



CT DEEP UPDATE NEWEA ANNUAL CONFERENCE REGULATORS ROUNDTABLE

Presented by: [Ivonne Grajko Hall, P.E](#)

[Assistant Director, Municipal Wastewater Program, CT DEEP](#)

[Date: January 22, 2024](#)

CT DEEP TOPICS

- 1) FY24/25 Clean Water Fund Priority List
- 2) Report on PFAS Sampling at CT WPCFs/POTWs
- 3) CT Nitrogen General Permit Reissued
- 4) EPA BIL: Norwich and Meriden WPCF Upgrade
- 5) EPA OSG/EJ G2G: North Hartford Pilot Project

NEW DEPUTY COMMISSIONER

Emma Cimino is the new Deputy Commissioner of the Environmental Quality branch of the CT DEEP

- Most recently worked in Senator Chris Murphy's Office as Legislative Assistant
- Oversees Water, Air & Materials Management Bureaus

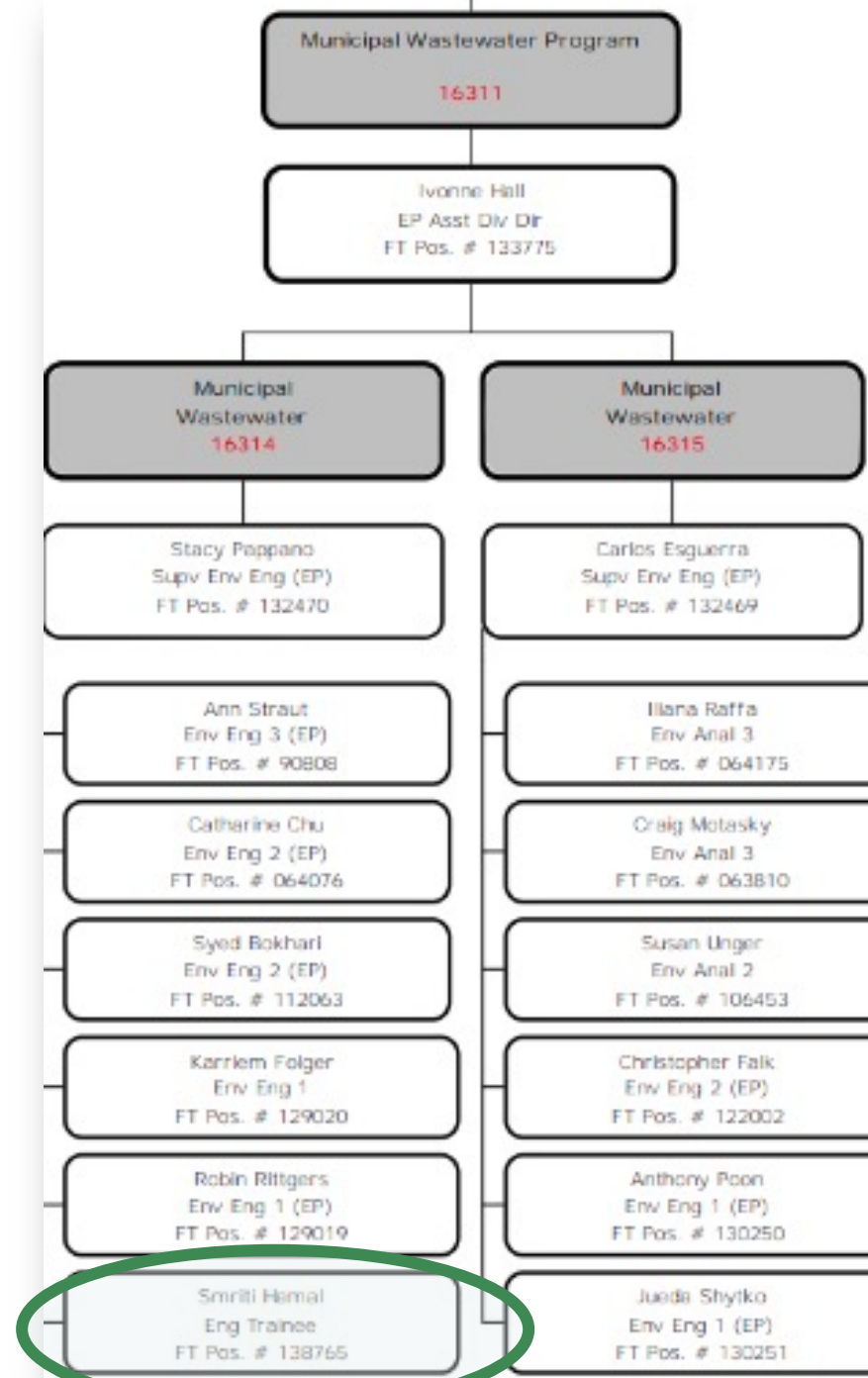


CT DEEP MUNICIPAL WASTEWATER STAFF UPDATE

Newest staff engineer in 2023: Smriti Hamal



Recruiting for new Environmental Analyst for enforcement





DRAFT CLEAN WATER FUND FY24/25 PRIORITY LIST: PUBLIC COMMENT PERIOD

Draft Clean Water Fund
Priority List has been
finalized for FY2024 and
FY2025

Public notice appeared
in major newspapers
and is on website

Public hearing
scheduled for 2/7/24 at
1pm on Zoom

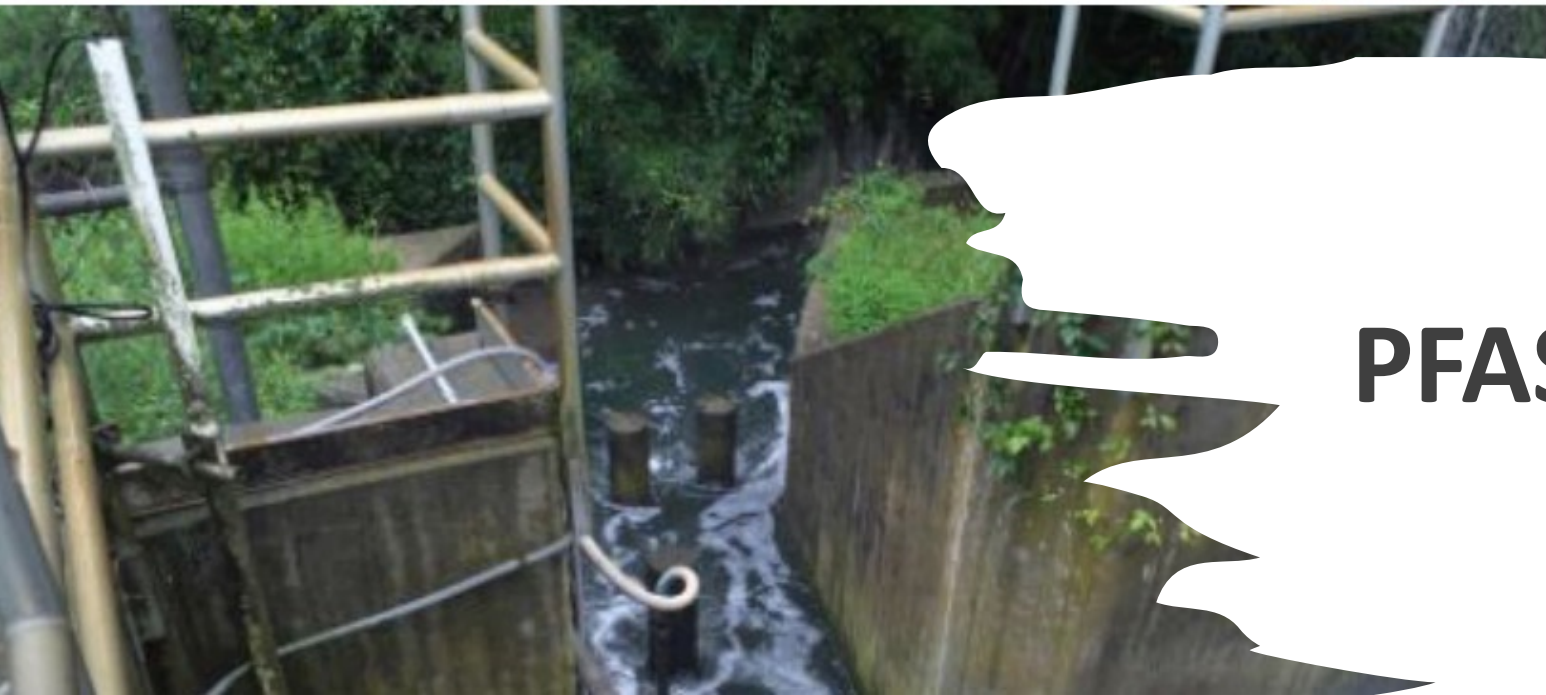
- Must register by emailing
CWF@ct.gov to get link

DRAFT Clean Water Fund

Financial Assistance Programs
Municipal Water Pollution Control
Priority List, State Fiscal Years
2024 & 2025

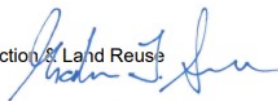
Water Pollution Control Facility PFAS Sampling Study

PREPARED FOR:
CONNECTICUT DEPARTMENT OF ENERGY AND ENVIRONMENTAL PROTECTION
BUREAU OF WATER PROTECTION & LAND USE



Memorandum

TO: WPCF Superintendents

FROM: Graham J. Stevens, Bureau Chief, Water Protection & Land Reuse 

DATE: June 15, 2023

SUBJECT: Final Weston & Sampson Report of Per- and Polyfluoroalkyl substances (PFAS) Sampling Study at WPCFs

Per- and polyfluoroalkyl substances (PFAS) are a group of several thousand human-made substances that are not naturally occurring and are resistant to heat, water, and oil. These chemicals have been used and produced extensively in the United States for both commercial and industrial purposes, as well as for emergency fire response. Due to their unique chemistry, PFAS have been widely used as surface coatings and protectant formulations in consumer goods such as carpet and home textiles; clothing; food packaging; and non-stick cookware. PFAS have also been used as a surfactant in chrome plating, firefighting foam, and other industrial applications.

The Connecticut Department of Energy and Environmental Protection (DEEP) contracted Weston & Sampson Engineers, Inc. to perform a study assessing the potential presence of PFAS in various environmental media at select water pollution control facilities (WPCFs) within Connecticut, as well as in their receiving waters and in aquatic species in such waters. Thirty-five (35) WPCFs were selected for participation by DEEP to provide geographic coverage of the State and cover a range of differing community sizes, inputs, and treatment processes.

Environmental media tested for PFAS included:

- Influent, effluent, and sewage sludge from 35 WPCFs, sampled in summer 2021 and winter 2022
- Composite sewage sludge and incinerator scrubber water from 4 WPCFs that incinerate sewer sludge, sampled in summer 2021 and winter 2022
- Fish tissue collected downstream of 10 WPCF outfalls, as well as surface water and downstream of those outfalls, sampled in Fall 2021

PFAS REPORT ISSUED

PER- AND POLYFLUOROALKYL SUBSTANCES (PFAS)

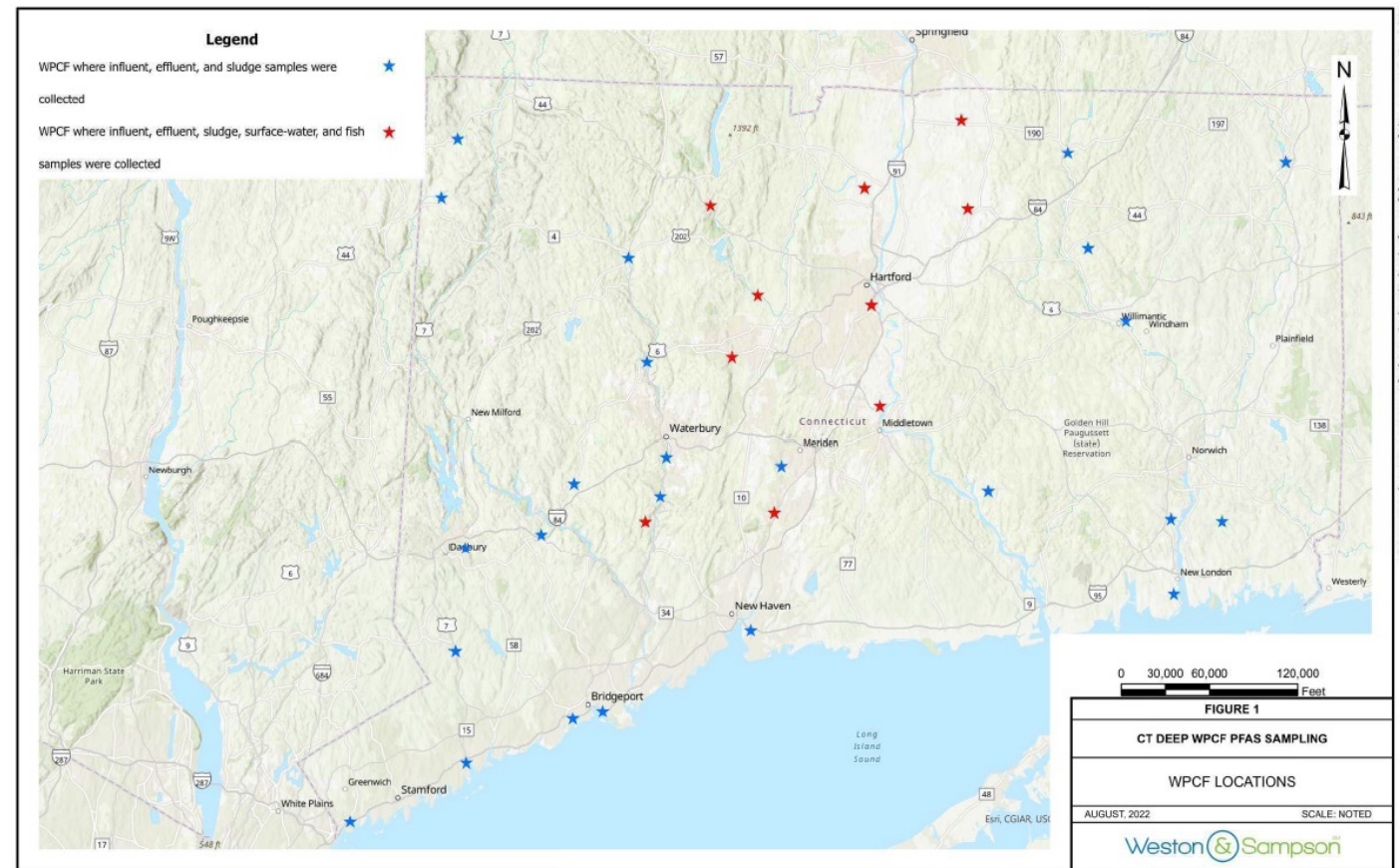
Weston & Sampson report now available for consultation on CT DEEP's website

[CTDEEP-WPCF-PFAS-Study-06_08_23-FINAL.pdf](#)

Sampling program included:

- Influent, effluent, sludge from **35 POTWs**
- Composite sludge and **scrubber water** at **4 sewage sludge incinerator facilities**
- Fish tissue near the outfalls of **10 POTWs**, as well as **surface water upgradient and downgradient of the outfalls**

Compound Name	Compound Acronym
Perfluorobutanesulfonic acid	PFBS
Perfluorobutanoic acid	PFBA
Perfluoropentanoic acid	PFPeA
Perfluorohexanesulfonic acid	PFHxS
Perfluorohexanoic acid	PFHxA
Perfluoroheptanoic acid	PFHpA
Perfluorooctanesulfonic acid	PFOS
Perfluorooctanoic acid	PFOA



8 PFAS compounds were most prevalent. Detected in >50% of all samples taken across all media

- **4-8 carbon chain length compounds were the most frequently observed**

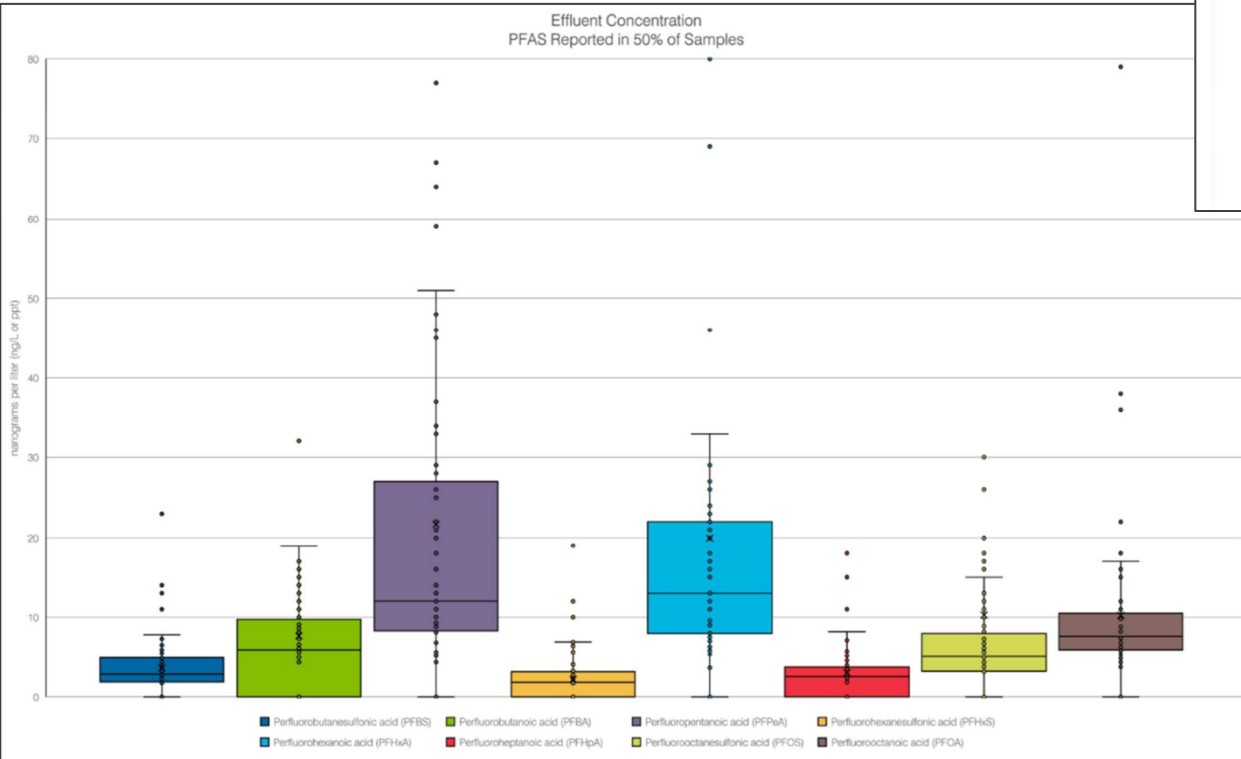
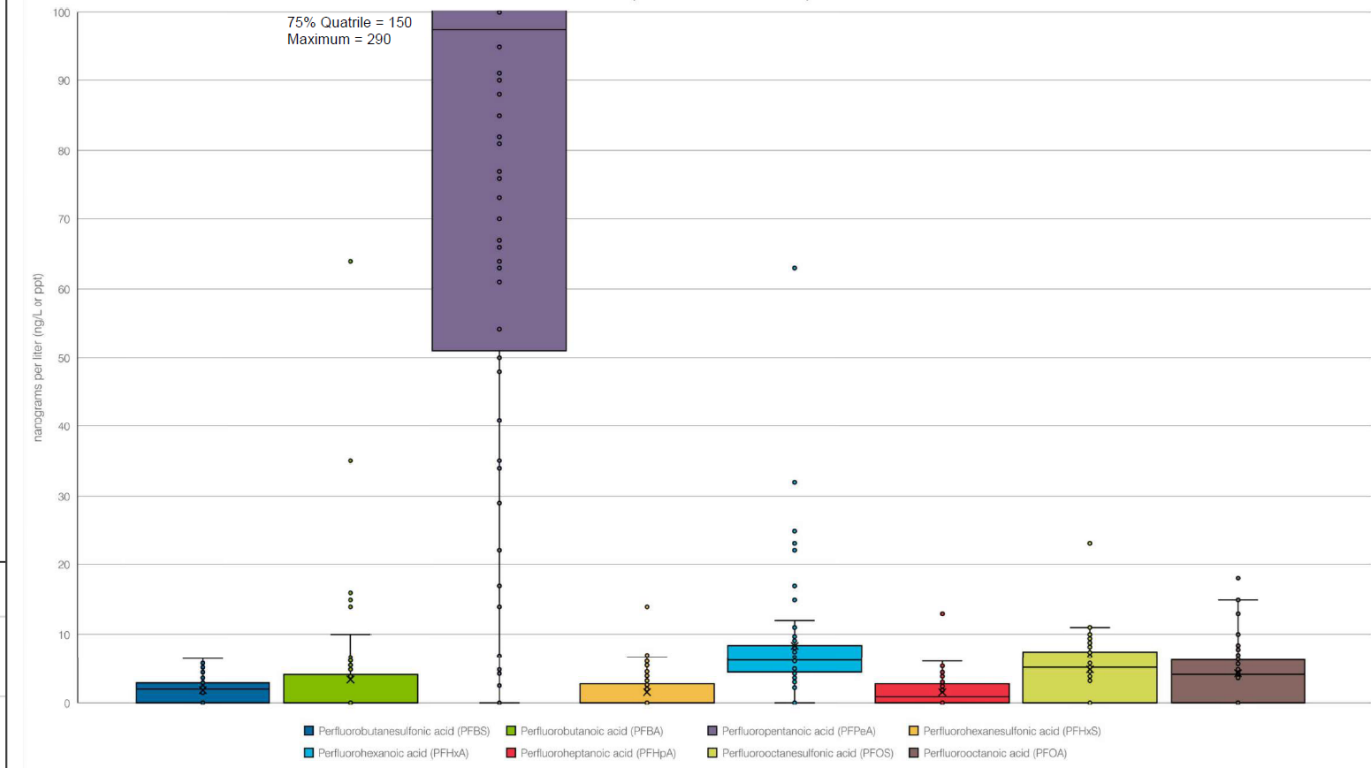
10/16/2023

Connecticut Department of Energy & Environmental Protection



PFAS STUDY RESULTS

Influent (PFPeA)
(perfluoropentanoic acid, 5 carbon version of PFOA)

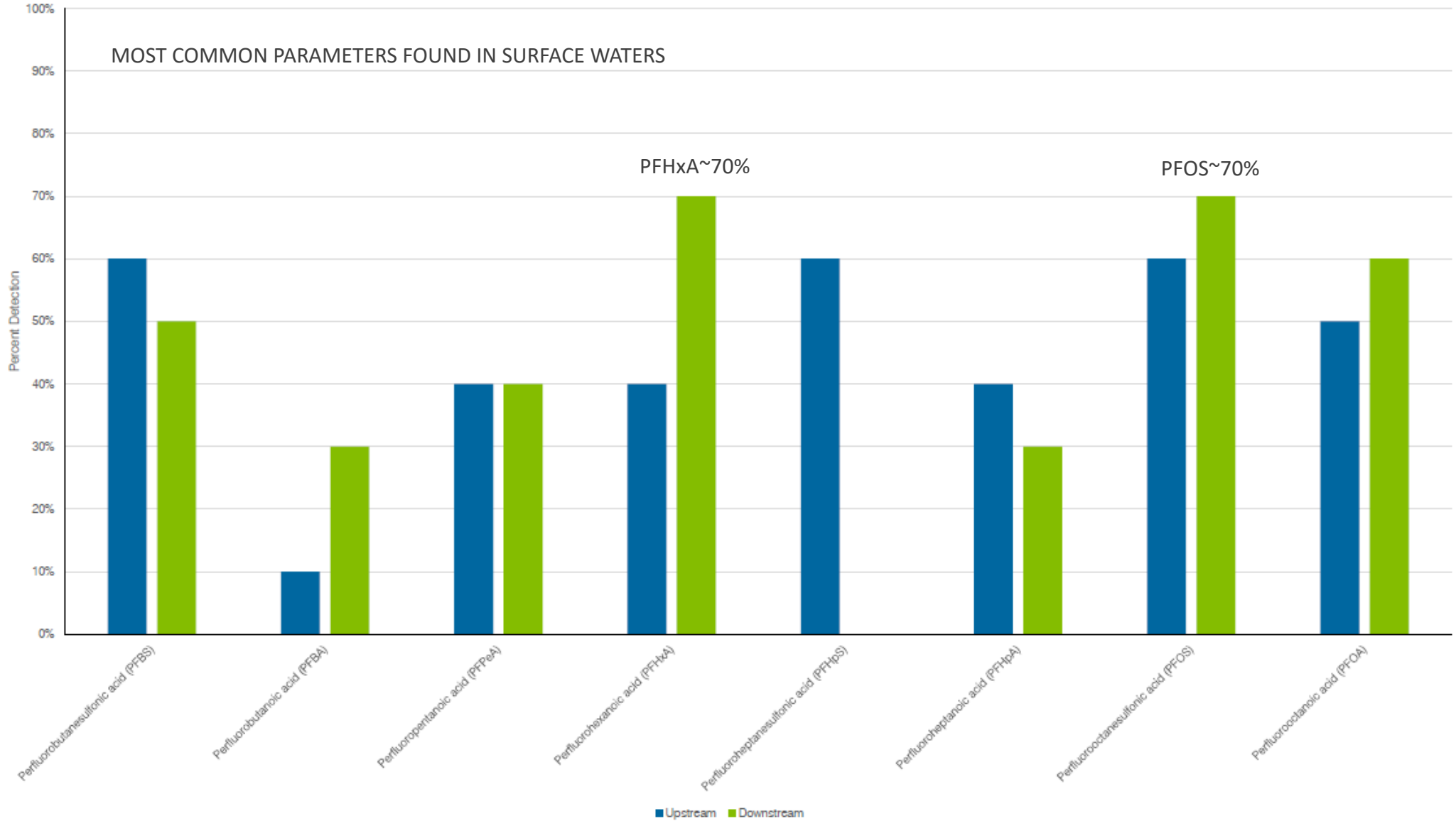


Effluent PFPeA and PFHxA
(5 and 6-carbon versions of PFOA) are the dominant PFAS found in effluent



Surface Water All Locations
Percent Detections PFAS Reported >50% of Samples

MOST COMMON PARAMETERS FOUND IN SURFACE WATERS



SLUDGE

PFOS is the dominant PFAS compound found in sludge. There were variances in types of PFAS identified in “solid” sludge vs “liquid” sludge

PFOS is the dominant PFAS compound found in composite incinerator sludge as well

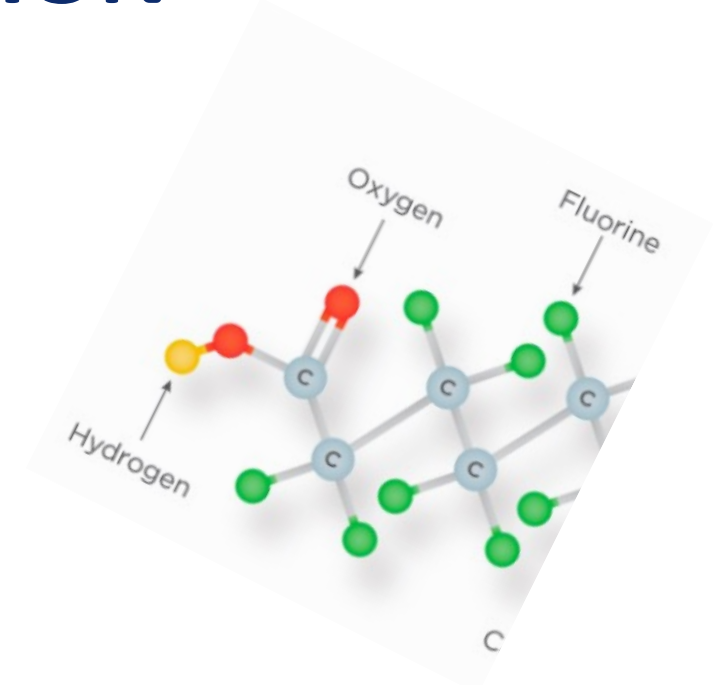
PFAS - MONITORING IMPLEMENTATION

DEEP Internal Workgroup

- Coordinate efforts for source reduction and monitoring with Pretreatment Program
- PFAS information and updates

General Permit Development

- ❑ Monitoring requirements (influent, effluent, sludge)
- ❑ Use EPA approved methods by CT DPH certified lab
- ❑ Reporting sample results
 - How to collect monitoring results
 - How to manage the data collection



GENERAL PERMIT FOR NITROGEN DISCHARGES

The renewal of the General Permit for Nitrogen Discharges authorizing the discharge of total nitrogen from specified (78) POTWs was public noticed in June 2023 and finalized in Dec 2023.

The effective date is Jan 1, 2024 – Dec 31, 2028

A few updates regarding the renewal:

➤ Reporting & Data Entry

- Log into a system – CT DEEP IT developing this for launch
- Data entry in a new on-line fillable form
- User subscriber agreements in development
- Will no longer submitting a NAR excel spreadsheet template once system launches and agreements in place

➤ Nitrogen Monitoring

- Nitrate and Nitrite will now be reported individually



NORWICH WPCF UPGRADE

This past fall, construction started on a five-year \$186 million upgrade to the Norwich WPCF to reduce sewer overflows and nitrogen, which will improve the water quality of both the Thames River and Long Island Sound.

Facility is also being constructed to withstand the effects of extreme weather events

This project is receiving \$67.7 million in grant and \$123.1 million in loan from the CWF, which are partially funded by EPA Bipartisan Infrastructure Law (BIL) grants targeted for distressed communities



NORTH HARTFORD PILOT PROJECT

DEEP and the MDC committed to a new pilot project that is designed to reduce occurrences of combined sewer overflows to the North Branch of the Park River and sewer backups in North Hartford



This innovative pilot project is comprised of 12 contracts that are being expedited to provide immediate relief to chronically affected neighborhoods and will total \$193 million overall

The DEEP CWF is providing \$47.8 million in grant and \$47.8 in loan to complete the public sewer work

DEEP is also providing an additional \$48.5 million in grant to rehabilitate sewers on private property to alleviate the sewer backups

POLITICS

State announces millions in funding to address North Hartford flooding

Connecticut officials say this help is long overdue after what they call years of inequality.



HOME MAIL NEWS FINANCE SPORTS ENTERTAINMENT LIFE SEARCH SHOPPING

yahoo!news

Hartford Courant

Hartford residents look for action on flooding; it's doing 'multiple outreach meetings.'

Deidre Montague, Hartford Courant
July 25, 2023 · 5 min read

North Hartford residents say they are still awaiting action on flooding plagued the city, as Gov. Ned Lamont and his administration a month ago announced the commitment of \$85 million from the state Clean Water Fund and for a pilot program that will address sewage overflows in streets and buildings.

The Clean Water Fund is administered by the state Department of Environmental Protection, and the fund is used by the state to provide assistance to municipalities for projects addressing wastewater.

ews Weather Watch Now Report It On-A

HARTFORD

North Hartford flooding victims get aid from the state

by: **Bob Wilson**
Posted: Jun 6, 2023 / 11:10 PM EDT
Updated: Jun 8, 2023 / 01:45 PM EDT

mirror Connecticut's Nonprofit Journalism.

EMAIL SIGN-UP DONATE

TRENDING COLUMN: Metro-North Strike? Free School Meals State Police Ticketing Scandal

ENERGY & ENVIRONMENT

Hartford's North End floods a week after \$170M project announced

Federal, state and local officials last week announced a multi-year plan to address the flooding issues in the North End

by Dave Altimari
July 5, 2023 @ 4:32 pm

Waiting for www.google.com...

NEWS > CONNECTICUT NEWS

Hartford residents worry amid massive summer rain deluge as multiple agencies address flooding



Governor Lamont Commits \$85 Million in State Funding To Address Flooding Mitigation in North Hartford

Funding Contributes to a Total \$170 Million Investment to Address Flooding in the Neighborhood

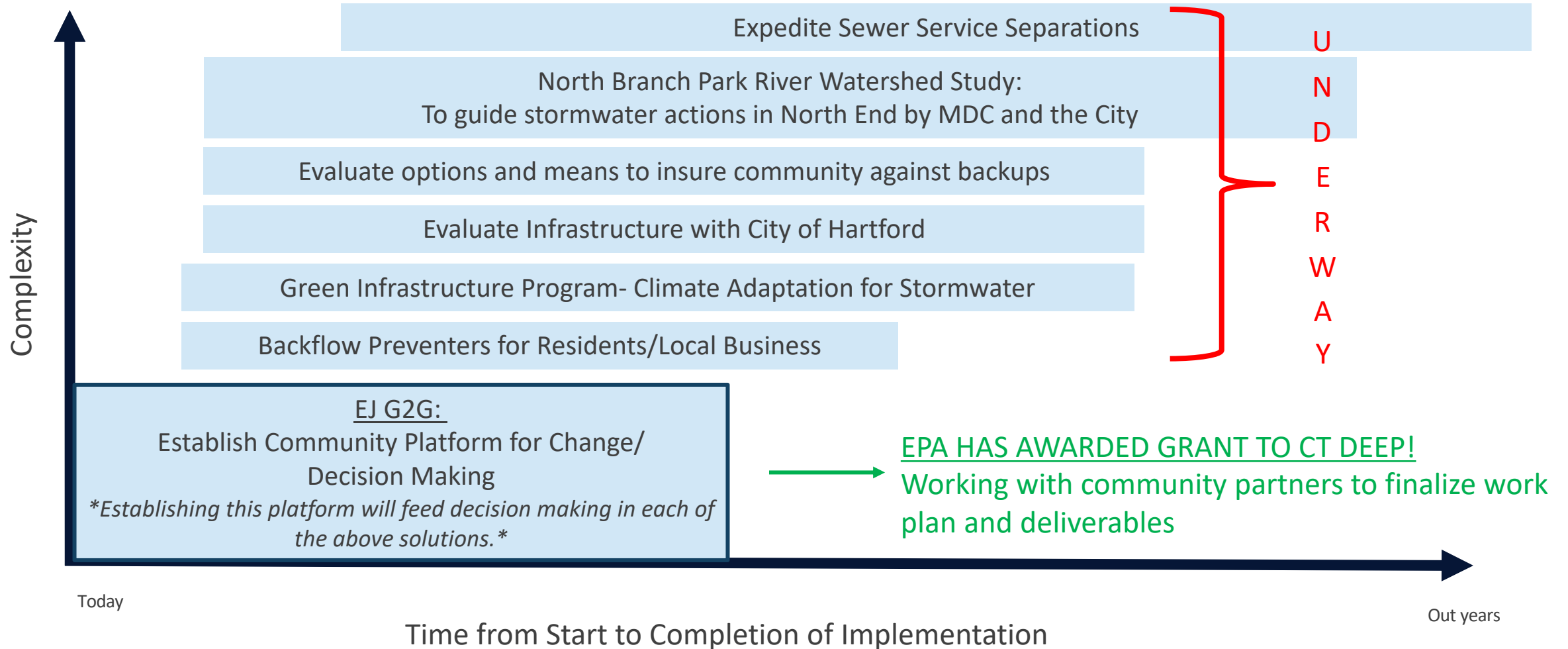
BASEMENT BACKUPS



- Many houses in Hartford have inflow connected to the under-capacity combined sewer
- Removing inflow connections from combined system requires access from homeowners, but many residential buildings in North Hartford are rented
- Utility is then required to complete restoration work on private property but work on private property is NOT eligible for traditional state SRF funding
- On-going illicit connections are an issue as a result of new connections or re-connections (after disconnection by a utility)
- There is concern that drainage to MDC's combined system is being impeded from higher flows in the North Branch of the Park River as the result of poor maintenance and higher frequency of climate-induced storms

OVERVIEW OF NORTH END SEWER AND FLOODING RESPONSE

Multi-Partner, Multi-Resource, Multi-Scale Solutions



UPDATED CONSENT ORDER



CT DEEP updated the 2022 Consent Order with MDC to re-prioritize actions to provide more relief to North End residents with specific projects to be implemented between 2023 and 2028 without an increase to sewer fees.



12 projects proposed by MDC from 2023 to 2029 (now incorporated into DEEP's 2023 consent order)

Projects will increase protections from sewer-related backups and sewer flooding



Projects are estimated to cost \$190 million, to receive 50% grant by State



Projects started in July 2023

6 more projects will begin in 2024

1 project will begin in 2025



Office of Environmental Justice in Action

www.epa.gov/environmentaljustice



OTHER NORTH HARTFORD INITIATIVES

- Through EPA BIL's Technical Assistance Program CT DEEP working with EPA, its technical assistance contractors, and City of Hartford/the MDC to plan, design, and implement a **green infrastructure pilot** in the North End as an alternative stormwater management measure which will serve to reduce stormwater drainage into a downstream combined sewer.
- EPA's G2G Grant:
 - CT DEEP will be the primary recipient of the award and each community partner would be a sub-recipient (**Blue Hills Civic, Hartford Next, Keney Park Sustainability**).
 - Next steps: per EPA request, hone work plan and budget on such details as: updates to start date & project timeline; each sub-recipient's focus area and level of involvement, separately or collectively; project deliverables and specific outcomes; oversight plan/ operational structure for project work and outcomes

