Tegan Goodman

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EDUCATION

San Diego State University | San Diego, CA

May 2025

Bachelor of Science in Environmental Engineering

Universidad Carlos III de Madrid | Madrid, Spain

January - May 2023

Bachelor of Science in Environmental Engineering

WORK EXPERIENCE

GIS Management Intern | City of San Diego | Environmental Services Department July 2024 - Present

- Conducted spatial analysis with ArcGIS and QGIS to optimize waste management routes.
- Completed technical analysis and contributed to a federal grant proposal (SWIFR) by utilizing the EPA Waste Reduction Model. Conducted calculations and collaborated with cross-functional teams to develop and support the proposal.
- Observed the significant city transition due to Measure B, an amendment to San Diegos People's Ordinance allowing the city to charge for waste services. I contributed by attending planning meetings, researching code amendments, fiscal impacts, business contracts, and conducting GIS analysis to assess the spatial and operational impacts of rerouting collection services.
- Attended the ESRI GIS User Conference, where I networked and participated in various informational seminars. Actively engaged in a working group to purpose a new Standard Occupational Classification.

Student Research Assistant | Coastal Engineering Lab | San Diego State University May 2024 - Aug. 2024

• Utilized MATLAB and remote sensing data to perform tsunami simulations, measuring the strength of past tsunamis in various global regions and comparing them to projected future hazards related to climate change.

Student Research Assistant | Structural Engineering Lab | San Diego State University May 2022 – Sep. 2022

- Conducted experiments comparing the compressive and tensile strength of concrete mixed and cured with saltwater versus freshwater.
- Analyzed data comparing the concrete strength of saltwater versus freshwater mixtures and how it changed over time.

PROFESSIONAL ORGANIZATIONS

Women In Science Society	Fall 2021 – May 2025
National Society of Leadership and Success	Spring 2022 - May 2025
Society of Women Engineers	Spring 2022 - May 2025
American Water Works Association	Fall 2023 – Spring 2024

PROJECTS

South Coast Water Desalination Pretreatment

Capstone Senior Design Project

• Led a team in designing a large-scale pretreatment system for the South Coast Water Desalination Plant, targeting an initial capacity of 10 MGD with planned expansion to 30 MGD. The system focused on

effective removal of iron and manganese prior to reverse osmosis. Oversaw the development of a comprehensive construction plan, including site layouts, utility planning, construction staging, chemical treatment processes, and an Environmental Impact Report.

As Project Manager, I was responsible for scheduling, time management, and coordination with industry professionals and faculty advisors. I contributed to the overall design process and developed a detailed project schedule, cost analysis, materials list, and basis of design. I also wrote and edited the project proposal and all submittals.

VOLUNTEERING

Children and Community Health Volunteer | Global Leadership Adventures

Aztec Unity Project | San Diego Habitat for Humanity

July 2019 *April* 2022

SKILLS

Technical: GIS, AutoCAD, MATLAB, Python, R Studio, VS Code, Github, Microsoft Office, Google Workspace, Laboratory skills and safety, Project Management

Engineering Courses: Fluid Mechanic, Hydraulics, Thermodynamics, Coastal Engineering, Air Pollution, Water and Wastewater Treatment, Environmental Engineering Laboratory