



Division of Water Resources
Linda Culpepper, Interim Director
August 30, 2018

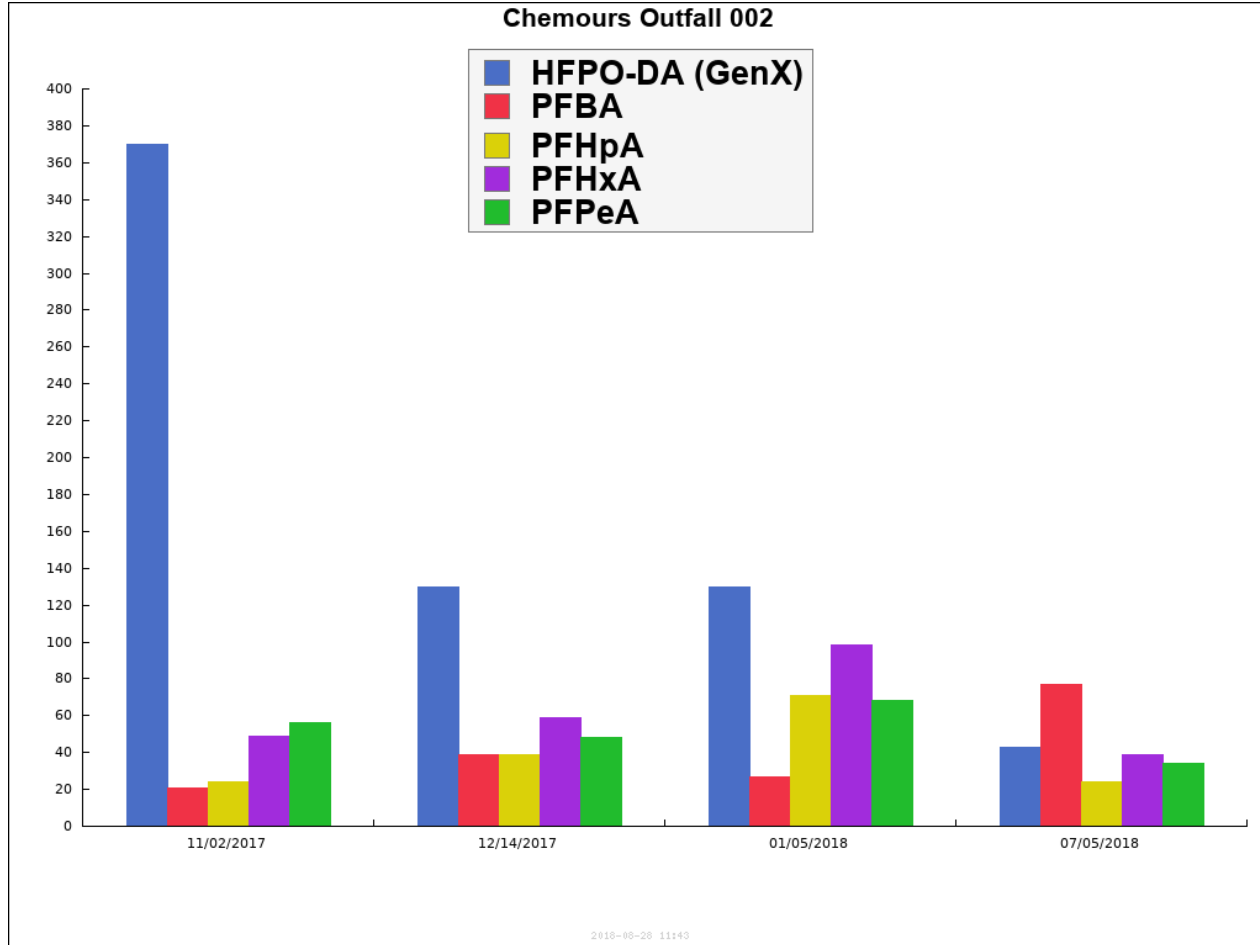


Current Water Sampling by DEQ, and Analysis by EPA Athens Laboratory

- Two composite samples weekly at Chemours wastewater outfall into the Cape Fear River:
Monday–Thursday and Friday-Sunday
- Drinking water facilities downstream are sampled weekly:
 - Bladen Bluff
 - International Paper
 - NW Brunswick
 - Pender County
 - CFPU Sweeney
- Starting ambient monitoring for PFAS across North Carolina
 - Jordan Lake watershed monthly Jan – June 2018
 - Falls Lake watershed monthly May – October 2018



Data from Chemours
Wastewater outfall
(parts per trillion)



Path Forward

- Chemical analysis – develop and harmonize existing test methods
 - Wastewater, sediment, soil, food, air emissions, blood serum, urine
 - Analytical reporting levels, widely accessible, cost effective analytical methods to identify and quantify environmentally relevant concentrations of known and unknown PFAS
- Research on human health and ecological toxicity
 - Prioritize PFAS for study on the prevalence of human and ecological exposures, exposure concentrations, and anticipated toxicity potency
 - Rapid bioassays
 - Chemical mixtures – evaluate additive and synergistic effects on human health and ecological risk
 - Evaluate the need for new wastewater Whole Effluent Toxicity methods for aquatic toxicology (add new organisms for surrogate testing)
 - Fate and bioaccumulation studies to evaluate the mobility and bioavailability of different chemical classes of PFAS
 - Toxicity bench marks (Reference Dose, similarity in chemical families, cumulative exposure)
- NC is using the Secretaries' Science Advisory Board to make recommendations on health values and to prioritize chemicals for evaluation



Reference material:

Department of Environmental Quality GenX information:

<https://deq.nc.gov/news/hot-topics/genx-investigation>

Division of Water Resources: <https://deq.nc.gov/about/divisions/water-resources/>

Linda Culpepper
Interim Director Division of Water Resources
linda.culpepper@ncdenr.gov

Thank you for joining us today.

