



# BREVARD COUNTY PER- AND POLYFLUOROALKYL SUBSTANCES (PFAS) SAMPLING

## PROJECT DESCRIPTION

As part of an investigation into potential concerns regarding Per- and Polyfluoroalkyl Substances (PFAS), Brevard County contracted with Applied Ecology, Inc. (AEI) to determine the background level of emerging contaminants in a variety of media (surface water, groundwater, and sediment) across the County.

In 2016, the EPA reduced the Health Advisory Level for PFAS (PFOA + PFOS) in drinking water from 400 to 70 parts per trillion. This triggered the Department of Defense (DOD) to sample for PFAS at all its facilities. During the summer of 2018, data was released indicating high levels of PFAS in groundwater at Patrick Air Force Base (PAFB, now Patrick Space Force Station, PSFS) and Cape Canaveral Air Force Station (now Cape Canaveral Space Force Station, CCSFS). High levels of PFAS were attributed to decades of prior use of Aqueous Film Forming Foam (AFFF) for fire-fighting. Levels at PSFB were up to 4.3 million parts per trillion, while levels at CCSFS were 1 million parts per trillion. It was unknown if the PFAS was moving through the groundwater to adjacent communities off-base and the Indian River Lagoon, and adjacent communities were concerned about their drinking water supply. Out of an abundance of caution and sensitivity to community concerns and to better understand the distribution of PFAS levels in Brevard County waters, AEI prioritized and conducted PFAS sampling across 50 locations across the county, including shallow groundwater wells, shallow and deep irrigation wells, surface water and sediment from the Indian River Lagoon. For a subset of wells in South Patrick Shores, a full suite of federally listed priority pollutants was tested for due to community concerns about cancer rates in the area.

## OUTCOMES

AEI was able to provide rapid response to alleviate community concerns, ensure emergent contaminant protocols were consistently applied, and communicate appropriately throughout project implementation. This high-profile project required discretion, focus on data quality management, and guiding the County on complex data interpretation.

## PROJECT DETAILS





### PROJECT CLIENT:

Brevard County

### PROJECT LOCATION:

Brevard County, FL

### SERVICE LINE AREAS:

-  Environmental Compliance
-  Engineering & Water Resources
-  Geospatial Services
-  Contamination Assessment

### EXPERTISE:

- Emergent Contaminants (PFAS)
- Surface Water, Groundwater, Sediment Sampling
- Quality Management
- Data Interpretation
- Public Communication