

Per- and polyfluoroalkyl substances (PFAS) are a family of >9,000 man-made aliphatic, highly persistent, and toxic compounds that are ubiquitous across the globe. Yet, their environmental occurrence, concentration and distribution in surface water near known source sites has not been extensively studied. This study establishes the first comprehensive seasonal baseline of PFAS presence in the Indian River Lagoon in Brevard County Florida, which has been affected by discharge of contaminated wastewater as well as runoff from Patrick Space Force Base and Cape Canaveral, among others. In addition, surface water pertaining to 4 storm events between 2019 and 2022 were sampled to assess the role of extreme weather and flooding events on PFAS transport.