Supporting Information for

Assessing the Effectiveness of Point-of-Use Residential Drinking Water Filters for Perfluoroalkyl Substances (PFAS)

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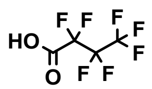
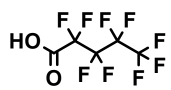
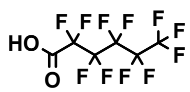
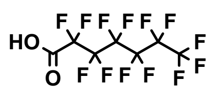
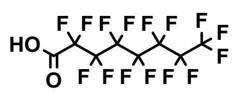
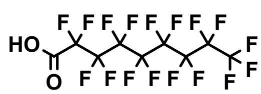
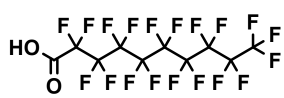
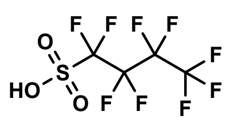
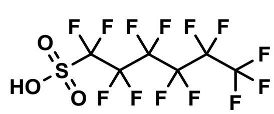
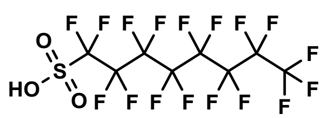
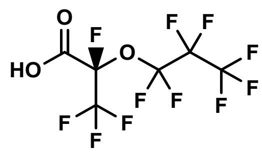
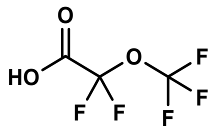
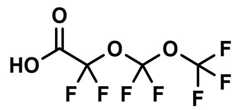
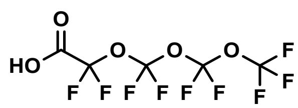
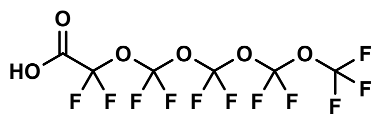
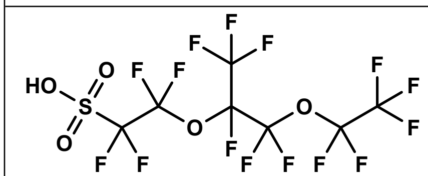
Target Analytes

Table S1: Summary table of the target PFASs compounds analyzed in this study.

Structure	**Name and Identifiers**
	**PFBA** Perfluorobutanoic acid CAS: 375-22-4 InchiKey: YPJUNDFVDDCYIH-UHFFFAOYSA-N
	**PFPA** Perfluoropentanoic acid CAS: 2706-90-3 InchiKey: XZGQIAOTKWCDB-UHFFFAOYSA-N
	**PFHxA** Perfluorohexanoic acid CAS: 307-24-4 InchiKey: PXUULQAPEKKVAH-UHFFFAOYSA-N
	**PFHpA** Perfluoroheptanoic acid CAS: 375-85-9 InchiKey: ZWBAMYVPMDSJGQ-UHFFFAOYSA-N
	**PFOA** Perfluorooctanic acid CAS: 335-67-1 InchiKey: SNGREZUHAYWORS-UHFFFAOYSA-N
	**PFNA** Perfluorononanoic acid CAS: 375-95-1 InchiKey: UZUFPBIDKMEQEQ-UHFFFAOYSA-N
	**PFDA** Perfluorodecanoic acid CAS: 335-76-2 InchiKey: PCIUEQPBYFRTEM-UHFFFAOYSA-N
	**PFBS** Perfluorobutanesulfonic acid CAS: 375-73-5 InchiKey: JGTNAGYHADQMCM-UHFFFAOYSA-N
	**PFHxS** Perfluorohexanesulfonic acid CAS: 355-46-4 InchiKey: QZHDEAJFRJCDMF-UHFFFAOYSA-N
	**PFOS** Perfluorooctanesulfonic acid CAS: 1763-23-1 InchiKey: YFSUTJLHUFNCNZ-UHFFFAOYSA-N
	**GenX** hexafluoropropylene oxide–dimer acid (HFPO-DA), perfluoro-2-propoxypropanoic acid (PFPrOPrA) CAS: 13252-13-6 InchiKey: CSEBNABAWMZWIF-UHFFFAOYSA-N

	**PFMOAA** Perfluoro-2-methoxyacetic acid CAS: InchiKey: 674-13-5
	**PFO2HxA** Perfluoro-3,5-dioxahexanoic acid CAS: 39492-88-1 InchiKey:
	**PFO3OA** Perfluoro-3,5,7-trioxaoctanoic acid CAS: 39492-89-2 InchiKey:
	**PFO4DA** Perfluoro-3,5,7,9-tetraoxadecanoic acid CAS: 39492-90-5 InchiKey:
	**Nafion BP2** Ethanesulfonic acid, 2-[1-[difluoro(1,2,2,2 tetrafluoroethoxy)methyl]-1,2,2,2-tetrafluoroethoxy]-1,1,2,2-tetrafluoro- CAS: 749836-20-2 InchiKey:

Sample Collection

Central NC samples were collected from a convenience sample of 61 home owners residing in Chatham, Durham, Orange, and Wake counties in central North Carolina. Flyers advertising the study were distributed among listservs for several groups in Durham, NC, and solicited via friends and colleagues of the authors. Interested participants contacted the study authors and they were interviewed by study personnel to first ensure they met the necessary requirements. Next, a home visit was scheduled to collect the water samples by the research team. Two 1-L water samples were collected from each home. one unfiltered tap sample and one filtered tap sample. For POE systems, unfiltered samples were collected from a faucet on the exterior of the home. Samples were collected in HDPE bottles. During the home visit, homeowners were also asked to complete a short questionnaire regarding the age of their water filter, how frequently they changed the cartridges/filters, and their drinking water habits. All participants provided informed consent prior to sample collections, and all study protocols were reviewed and approved by Duke University's Institutional Review Board.

Similarly to above, the Southeastern NC samples were collected from a convenience sample residing in New Hanover and Brunswick Counties in Southeastern NC. Samples were collected in 1-L HDPE bottles between June 30, 2017 and December 19, 2017.

Table S2: Summary of samples collected and homes visited for each of the study regions.

	Central NC	Southeastern NC	Total
Residential Homes	61	12	73
Unfiltered Water Samples	61	26	87
Filtered Water Samples	63	26	89
Follow up Sampling	1	0	
Homes with 2 Filters	4	0	
Homes with 3 Filters	1	0	
Homes without Filters	5	0	

Table S3: Summary of filter types for each of the study regions.

	Central NC	Southeastern NC	Total
Filtered Water Samples	63	26	89
POU Filters	57	19	76
Counter	0	1	1
Faucet	2	0	2
Pitcher	12	0	12
Refrigerator	22	3	25
Under-Sink Single Stage	5	5	10
Dual-Stage	4	3	7
Reverse Osmosis	12	7	19
POE Systems	6	7	13
Whole House - GAC	6	2	8
Whole House - GAC/CIX	0	5	5

Laboratory Methods (Central NC)

After sample collection, water samples were stored in a 4°C refrigerator until subsequent extraction and analysis. All water samples were measured to an exact volume of 800 mL using a plastic graduated cylinder and excess water was wasted. Laboratory blanks were produced by measuring out 800 mL of LC/MS grade water. Source water required an additional filter step prior to measuring out 800 mL to remove particulate matter. For this step, samples were filtered through a ceramic filter funnel containing a glass fiber filter into a Büchner flask using a vacuum.

All samples were spiked with an isotopically labelled GenX [2,3,3,3-Tetrafluoro-2-(1,1,2,2,3,3,3-heptafluoropropoxy)-$^{13}C_3$-propanoic acid] and a mix of isotopically labelled PFAAs from Wellington Laboratories (MPFAC-MXA). This mix includes, Perfluoro-n-[1,2,3,4-$^{13}C_4$]butanoic acid, Perfluoro-n-[1,2-$^{13}C_2$]hexanoic acid, Perfluoro-n-[1,2,3,4-$^{13}C_4$]octanoic acid, Perfluoro-n-[1,2,3,4,5-$^{13}C_5$]nonanoic acid, Perfluoro-n-[1,2-$^{13}C_2$]decanoic acid, Perfluoro-n-[1,2-$^{13}C_2$]undecanoic acid, Perfluoro-n-[1,2-$^{13}C_2$]dodecanoic acid, Sodium perfluoro-1-hexane[18O2]sulfonate, and Sodium perfluoro-1-[1,2,3,4-$^{13}C_4$]octanesulfonate.

After adding labelled standards, samples were processed using a Thermo Scientific™ Dionex™ AutoTrace™ 280 Solid-Phase Extraction (SPE) instrument. Sample lines were cleaned with Methanol and LC/MS grade water prior to loading samples. The instrument was equipped with Oasis WAX SPE cartridges (6cc cartridge 500mg 60µm) for this analysis. The SPE instrument was run with a method consisting of the following steps 1) condition cartridges with 6 mL 0.1% NH_4OH in MeOH, 2) condition cartridges with 6 mL methanol, 3) condition cartridges with 6 mL NaOAc (aq) buffer, 4) run 800 mL samples through SPE columns for 80 minutes at a rate of 10 mL/minute, 5) wash cartridges with 6 mL NaOAc (aq) buffer, 6) Wash cartridges with 6 mL methanol, and 7) elute samples with 6 mL 0.1% NH_4OH in MeOH. Following SPE analysis samples were concentrated to 0.3 mL using a nitrogen evaporation system and 0.7 mL ammonium acetate was added to each sample. Samples were then spiked with an isotopically labelled PFOA standard and stored in a -20°C freezer until instrument analysis.

Water extracts were analyzed in electrospray negative mode on an Agilent 1260 Infinity II LC system coupled to an Agilent 6460A triple quadrupole mass spectrometry (LC-MS/MS). The chromatographic separation was achieved under gradient conditions using a C18 column (Agilent Zorbax Eclipse XDB-C18, 4.6 x 50 mm, 1.8 µm particle size) with mobile phases water (A) and methanol (B) both modified with 2mM ammonium acetate. The gradient program was as follows: initial condition 30% B, held for 1.5 min, increased to 95% B over 2 min, held for 5 min, increased to 100% B over 3.5 min, returned to initial condition 30% B over 0.5 min, and held for 5.5 min. The flow rate was 0.4 mL/min, the column temperature was 45°C, and the injection volume was 20 µl. Quantification was performed using multiple reaction monitoring transitions (MRMs). All target compound parameters including precursor ion, product ion, collision energy, and fragmentor voltage were optimized for each compound.

Quality Assurance and Control (QA/QC)

Laboratory blanks consisting of 800 mL of LC/MS grade water were processed in tandem with every batch of samples. Method detection limits (MDL) were determined for each batch of samples and was calculated using three times the standard deviation of laboratory processing blanks (**Table S4**). MDLs ranged from <0.01 to 2.68 ng/L among the batches. Average recoveries for labelled PFAAs were 86% in samples and 99% in blanks. Accuracy was assessed by preparing triplicates matrix spikes at 1 ng/L and 10 ng/L levels. We found the 1 ng spikes to have an average recovery of 88% (range: 67% - 115%) and the 10 ng spike to have an average recovery of 95% (range: 61% - 130%). Precision was tested through repeat injection on the instrument. We found the 1 ng injections to have an average RSD of 3.3% (range: 1.1% - 6.2%) across all compounds and the 10 ng spike to have an average RSD of 2.1% (range: 0.6% - 6.6%). (**Table S5 & Table S6**).

Statistical Analysis

All statistical analysis for this study were performed using R. When a PFAA was present in the tap water sample but below the MDL in the filtered water sample, statistical analysis was conducted by assigning random values between 0 and one-half the MDL for non-detects. Non-parametric statistics, specifically the Wilcoxon-Rank sum test, was used when comparing pre and post filter PFAS levels as PFAS levels were not normally distributed (p-value << 0.01, Shapiro-Wilk Test). The relationships between percent removal and filter and source waters characteristics were analyzed using regression analysis. Specifically, the predictors we examined were brand, source water matrix/loading, age of the filter, and estimated water consumptions levels.

Table S4: Summary of batch specific MDLs (ng/L)

	GenX	PFBA	PFBS	PFDA	PFHpA	PFHxA	PFHxS	PFNA	PFOA	PFOS	PFPA
Batch 1	<0.01	0.11	0.18	0.30	0.14	0.09	0.17	2.68	0.12	0.04	0.28
Batch 2	<0.01	0.39	0.62	0.23	0.14	0.10	0.19	2.36	0.51	0.03	0.39
Batch 3	<0.01	0.05	0.72	0.13	0.14	0.22	0.19	0.18	0.16	0.14	0.07
Batch 4	<0.01	0.11	0.06	<0.01	0.05	0.07	0.09	0.09	0.01	<0.01	0.02
Batch 5	<0.01	0.20	2.18	<0.01	0.10	0.16	0.12	0.07	0.26	<0.01	0.09
Batch 6	<0.01	0.07	0.02	<0.01	<0.01	<0.01	0.03	0.03	0.04	<0.01	0.06
Batch 7	<0.01	0.19	0.22	<0.01	0.02	0.08	0.13	0.04	0.27	0.16	0.03
Batch 8	<0.01	0.05	0.31	<0.01	<0.01	0.03	0.07	0.04	0.63	0.04	0.07
Batch 9	<0.01	0.07	0.14	<0.01	0.08	0.09	0.01	0.06	0.23	0.08	0.42
Batch 10	<0.01	0.18	0.19	0.06	0.09	0.53	0.10	0.07	0.11	0.12	<0.01
Batch 11	<0.01	0.16	0.10	0.03	0.20	0.19	0.09	0.04	0.80	1.10	<0.01
Batch 12	<0.01	<0.01	0.36	0.05	0.11	0.12	0.09	0.03	1.20	2.62	0.10
Batch 13	<0.01	0.10	0.18	<0.01	0.07	0.24	0.11	0.07	1.40	0.56	0.58
Average	**<0.01**	**0.14**	**0.41**	**0.13**	**0.10**	**0.16**	**0.11**	**0.44**	**0.44**	**0.49**	**0.19**

Table S5: Summary of QC test for analytical accuracy. Accuracy was assessed by preparing triplicates matrix spikes at a 1 ng and a 10 ng level.

	1 ng spike (n=3)			10 ng spike (n=3)		
	Mean	**% Recovery**	**SD**	**Mean**	**% Recovery**	**SD**
GenX	1.15	115	0.15	9.87	99	0.29
PFBA	1.06	106	0.02	9.63	96	0.14
PFBS	0.67	67	0.03	6.11	61	0.52
PFDA	0.77	77	0.04	9.52	95	0.25
PFHpA	1.12	112	0.04	13.02	130	0.12
PFHxA	0.89	89	0.10	9.89	99	0.31
PFHxS	0.80	80	0.03	8.50	85	0.16
PFNA	0.83	83	0.03	9.96	100	0.36
PFOA	0.82	82	0.03	9.87	99	0.16
PFOS	0.78	78	0.03	9.32	93	0.32
PFPA	0.79	79	0.08	9.24	92	0.29

Table S6: Summary of QC test for analytical precision. Precision was tested through 5 repeat LC-MS/MS injection at a 1 ng and a 10 ng level.

	1 ng spike (n=5)			10 ng spike (n=5)		
	Mean	**SD**	**%RSD**	**Mean**	**SD**	**%RSD**
GenX	1.31	0.08	6.2	9.53	0.63	6.6
PFBA	1.04	0.01	1.4	9.68	0.09	0.9
PFBS	0.63	0.03	5.3	5.88	0.20	3.4
PFDA	0.80	0.02	2.1	9.54	0.07	0.8
PFHpA	1.07	0.01	1.1	13.03	0.08	0.6
PFHxA	0.87	0.03	3.4	9.77	0.08	0.9
PFHxS	0.82	0.04	5.3	8.97	0.31	3.5
PFNA	0.85	0.02	2.2	9.85	0.11	1.2
PFOA	0.83	0.01	1.7	9.84	0.09	0.9
PFOS	0.85	0.04	4.6	9.46	0.27	2.8
PFPA	0.79	0.03	3.4	9.15	0.15	1.7

Laboratory Methods (Southeastern NC)

Following SPE using weak anion-exchange, reverse-phase, water-wettable polymer cartridges (Waters WAX), extracts were analyzed using a Waters Acquity ultra performance liquid chromatograph interfaced with a Waters Quattro Premier XE triple quadrupole mass spectrometer (Waters, Milford, MA, USA). Method details are described elsewhere.[1] For PFEAs without analytical standards, percent removal by POU/POE systems was assessed from relative response factors (analyte peak area/internal standard peak area).

Central North Carolina Utility Water Levels

Most water utilities examined in this study have reported measuring PFASs in their water through spot or periodic sampling, with the city of Pittsboro being the exception. To our knowledge, they have not reported measuring PFASs in their drinking water. In January of 2018, the City of Durham tested for a suite of 13 PFAAs in their source water.[2] They reported PFAA levels of 82 ng L^{-1} for ∑(11) PFASs, which is greater than what we report in their drinking water (16 ± 5 ng L^{-1}), suggesting Durham's water may be subject to periodic spikes in PFAS levels. Also in January of 2018, OWASA tested for a suite of 39 PFAAs in source water and finished drinking water.[3] They reported similar levels in their drinking water (46 ng L^{-1} for ∑(11) PFASs) to what we found (47 ± 15 ng L^{-1}), despite being sampled at different times suggesting some consistency in drinking water levels with time. The City of Raleigh initially tested for a suite of 6 PFAAs in their finished drinking water between fall of 2013 and spring of 2014 with no reported detections.[4] Later they expanded their list to included 38 PFAAs for sampling in October 2017 and April 2018 and reported (14 ± 7 ng L^{-1} for ∑(11) PFASs) similar to what we report for this study (21 ± 3 ng L^{-1}), again suggesting some consistency in drinking water levels with time.

The City of Cary has been sampling for a suite of 39 PFAAs in their finished drinking water and raw tap water regularly since January 2018 and sampled for a suite of 18 PFAAs in December 2017.[5] During the summer and Fall of 2018, they reported similar levels for ∑(11) PFASs in both source water (121 ± 12 ng L^{-1}) and finished drinking water (58 ± 7 ng L^{-1}) similar to what we report for this study (118 ± 39 ng L^{-1} and 53 ± 18 ng L^{-1}, respectively.). In addition, they also reported statistically significant removal ($p < 0.0001$) for the PFAA levels between raw water and finished drinking water. On average, they achieved 53 ± 7% removal on the 11 target PFAAs examined in this study, which is consistent with the AC filter efficiencies reported in this study.

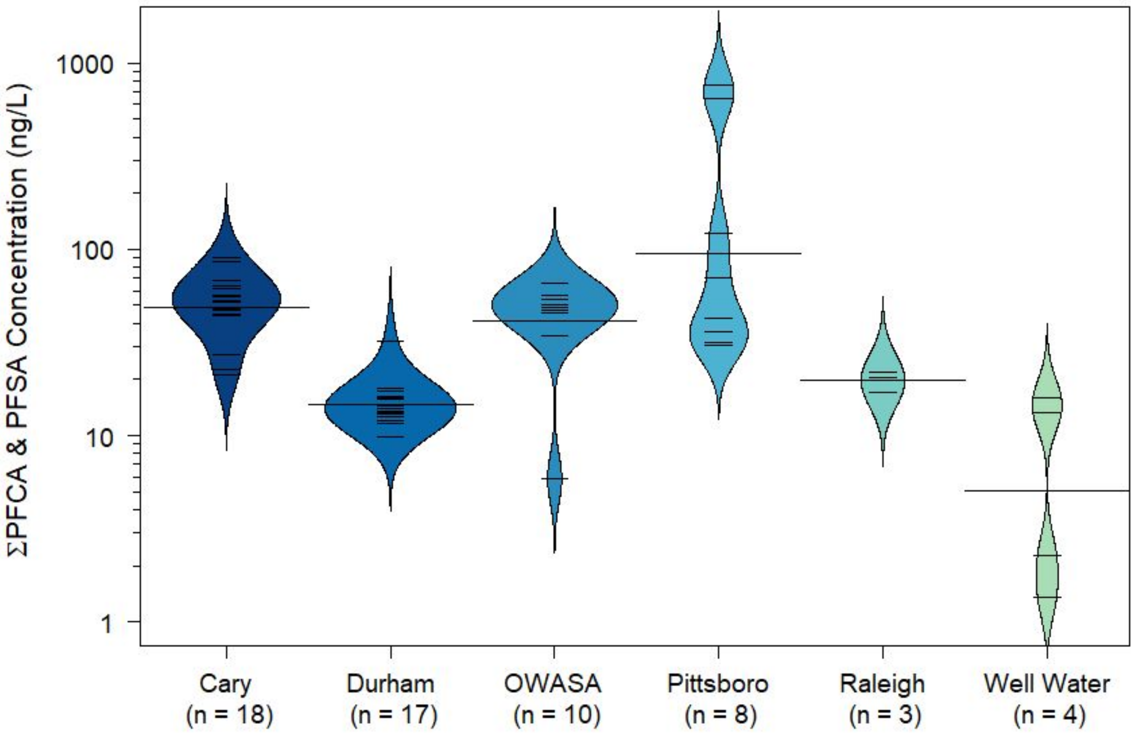


Figure S1: Source water concentrations for different water utilities.

When examining tap water signatures of the 10 target PFCAs & PFSAs, it was apparent that the different sources reflected different PFAS compositions. For example, Durham and Raleigh drinking water displayed similar signatures, with PFOS, PFOA, and PFBA being the dominant PFAAs, and their water supplies are surface reservoirs near one another (Lake Michie and Falls Lake, respectively). Likewise, Pittsboro and Cary share a watershed and have similar signatures. (**Figure S2 & Figure S3**).

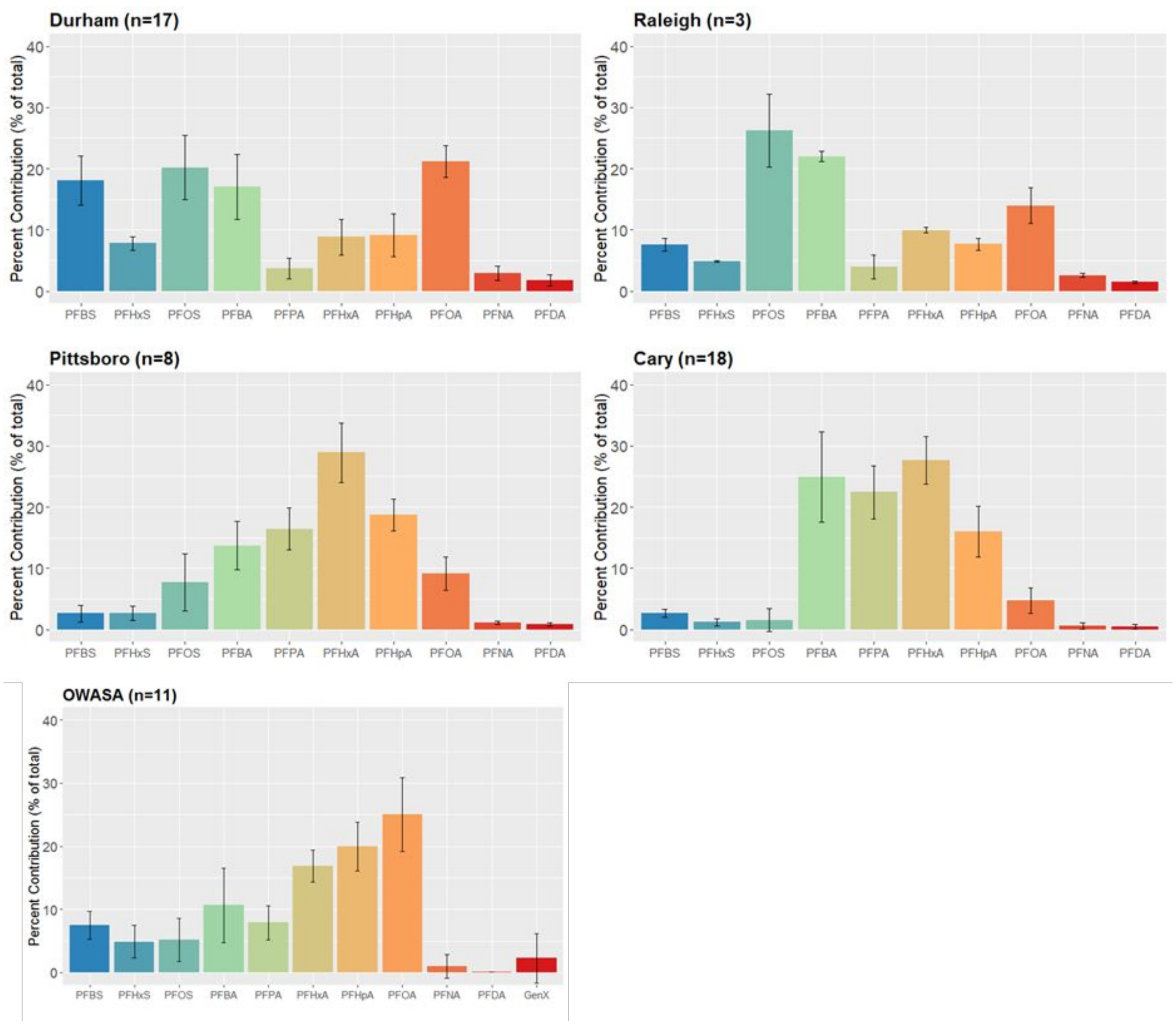


Figure S2: Source water profile of 11 PFAAs chemicals for different water utilities.

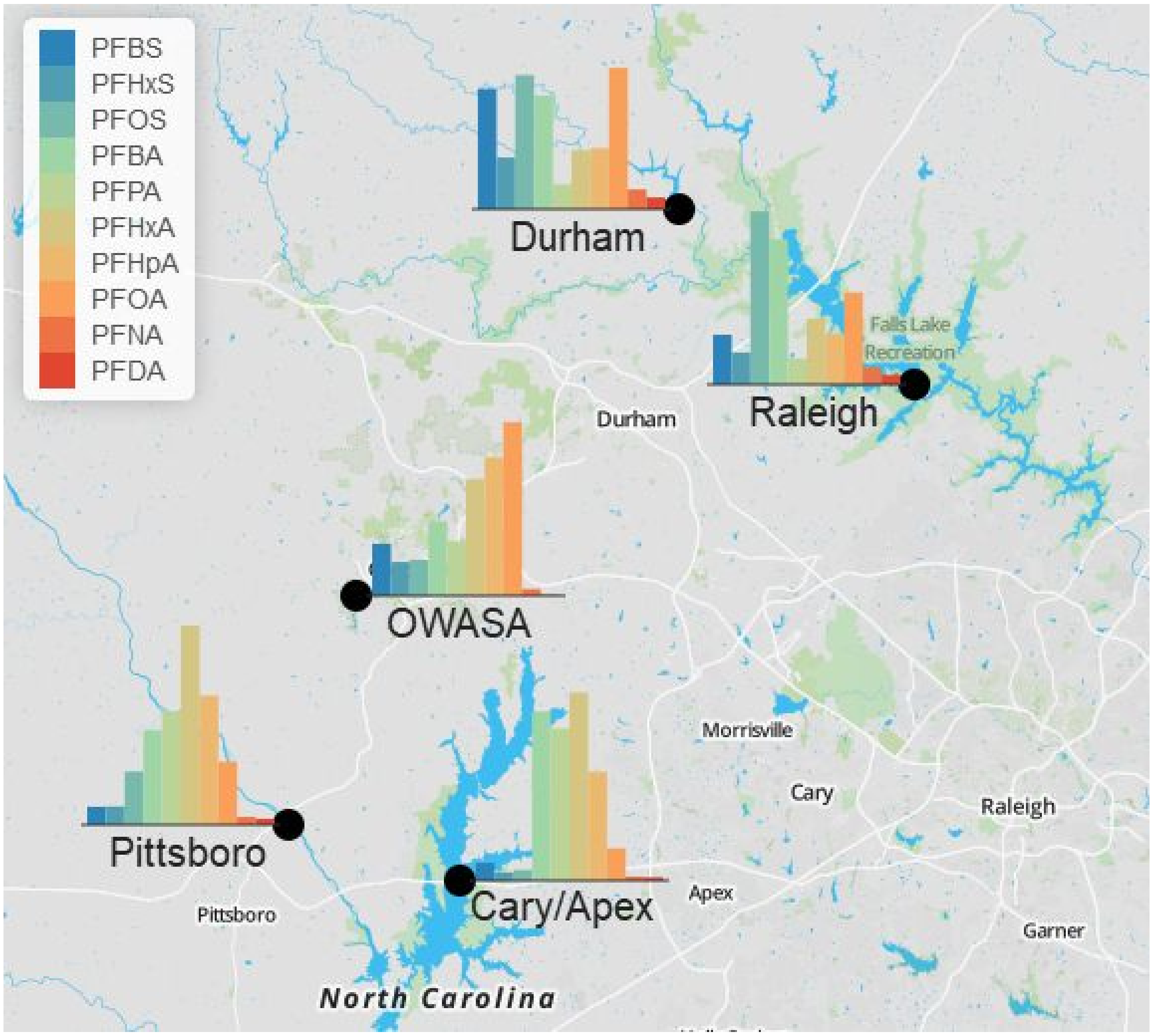


Figure S3: Map of PFASs profiles from different drinking water sources.

Point of Use/Entry Additional Information

Table S7: Summary of p-values for Wilcoxon rank-sum test between all filtered water sample and source water.

Sample ID	*p-value*	*Filter Class*	*Source Water*	*Filter Type*
PF001B	0.001953	RO	Cary / Apex WTP	Reverse Osmosis (RO)
PF006B	0.007813	RO	City of Durham	Reverse Osmosis (RO)
PF033B	0.001953	RO	Cary / Apex WTP	Reverse Osmosis (RO)
PF007B	0.001953	RO	City of Durham	Reverse Osmosis (RO)
PF047B	0.000977	RO	Cary / Apex WTP	Reverse Osmosis (RO)
PF056B	0.000977	RO	Pittsboro	Reverse Osmosis (RO)
PF058B	0.001953	RO	Pittsboro	Reverse Osmosis (RO)
PF060B	0.003906	RO	Pittsboro	Reverse Osmosis (RO)
PF022C	0.000977	RO	Cary / Apex WTP	Reverse Osmosis (RO)
PF046C	0.001953	RO	OWASA	Reverse Osmosis (RO)
PF059D	0.000977	RO	Pittsboro	Reverse Osmosis (RO)
PF033C	0.001953	RO	Cary / Apex WTP	Reverse Osmosis (RO)
PF003B	0.007813	AC	City of Durham	Dual-stage
PF011B	0.007813	AC	City of Durham	Dual-stage
PF021B	0.003906	AC	OWASA	Dual-stage
PF038B	0.000977	AC	Pittsboro	Dual-stage
PF005B	0.007813	AC	City of Durham	Kitchen Faucet (KF)
PF031B	0.000977	AC	City of Durham	Kitchen Faucet (KF)
PF027B	0.03125	AC	City of Durham	Under-Sink (US)
PF035B	0.109375	AC	City of Durham	Under-Sink (US)
PF043B	0.009766	AC	OWASA	Under-Sink (US)
PF062B	0.007813	AC	Cary / Apex WTP	Under-Sink (US)
PF042C	0.000977	AC	City of Durham	Under-Sink (US)
PF009B	0.003906	AC	Cary / Apex WTP	Pitcher Filter (PF)
PF010B	0.007813	AC	City of Durham	Pitcher Filter (PF)
PF013B	0.007813	AC	Well	Pitcher Filter (PF)
PF014B	0.003906	AC	City of Durham	Pitcher Filter (PF)
PF015B	0.054688	AC	Cary / Apex WTP	Pitcher Filter (PF)
PF026B	0.000977	AC	Raleigh	Pitcher Filter (PF)
PF036B	0.001953	AC	Cary / Apex WTP	Pitcher Filter (PF)
PF039B	0.001953	AC	Pittsboro	Pitcher Filter (PF)
PF045B	0.000977	AC	OWASA	Pitcher Filter (PF)
PF049B	0.9375	AC	Well	Pitcher Filter (PF)
PF055B	0.001953	AC	Raleigh	Pitcher Filter (PF)

PF009C	0.003906	AC	Cary / Apex WTP	Pitcher Filter (PF)
PF004B	0.074219	AC	City of Durham	Refrigerator Filter (RF)
PF012B	0.007813	AC	City of Durham	Refrigerator Filter (RF)
PF017B	0.359375	AC	Cary / Apex WTP	Refrigerator Filter (RF)
PF018B	0.820313	AC	Cary / Apex WTP	Refrigerator Filter (RF)
PF019B	0.007813	AC	Cary / Apex WTP	Refrigerator Filter (RF)
PF008B	0.007813	AC	OWASA	Refrigerator Filter (RF)
PF020B	0.300781	AC	Cary / Apex WTP	Refrigerator Filter (RF)
PF025B	0.147461	AC	Cary / Apex WTP	Refrigerator Filter (RF)
PF002B	0.083008	AC	City of Durham	Refrigerator Filter (RF)
PF034B	0.001953	AC	City of Durham	Refrigerator Filter (RF)
PF023B	0.000977	AC	Cary / Apex WTP	Refrigerator Filter (RF)
PF024B	0.000977	AC	Cary / Apex WTP	Refrigerator Filter (RF)
PF040B	0.000977	AC	OWASA	Refrigerator Filter (RF)
PF044B	0.00293	AC	OWASA	Refrigerator Filter (RF)
PF042B	0.000977	AC	City of Durham	Refrigerator Filter (RF)
PF029B	0.001953	AC	OWASA	Refrigerator Filter (RF)
PF032B	0.003906	AC	Cary / Apex WTP	Refrigerator Filter (RF)
PF037B	0.001953	AC	OWASA	Refrigerator Filter (RF)
PF048B	0.03125	AC	Well	Refrigerator Filter (RF)
PF051B	0.001953	AC	OWASA	Refrigerator Filter (RF)
PF052B	0.015625	AC	Cary / Apex WTP	Refrigerator Filter (RF)
PF057B	0.101563	AC	Pittsboro	Refrigerator Filter (RF)
PF030B	0.024414	AC	City of Durham	Whole House Carbon (WH)
PF022B	0.320313	AC	Cary / Apex WTP	Whole House Carbon (WH)
PF046B	0.431641	AC	OWASA	Whole House Carbon (WH)
PF059B	0.083008	AC	Pittsboro	Whole House Carbon (WH)

Table S8: Summary Statistics for Paired Wilcoxon Rank Sum test for PFCAs and PFSAs removal.

p-value	< 0.05	> 0.05
Cary / Apex WTP	15	6
City of Durham	14	3
OWASA	10	1
Pittsboro	7	2
Raleigh	2	0
Well	2	1

p-value	< 0.05	> 0.05
Reverse Osmosis (RO)	11	0
Dual-Stage	4	0
Activated Carbon	35	13
Kitchen Faucet	2	0
Under-sink	4	1
Pitcher Filter	11	2
Refrigerator Filter	15	7
Whole House Carbon	3	3

p-value	< 0.05	> 0.05
1 month	4	1
1 - 6 months	9	5
7 - 12 months	5	0
1 - 5 years	12	4
5 years	4	3
Unknown	1	0

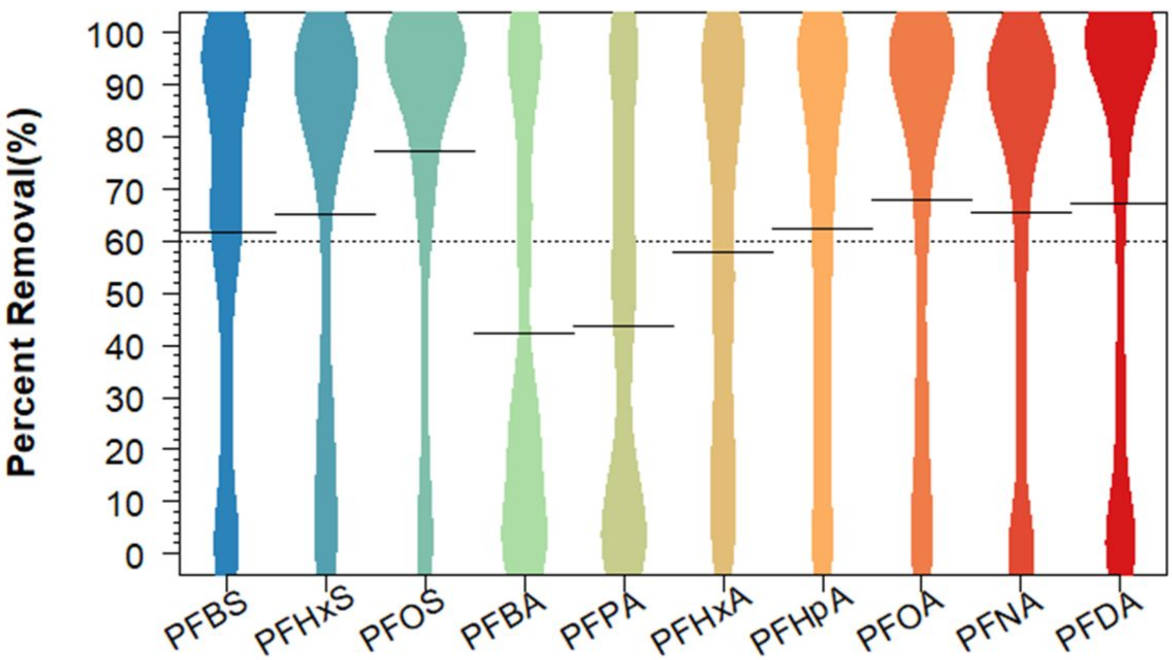


Figure S4: Beanplot for percent removal of all activated carbon filters for 11 target PFAAs chemicals.

Central North Carolina Surface and Tap Water Comparison

Surface water samples were also collected from two areas that are the drinking water source for the towns of Pittsboro, Cary and Apex, NC due to the higher concentrations observed in these samples. The samples were collected in approximately 1-week intervals between August and November 2019 at three sampling locations to monitor changes in the water supply over time. Two sites were located on the Haw River (35°46'16.9"N 79°08'42.2"W and 35°43'51.4"N 79°06'25.5"W) and one site was located on Jordan Lake (35°43'56.4"N 79°01'06.0"W). Twelve additional samples were collected in July 2018 from Jordan Lake to examine spatial distributions in PFAA levels across the lake. All samples were stored at 4°C after collection until analysis.

The sampling site at Jordan Lake was collocated with the Cary water intake. The mean ∑PFCA & PFSA concentration found in Jordan Lake at this sampling location was 118 ± 39 ng L^{-1}, which was significantly higher (p-value < 0.001) than PFAA levels in the Cary drinking water supply 53 ± 18 ng L^{-1}. Using the gage height of a nearby United States Geological Survey (USGS) station (02098197), it was found that no significant relation existed between lake height (i.e., water levels) and either Jordan Lake or Cary drinking water PFAA levels (**Figure S5**).

Similarly, one of the Haw River sampling sites was collocated with the Pittsboro water intake, as well as a USGS river monitor station (02096960). The mean ∑PFCA & PFSA concentration found at this sampling location measured over five months was 269 ± 218 ng L^{-1} with a maximum measured of 662 ng L^{-1}. Also contrarily to above, there was a significant inverse log-log correlation between Haw River streamflow (cfm) and both Haw River water PFAA levels (p-value = 0.002) and Pittsboro drinking water (p-value = 0.003) (**Figure S6**). This suggests that the ∑PFCA & PFSA levels we measured in the Haw River are likely coming from a consistent point source or sources, such as a wastewater treatment plant effluent, rather than a non-point source, such as runoff from biosolids applications.

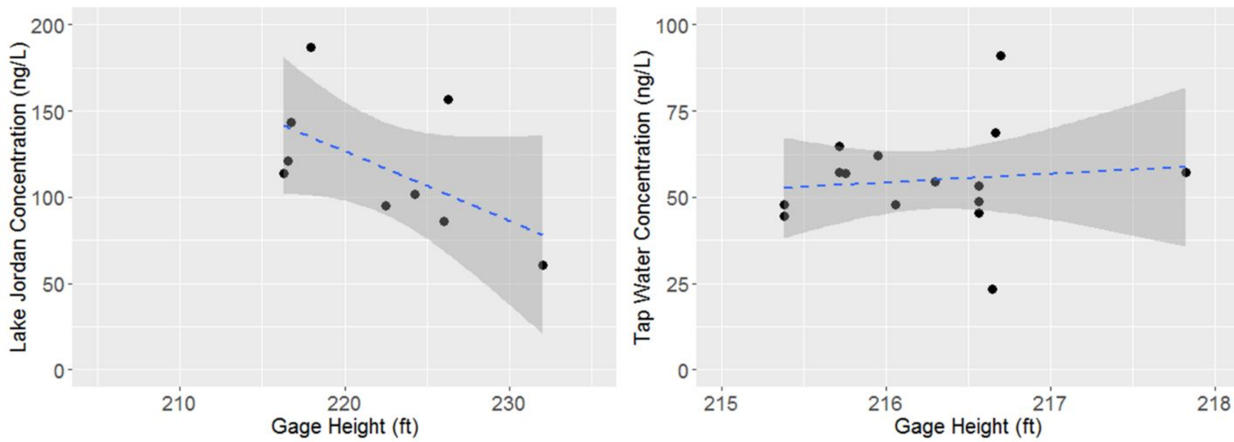


Figure S5: ∑PFCA & PFSA concentration in Jordan Lake water (a) and Cary/Apex drinking water (b) compared to Jordan Lake gage height.

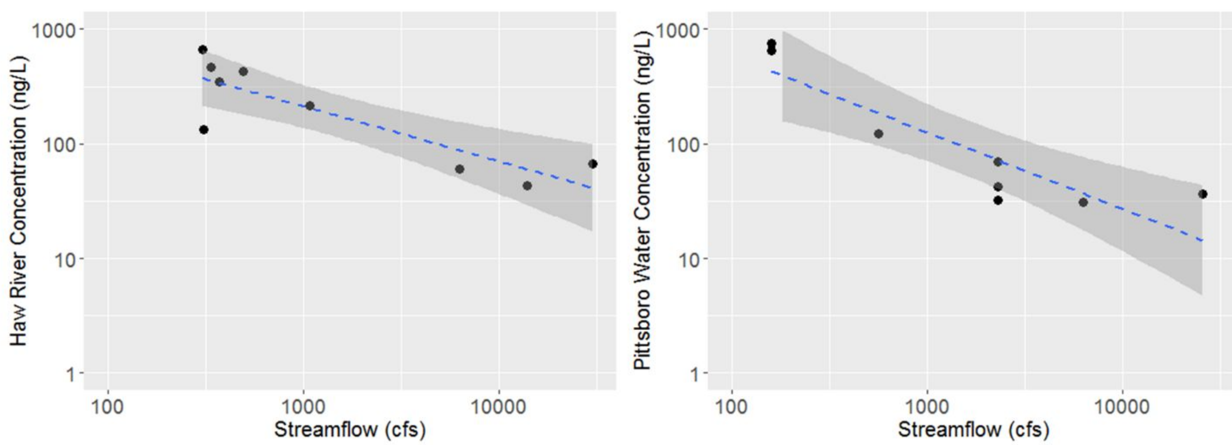


Figure S6: ∑PFCA & PFSA concentration in Haw River water (a) and Pittsboro drinking water (b) compared to Haw River streamflow

References

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2. Emerging Contaminants: Perfluorinated Compounds (PFCs). https://www.dconc.gov/county-departments/departments-a-e/engineering-and-environmental-services/utilities-division/emerging-contaminants; Durham County Utilities Division: Durham, NC (accessed Jan 11, 2019).
3. Testing for perfluorinated compounds. https://www.owasa.org/testing-for-perfluorinated-compounds; Orange Water and Sewer Authority: Chapel Hill, NC (accessed Jan 11, 2019).
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Raw Values

Table S9: Raw Concentration values

Location	Utility	Filter Brand	Filter Classification	Age of Filter (months)	Note:	GenX	PFBS	PFHxS	PFBA	PFOS	PFPA	PFHxA	PFHpA	PFOA	PFNA	PFDA
Central NC	Cary / Apex WTP	---	---	---		0.5	1.6	1.1	16.8	1.6	18.5	26.4	18.9	5.4	<MDL	0.4
---	---	Aquasana: Under Sink OptimH2O® Reverse Osmosis + Claryum®	Reverse Osmosis	2		<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	0.2	0.2	<MDL	<MDL	<MDL
Central NC	City of Durham	---	---	---		0.6	2.9	2.1	3.5	1.6	2.4	5.3	5.9	8.1	0.3	0.1
---	---	GE	Refrigerator	n/a		0.6	<MDL	1.9	3.2	2.5	1.6	3.9	4.6	6.7	0.4	0.3
Central NC	City of Durham	---	---	---		0.6	2.3	1.0	1.8	3.4	<MDL	0.9	1.2	2.7	<MDL	<MDL
---	---	Kenmore	Dual-Stage	18		<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Central NC	City of Durham	---	---	---		0.6	1.9	1.1	1.7	3.3	<MDL	1.0	1.0	2.9	<MDL	0.4
---	---	Every Drop Refrigerator Filter	Refrigerator	4		0.1	3.6	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Central NC	City of Durham	---	---	---		0.7	2.5	0.8	1.8	2.1	<MDL	0.9	1.0	2.5	<MDL	<MDL
---	---	Whirlpool	Under-Sink Single Stage	12		0.3	<MDL	<MDL	1.4	<MDL	<MDL	0.4	0.4	<MDL	<MDL	<MDL
Central NC	City of Durham	---	---	---		0.5	2.7	1.0	1.8	2.3	<MDL	0.9	0.9	2.5	<MDL	<MDL
---	---	Culligan	Reverse Osmosis	1		<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Central NC	City of Durham	---	---	---		0.7	<MDL	1.2	2.7	2.5	0.6	1.2	1.0	2.7	0.4	0.2
---	---	Ecowater	Reverse Osmosis	(5 days)		<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Central NC	OWASA	---	---	---		1.0	<MDL	<MDL	1.7	1.0	0.4	0.8	0.7	0.9	0.4	<MDL
---	---	Whirlpool	Refrigerator	5		<MDL	<MDL	<MDL	0.8	<MDL	0.2	0.5	0.3	<MDL	<MDL	<MDL
Central NC	Cary / Apex WTP	---	---	---		0.8	1.5	0.6	11.1	0.6	14.6	15.6	10.0	2.4	<MDL	<MDL
---	---	Brita	Pitcher	1		0.5	0.4	0.3	5.7	0.2	6.5	7.3	5.1	0.9	<MDL	<MDL
---	---	Brita	Pitcher	1	Follow up sampling	0.3	<MDL	<MDL	3.3	0.0	3.9	3.7	1.8	<MDL	<MDL	<MDL
Central NC	City of Durham	---	---	---		0.6	2.9	1.0	1.8	3.4	<MDL	1.1	1.0	2.8	<MDL	<MDL
---	---	PUR	Pitcher	1.5		0.5	2.0	0.8	1.4	1.2	<MDL	0.8	0.7	2.0	<MDL	<MDL
Central NC	City of Durham	---	---	---		0.7	2.3	1.1	2.0	3.7	<MDL	1.1	1.2	3.2	<MDL	<MDL
---	---	GE: FXSVC	Dual-Stage	9		<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL

Central NC	City of Durham	---	---	---		0.6	2.8	1.2	1.9	2.5	<MDL	1.2	1.0	2.9	<MDL	<MDL
---	---	LG	Refrigerator	4		0.2	<MDL	<MDL	<MDL	0.0	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Central NC	Well	---	---	---		<MDL	<MDL	0.7	0.9	2.7	3.8	3.4	2.3	1.9	<MDL	0.4
---	---	Berkey	Pitcher	12		<MDL	<MDL	<MDL	0.2	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Central NC	City of Durham	---	---	---		0.6	2.4	1.1	2.1	3.6	0.4	0.9	1.1	2.9	<MDL	<MDL
---	---	Berkey	Pitcher	6		0.2	<MDL	<MDL	1.5	0.1	<MDL	0.2	<MDL	<MDL	<MDL	<MDL
Central NC	Cary / Apex WTP	---	---	---		0.9	1.1	1.0	12.1	1.5	14.1	19.2	14.4	4.4	<MDL	<MDL
---	---	Berkey	Pitcher	24		0.2	<MDL	<MDL	14.1	<MDL	13.9	2.5	<MDL	<MDL	<MDL	<MDL
Central NC	Well	---	---	---		<MDL	0.5	<MDL	<MDL	0.3	<MDL	<MDL	<MDL	0.6	<MDL	<MDL
Central NC	Cary / Apex WTP	---	---	---		0.9	1.5	0.5	11.9	0.3	10.9	15.4	10.0	1.7	<MDL	<MDL
---	---	Clear Choice: CLCH105	Refrigerator	3		0.8	5.8	0.4	9.8	0.2	11.8	12.0	5.9	1.2	<MDL	<MDL
Central NC	Cary / Apex WTP	---	---	---		1.1	1.1	0.4	10.8	0.2	10.4	14.1	9.4	1.4	<MDL	<MDL
---	---	Every Drop	Refrigerator	6		1.1	2.3	0.4	10.5	0.5	17.1	12.8	6.2	1.3	<MDL	<MDL
Central NC	Cary / Apex WTP	---	---	---		0.7	<MDL	0.5	10.6	0.2	11.6	12.8	7.5	1.4	<MDL	<MDL
---	---	Samsung	Refrigerator	6		<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Central NC	Cary / Apex WTP	---	---	---		1.4	1.5	0.6	12.0	0.5	11.6	15.5	9.1	2.4	<MDL	<MDL
---	---	Samsung	Refrigerator	6		1.2	<MDL	<MDL	15.4	<MDL	14.3	11.4	5.2	0.8	<MDL	<MDL
Central NC	OWASA	---	---	---		0.9	3.2	4.1	3.5	2.7	3.9	8.7	13.7	17.1	<MDL	<MDL
---	---	Whirlpool: WHEEDF	Dual-Stage	2		<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Central NC	Cary / Apex WTP	---	---	---	Filters Run in Series	0.9	1.5	0.5	13.4	0.5	11.1	12.6	5.6	1.6	0.1	0.2
---	---	n/a	Whole House - GAC	12		0.5	0.6	<MDL	25.4	0.0	19.2	8.3	1.8	<MDL	<MDL	<MDL
---	---	n/a	Reverse Osmosis	12		<MDL	0.2	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Central NC	Cary / Apex WTP	---	---	---		0.7	1.7	0.3	13.5	0.3	12.0	12.5	5.5	1.2	0.1	0.1
---	---	Whirlpool: HDX FMW-5	Refrigerator	6		0.5	0.7	0.1	8.6	0.1	6.9	6.5	2.9	0.7	0.1	0.1
Central NC	Cary / Apex WTP	---	---	---		0.7	1.3	0.4	13.1	0.3	10.5	11.8	5.2	1.1	0.1	0.1
---	---	Whirlpool: HDX FMW-5	Refrigerator	5		0.5	0.8	0.1	12.6	<MDL	8.8	6.6	2.3	0.2	<MDL	<MDL

Central NC	Cary / Apex WTP	---	---	---		0.9	1.9	0.8	13.0	0.6	11.8	17.7	11.7	3.1	0.4	0.2
---	---	GE: Smart Water	Refrigerator	6		0.5	<MDL	<MDL	19.9	0.0	13.9	6.7	2.1	0.2	<MDL	0.0
Central NC	Raleigh	---	---	---		0.8	1.2	0.8	3.8	3.3	1.0	1.8	1.5	2.9	0.5	0.2
---	---	Zero Water	Pitcher	1		0.1	<MDL	0.1	0.5	0.5	0.3	0.3	0.3	0.4	<MDL	0.0
Central NC	City of Durham	---	---	---		<MDL	<MDL	<MDL	3.3	<MDL	<MDL	1.5	1.5	2.7	0.5	0.3
---	---	Culligan	Under-Sink Single Stage	2		<MDL	<MDL	<MDL	2.4	<MDL	<MDL	1.2	1.4	1.9	0.3	<MDL
Central NC	City of Durham	---	---	---		0.7	2.9	1.5	2.9	3.4	0.5	1.3	1.4	3.2	0.5	0.2
Central NC	OWASA	---	---	---		0.8	5.8	0.3	3.3	4.1	3.0	9.8	8.2	15.2	0.3	<MDL
---	---	Amana	Refrigerator	12		0.3	<MDL	0.2	1.2	<MDL	0.7	2.1	2.2	2.3	<MDL	<MDL
Central NC	City of Durham	---	---	---		0.6	2.8	1.1	2.9	2.8	0.6	1.1	1.2	3.1	0.4	0.2
---	---	n/a	Whole House - GAC	18		0.2	<MDL	<MDL	4.3	0.1	0.5	0.2	0.1	0.1	<MDL	<MDL
Central NC	City of Durham	---	---	---		0.5	2.5	1.1	2.7	2.7	0.6	1.2	1.2	3.2	0.5	0.2
---	---	PUR	Faucet	1		0.2	0.1	0.2	1.1	0.1	0.2	0.4	0.3	0.7	<MDL	<MDL
Central NC	Cary / Apex WTP	---	---	---		1.3	1.2	<MDL	11.1	1.7	9.1	19.4	8.7	4.3	0.4	<MDL
---	---	Whirlpool	Refrigerator	n/a		<MDL	1.1	<MDL	<MDL	0.2	<MDL	<MDL	<MDL	0.4	<MDL	<MDL
Central NC	Cary / Apex WTP	---	---	---	Filters Run in Series	0.9	<MDL	0.9	13.4	0.6	14.1	19.2	12.4	2.8	0.3	0.2
---	---	Apec Water: RO-45	Reverse Osmosis	12		<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
---	---	Zero Water	Reverse Osmosis	12		<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Central NC	City of Durham	---	---	---		0.5	<MDL	1.3	2.7	2.9	0.4	1.1	1.0	2.9	0.5	0.4
---	---	GE	Refrigerator	12		<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Central NC	City of Durham	---	---	---		0.8	4.4	<MDL	3.6	<MDL	<MDL	2.0	2.6	3.7	0.6	0.3
---	---	Whirlpool: WHCF-DUF	Under-Sink Single Stage	6		0.5	<MDL	<MDL	2.8	<MDL	<MDL	1.8	2.6	3.8	0.8	0.2
Central NC	Cary / Apex WTP	---	---	---		1.0	<MDL	0.9	12.9	0.4	10.9	17.4	10.2	2.7	0.3	0.2
---	---	Brita: Soho	Pitcher	(3 weeks)		0.8	<MDL	0.8	11.4	0.4	9.9	15.4	8.7	2.3	0.2	0.1
Central NC	OWASA	---	---	---		0.8	1.4	0.3	5.3	2.2	3.9	9.1	8.8	14.0	0.3	<MDL
---	---	Bosch	Refrigerator	n/a		<MDL	0.9	<MDL	0.8	<MDL	0.3	0.6	<MDL	0.6	<MDL	<MDL
Central NC	Pittsboro	---	---	---		0.4	7.9	9.6	96.1	15.4	158.4	261.4	144.7	48.2	7.9	9.0

---	---	Whirlpool: WHEM B40	Dual-Stage	6		<MDL	<MDL	<MDL	4.9	0.0	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Central NC	Pittsboro	---	---	---		0.3	6.5	8.5	88.1	15.2	121.0	233.4	115.1	43.0	7.8	8.7
---	---	PUR	Pitcher	1		0.3	3.3	3.2	63.5	4.0	82.2	137.1	79.6	18.8	2.6	2.4
Central NC	OWASA	---	---	---		0.4	5.1	5.3	4.4	3.6	4.0	9.3	13.9	20.0	0.3	0.1
---	---	Jenn-Air	Refrigerator	1		0.2	1.7	1.3	3.1	0.1	2.3	4.4	6.4	6.6	<MDL	<MDL
Central NC	City of Durham	---	---	---	Independent filters	0.7	3.1	1.0	2.9	3.5	0.3	1.1	0.9	2.5	0.4	0.2
---	---	PUR	Refrigerator	(1 week)		<MDL	<MDL	<MDL	<MDL	0.0	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
---	---	PUR	Faucet	1		0.2	0.3	0.1	1.0	<MDL	0.1	0.1	0.2	0.3	<MDL	<MDL
Central NC	OWASA	---	---	---		0.4	4.4	3.0	4.6	1.8	4.2	9.1	12.1	14.6	0.2	<MDL
---	---	Filtrete: 3US-PF01	Under-Sink Single Stage	8		<MDL	<MDL	<MDL	5.4	<MDL	2.3	<MDL	<MDL	<MDL	<MDL	<MDL
Central NC	OWASA	---	---	---		0.4	4.7	3.5	4.5	1.8	4.1	8.9	11.8	14.6	0.2	0.0
---	---	n/a	Refrigerator	n/a		0.2	1.5	0.4	4.6	0.2	3.7	3.6	3.3	2.2	<MDL	<MDL
Central NC	OWASA	---	---	---		0.5	3.9	2.9	4.5	1.4	3.8	8.3	10.9	13.0	0.1	0.0
---	---	Aquasana: Clean Water Machine	Pitcher	3		<MDL	0.5	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Central NC	OWASA	---	---	---	Run in Series	0.4	2.2	1.1	6.5	0.5	5.2	7.0	6.2	5.6	0.1	<MDL
---	---	n/a	Whole House - GAC	8		0.5	3.0	1.4	5.3	0.5	4.4	7.8	6.9	6.6	0.1	<MDL
---	---	n/a	Reverse Osmosis	24		<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Central NC	Cary / Apex WTP	---	---	---		1.3	2.8	2.6	14.6	6.7	10.1	24.1	13.3	8.7	1.6	1.3
---	---	AQUA TRU Countertop Water Filtration	Reverse Osmosis	7		<MDL	<MDL	<MDL	<MDL	0.0	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Central NC	Well	---	---	---		<MDL	1.1	0.2	0.2	0.2	0.2	0.2	0.1	<MDL	<MDL	<MDL
---	---	Frigidaire	Refrigerator	60		<MDL	<MDL	<MDL	<MDL	<MDL	0.2	0.1	<MDL	<MDL	<MDL	<MDL
Central NC	Well	---	---	---		<MDL	11.7	0.2	0.2	0.7	0.1	0.2	0.1	<MDL	<MDL	<MDL
---	---	Brita	Pitcher	(3 weeks)		<MDL	4.5	0.2	0.3	0.4	0.2	0.4	0.2	<MDL	<MDL	<MDL
Central NC	OWASA	---	---	---		0.7	4.0	3.1	4.3	2.9	3.0	8.0	11.4	11.7	0.1	0.1
Central NC	OWASA	---	---	---		0.4	3.7	2.4	4.0	1.6	4.7	8.9	10.4	10.9	0.1	<MDL
---	---	GE: Smart WaterPlus	Refrigerator	n/a		<MDL	<MDL	<MDL	0.1	<MDL	<MDL	0.1	0.0	<MDL	<MDL	<MDL

Central NC	Cary / Apex WTP	---	---	---		0.7	0.3	0.1	10.8	<MDL	6.8	3.6	1.1	<MDL	<MDL	<MDL
---	---	Whirlpool	Refrigerator	8		0.6	0.2	0.1	10.7	<MDL	6.0	3.0	0.8	<MDL	<MDL	<MDL
Central NC	Pittsboro	---	---	---		0.6	1.6	3.0	14.3	13.3	17.3	37.1	25.8	8.3	1.2	0.9
Central NC	Raleigh	---	---	---		1.1	1.4	1.0	4.6	6.1	0.5	2.0	1.4	2.6	0.5	0.3
Central NC	Raleigh	---	---	---		1.0	1.9	1.1	4.6	6.5	0.7	2.1	1.7	2.6	0.5	0.3
---	---	Brita	Pitcher	6		0.9	1.9	1.1	4.4	5.6	0.6	2.0	1.3	2.5	0.5	0.3
Central NC	Pittsboro	---	---	---		0.3	1.5	1.4	4.2	4.9	4.8	8.3	6.3	4.1	0.6	0.3
---	---	AQUA TRU Countertop Water Filtration	Reverse Osmosis	n/a		<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Central NC	Pittsboro	---	---	---		0.5	1.1	1.2	3.8	3.0	3.5	7.5	5.9	4.2	0.2	0.2
---	---	Whirlpool	Refrigerator	4		0.5	0.9	1.6	3.6	3.7	4.8	10.9	9.0	4.1	0.2	0.3
Central NC	Pittsboro	---	---	---		0.3	1.0	0.6	7.3	<MDL	5.7	8.7	4.8	2.7	0.4	0.2
---	---	Primo	Reverse Osmosis	n/a		<MDL	<MDL	<MDL	<MDL	43.3	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Central NC	Pittsboro	---	---	---	Run in Series	0.2	1.8	1.8	5.8	3.4	6.4	10.3	7.1	5.0	0.6	0.3
---	---	Custom	Whole House - GAC	9		0.2	2.8	1.5	8.2	<MDL	23.1	40.4	21.9	6.8	0.8	0.4
---	---	Custom	Whole House - GAC	9		0.1	2.0	2.2	9.3	<MDL	23.0	36.9	24.2	7.3	0.9	0.4
---	---	Custom	Reverse Osmosis	9		<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Central NC	Pittsboro	---	---	---		<MDL	1.8	1.7	7.7	<MDL	13.9	21.6	16.3	5.7	0.7	0.5
---	---	n/a	Reverse Osmosis	n/a		<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Central NC	Cary / Apex WTP	---	---	---		1.0	0.7	<MDL	8.7	<MDL	7.8	6.3	3.6	<MDL	0.1	0.2
---	---	n/a	Whole House - GAC	12		0.9	0.3	<MDL	6.8	<MDL	3.9	2.6	0.9	<MDL	<MDL	<MDL
Central NC	Cary / Apex WTP	---	---	---		0.9	0.6	0.2	6.7	<MDL	5.3	5.0	3.0	<MDL	0.1	<MDL
---	---	HydroViv	Under-Sink Single Stage	6		0.8	<MDL	<MDL	5.4	<MDL	2.2	1.0	0.3	<MDL	<MDL	<MDL
Southeast NC	Sweeney	---	---	---		<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
---	---	Aquasana AQ-5200	Dual-Stage	1		<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL

Southeast NC	Sweeney	---	---	---		66.1	<MDL	14.9	12.2	26.3	30.6	25.2	17.2	13.0	<MDL	<MDL
---	---	Hydroviv Tailored Tapwater & HDX Whirlpool 3	Dual-Stage	1		<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Southeast NC	Sweeney	---	---	---		39.9	<MDL	<MDL	20.4	<MDL	52.8	57.7	28.6	13.8	<MDL	<MDL
---	---	Hydroviv Tailored Tapwater & HDX Whirlpool 3	Dual-Stage	6		<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Southeast NC	Sweeney	---	---	---		41.3	<MDL	<MDL	<MDL	18.8	30.9	21.9	16.6	15.0	<MDL	<MDL
---	---	Big Berkey with 2 Black Filters	Counter	26		101.8	<MDL	<MDL	12.4	<MDL	28.4	15.7	<MDL	<MDL	<MDL	<MDL
Southeast NC	Northwest	---	---	---		46.4	<MDL	<MDL	<MDL	<MDL	22.0	15.1	<MDL	<MDL	<MDL	<MDL
---	---	EcoAqua EFF-6027A	Refrigerator	1		<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Southeast NC	Northwest	---	---	---		46.9	<MDL	<MDL	17.9	<MDL	54.5	46.4	24.1	10.7	<MDL	<MDL
---	---	EcoAqua EFF-6027A	Refrigerator	6		<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Southeast NC	Northwest	---	---	---		75.3	<MDL	<MDL	18.3	<MDL	55.0	42.5	23.4	<MDL	<MDL	<MDL
---	---	LG 5231JA2006B	Refrigerator	5		<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Southeast NC	Sweeney	---	---	---		224.4	<MDL	14.7	14.7	19.9	26.9	20.8	17.4	<MDL	<MDL	10.1
---	---	Kinetico K-5	Reverse Osmosis	(2 weeks)		<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Southeast NC	Sweeney	---	---	---		43.3	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
---	---	Puronics Micromax 7000	Reverse Osmosis	(2 weeks)		<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Southeast NC	Sweeney	---	---	---		51.1	<MDL	<MDL	<MDL	24.7	29.4	17.5	14.8	10.1	<MDL	<MDL

---	---	Titan Water Pro NW-RO50-NP35	Reverse Osmosis	(2 weeks)		<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Southeast NC	Northwest	---	---	---		40.9	<MDL	<MDL	11.3	10.1	26.2	17.2	10.4	<MDL	<MDL	<MDL
---	---	Culligan Aqua-Cleer RO30	Reverse Osmosis	1		<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Southeast NC	Sweeney	---	---	---		67.3	<MDL	10.1	12.5	24.9	29.4	20.8	14.0	10.3	<MDL	<MDL
---	---	Culligan Aqua-Cleer	Reverse Osmosis	2		<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Southeast NC	Sweeney	---	---	---		47.1	<MDL	<MDL	21.1	<MDL	48.1	47.6	24.0	12.8	<MDL	<MDL
---	---	Puronics Micromax 7000	Reverse Osmosis	6		<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Southeast NC	Sweeney	---	---	---		178.8	10.6	14.4	14.1	19.1	26.4	19.8	18.0	<MDL	<MDL	<MDL
---	---	APEC RO-45	Reverse Osmosis	67		<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Southeast NC	Northwest	---	---	---		46.4	<MDL	<MDL	<MDL	<MDL	22.0	15.1	<MDL	<MDL	<MDL	<MDL
---	---	Custom Formulations KDF/GAC	Under-sink Single Stage	1		<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Southeast NC	Northwest	---	---	---		46.9	<MDL	<MDL	17.9	<MDL	54.5	46.4	24.1	10.7	<MDL	<MDL
---	---	Custom Formulations KDF/GAC	Under-sink Single Stage	6		<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Southeast NC	Sweeney	---	---	---		66.1	<MDL	14.9	12.2	26.3	30.6	25.2	17.2	13.0	<MDL	<MDL
---	---	Hydroviv Tailored Tapwater	Under-sink Single Stage	1		<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Southeast NC	Northwest	---	---	---		75.3	<MDL	<MDL	18.3	<MDL	55.0	42.5	23.4	<MDL	<MDL	<MDL
---	---	eSpring 100189 (UV lamp off)	Under-sink Single Stage	4		<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Southeast NC	Sweeney	---	---	---		39.9	<MDL	<MDL	20.4	<MDL	52.8	57.7	28.6	13.8	<MDL	<MDL

---	---	Hydroviv Tailored Tapwater	Under-sink Single Stage	6		<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Southeast NC	Sweeney	---	---	---		52.0	<MDL	<MDL	11.3	26.1	30.4	24.4	15.4	15.4	<MDL	<MDL
---	---	Puronics Clarius-W IGEN	Whole House - GAC/CIX	2		22.8	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Southeast NC	Northwest/211 (mix)	---	---	---		47.4	<MDL	<MDL	19.4	<MDL	57.5	48.8	26.5	<MDL	<MDL	<MDL
---	---	Puronics Clarius-W	Whole House - GAC/CIX	5		46.0	<MDL	<MDL	16.5	<MDL	36.3	33.5	18.8	<MDL	<MDL	<MDL
Southeast NC	Sweeney	---	---	---		31.8	<MDL	<MDL	20.3	<MDL	56.6	55.8	39.2	15.3	<MDL	<MDL
---	---	Puronics Clarius-W IGEN	Whole House - GAC/CIX	6		29.0	<MDL	<MDL	16.7	<MDL	32.7	33.6	24.5	<MDL	<MDL	<MDL
Southeast NC	Sweeney	---	---	---		52.0	<MDL	<MDL	11.3	26.1	30.4	24.4	15.4	15.4	<MDL	<MDL
---	---	Puronics Defender IGEN	Whole House - GAC/CIX	15		42.8	<MDL	17.0	13.5	25.0	29.5	19.9	16.1	11.1	<MDL	<MDL
Southeast NC	Northwest/211 (mix)	---	---	---		<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
---	---	Puronics Clarius-W	Whole House - GAC/CIX	23		22.1	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL
Southeast NC	Sweeney	---	---	---		72.2	<MDL	11.0	12.2	24.8	34.8	24.8	22.3	11.3	<MDL	<MDL
---	---	Aquasana EQ-1000	Whole House - GAC	1		40.0	<MDL	11.9	10.4	28.3	31.1	21.9	15.9	19.3	<MDL	<MDL
Southeast NC	Sweeney	---	---	---		28.8	<MDL	<MDL	18.9	<MDL	60.4	57.7	36.4	14.1	<MDL	<MDL
---	---	Aquasana EQ-1000	Whole House - GAC	6		<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL	<MDL