### About **CCRW's Research**

Coastal Carolina RIverwatch is partnering with Duke University to research PFAS contamination in aquaculture and wild caught oysters in NC.

The Water Quality for Fisheries: PFAS and **Heavy Metal Contamination in North Carolina Farm Raised and Wild Caught Oyster Populations**, made possible through the Environmental Enhancement Grant from the NC Attorney General's office.

• The proposed research and outreach will expand the State's understanding of PFAS, mercury, and heavy metals on wild caught and aquaculture oyster populations and inform future water quality restoration efforts.





### **Get In Touch**

### Email

Waterkeeper @CoastalCarolinaRiverwatch.org

#### **CCRW**

https://coastalcarolinariverwatch.org/

### **PFAS Testing** Network

https://ncpfastnetwork.com/



# **PFAS IN MARINA FIRE SUPPRESSION**

## **SYSTEMS**

How to prevent contamination of waterways

### What **Are PFAS?**

Per- and polyfluoroalkyl substances (PFAS) are a large, complex group of synthetic chemicals that have been used in consumer products around the world since about the 1950s. They are ingredients in various everyday products.

PFAS are used to make nonstick cookware, water-repellent clothing, stain resistant fabrics and carpets, some cosmetics, some firefighting foams, and products that resist grease, water, and oil.



### WHY PFAS ARE **DANGEROUS**

Many scientific articles have been published about PFAS exposure and health effects. Scientific studies have shown that exposure to some PFAS in the environment may be linked to harmful health effects in humans and animals. People who are more regularly exposed to PFAS containing materials are more likely to be harmed.



PFAS are found in rivers, ground water, air, soil, fish, and shellfish at locations across the nation.



Long term health impacts on humans: Increases in cholesterol levels, changes in liver enzymes, kidney and testicular cancer, and more.



PFAS can be found in fire suppression foams (AFFF) used in marina dry stack facilities.



More research is needed to better understand PFAS exposure in our environment and new kinds of PFAS are continually being developed.



### What Your Marina **Can Do**

• Learn what chemicals are used in your facilities. Specifically look for aqueous film-forming foams (AFFFs). • Replace toxic PFAS containing fire fighting foam with PFAS-free alternatives like Fluorine-free foams. • Write to the state requesting that they create a buy back program for businesses using AFFF.

