
Connect with us!

WSP USA One Penn Plaza New York, NY 10119 main: +1-212-465-5000 email: usinfo@wsp.com

wsp.com

About WSP USA

WSP USA is the U.S. operating company of WSP, one of the world's leading engineering, environment and professional services firms. Recognized on <u>Fast</u> <u>Company's Brands that Matter List for 2022</u> as a top Community-Minded Business, WSP USA brings together engineers, planners, technical experts, strategic advisors and construction management professionals who are dedicated to collaborate in the best interests of serving local communities. WSP USA designs lasting solutions in the buildings, transportation, energy, water and environment markets. With more than 15,500 employees in 300 offices across the U.S., WSP partners with its clients to help communities prosper.

© 2023 WSP. All rights reserved.

Water, Wastewater and Stormwater

Preparing for the future

۱۱SD







Addressing water challenges with innovative planning and design

Optimizing water management

Population growth, industrial development and aging water assets have put pressure on conventional water, wastewater and stormwater technologies and infrastructure. This has created new challenges in both quantity and quality management. Added to this pressure are the new realities of adapting to climate change—from vulnerability to rising sea levels, severe coastal storms and inland flooding to severe drought conditions that threaten water supplies. Public agencies, owners and operators need long-term solutions, and a means of paying for them.

Improving water quality

WSP USA assists clients in finding the right solutions to water challenges through innovative planning and design, deep knowledge of the regulatory environment and a unique understanding of the alternative delivery mechanisms available in today's tough economic climate. We provide a full range of services from strategy development through project implementation. Working alongside our clients, we serve as trusted advisors providing in-depth and objective advice.

WSP brings together a diverse team of talented individuals with advanced degrees in science, engineering and business, as well as professional work experience in industry, consulting and regulatory agencies. We are problem-solvers who explore new ideas and are driven to find the ideal solution. Our U.S. team is backed by WSP's network of global water experts to bring best industry practices to deliver world class services at the local level.

Services

Water supply and reuse

Safe, clean water is essential to support life and the environment. WSP provides integrated water resources planning, design and management to optimize solutions for water supply, alternative sources, wastewater management and reuse of reclaimed wastewater. We have experience in advanced water treatment technologies including desalination of seawater and brackish water and zero-effluent discharge systems for power facilities. We help clients anticipate needs and take action to optimize and ensure the reliability of the water supply.

Water and wastewater treatment and convevance

Scarcity and poor water quality from inadequate, aging, inefficient or ineffective water and wastewater infrastructure have profound impacts on the quality of life worldwide. At WSP, we provide innovative solutions and technologies for planning, engineering and management to improve the effectiveness of operations, maintenance and replacement of aging and failing drinking water and wastewater treatment and conveyance systems. Our team is committed to environmentally sound structures that reflect sustainable engineering. We have a long record of meeting strict environmental regulations that govern the design, construction and operation of all types of water and wastewater conveyance structures.

Flood control and hydraulic structures

Climate uncertainties have altered both precipitation and coastal storm surge, in frequency and intensity. Consequently, the flood risk to communities is likely to increase dramatically across the U.S. WSP's water resources and hydraulic specialists are experienced with a variety of flood control and conveyance facilities including levees, dams, canals, pump stations, detention basins and impoundments, and intake, flow diversion and outlet structures. We utilize our in-depth hydrologic and hydraulic engineering knowledge and apply our extensive experience to assist municipalities in safeguarding their communities and preventing loss of life and property.

Facility and asset management

As the nation's public water infrastructure ages, effective facility and asset management can help municipal agencies and utilities maximize the value of capital as well as operations and maintenance resources. We integrate technical excellence, financial management and business knowledge to provide the management strategies and tools clients need to optimize the life and value of water infrastructure assets and make informed decisions on asset rehabilitation, repair and replacement.





Stormwater, watershed and ecosystem management

Population growth and urban development contribute to both increased quantity of stormwater and the amount of pollutants in runoff causing rapid changes in watershed hydrology and ecosystem balance. Effective stormwater management reduces and mitigates the adverse impacts caused by such imbalance. With a full understanding of stormwater management, pollution control regulations and industry standards, WSP delivers stormwater control facility planning, analysis and design, watershed management and planning, green infrastructure (GI) and ecosystem assessment and restoration. We help clients define and respond to stormwater threats and develop management practices that address water quality issues. Our solutions manage and protect surface water resources for the long term in a sustainable way.

Climate adaptation and resiliency

Organizations and communities are increasingly facing the challenges and uncertainties created by climate change. We create resilient systems through the development of integrated engineering, planning and policy solutions. WSP provides vulnerability and risk assessments, hazard planning, coastal and fresh- water flood protection system design, climate adaptive engineering and asset management, postextreme event recovery projects, and the development of capital improvement plans and integrated funding programs. We help clients prepare for the future.

- 01 For over 30 years, WSP has been delivering Water Conserv II in Orlando, FL with reclaimed water system planning and design, construction management, design/build procurement services, engineer-procured construction and permitting for agricultural and residential irrigation and aquifer recharge.
- **02** WSP provided the award-winning Marblehead Pipeline Replacement project with emergency condition assessment for 12,000 feet of 20-in and 24-in pressure sewers, alternatives analysis for emergency replacement, engineering design and construction management utilizing the float and sink construction approach.
- **03** To restore water quality to rivers and streams that feed the Chesapeake Bay, our team implemented green infrastructure elements including bioretention facilities, rain gardens, impervious removal, pervious pavers and tree plantings as part of the Tidal Back River Green Infrastructure project in Baltimore County, MD.
- 04 In Sacramento, CA our team provided construction management, inspection and quality assurance services, utilities relocation/coordination, environmental mitigation and sensitive area protection to 40 miles of levees to a 200-year flood protection level for the Natomas Levee Improvement Program.