

UNRBA Path Forward Committee Meeting December 3, 2014
Handout DWR Falls Lake Emerging Contaminates Report dated April 2019

The DWR report is available at:

<https://files.nc.gov/ncdeq/Water%20Resources/files/ec/Identificaton-of-Select-Emerging-Compounds-in-Falls-of-the-Neuse-Reservoir-and-Surrounding-Watershed-FINAL.pdf>

NC DEQ DWR conducted sampling of Falls Lake area in 2018 for the presence of select emerging compounds including per and polyfluoroalkyl substances (PFAS); 1,4-dioxane; and bromide in the surface waters of Falls Lake and the surrounding watershed in 2018. The report is very lengthy but most of the report consists of EPA detailed analytical results with extensive qa/qc data. The substance and summary of the report can be read in the first few pages.

- Five locations in the watershed and five locations in Falls Lake were sampled once per month from July through December 2018, except September when flooding from Hurricane Florence made the lake inaccessible.
- Laboratory analysis for **bromide** was conducted by the DWR Laboratory in Raleigh.
No values above the practical quantitation limit (PQL) of 0.4 µg/L were reported at any site
- Analysis for **1,4-dioxane** was also conducted by the DWR Laboratory.
1,4-dioxane was detected only once at 1 µg/L at site NEU018E
 (Falls Lake Mainstream just upstream Lick Creek) on 8/16/18.
 The laboratory minimum reporting level was not mentioned.
- **PFAS analysis** was conducted by USEPA’s SESD in Athens, GA.
 Of the 23 PFAS compounds selected for this study only two compounds, PFPeA and PFOS were found at or above the minimum reporting limit (MRL) on one occasion each.
 Overall, Minimum Reporting Limit values for PFAS analytes ranged from 17-160 ng/L.
- **Site J1210000 was the only site to exhibit detectable concentrations of target PFAS analytes.**
PFPeA was detected at site J1210000 on 7/26/2018 at 57ng/L. (Minimum Reporting Level 40ng/L)
PFOS was detected at site J1210000 on 11/29/2018 at 46 ng/L. (Minimum Reporting Level 39ng/L)
 This locations is KNAP OF REEDS CRK AT WWTP OUTFALL NR BUTNER
 Note that these reported values were above (but close) to the MRL.
- Monitoring Locations Included:

Station ID	Station Description	Latitude	Longitude
NEU013	FALLS LAKE AT I-85 NEAR NORTHSIDE	36.07053	-78.77907
NEU0171B	FALLS LAKE AT MOUTH OF LITTLE LICK CREEK	36.01799	-78.73492
NEU018E	FALLS LAKE AT MOUTH OF LEDGE CREEK NR CREEDMOOR	36.01494	-78.70696
NEU019L	FALLS LAKE AT CHANNEL MARKER #6 NEAR BAYLEAF NC	36.00507	-78.64668
NEU020D	FALLS LAKE AT MARKER #1 NEAR BAYLEAF NC	35.95591	-78.58444
J0810000	ENO RIV AT SR 1004 NR DURHAM	36.07254	-78.86270
J1100000	FLAT RIV AT SR 1004 NR WILLARDSVILLE	36.13186	-78.82780
J1210000	KNAP OF REEDS CRK AT WWTP OUTFALL NR BUTNER	36.12797	-78.79852
J1330000	ELLERBE CRK AT SR 1636 NR DURHAM	36.05949	-78.83224
J1890000	NEUSE RIVER AT SR 2000 NR FALLS	35.94077	-78.58010