STORMWATER AND SURFACE WATER SERVICES

RESOURCEFUL & INTENTIONAL

West Yost: Your Partner in Stormwater and Surface Water Services

West Yost has expertise in stormwater planning, regulatory compliance, and infrastructure design, delivering tailored solutions for stormwater capture and groundwater recharge. Our integrated approach includes advanced modeling, FEMA compliance, and tailored master plans. We also provide grant support and public outreach, leading to project success and stakeholder engagement.

STORMWATER AND SURFACE WATER SERVICES

- **Hydrology & Hydraulics:** Expert analysis and design of water flow systems to manage stormwater and groundwater resources, providing efficient and sustainable water management solutions.
- **1 & 2D Modeling:** Advanced modeling techniques to simulate and predict water behavior in various scenarios, offering accurate data for informed decision-making.
- **FEMA Services: C/LOMR, Accreditation:** Comprehensive services for FEMA compliance, including Conditional and Letter of Map Revisions and levee accreditation.
- **Stormwater Capture and Groundwater Recharge:** Innovative solutions for capturing stormwater and enhancing groundwater recharge, maximizing water resource utilization and sustainability.
- **Stormwater Master Planning, Numerical Planning, Design Standards, Planning Documents:** Comprehensive planning and documentation for effective stormwater management, tailored to meet your specific needs and regulatory requirements.
- **Grant Funding:** Strategic support for securing funding, specializing in custom applications, storytelling, industry research, and policy development.
- **Public Outreach:** Engaging with the community to enhance project visibility and increase stakeholder buy-in through tangible and digital materials.

SOME OF OUR SUCCESS STORIES

Aliso Creek RWL Scour Study, Orange County, CA:

West Yost developed alternatives to replace a recycled water pipeline under Aliso Creek, addressing repair challenges. Using floodplain modeling and empirical scour calculations, we established design elevations above the regulatory flood water surface and maximum scour depths below the channel bed. The feasibility analysis considered capital and long-term costs, including hydraulic performance and structural integrity, helping the District select an optimal solution for operations and maintenance. **This approach enhances the pipeline's resilience against future flood events.**

Elk Grove Stormwater and Drainage Master Plan (SDMP) Update, Elk Grove, CA:

West Yost updated Elk Grove's Storm Drain Master Plan to manage growth and future development. We combined existing SWMPs, conducted drainage and facilities studies, and used numerical modeling to analyze the City's drainage system, which includes 400 miles of underground pipes and 60 miles of channels. Our plan incorporated land use planning and capital improvement program development, reducing flooding while maintaining rural areas. Regular communication with the City and developers resulted in a robust guide for drainage-related projects. **This comprehensive plan supports sustainable urban and rural development.**

SUCCESS STORIES CONTINUED

Roseville WWTP Levee FEMA Certification/ Accreditation, Roseville, CA:

West Yost helped Roseville achieve levee accreditation for wastewater treatment ponds under tight deadlines. Using hydraulic modeling, analytic hydrology, empirical scour and erosion assessment, levee design, and stormwater management principles, we demonstrated compliance with FEMA CFR 65.10 requirements. Collaboration with regulators facilitated timely delivery, minimized response-to-comment cycles, and reduced project costs, achieving the City's regulatory compliance goals. **This project highlights our ability to integrate technical expertise with regulatory requirements for successful outcomes.**

Development and Implementation of Recharge Master Plans, Chino Basin Watermaster:

West Yost created a Recharge Master Plan to increase groundwater recharge in Chino Basin. We optimized stormwater management facilities, leveraged supplemental water sources, and collaborated with flood control agencies to maximaze recharge potential. Using surface water modeling, analyzed recharge projects, project yields and developed finance and implementation plans. Plan implementation resulted in significant increases in stormwater recharge (14,000 afy) and recycled water recharge (10,000 afy). **Ongoing updates keep the plan effective and responsive to change water resources plans and economic drivers.**

OUR TEAM

David Jaffe, PhD, PE, D.WRE
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David has over 20 years of experience, excelling in turning engineering science into environmental benefits. His expertise in water resource management and development fosters positive social change through innovative surface water modeling and sediment transport solutions.

Carolina Sanchez, PE
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Carolina excels in recharge master planning, groundwater management planning, and guiding multi-stakeholder groups through complex decision-making processes that rely on complex technical information.

Doug Moore, PE
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Doug is an engineer specializing in storm drainage facility master planning, stormwater computer modeling, facilities planning, preliminary design, design and specifications, project permitting, and project management.

Melissa Duffy, PE
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Melissa focuses on hydrologic and hydraulic modeling and analysis for storm drainage master plans, drainage analyses, and FEMA Letter of Map Change applications as a civil engineer.

Sheri Lasick
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Sheri offers grant writing, funding research, and funding management services to public and non-profit entities, along with program analyses, policy development, and industry research.

Scan to view our team's resume.

David Garrison
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David provides professional services that drive effective public outreach strategies and strategic planning initiatives.

We are ready to contribute our expertise to your stormwater & surface water project. We look forward to collaborating with the dedicated professionals and teams already in place, and serving our local communities. Our commitment is to deliver results that make a difference. **Let's build a safer and sustainable future together.**