



PROJECT OVERVIEW

The project directly confronts the critical logistical challenge of water, which creates a significant vulnerability for agile bases by requiring the constant resupply of potable water and the removal of wastewater. To sever this logistical tether, the project integrates key technologies for self-sufficiency.

BENEFITS

The ZWF concept will eliminate the need for water resupply by producing potable water on-site using Small Unit Water Purifiers (SUWP) and Atmospheric Water Generation (AWG). Concurrently, it will dramatically reduce overall water demand by recycling graywater from showers and laundry. Finally, the burden of hauling away wastewater will be eliminated by treating blackwater on-site, allowing for its safe discharge and making the base more resilient, independent, and secure.

PATH FORWARD

The ZWF project has proven to be a successful catalyst for innovation, with its data and technologies now driving the next generation of water solutions. GVSC is leveraging these outcomes in a Phase 2 SBIR to significantly improve the efficiency of atmospheric technologies. The project's work has also directly informed an official Platoon Water Purification System (A-CDD) that is on track to be fielded to Army units by FY28. Demonstrating its continued relevance, ZWF data is also being used to support a high-priority water modernization sprint for OUSD(R&E).

DoD Executive Agent

Office of the Assistant Secretary of the Army for Installations, Energy, and Environment

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