



STORMWATER MANAGER



WHAT'S MY JOB?

Description

A Stormwater Manager oversees the design and implementation of systems to manage rainwater and mitigate the effects of runoff in urban areas. This role requires technical knowledge, project management skills, and regulatory understanding. They plan by evaluating critical areas to prevent flooding and pollution, and design systems such as bio-retention and permeable pavements to improve water quality. Additionally, they coordinate construction and ensure that projects comply with environmental regulations, educating the public on water management and contributing to urban sustainability.

MY STUDIES

- **Degrees:** Bachelor's or Master's degree in Civil Engineering, Environmental Engineering, Hydrology, or a related field.

- **Certifications:** Professional certifications in Stormwater Management, Hydrological Modelling, Environmental Engineering, or similar credentials.
- **Continuous Learning:** Courses or training in Urban Water Management, Environmental Regulations, or Sustainable Infrastructure Design.



YOUR SPECIAL TALENTS

Soft Skills

- **Patience and Persistence:** Maintaining perseverance and dealing with the inherent uncertainties and complexities of managing stormwater systems.
- **Problem-Solving:** Addressing challenges and finding creative solutions to issues related to stormwater runoff, flooding, and water quality.
- **Sustainability Awareness:** Understanding and promoting sustainable stormwater management practices and environmental stewardship.
- **Adaptability:** Being flexible and responsive to changing weather patterns, regulatory updates, and unexpected site conditions.



Hard Skills

- **Hydrology and Hydraulics:** Study of water flow and distribution in natural and built environments.
- **Civil Engineering:** Design, construction, and maintenance of infrastructure like roads, bridges, and buildings.
- **Geographic Information Systems (GIS):** Technology for capturing, storing, analyzing, and managing geographic data.
- **Computer-Aided Design (CAD):** Use of computer software to create precise drawings and models for engineering and architectural projects.
- **Erosion and Sediment Control:** Techniques to prevent soil erosion and manage sediment in construction and land development projects.





COOL THINGS YOU'LL DO

- **Planning and Design:** Develop and implement stormwater management plans and infrastructure projects, including drainage systems, retention basins, and green infrastructure. Use Geographic Information Systems (GIS) and Computer-Aided Design (CAD) tools to map, design, and model stormwater systems.
- **Regulatory Compliance:** Ensure compliance with local, state, and federal regulations regarding water quality and stormwater management. Prepare and submit necessary permits and reports to regulatory agencies.
- **Project Management:** Oversee the construction and maintenance of stormwater infrastructure projects.
- **Monitoring and Evaluation:** Monitor stormwater systems and water quality to assess performance and identify areas for improvement.
- **Environmental Protection:** Implement best management practices (BMPs) to minimize the environmental impact of stormwater runoff.
- **Data Analysis and Reporting:** Analyze data from stormwater monitoring and assessment activities to inform decision-making.
- **Community Engagement and Public Outreach:** Engage with local communities, stakeholders, and the public to raise awareness about stormwater management issues and initiatives. Conduct public outreach and educational programs to promote understanding and participation in stormwater management efforts.
- **Innovative Technology Integration:** Explore and implement innovative technologies and practices for stormwater management, such as smart stormwater systems or nature-based solutions. Pilot and evaluate new technologies to improve efficiency, effectiveness, and sustainability of stormwater management practices.