

PER-AND POLY-FLUOROALKYL SUBSTANCES (PFAS): WATER/ WASTEWATER SOLUTIONS



Combining nearly two decades of PFAS investigation and remediation experience with 65 years in the water and wastewater industry, Weston offers innovative, sustainable, and scalable solutions to safeguard communities from the health and environmental hazards of PFAS in water and wastewater.

FULL LIFE CYCLE SOLUTIONS:

Weston brings a unique advantage to your PFAS challenge. Our combined expertise in both the remediation and water/wastewater fields means you benefit from a team of experts who understand the latest regulations, science, and technologies specific to PFAS water and wastewater. Our PFAS team of subject matter experts (SMEs) provide support from assessment to risk mitigation. Our services include:

- Technology evaluation and selection (feasibility studies)
- Bench-scale/pilot studies
- Treatment plant design/build, operations and maintenance (O&M) and optimization
- Development of modular treatment systems for broad applications
- Community relations/risk communication support
- Engineering estimates
- Investigation, modeling, hydrogeology, and hydrology (e.g., co-contaminants)
- Source and upstream identification and differentiation
- Strategy and regulatory support/National Pollutant Discharge Elimination System (NPDES) permitting
- Watershed/supply analysis

TECHNICAL CAPABILITIES AND EXPERTISE:

Drawing from our robust team of water/ wastewater, and PFAS SMEs, Weston can provide comprehensive solutions for our clients. Our treatment experience includes biological, physical and chemical treatment, and application of innovative technologies relating to all contaminants of concern, including PFAS, for various industries and public utilities.

Our expertise includes:

- 300 in-house, nationwide staff (45 PEs and 35 PGs) with experience in PFAS soil, water, and wastewater treatment; PFAS destruction; and PFAS research and development (R&D)
- PFAS experience in every EPA region and 29 states which allows Weston to predict regulatory requirements and pressures
- 100+ PFAS projects valued at \$96M+ across 29 states
- 15+ years of leadership in many organizations such as the Interstate Technology and Regulatory Council (ITRC), National Ground Water Association (NGWA), Strategic Environmental Research and Development Program (SERDP), so Weston is abreast of regulatory changes and technological advances.
- Application of cost-effective, technology-agnostic approaches (e.g., IX, GAC, SCWO) tailored to each site, situation, and project allows for the most appropriate solution for our clients.



PFAS Investigation, Potable Water and Stormwater Treatment, Nantucket Memorial Airport, MA.

Weston was contracted by Nantucket Memorial Airport (ACK) to characterize and mitigate the impacts stemming from their past use of PFAS-containing aqueous film-forming foam (AFFF) during FAA training.

Sampling/Lab Analysis

- Assessed PFAS levels in water and soil near Nantucket Airport (ACK), offering regulatory guidance and technical plans. Implemented a step-out sampling process to confirm the extent of impacts to neighboring residents and completed risk mitigation/communication measures in multiple languages.
- Optimized data collection during each mobilization, working closely with ACK authorities to minimize disruption to airport operations.

Evaluation and Treatment Approach

- Provided temporary water supplies to impacted residents; designed, installed, maintained, and monitored point-of-entry treatment systems (ion exchange [IX] and granular activated carbon [GAC]) on private water supplies that exceeded MassDEP criteria.
- Designed, constructed, and operated and maintained a modular stormwater treatment system.

Design/Build of PFAS Contaminated Potable Water Supply Treatment, Joint Base Lewis-McChord, WA.

Weston completed this time-sensitive remedial design and construction of GAC treatment systems at the Joint Base Lewis-McChord (JBLM) to reduce groundwater PFAS levels below EPA's health advisory within a year of project award, promptly addressing the community's needs.

Evaluation and Treatment Approach

- Designed PFAS treatment systems for contaminated drinking water at four Joint Base Lewis-McChord drinking water production wells.
- GAC and IX resin were evaluated for PFAS removal. GAC was selected as the preferred PFAS removal method due to lower cost and proven record of successfully removing PFAS from potable water supply wells.
- Modular treatment systems at each well saved on costs and had capacities of 500-1,065 gpm. One system included fluoridation. Weston demonstrated all systems met EPA standards for PFOA and PFOS, ensuring safe drinking water.



PFAS Water Supply Sampling and Innovative Treatment, Joint Base McGuire-Dix-Lakehurst, NJ.

Weston was tasked by the Joint Base McGuire-Dix-Lakehurst (JBMDL) to mitigate PFOA and PFOS contamination that were detected above the EPA lifetime Health Advisory (HA) level in groundwater wells, potentially compromising the potable water for 800+ residents.

Sampling/Lab Analysis

- Sampled and analyzed drinking water at 189 residential and commercial properties within a 2-mile radius of the installation.

Evaluation and Treatment Approach

- Provided temporary bottled water and ice to 2 private facilities serving 475 individuals.
- Designed and constructed GAC point-of-entry treatment filtration systems at the 2 facilities, which successfully mitigated PFAS concentrations below the EPA health advisory level.
- Provided dependable water to affected community by designing and building an 800-foot municipal water main extension.
- Designed and constructed a water treatment plant supplied by a new deep aquifer well (1,000+ feet below ground surface) to replace the existing PFAS-impacted potable water well.



FOR MORE INFORMATION, CONTACT:

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