- Prepare design reports, cost comparisons, and presentations for permitting and utility board approval.
- Support projects from early planning through final design to make sure systems are reliable, affordable, and meet environmental standards.

Principal Environmental Consultant, *Tetra Tech*, Coral Gables, FL Nov 2018 - Jul 2024

- Led teams responsible for site cleanup and redevelopment projects, ensuring all work met state and federal environmental rules.
- Focused on PFAS contamination studies and treatment systems, helping reduce contaminant levels to safe drinking-water standards.
- Reviewed groundwater and soil data to develop cleanup strategies that lowered long-term maintenance costs.
- Worked with engineers, geologists, and field staff to keep projects on schedule and within budget.

Senior Environmental Specialist, *Wood PLC*, Coral Gables, FL Sep 2017 - Oct 2018

- Oversaw environmental compliance for a large regional water and wastewater system serving more than 2 million residents.
- Improved monitoring programs and reporting systems, helping facilities reduce permit violations and improve water-quality performance.
- Supported facility upgrades by coordinating with operations teams, regulators, and community organizations.
- Helped develop energy-saving and sustainability initiatives across treatment plants.

Environmental Engineer, *Stantec*, Coral Gables, FL May 2015 - Sep 2017

- Assisted with environmental compliance for water and wastewater treatment facilities.
- Helped review discharge data and prepare reports for state and federal agencies.
- Supported field technicians conducting sampling, SCADA checks, and equipment inspections.

Environmental Engineering Intern, *Stantec*, Coral Gables, FL Jan 2014 - May 2015

- Oversaw environmental compliance for a large regional water and wastewater system serving more than 2 million residents.
- Updated procedures and training materials to improve consistency in compliance reporting.
- Coordinated with operations teams to track corrective actions for permit issues.

EDUCATION

BSEE, *University of Miami*, College of Engineering May 2015

SKILLS

- **Software:** Civil 3D, Excel, MATLAB, Python, Tableau, Power BI, Bluebeam Revu
- **Analysis:** EPA SWMM, HEC-RAS, AERMOD, QUAL2K, ArcGIS, QGIS, Minitab, R