NAVAL WEBSTER OUTLYING FIELD

St. Inigoes, Maryland

$1.2MM
Verified Annual Savings

21,873 MMBTU
Verified Annual Energy Savings

2.8MM GAL.
Annual Water Savings

At a glance

CEG Solutions delivered a $28M ESPC across 67 buildings at the Naval Webster Outlying Field, electrifying major facilities and reducing energy consumption by over 40%, and boosting resilience.

Project Highlights

- $28M ESPC covering 67 buildings
- $1.2M verified annual savings
- 21,873 MMBtu energy savings
- 2.8M gallons water savings annually
- 600 tons of GSHP capacity installed
- 54% energy reduction in five largest buildings
- 40%+ total campus-wide reduction
- Custom O&M program for GSHP systems

OVERVIEW

Webster Outlying Field sought to reduce energy use, eliminate fuel oil reliance, and modernize aging systems across its diverse campus. CEG was tasked with a multi-phase ESPC covering 67 buildings — from hangars and research labs to data centers. The challenge: deliver deep energy savings and electrification measures without disrupting critical defense research and operations.

STRATEGIES

Deep Energy Retrofit, Electrification & Carbon Reduction, Energy & Operational Efficiency, Performance Assurance, Performance Contracting, Resiliency

Deep Energy Retrofit

Achieved Deep Energy Retrofit Status (40% or more energy savings) in the five largest energy-consuming buildings, and a 40% energy consumption eduction across total project (67 buildings).

Energy Conservation Measures

- Ground Source Heat Pump (GSHP) installation & borefields
- HVAC & controls upgrades
- Retrofit of 10,000 lighting fixtures
- Domestic water fixture retrofits (384 units)
- Envelope upgrades in 53 buildings
- Retrocommissioning across 43 facilities

SOLUTIONS

CEG implemented lighting retrofits (10,000 fixtures), HVAC upgrades, water fixture replacements, envelope improvements, and retrocommissioning across 60+ buildings. The centerpiece was electrification: nine central plants were replaced with 600 tons of GSHP systems, fully electrifying the site's five largest buildings. Borefields were sized and sited to support simultaneous heating and cooling, cutting fossil fuel use and enhancing resilience. CEG also provided tailored O&M support, including GSHP maintenance, manuals, and staff training.

RESULTS

The Webster project delivers $1.2M in annual savings, reduces energy use by 21,873 MMBtu, and cuts water consumption by 2.8M gallons each year. Energy use fell by more than 40% across the campus and by 54% in its largest buildings. By eliminating fuel oil and installing high-efficiency GSHPs, Webster enhanced resilience, reduced emissions, and advanced its long-term sustainability goals.