

**PFAS Baseline Study  
Lake Fish Specimen, Surface Water,  
and Sediment  
Multiple Lakes, New Hampshire**

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## LIST OF ACRONYMS

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°C	Celsius
µg/kg	micrograms per kilogram
µS/cm <sup>2</sup>	micro-Siemens per square centimeter
%	percent
BIP	Big Island Pond
CAL	Canobie Lake
CAP	Captain Pond
COP	Cobbetts Pond
DO	dissolved oxygen
DOC	dissolved organic carbon
Eurofins	Eurofins TestAmerica Sacramento
FRB	field reagent blank
FTS	fluorotelomer sulfonate
GPS	Global Positioning System
GTP	Great Pond
HIL	Highland Lake
HOP	Horseshoe Pond
LMA	Lake Massabesic
mg/L	milligrams per liter
mg/m <sup>3</sup>	milligrams per cubic meter
MS/MSD	matrix spike/matrix spike duplicate
ng/L	nanograms per liter
NETFOSE/N-EtFOSE	N-ethyl perfluorooctane sulfonamido ethanol
NHDES	New Hampshire Department of Environmental Services
NHFG	New Hampshire Fish and Game
NMeFOSE/N-MeFOSE	N-Methylperfluoro-1-octanesulfonamidoethanol
ORP	oxidation reduction potential
PFAS	per-and polyfluoroalkyl substances
PFCA	perfluoroalkyl carboxylates/carboxylic acids
PFDA	Perfluorodecanoate/Perfluorodecanoic acid
PFDOA	Perfluorododecanoate/Perfluorododecanoic acid
PFDS	Perfluorodecanesulfonate/Perfluorodecanesulfonic acid
PFHxS	Perfluorohexanesulfonate/Perfluorohexanesulfonic acid

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## LIST OF ACRONYMS (CONTINUED)

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PFNA	Perfluorononanoate/Perfluorononanoic acid
PFOA	Perfluorooctanoate/Perfluorooctanoic acid
PFOS	Perfluorooctanesulfonate/Perfluorooctanesulfonic acid
PFSA	perfluoroalkyl sulfonate/sulfonic acids
PFTeA	Perfluorotetradecanoic acid
PFTeDA	Perfluorotetradecanoate
PFTriA	Perfluorotridecanoic acid
PFTrDA	Perfluorotridecanoate
PFUNA	Perfluoroundecanoate/Perfluorodecanoic acid
QA	Quality Assurance
QC	quality control
RB	rinsate blanks
RDL	reporting detection limits
SAP	Sampling and Analysis Plan
SGS	SGS AXYS Laboratory
WESTON®	Weston Solutions Inc.

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## 1. INTRODUCTION

The New Hampshire Department of Environmental Services (NHDES) Watershed Management Bureau, in cooperation with the Environmental Health Program, tasked Weston Solutions Inc. (WESTON<sup>®</sup>) to conduct a study of the presence of per- and polyfluoroalkyl substances (PFAS) in fish tissue, surface water, and sediments within lakes throughout New Hampshire. Work was conducted in accordance with the Scope and Budget dated 13 August 2020 and approved by NHDES on 18 September 2020 under Contract Project No. EMCON-W-001. Field sampling was performed by WESTON between 5 October 2020 and 29 October 2020 at 14 lakes throughout southern New Hampshire (**Figure 1**). WESTON performed this sampling to develop a baseline data set for NHDES on fish, surface water, and sediment PFAS concentrations at selected lakes. This report presents the results of the study and, consistent with the scope of work, does not include a detailed evaluation or interpretation of the analytical results.

### 1.1 CONTAMINANTS OF INTEREST AND REGULATORY CRITERIA

Contaminants of interest for this study were PFAS (**Table 1**). Secondary parameters included dissolved organic carbon (DOC), alkalinity, hardness, and chlorophyll-a as well as field parameters collected at the time of sampling.

NHDES has not yet promulgated criteria for PFAS in fish tissue, sediment, or surface water; however, some water bodies may serve as drinking water supplies and maximum contaminant levels are referenced, as applicable, within this document. Direct contact risk-based soil concentrations have also been established and pertain to exposure from incidental ingestion and dermal contact with impacted soil<sup>1</sup>. The direct contact risk-based concentrations do not account for potential exposures including runoff to nearby surface water bodies or bioaccumulation in the food chain. Refer to **Table 1** for a list of PFAS analytes, acronyms, Chemical Abstract Services numbers, and promulgated criteria.

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<sup>1</sup> [NHDES Direct Contact Risk-Based Soil Concentrations for PFAS](#)

## 1.2 DATA QUALITY OBJECTIVES

The primary data quality objectives for the monitoring program are (1) all measurements be representative of the actual site conditions, and (2) all data resulting from field sampling and analysis activities be comparable. Comparability is the extent to which data from one data set can be compared directly to similar or related data sets and/or decision-making standards. Data comparability was achieved by continuity of acceptable laboratory practices, method analysis, sample collection procedures, and sample handling. In some instances, sample matrix variability resulted in necessary laboratory dilutions and subsequently higher reporting limits. In all cases, isotope dilution was utilized and is the preferred method as it can eliminate adverse effects caused by difficult matrices resulting in some quality control (QC) failures. The laboratory first ran samples undiluted but was forced to dilute samples when the extraction column became plugged, or the instrument was saturated resulting in QC failures that would have caused rejection of data. In all cases the best results were reported, and all data are accepted with applicable qualifications added. In no cases were data rejected.

Performance acceptance criteria for all new data generated for this project are based on principal data quality indicators, including precision, bias, representativeness, completeness, comparability, and sensitivity. The reporting detection limits (RDLs) and the acceptance limits for accuracy and precision for data generated by Eurofins TestAmerica (Eurofins) were accepted for use on this project by WESTON's data validator and chemist. Fish tissue data did not meet the RDLs specified in the project *Sampling and Analysis Plan (SAP)*. Therefore, fish tissue was also analyzed by SGS AXYS laboratory (SGS) via a proprietary method to achieve target RDLs. Refer to the *SAP* for Eurofins's test methods and the associated RDLs, and **Appendix A** of this report for SGS test method and RDLs (WESTON, 2020).

## 1.3 STUDY AREA, SAMPLE MEDIA, AND TARGET SPECIES

Twelve target lakes and two reference lakes located throughout New Hampshire were selected for inclusion in this study (**Figure 1** and **Table 2**). Fish, surface water, and sediment samples were collected from the selected lakes (**Figures 2 – 15**). Two of the lakes, representing greater than 10 percent (%) of the lakes sampled, were selected for confirmation sampling. The target

lakes included popular fishing locations located in southern New Hampshire with two reference sites located in the central part of the state. The average depths of the 14 lakes range from 2.5-5.5 meters; however, as reported by NHDES, several lakes were below normal pool elevations due to drought conditions.

Target fish for collection included yellow perch (*Perca flavescens*) and smallmouth bass (*Micropterus dolomieu*), where available. To meet a sufficient sample size, five specimens per target fish species were obtained. In instances where the target species were not captured in sufficient quantities or, if captured, were smaller than the size range typically retained by anglers for consumption, largemouth bass (*Micropterus salmoides*), bluegill sunfish (*Lepomis macrochirus*), common (pumpkinseed) sunfish (*Lepomis gibbosus*), or black crappie (*Pomoxis nigromaculatus*) were substituted for smallmouth bass and yellow perch.

Fish species were assigned to groups of top predators (excluding salmonids and pike), secondary consumers, bottom associated fish, and salmonids/pike. The preferred target fish species for sampling of smallmouth bass and yellow perch were associated with the first two groups but the species in other groups were established as alternate species if insufficient numbers of the preferred species were encountered. The ranking of alternate candidate fish species was determined in the study planning phase and in consultation with NHDES based on expected angler preferences for catching and consuming game fish as described in **Table 3** of the SAP (WESTON, 2020). Bycatch of non-target fish specimens and offal remaining from the filet tissue removal were retained and packaged for frozen storage for subsequent analysis. Bycatch samples and offal were split between NHDES and Dartmouth University with the latter conducting an un-related study.

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## **2. TECHNICAL APPROACH**

### **2.1 FISH SAMPLING**

WESTON obtained a New Hampshire Fish and Game (NHFG) Scientific License as required for the collection of fish for non-game purposes. License conditions were strictly followed during sampling activities, including providing advance notification of pending field collection activities to Mr. Scott Decker, Program Supervisor of the Inland Fisheries Division of NHFG.

All sampling activities were performed in accordance with the *SAP*, except as noted in Subsection 2.5. Composite samples consisted of five representative individuals for each species. Fish were of legal size and, to the extent possible, were within the size range that would be kept by a recreational angler for human consumption. WESTON used electrofishing as the principal technique for collecting fish in the upper to middle section of the water column. In addition, several lakes were slated for seasonal drawdown in October and the sequence of sampling was adjusted so that those lakes were visited early in the program.

WESTON utilized the following two vessels for collection:

- 16-foot aluminum v-hull boat equipped with a generator-powered Smith-Root VI-A electrofisher fitted with two bow-mounted anodes and a single trailing cathode.
- 12-foot aluminum jon-boat equipped with a generator-powered Smith-Root 1.5KVA electrofisher fitted with a single bow-mounted anode and a single trailing cathode.

Sample location coordinates were collected in the field by a handheld Global Positioning System (GPS) with sub-meter accuracy. Although efforts were made to collect the coordinates for the beginning and end of each electrofishing run within each of the lakes, this proved to be unrealistic as electrofishing was typically performed continuously throughout the day along the entire perimeter of each of the lakes. Areas with better structure and capture success were revisited repeatedly to obtain the required number of specimens of appropriate size for sampling. The electrofishing paths are provided on **Figures 2 – 15**.

Descriptions of the sampling locations, including water conditions, substrate, and habitat characteristics, were noted on field sampling sheets (**Appendix B**). Each fish retained for tissue

analysis was weighed and total length was measured (**Table 3**). All deformities, erosions, lesions, or tumors were noted on the field sampling sheets. Skin-off filet tissue samples were prepared in the field from the right-side filets of the fish specimens. In instances where small specimen sizes did not yield sufficient sample mass from only the right-side filets, left-side filets were also prepared from all fish specimens and were added to the composite sample and documented on the applicable sampling sheets (**Appendix B**). Quality control samples collected included matrix spike/matrix spike duplicate samples (MS/MSD), field duplicates (skin-off left side filets), and equipment rinsate blanks (RBs) of fileting equipment. Head, skin, viscera, and the remaining filets were frozen and retained for each specimen as offal samples. Offal samples were frozen on wet ice and couriered to Dartmouth University to be held for additional and unrelated analyses.

Filet and offal tissue samples were double bagged in zip seal bags. Filet samples were shipped frozen on dry ice to Eurofins for PFAS analysis via the U.S. Environmental Protection Agency Method 537 as modified for non-drinking water matrices. Eurofins laboratory analyzed each fish tissue sample and associated field QC samples for 36 PFAS (**Table 1**). Remaining homogenate was retained by Eurofins for shipment back to NHDES upon completion of the study; however, Eurofins laboratory was unable to meet the RDLs of 1 microgram per kilogram ( $\mu\text{g}/\text{kg}$ ) as specified in the project *SAP*. Therefore, the remaining fillet and offal tissue samples were sent to the secondary laboratory, SGS, for PFAS analyses.

Of the 12 target lakes, all were completed within 1 day of electrofishing, except for Big Island Pond, Arlington Mill Reservoir, and Lake Massabesic where a second day was required to collect enough fish for a five-specimen composite sample of the target or alternate species. No other fishing collection methods were required for the target lakes. Reference lakes Armington Lake and Highland Lake required 5 days and 2 days, respectively. The low conductivity of these lakes made the electrofishing equipment less effective and limited the effective range of the electric field within the water column. However, electrofishing was the only collection method used on Highland Lake and a five-specimen composite sample was achieved after 2 full days of collection. Minor deviations to the routine sampling process for this lake are detailed below.

Five full days were spent at Armington Lake to collect an adequate five-specimen composite sample of each of the two target species. After 3 full days of little success electrofishing, the decision was made to attempt gillnetting and rod and reel angling. Arrangements were made with NHFG, and our scientific collection permit was amended to allow the use of gillnets. Two 100-foot-long multi-panel monofilament gillnets were deployed. After setting the second gillnet, the field team returned to the first gillnet set and removed and released an entangled but un-harmed loon. Both gillnets were immediately pulled, gillnetting was ceased, and electrofishing was resumed. A final attempt the following day utilized rod and reel angling at deeper locations within Armington Lake below the effective capture range of electrofishing gear. The gillnet and angling methods were not effective at collecting any additional fish. With concurrence from NHDES, the decision was made that sufficient gear effort had been expended and to proceed with processing the fish retained from earlier electrofishing as the Armington Lake tissue samples. Additional details pertaining to the alternate methods and numbers of fish collected at Armington Lake are provided below.

## **Deviations from SAP**

### ***Highland Lake***

After 2 full days of electrofishing on Highland Lake, six smallmouth bass and five common pumpkinseed sunfish were collected. However, one of the smallmouth bass was significantly larger than the remaining five. After consulting with NHDES, the decision was made to collect a single filet sample from the large smallmouth bass in addition to the five-specimen composite sample of the remaining five smallmouth bass. The large specimen was submitted for analysis as a separate, discrete sample because combining the large filet mass with the lesser filet mass obtained from the five smaller fish would not yield a composite sample representative of average PFAS concentrations. Both left- and right-side filets were collected from the five-specimen composite sample to acquire enough fish tissue mass to be analyzed. The right-side filet was removed prior to the left-side filet being removed. Left- and right-side filets were individually weighed prior to combining into one composite sample. Individual filet weights were noted on the field sampling sheets during sample processing. These deviations were done

with concurrence from NHDES and were noted on the field sampling sheets during sample processing.

### **Armington Lake**

Although every attempt was made to collect five specimens at Armington Lake, an insufficient number of specimens were collected. With concurrence from NHDES, WESTON collected a smaller quantity before finalizing the samples submitted for PFAS analyses from this lake.

After 5 full days of fish collection activities, including 3 days of electrofishing, 1 day of gillnetting, and 1 day of rod and reel angling, five yellow perch and one smallmouth bass were collected. After discussions with NHDES, this lake was designated complete based on the amount of gear effort expended and the use of multiple collection methods. All fish collected from this lake were appreciably smaller than those collected from all previous lakes. To provide the laboratory with sufficient fish tissue mass, both the left- and right-side filets were collected from the smallmouth bass and the yellow perch specimens. The right-side filets were removed before the left-side filets for both the smallmouth bass and the yellow perch. Left- and right-side filets were individually weighed prior to combining into one composite sample for each target species. The individual filet weights were noted on the field sampling sheets during sample processing. These deviations were done with concurrence from NHDES and were noted on the field sampling sheets during sample processing.

Total fish counts from each of the 14 study lakes are provided in the table below, representing 37 fish tissue samples.

	Smallmouth Bass	Largemouth Bass	Yellow Perch	Blue Gill	Pumpkin Seed	Black Crappie
Arlington Mill Reservoir		5	5			
Armington Lake	1		5			
Baboosic Lake		5		5		
Beaver Lake	5 (5 DB)		5 (5 DB)			
Big Island Pond		5	5			
Canobie Lake		5		5		
Captain Pond		5 (5 RE)	5 (5 RE)			

	Smallmouth Bass	Largemouth Bass	Yellow Perch	Blue Gill	Pumpkin Seed	Black Crappie
Cobbetts Pond		5 (5 RE)	5 (5 RE)			
Great Pond		5	5			
Highland Lake	6				5	
Horseshoe Pond		5	5			
Lake Massabesic		5 (5 DB)		5 (5 DB)		
Naticook Lake	5					5
Robinson Pond		5	5			
<b>FISH TOTALS</b>	<b>22</b>	<b>65</b>	<b>60</b>	<b>20</b>	<b>5</b>	<b>5</b>

**Notes:**

RE refers to resampling per the SAP

DB refers to duplicates

## 2.2 SURFACE WATER SAMPLING

Three surface water samples were collected using a peristaltic pump and dedicated high-density polyethylene tubing from each of the 14 lakes. The SAP included provisions for sampling depths for both stratified and unstratified (mixed) conditions (WESTON, 2020). At stratified lakes, one sample was collected from each of the three water column depths representing the mid-epilimnion, metalimnion, and near bottom. Sampling depths were determined based on total water depth and water temperatures at the time of sampling. Direct temperature measurements were collected from the water column within each lake. Stratification of lakes was defined by a temperature difference of greater than 1 degree Celsius (°C) from top to bottom of the water column to define the mid-epilimnion, metalimnion, and near bottom strata. Because all lakes were observed to have turned over by the time of sample collection, samples were to be collected from three depth intervals: 1 meter below the surface; the mid-depth of the water column; and near bottom, approximately 0.5 meter above the sediment, to prevent perturbation (**Appendix C**). All lakes had experienced turnover prior to commencing field work and the surface water sample collection proceeded following the unstratified collection method. Further, all surface water samples were collected prior to the collection of the co-located sediment sample (Subsection 2.3).

Surface water was pumped directly from each of the pre-determined depths into laboratory-prepared sampling containers. Each field sample was assigned a unique identification, placed in an individual zip seal bag, placed into an ice-filled cooler, and shipped via FedEx under standard chain-of-custody procedures to Eurofins TA Sacramento, California, for PFAS analysis via Method 537 as modified; Eurofins TA Denver for analysis of DOC via Method 9060A, alkalinity via SM2320B, and hardness via SM2340C; and ENCO of Orlando, Florida for chlorophyll-a analysis via SM10200H. Water quality parameters, including dissolved oxygen (DO), temperature, conductivity, and pH, were recorded on field sheets (**Appendix B**). Sample locations were recorded using a hand-held GPS unit.

No deviations were required for surface water sampling. As noted, all lakes had turned over and no temperature stratification was observed. Provisions for this situation made in the *SAP* were followed. Oxidation reduction potential (ORP) was not a required field parameter and was mistakenly recorded on the field sheets. Because the YSI was not calibrated for ORP, the data should be ignored and are not included in **Table 5**.

## **2.3 SEDIMENT SAMPLING**

One sediment sample was collected from each of the 14 lakes immediately following the co-located surface water sample collection activities described above. Sediment samples were collected for PFAS analysis using a Wildco® petite Ponar clamshell-style dredge. All samples were collected from the top 0 to 6 inches of the sediment column. Following sample collection, the bulk sediment sample was transferred to a paint tray with a single use disposable polypropylene liner, homogenized, and transferred to labeled sample bottles. Sample containers were placed in individual zip seal bags in an ice-filled cooler and shipped under standard chain-of-custody procedures to Eurofins TA Sacramento for PFAS analysis via Method 537, as modified for non-drinking water matrices. A representative selection of sediment sampling photographs is provided in **Appendix B**. Sample locations were recorded using a handheld GPS. No deviations were made during sediment sample collection.

## **2.4 QUALITY ASSURANCE AND QUALITY CONTROL SAMPLE COLLECTION**

### **Fish Tissue**

Field duplicate samples were collected at a minimum frequency of 1 duplicate per 10 primary right-side filet composite samples (10%) and prepared from the left-side filets of the target fish specimens. The left-side filets were removed from each specimen and submitted as a skin-off filet tissue composite sample. The left-side skin-off filets were chosen at random from fish samples with adequate sample mass and were sent as field duplicate samples to Eurofins TA Sacramento for PFAS analysis via Method 537 as modified.

At both laboratories, equipment RBs were collected at a rate of 10% with one RB collected on sample processing equipment for every 10 samples. On every day that fish tissue samples were prepared and preserved by freezing, a field reagent blank (FRB) sample was collected by pouring laboratory-supplied PFAS-free water into laboratory-supplied sample containers. All primary and quality assurance (QA) and QC samples were analyzed for PFAS using Method 537 as modified. PFAS were not detected in any FRB or RB QA/QC samples at either laboratory that analyzed the fish tissue samples.

### **Surface Water**

Because single-use, disposable tubing was used to collect surface water samples, no equipment rinsate samples were collected. On every day that surface water samples were collected, prepared, and preserved for PFAS analysis, an FRB sample was collected by pouring laboratory-supplied PFAS-free water into laboratory-supplied sample containers. Field duplicate samples, at a 10% duplicate to primary sample ratio, and an MS/MSD were also collected. All QA/QC samples were shipped to Eurofins TA Sacramento for PFAS analysis by Method 537 as modified; to Eurofins TA Denver for DOC, alkalinity, and hardness analysis by Method 9060A, SM2320B, and SM20340C; and ENCO for chlorophyll-a analysis by SM10200H. PFAS were not detected in any FRB QA/QC samples.

## **Sediment**

Equipment RBs were collected at a minimum of 10% with one RB collected on a decontaminated petite Ponar dredge for every 10 primary media samples. On every day that sediment samples were collected, prepared, and preserved for PFAS analysis, a field FRB sample was also collected by pouring laboratory-supplied PFAS-free water into laboratory-provided sample containers. All primary and QA/QC samples were analyzed for PFAS using Method 537 as modified.

Quality control samples collected included an MS/MSD, field duplicate, and equipment RBs of the petite Ponar dredge. As described above, one sediment sample was collected at each of the 14 lakes. Field duplicate samples, at a 10% duplicate to primary sample ratio, were shipped to Eurofins TA Sacramento for PFAS analysis. PFAS were not detected in any FRB or RB QA/QC samples except for one instance. Perfluorooctanesulfonic acid (PFOS) (2.3 parts per trillion) was detected in the RB for Big Island Pond. The RB was collected after decontaminating the Ponar dredge and prior to collecting the first sediment sample. The Ponar was decontaminated between each sampling location using the same methodology. The only detection of PFOS in sediment was in the sediment sample at Robinson Pond and that data has been qualified accordingly.

### **2.4.1 Resampling**

A secondary set of fish tissue, surface water, and sediment samples was collected from two lakes. An additional five largemouth bass and yellow perch specimens were collected as a secondary composite sample set from Cobbetts Pond and Captains Pond to support a qualitative comparison of any differences in PFAS concentrations. Secondary samples for fish tissue, surface water, and sediment were collected at Captain Pond on the same date as the primary sample and on separate dates at Cobbetts Pond and were processed as described previously and sent to Eurofins TA Sacramento and, subsequently, to SGS for PFAS analysis. Cobbetts Pond was selected as a resample location with NHDES after primary samples had been collected. Resampling proceeded as directed by NHDES.

### **3. SUMMARY OF ANALYTICAL RESULTS**

Fish tissue analytical results are presented in **Table 4**, surface water and sediment analytical results are presented in **Table 5**, and surface water quality parameters are presented in **Table 6**. Laboratory analytical data packages are provided in **Appendix A**.

#### **3.1 FISH TISSUE**

For some tissue samples and compounds, Eurofins was unable to reach the target RDL specified in the project *SAP*. In some instances, Eurofins reported that sample matrix variability resulted in necessary laboratory dilutions and subsequently higher reporting limits. However, isotope dilution was utilized and is the preferred method as it can eliminate adverse effects caused by difficult matrices resulting in some QC failures. Eurofins first ran samples undiluted but was forced to dilute samples when the extraction column became plugged, or the instrument was saturated resulting in QC failures that would have caused rejection of data. In all cases, Eurofins reported the best results, and all data were accepted with applicable qualifications added. In no cases were data rejected.

To achieve lower reporting limits, the remaining unanalyzed fish tissue samples were sent to SGS laboratory in June 2021. Reporting limits were achieved in all samples, and the results from both laboratories are shown in **Table 4**. Because Eurofins experienced matrix interference and was unable to meet target RDLs in nearly all samples, only the SGS dataset for fish tissue is used for discussion within this report. Relative percent difference calculations are provided in **Appendix A**.

As presented in Table 4, seven perfluoroalkyl carboxylates (PFCA), two perfluoroalkyl sulfonates (PFSA), one fluorotelomer sulfonate (FTS), and perfluorooctane sulfonamide (PFOSA) were detected in fish tissue samples. PFCA detected in fish tissue samples include perfluorooctanoate (PFOA) (two lakes), perfluorononanoate (PFNA) (six lakes), and fish tissue from all lakes was found to have detectable concentrations of perfluorodecanoate (PFDA), perfluoroundecanoate (PFUNA), perfluorododecanoate (PFDoA), perfluorotridecanoate (PFTriA), and perfluorotetradecanoate (PFTeA). PFSA detected in fish tissue include PFOS (all

lakes) and perfluorodecane sulfonate (PFDS) (four lakes). The FTS 6:2 fluorotelomer sulfonate (6:2 FTS) was detected in fish tissue from two lakes and PFOSA was detected in fish tissue from three lakes.

Although PFDA, PFUNA, PFDoA, PFTriA, PFTeA, PFOS, and PFOSA were detected in fish tissue from each lake, PFOS was generally the dominant compound detected in all samples with mean and median concentrations of 5.701 µg/kg and 4.270 µg/kg, respectively, representing an average of 51% and 52% of the total PFAS detected across all samples. Further, PFOS makes up more than 40% of the PFAS detected in each sample except those from the reference lakes. The highest concentrations of PFOS were detected in large-mouth bass samples from Horseshoe Pond (18.3 µg/kg or 83% of total PFAS) and yellow perch samples from Robinson Pond (17.7 µg/kg or 86% of total PFAS). Conversely, the minimum concentrations of PFOS were detected in samples from reference lakes including the smallmouth bass from Highland Lake (0.752 µg/kg or 14% of total PFAS) and yellow perch from Armington Lake (0.953 µg/kg or 25% of total PFAS). PFUNA and 6:2 FTS were the only other PFAS with concentrations that averaged in the parts per trillion range while the other compounds detected were fractions of parts per trillion. A summary of the maximum PFAS detected and reported by SGS in fish tissue from the lakes evaluated is provided in the table below.

Lake Name and Location	Carboxylic Acids Max Fish Tissue Concentration							Sulfonic Acids, Fluorotelomer Sulfonic Acids, and Perfluorooctane Sulfonamides Max Fish Tissue Concentration				Total PFAS	% PFOS vs Total PFAS
	PFOA	PFNA	PFDA	PFUNA	PFDoA	PFTrDA	PFTeDA	PFOS	PFDS	6:2 FTS	PFOSA		
<b>Fish Tissue (µg/kg), wet weight</b>													
Arlington Mill Reservoir, Salem	--	<b>0.104 J</b>	<b>0.808</b>	<b>1.61</b>	<b>1.67</b>	<b>1.33</b>	<b>1.05</b>	<b>5.76</b>	--	--	--	12.33	47%
Armington Lake, Piermont	--	--	<b>0.246 J</b>	<b>1.01</b>	<b>0.650</b>	<b>1.17</b>	<b>0.427</b>	<b>1.04</b>	--	--	--	4.54	23%
Baboosic Lake, Merrimack	<b>0.142 J</b>	--	<b>0.629</b>	<b>1.36</b>	<b>0.928</b>	<b>1.050</b>	<b>0.552</b>	<b>5.25</b>	--	--	--	9.91	53%
Beaver Lake, Derry	--	<b>0.097 J</b>	<b>0.479</b>	<b>1.06</b>	<b>0.970</b>	<b>1.06</b>	<b>0.649</b>	<b>7.75</b>	--	--	--	12.07	64%
Big Island Pond, Derry	--	--	<b>0.619</b>	<b>1.23</b>	<b>1.21</b>	<b>1.11</b>	<b>0.701</b>	<b>4.48</b>	--	--	--	9.35	48%
Canobie Lake, Salem	--	<b>0.119 J</b>	<b>1.74</b>	<b>2.37</b>	<b>1.29</b>	<b>1.47</b>	<b>0.666</b>	<b>12.4</b>	<b>0.124 J</b>	--	--	20.18	61%
Captain Pond, Salem	--	<b>0.116 J</b>	<b>0.728</b>	<b>1.44</b>	<b>1.01</b>	<b>0.913</b>	<b>0.530</b>	<b>4.35</b>	--	--	--	9.09	48%
Cobbetts Pond, Windham	--	<b>0.187 J</b>	<b>2.90</b>	<b>3.38</b>	<b>2.21</b>	<b>1.43</b>	<b>0.782</b>	<b>15.2</b>	<b>0.184 J</b>	--	--	26.27	58%
Great Pond, Kingston	--	--	<b>0.574</b>	<b>1.26</b>	<b>0.922</b>	<b>0.997</b>	<b>0.523</b>	<b>5.29</b>	--	--	<b>0.109 J</b>	9.68	55%
Highland Lake, Andover	--	--	<b>0.241 J</b>	<b>1.02</b>	<b>1.08</b>	<b>1.82</b>	<b>0.710</b>	<b>1.22</b>	--	--	<b>0.102 J</b>	6.19	20%
Horseshoe Pond, Merrimack	--	--	<b>0.653</b>	<b>1.11</b>	<b>0.900</b>	<b>0.803</b>	<b>0.390</b>	<b>18.3</b>	<b>0.241 J</b>	--	--	22.40	82%
Lake Massabesic, Auburn	--	--	<b>0.783</b>	<b>1.56</b>	<b>1.11</b>	<b>1.91</b>	<b>0.765</b>	<b>6.23</b>	<b>0.327 J</b>	--	--	12.69	49%
Naticook Lake, Merrimack	<b>0.126 J</b>	<b>0.206 J</b>	<b>0.820</b>	<b>1.16</b>	<b>0.366 J</b>	<b>0.276 J</b>	<b>0.169J</b>	<b>6.59</b>	--	<b>3.3</b>	--	13.01	51%
Robinson Pond, Hudson	--	--	<b>0.313 J</b>	<b>0.613</b>	<b>0.499</b>	<b>0.531</b>	<b>0.239J</b>	<b>17.7</b>	--	<b>3.29</b>	<b>0.123 J</b>	23.31	76%
<i>Mean</i>	0.134	0.138	0.824	1.442	1.058	1.134	0.582	7.969	0.219	3.295	0.111	13.64	0.524
<i>Median</i>	0.134	0.118	0.641	1.245	0.990	1.085	0.601	5.995	0.213	3.295	0.109	12.20	0.518
<i>Minimum</i>	0.126	0.097	0.241	0.613	0.366	0.276	0.169	1.040	0.124	3.290	0.102	4.54	0.197
<i>Maximum</i>	0.142	0.206	2.900	3.380	2.210	1.910	1.050	18.30	0.327	3.300	0.123	26.27	0.817

**Notes**

-- PFAS compound not detected

### **3.2 SURFACE WATER**

While no PFAS were detected above laboratory reporting limits in surface water samples collected from the reference lakes, PFAS were detected in surface water samples from the target lakes (**Table 5**). Predominantly more PFCA were detected than PFSA, precursors, or replacement compounds. However, in some samples, the dominant contaminant is the precursor compound 6:2 FTS (1,100 nanograms per liter [ng/L] in Robinson Pond) or replacement compound HFPO-DA (280-850 ng/L in Beaver Lake). Of note, 6:2 FTS was also detected in the laboratory method blank (16.1 ng/L) associated with the Robinson Pond sample and is a known potential laboratory contaminant. However, the detected concentration of 6:2 FTS was greater than ten times that detected in the method blank and therefore cannot be ruled out as only laboratory contamination. Horseshoe Pond and Naticook Lake had the highest concentrations of PFOA with average concentrations of 24 and 16 ng/L, respectively, while the highest concentration of PFOS was detected in Robinson Pond (12 ng/L). Other PFAS detected were at concentrations in the single-digit parts per trillion levels.

Surface water quality data and field parameters are reported in **Table 6** and summarized below referencing the minimum, maximum, and median values for each parameter and the associated lake or lakes for the minimum and maximum values. The low DO reading at Cobbert Pond is unlike other DO readings at this lake, which otherwise ranged from 5.17 milligrams per liter (mg/L) to 9.28 mg/L. No calibration abnormalities were encountered and no other factors that could result in a biased low reading were observed during sample collection. Excluding that value, the next minimum DO value would be 1.76 mg/L in the bottom sample at Arlington Mill Reservoir (**Table 6**).

The pH data from this study are higher than the average pH readings to-date from each of the water bodies. The same is true for the minimum and maximum pH values from this study when compared to previous pH data. No calibration abnormalities were encountered and no other factors that could result in biased high readings were found. However, because of the illogical results, the pH data collected as part of this study are not considered valid. A comparison of the pH data to previous data is provided in **Appendix D**.

	Minimum	Maximum	Median
DOC (mg/L)	2.1 (HIL)	5.6 (AMR)	3.7
Chlorophyll-A (mg/m <sup>3</sup> )	1.1 (BIP, CAL, AMR, LMA)	30 (HOP)	2.7
Alkalinity (mg/L)	6.6 (AMR)	51 (COP)	24
Hardness (as CaCO <sub>3</sub> ) (mg/L)	5.8 (AMR)	130 (GTP)	35
Temperature (°C)	11.9 (AMR)	18.8 (BIP)	15.3
pH (standard units)	5.84 (CAP)	8.95 (CAP)	7.55
Dissolved Oxygen (mg/L)	1.33 (COP)	12.51 (CAP)	8.42
Specific Conductivity (µS/cm <sup>2</sup> )	22 (AMR)	570 (HOP)	238

#### Notes

HIL = Highland Lake  
 AMR = Arlington Mill Reservoir  
 BIP = Big Island Pond  
 CAL = Canobie Lake  
 LMA = Lake Massabesic  
 HOP = Horseshoe Pond  
 COP = Cobbetts Pond

GTP = Great Pond  
 CAP = Captain Pond  
 mg/L = milligrams per liter  
 mg/m<sup>3</sup> = milligrams per cubic meter  
 °C = degrees Celsius  
 µS/cm<sup>2</sup> = microsiemens per square centimeter

### 3.3 SEDIMENT

Five lakes had no PFAS detected above laboratory reporting limits in sediment. Of the remaining nine lakes, no more than four PFAS were detected including one PFCA (perfluorobutanoic acid [PFBA]) in six lakes; one PFSA (PFOS) in one lake; and two perfluorooctane sulfonamide ethanols (N-methyl perfluorooctane sulfonamido ethanol [NMeFOSE]) in two lakes and N-ethyl perfluorooctane sulfonamido ethanol [NetFOSE] in nine lakes (**Table 5**). Where detected, NetFOSE was the dominant compound detected. Further, NEtFOSE was the only compound detected in Armington Lake (reference lake) sediment at 25 µg/kg. No PFAS were detected in the second reference lake (Highland Lake). PFOS was detected only in the sediment sample from Robinson Pond. As with the results for surface water analyses, some of the highest sediment concentrations detected are found in Robinson Pond. The PFOS result was qualified with a "J" by the WESTON chemist reviewing the data

because the sample result was less than five times the associated blank level and professional judgment was used since there is a slight potential bias high due to RB contamination.

## **4. CONCLUSIONS**

PFAS were detected in either sediment, surface water, or fish tissues in all 14 lakes evaluated. The two reference lakes did not contain detectable concentrations of PFAS in surface water samples, and only one PFAS was detected in the sediment at one of the two reference lakes (Armington Lake). Although 7 of the 11 PFAS detected in the fish tissue were present in tissue from the reference lakes, the concentrations detected were less than those detected in the target lakes. In surface water, more PFCA were detected than PFSA or other PFAS. Of the four PFAS detected in sediment, NetFOSE was the most common while PFOS was the dominant PFAS detected in fish tissue.

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## **5. REFERENCES**

New Hampshire Department of Environmental Services (NHDES). 2017. *Master Quality Assurance Project Plan of the Hazardous Waste Remediation Bureau. EQA RFA 18008*. November.2017, Rev 1 February 2018.

NHDES. 2019. *Direct Contact Risk-Based Concentrations*. <https://www4.des.state.nh.us/nh-pfas-investigation/wp-content/uploads/PFAS-DCRB-value-112019-002.pdf>. November 20, 2019.

Weston Solutions, Inc. (WESTON). 2020. *Sampling and Analysis Plan, PFAS Background Study. Lake Fish Specimen, Surface Water, and Sediment Collection. Multiple Lakes, Southern New Hampshire*. October 4, 2020.

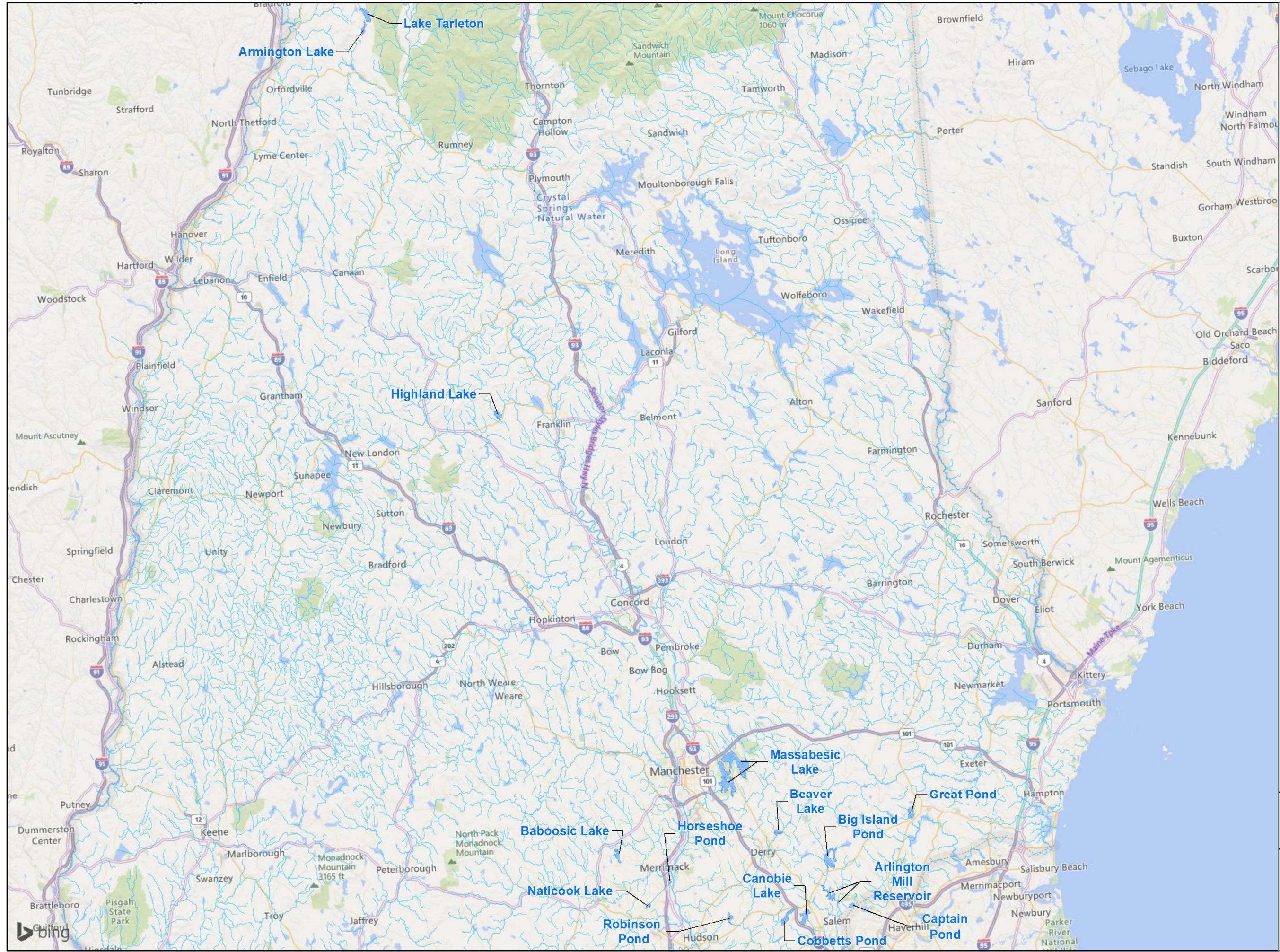
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## **FIGURES**

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## Legend

 Lake/Pond/Reservoir  
 River/Stream



Imagery Source: ESRI Bing  
Mapping Service 2019

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Drawn By:ricksc  
Checked By:kammerl

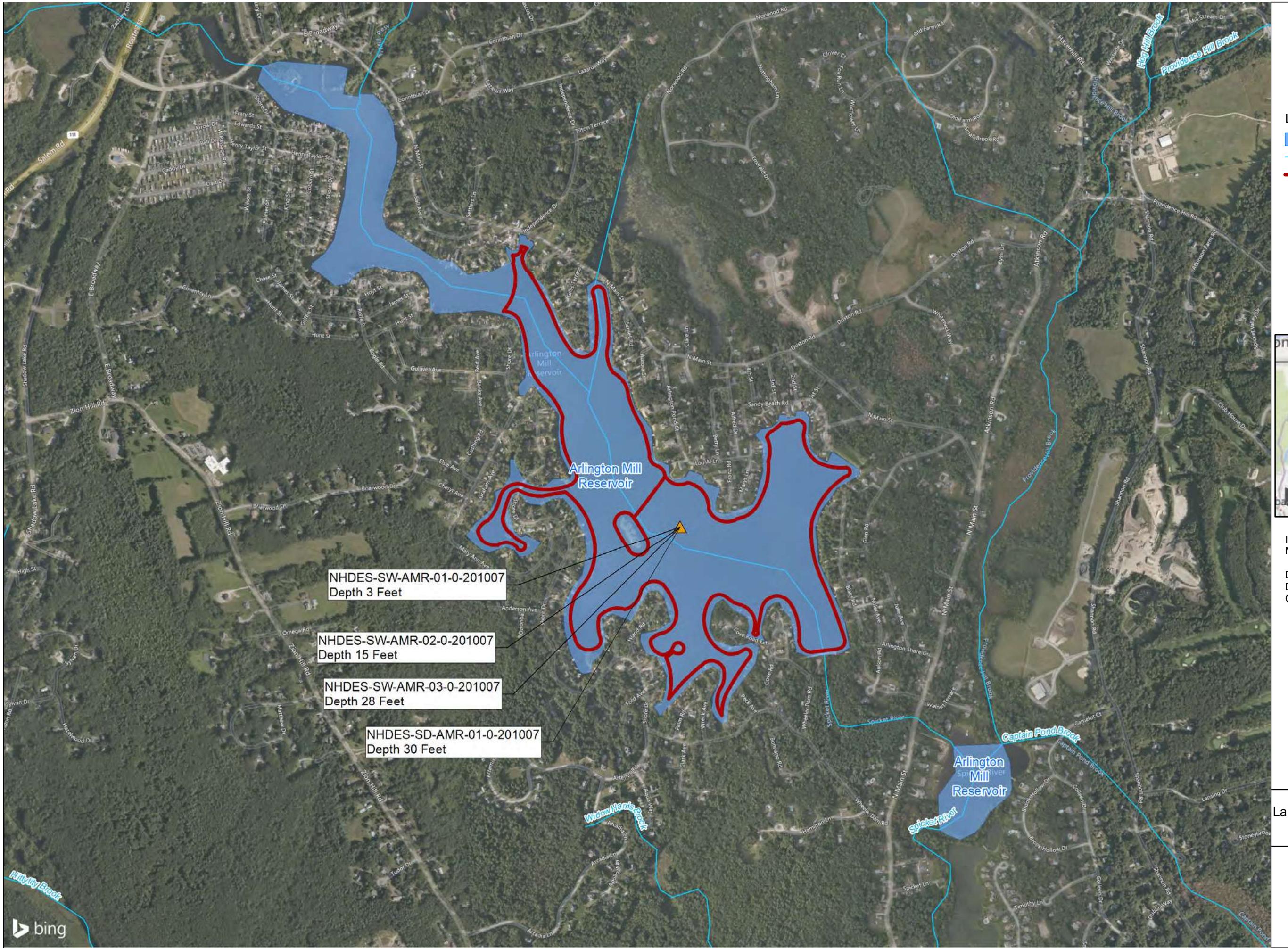


0                  5                  10 Miles

## PFAS Background Study Lake Fish Specimen, Surface Water, and Sediment Multiple Lakes, Southern New Hampshire

Figure 1

## Overview of Lakes in Southern New Hampshire Fish Study



Legend

- Lake/Pond/Reservoir
- River/Stream
- Small Electrofishing Boat Route
- Approximate Surface Water/
- Sediment Sample Location



Imagery Source: ESRI Bing  
Mapping Service 2019

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Drawn By:ricksc  
Checked By:kammerl

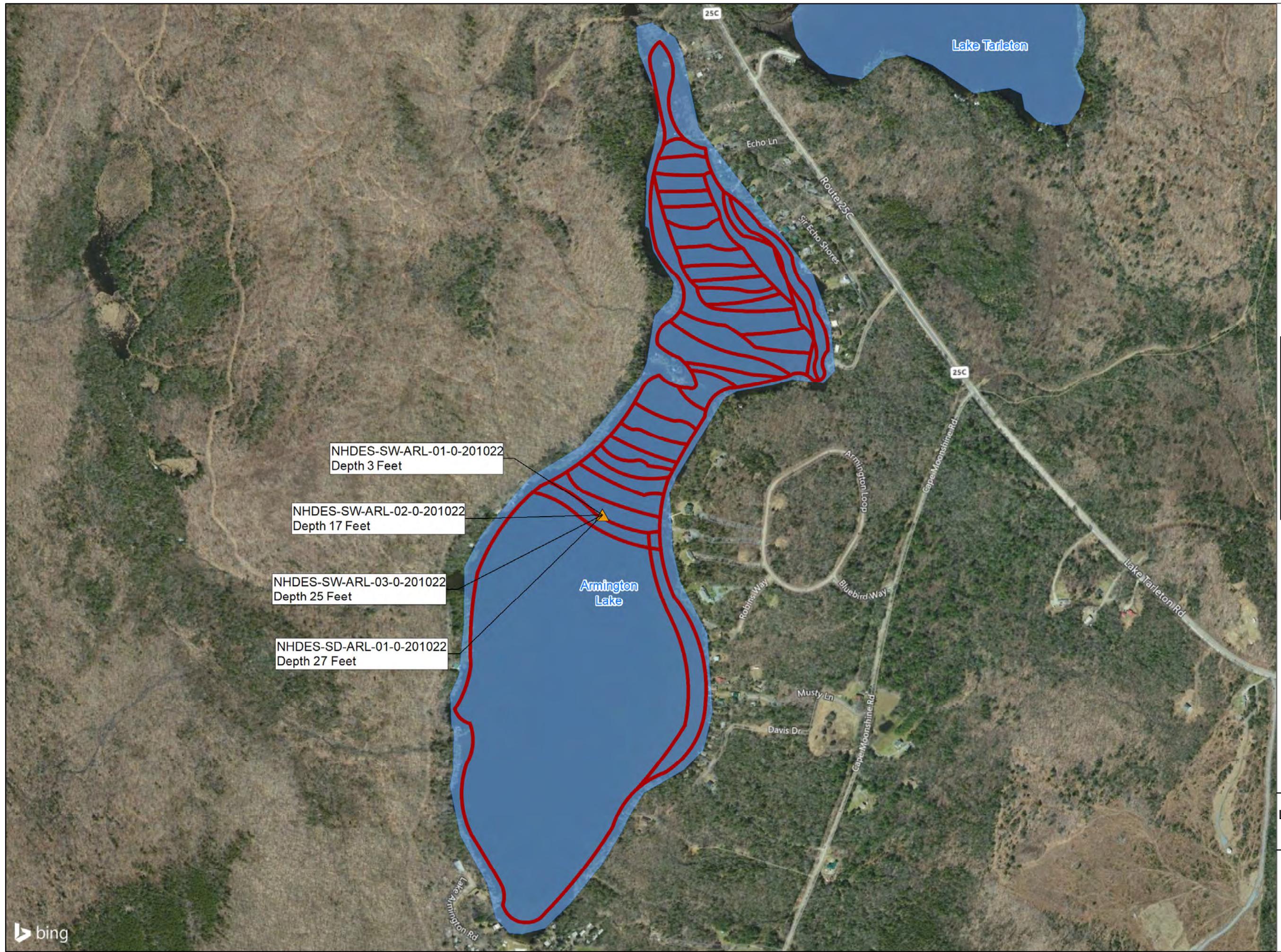


0      0.125      0.25 Miles

## PFAS Background Study Lake Fish Specimen, Surface Water, and Sediment Multiple Lakes, Southern New Hampshire

Figure 2

## Arlington Mill Reservoir Fish Sampling Locations



**Legend**

- Lake/Pond/Reservoir
- River/Stream
- Small Electrofishing Boat Route
- Large Electrofishing Boat Route
- ▲ Approximate Surface Water/Sediment Sample Location



Imagery Source: ESRI Bing  
Mapping Service 2019

Drawn Date: 4/28/2021  
Drawn By: ricks  
Checked By: kammerl

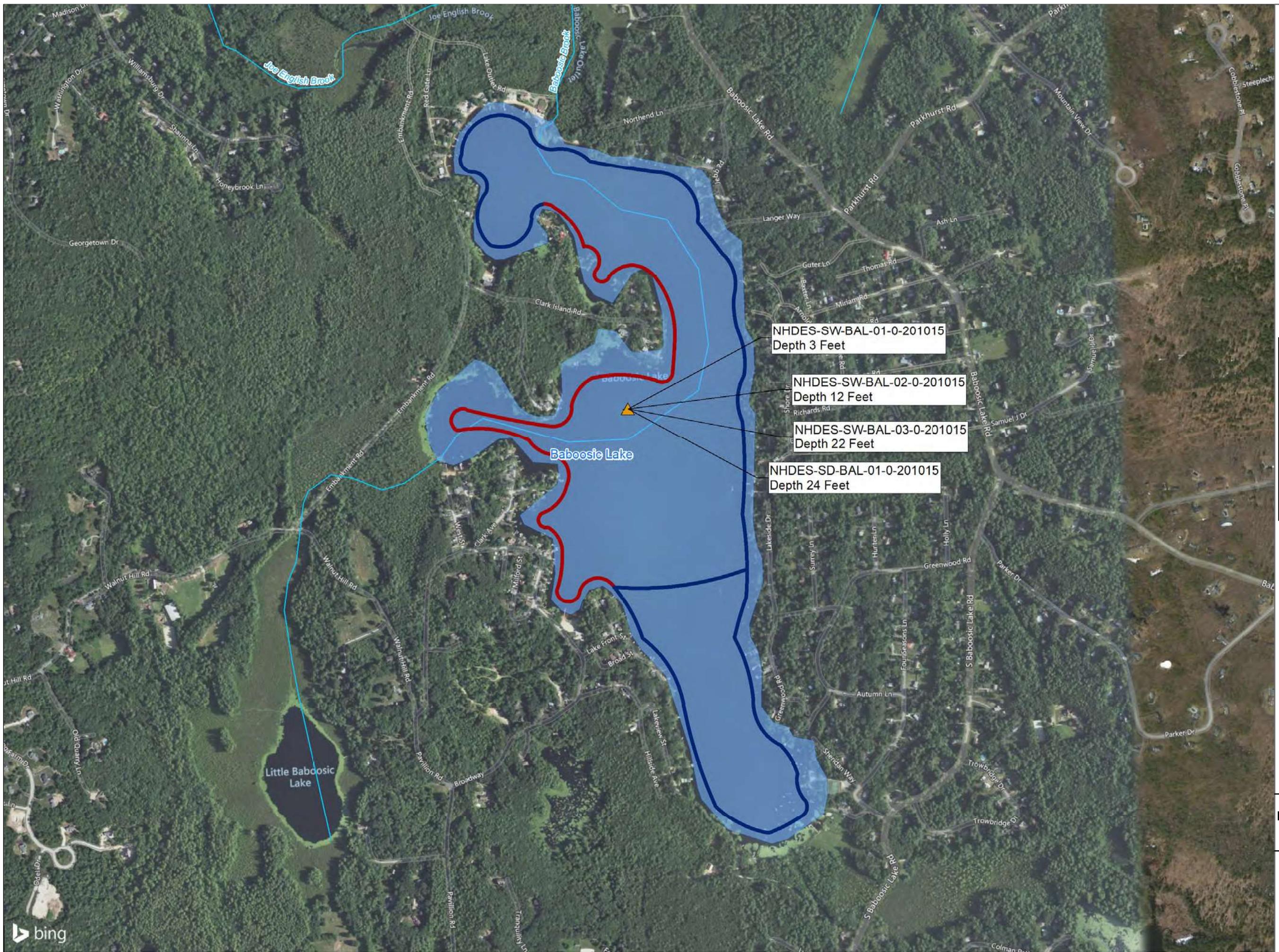


0 0.1 0.2 Miles

**PFAS Background Study**  
Lake Fish Specimen, Surface Water,  
and Sediment Multiple Lakes,  
Southern New Hampshire

Figure 4

Baboosic Lake  
Fish Sampling Locations



**Legend**

- █ Lake/Pond/Reservoir
- █ River/Stream
- Small Electrofishing Boat Route
- Large Electrofishing Boat Route
- Approximate Surface Water/
- △ Sediment Sample Location



Imagery Source: ESRI Bing  
Mapping Service 2019

Drawn Date: 4/28/2021  
Drawn By: ricks  
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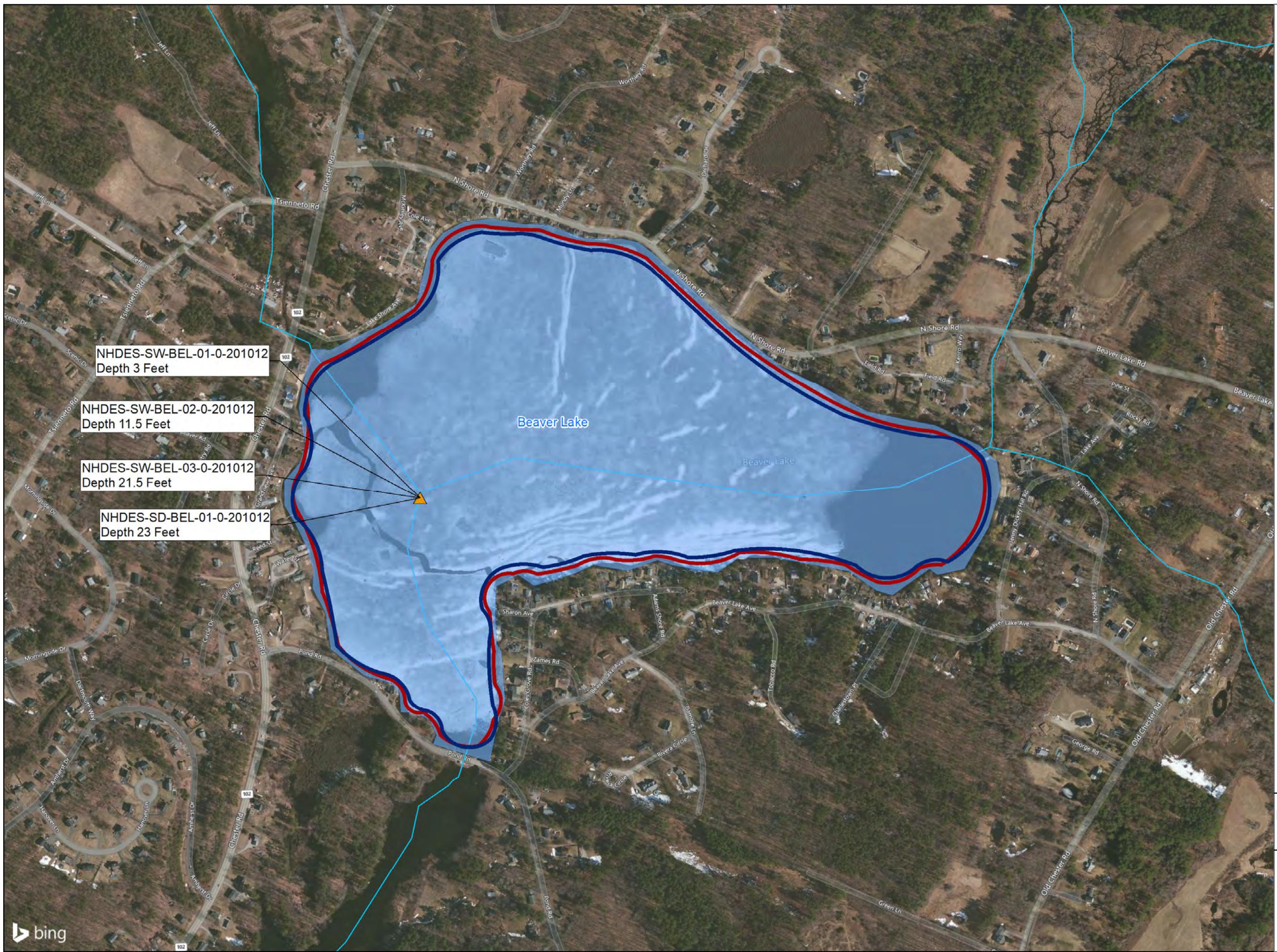


0 0.05 0.1  
Miles

PFAS Background Study  
Lake Fish Specimen, Surface Water,  
and Sediment Multiple Lakes,  
Southern New Hampshire

Figure 5

Beaver Lake  
Fish Sampling Locations



**Legend**

- Lake/Pond/Reservoir
- River/Stream
- Small Electrofishing Boat Route
- Large Electrofishing Boat Route
- ▲ Approximate Surface Water/Sediment Sample Location



Imagery Source: ESRI Bing  
Mapping Service 2019

Drawn Date: 4/28/2021  
Drawn By: ricks  
Checked By: kammerl

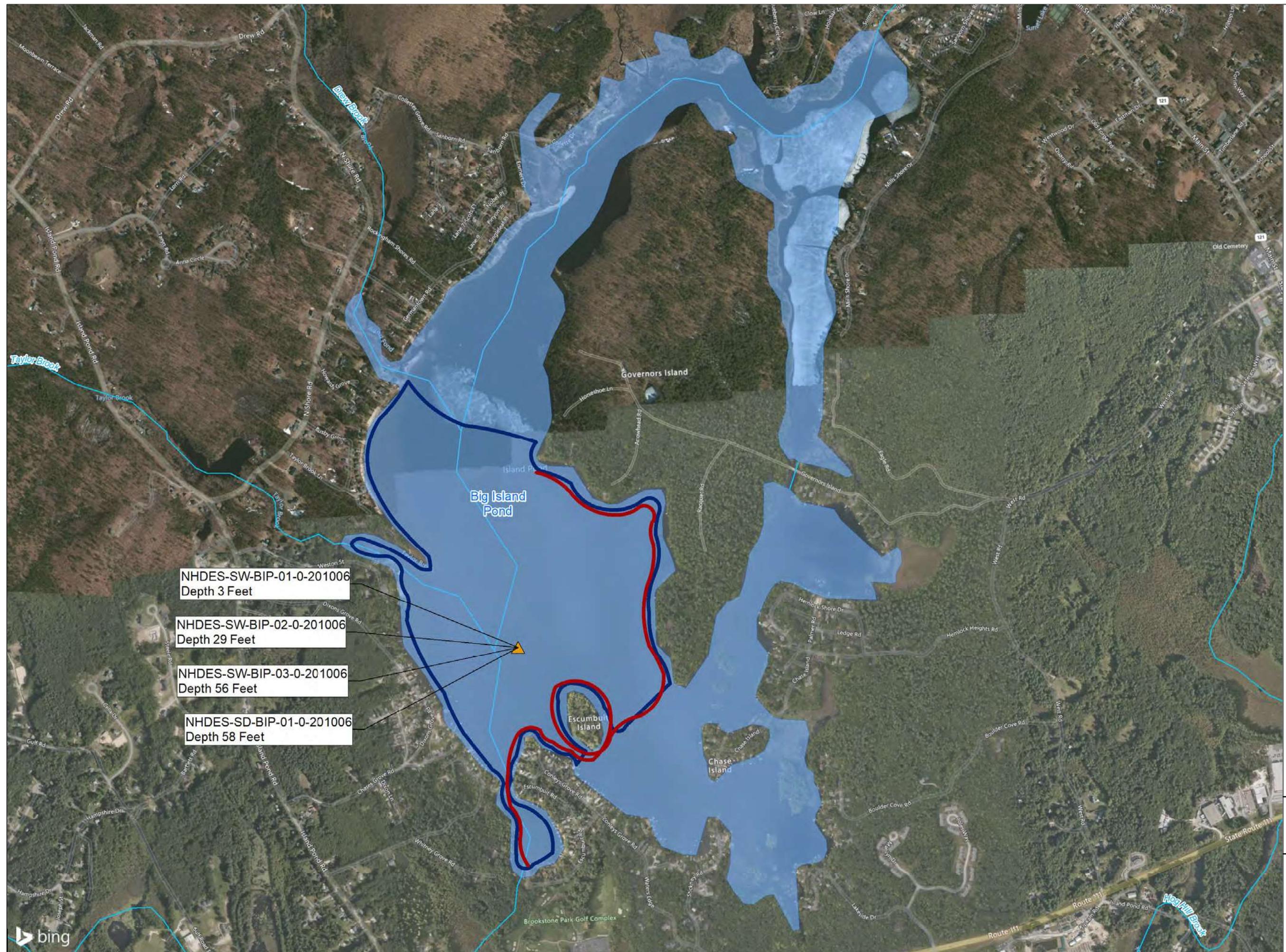


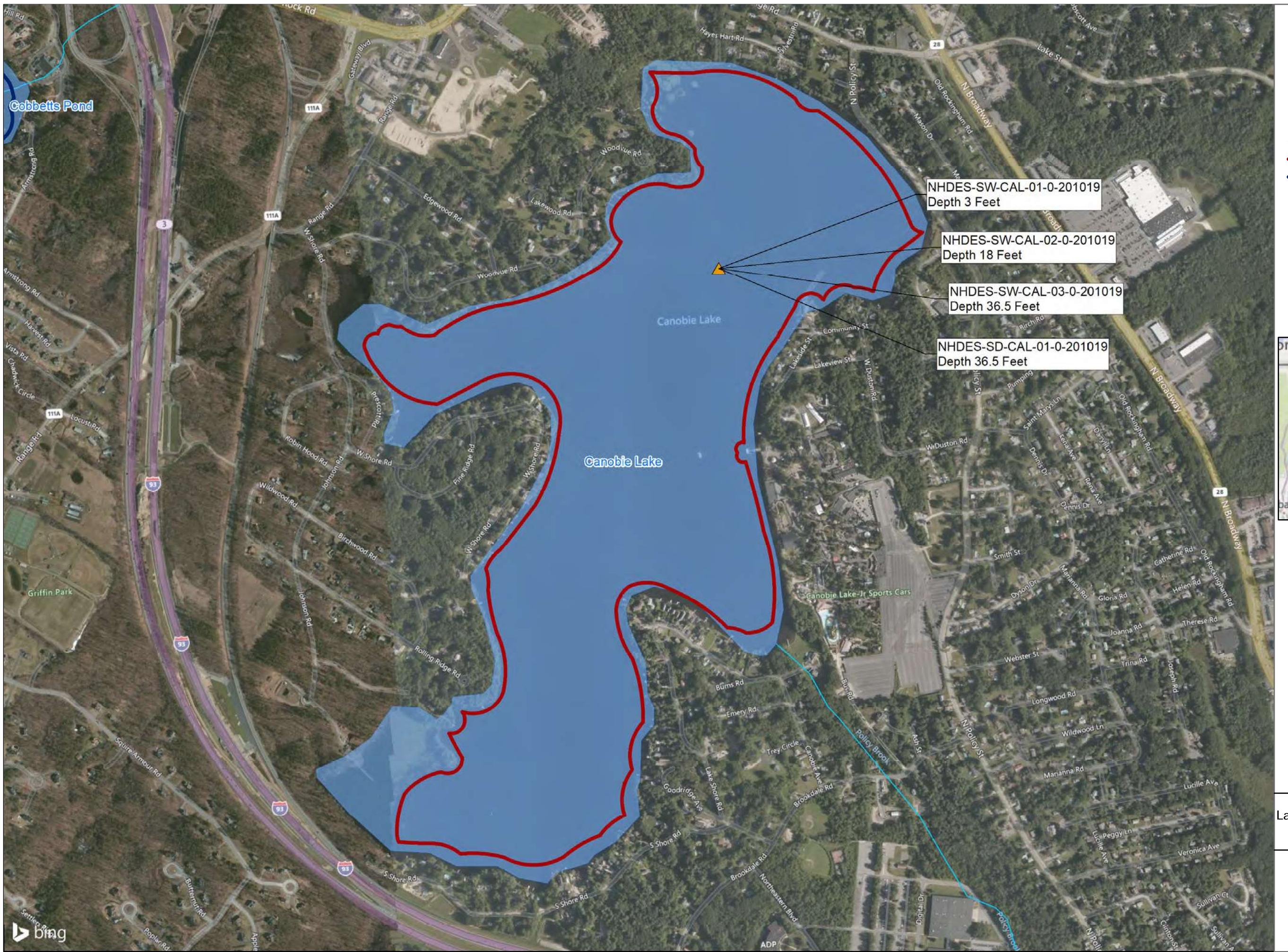
0 0.125 0.25 Miles

**PFAS Background Study**  
Lake Fish Specimen, Surface Water,  
and Sediment Multiple Lakes,  
Southern New Hampshire

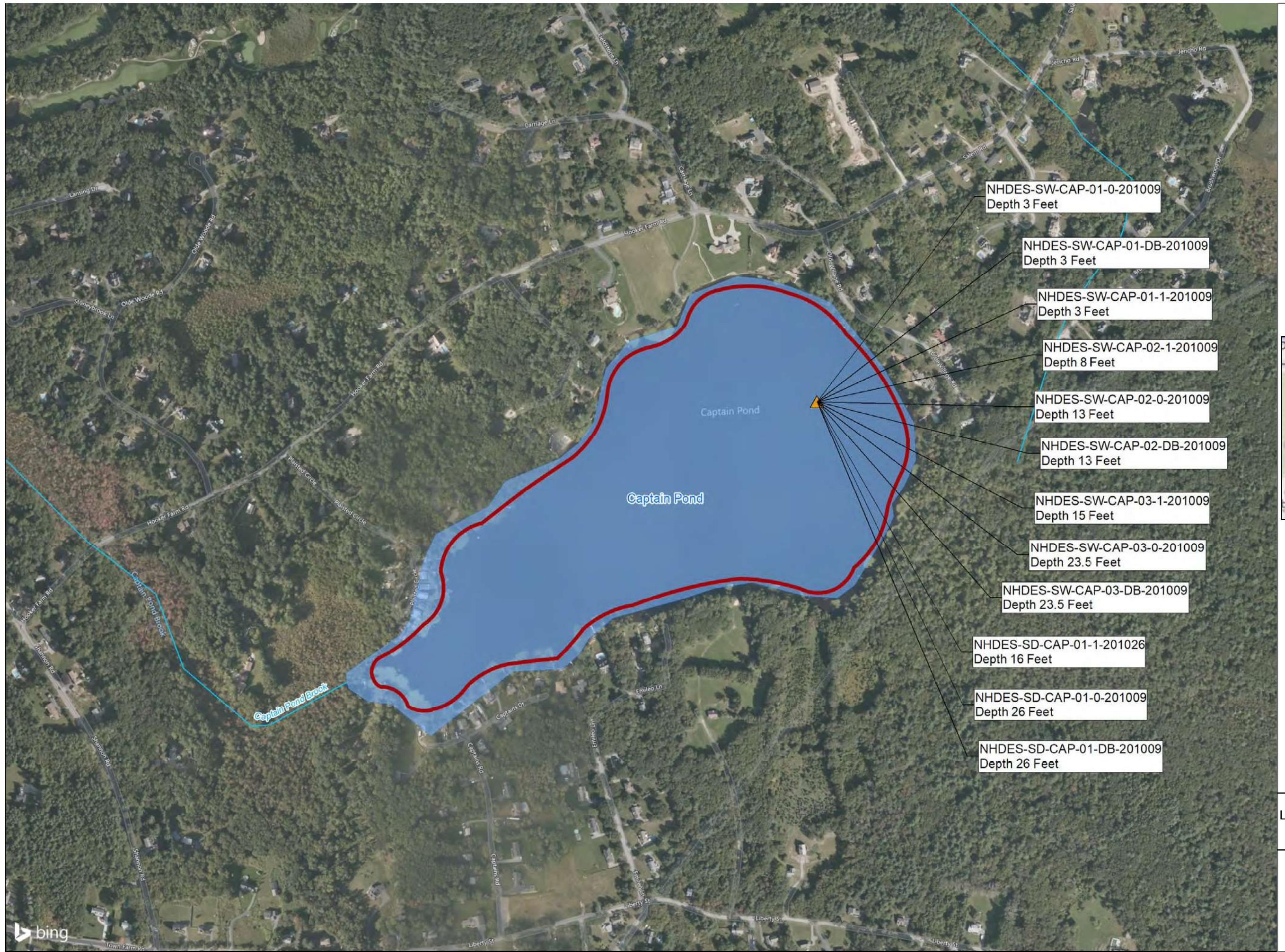
Figure 6

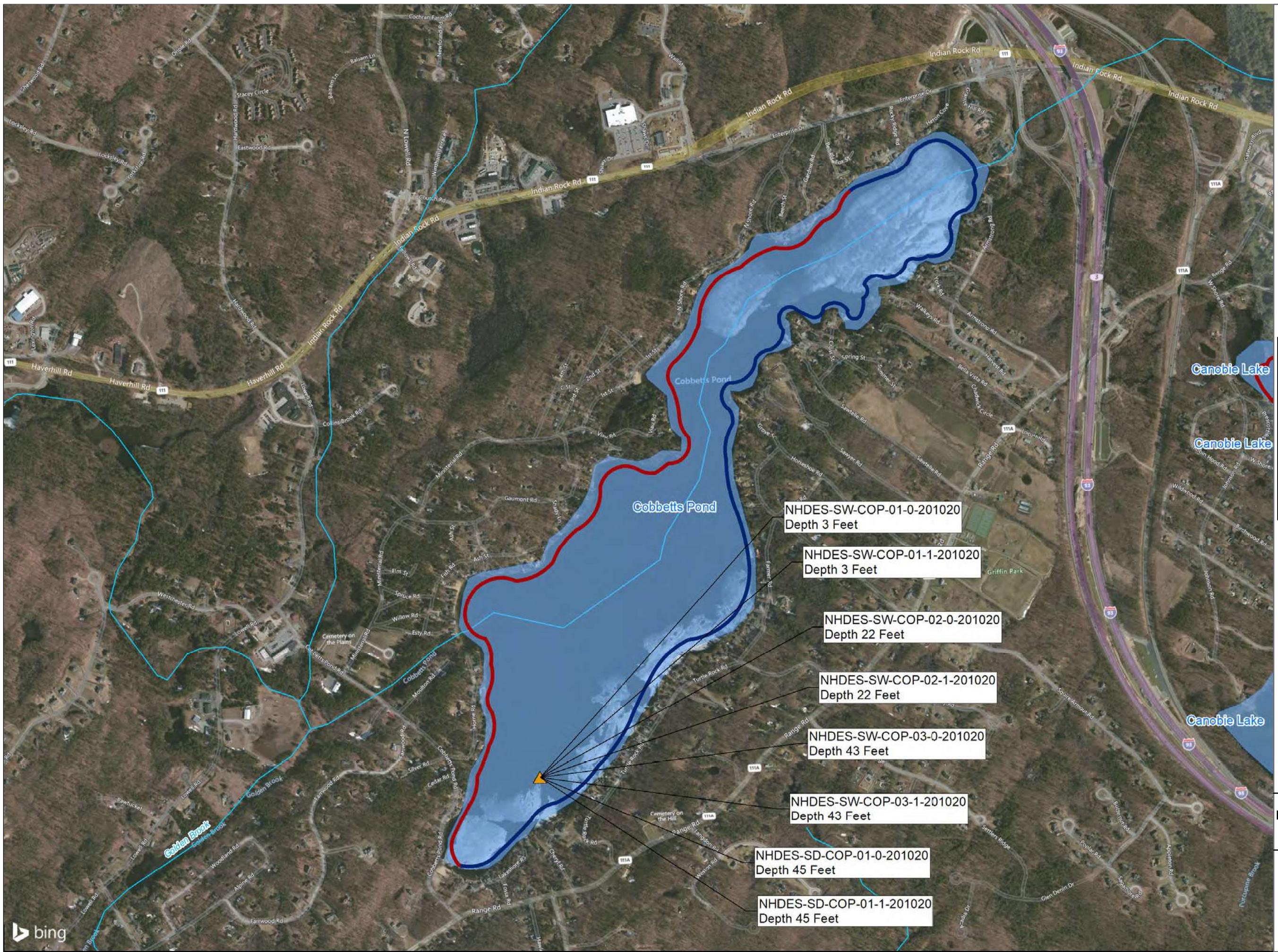
Big Island Pond  
Fish Sampling Locations





0 0.1 0.2 Miles





Imagery Source: ESRI Bing  
Mapping Service 2019

Drawn Date: 4/28/2021  
Drawn By: ricks  
Checked By: kammerl

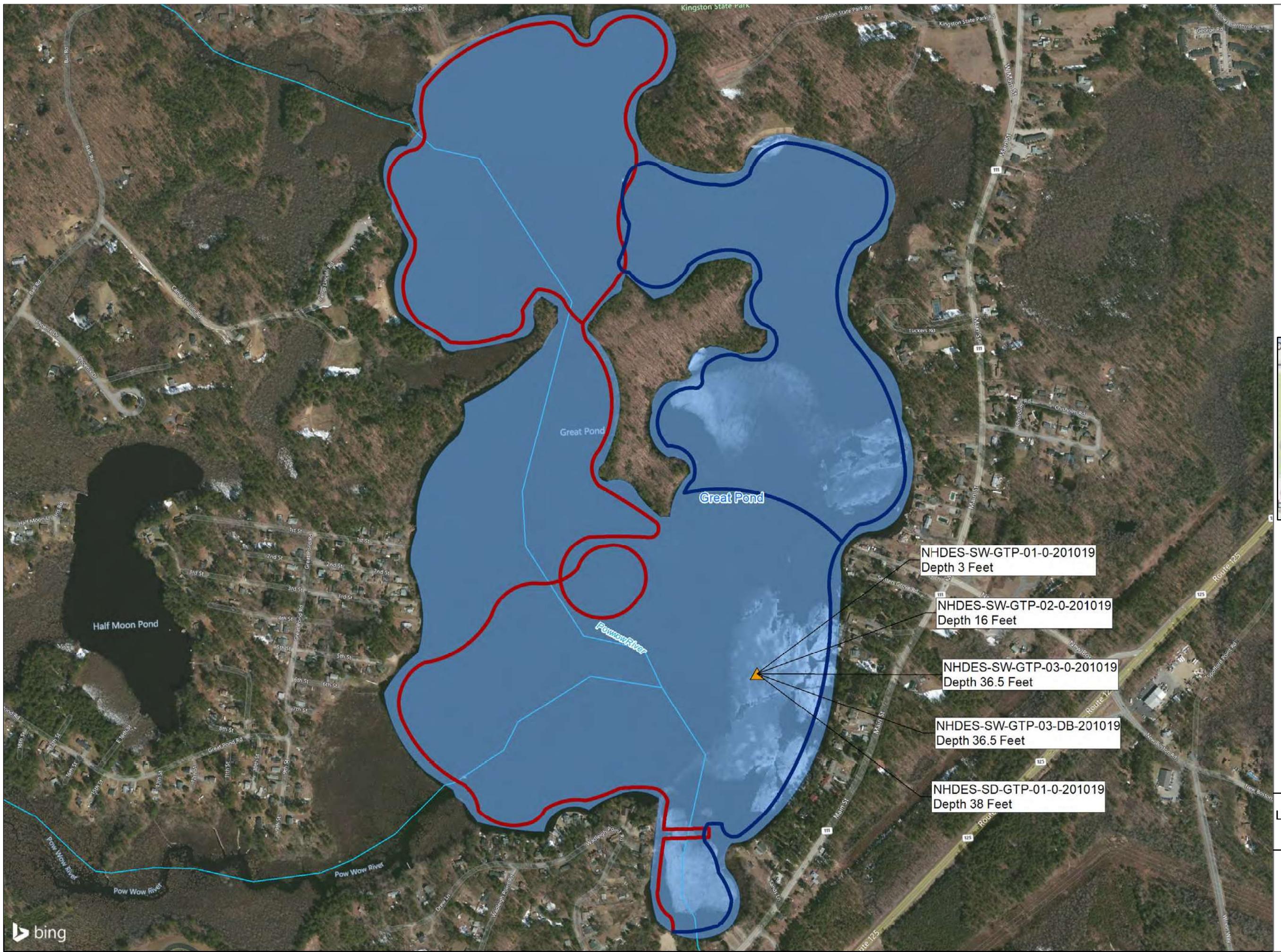


0 0.125 0.25 Miles

**PFAS Background Study**  
Lake Fish Specimen, Surface Water,  
and Sediment Multiple Lakes,  
Southern New Hampshire

Figure 9

Cobbetts Pond  
Fish Sampling Locations



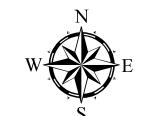
**Legend**

- Lake/Pond/Reservoir
- River/Stream
- Small Electrofishing Boat Route
- Large Electrofishing Boat Route
- Approximate Surface Water/
- Sediment Sample Location



Imagery Source: ESRI Bing  
Mapping Service 2019

Drawn Date: 4/28/2021  
Drawn By: ricks  
Checked By: kammerl

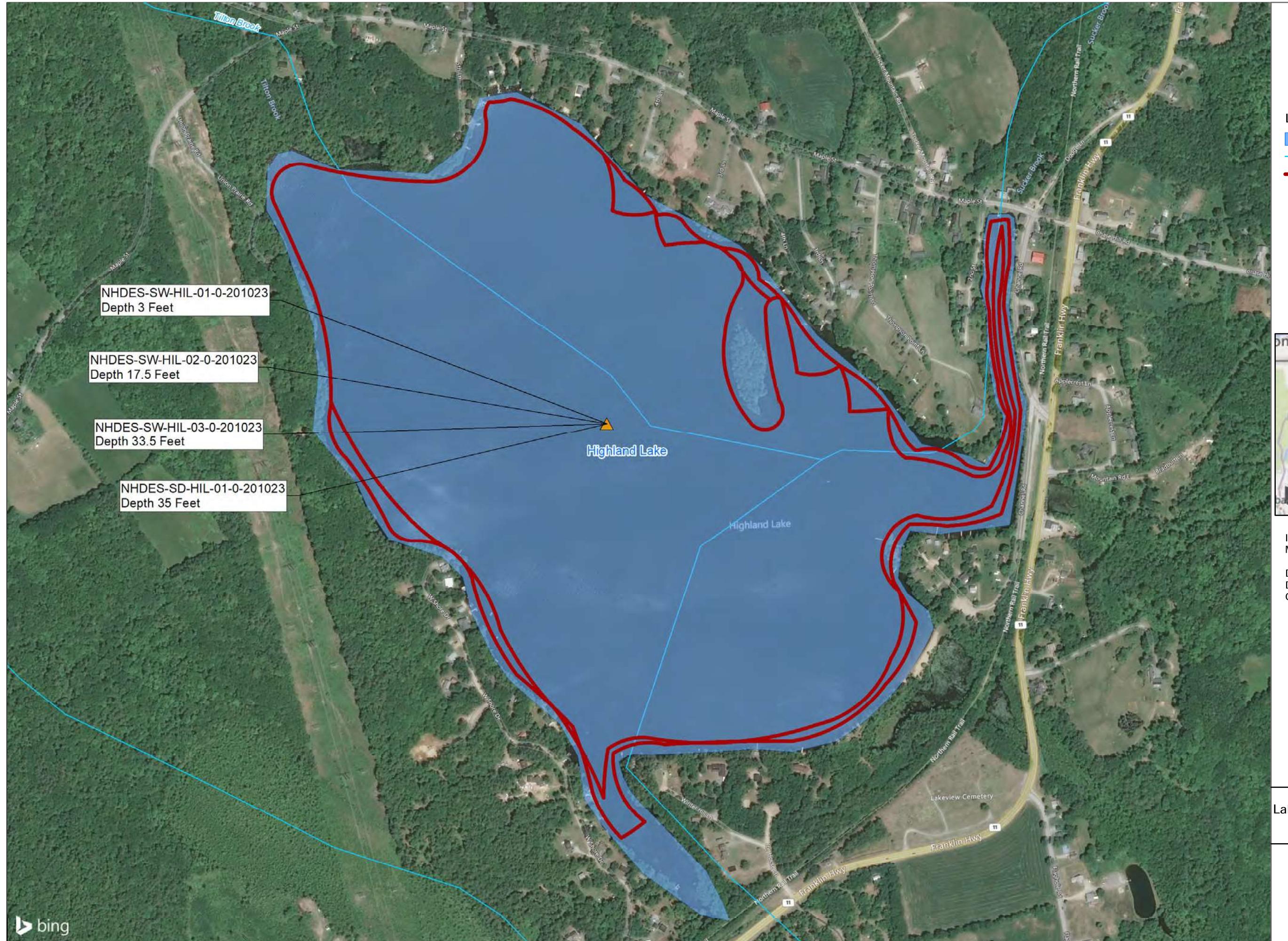


0 0.075 0.15 Miles

PFAS Background Study  
Lake Fish Specimen, Surface Water,  
and Sediment Multiple Lakes,  
Southern New Hampshire

Figure 10

Great Pond  
Fish Sampling Locations



**WESTON**  
SOLUTIONS

## Legend

- Lake/Pond/Reservoir
  - River/Stream
  - Small Electrofishing Boat Route
  - ▲ Approximate Surface Water/  
Sediment Sample Location



Imagery Source: ESRI Bing  
Mapping Service 2019

Drawn Date:4/28/2021  
Drawn By:ricksc  
Checked By: kammerl



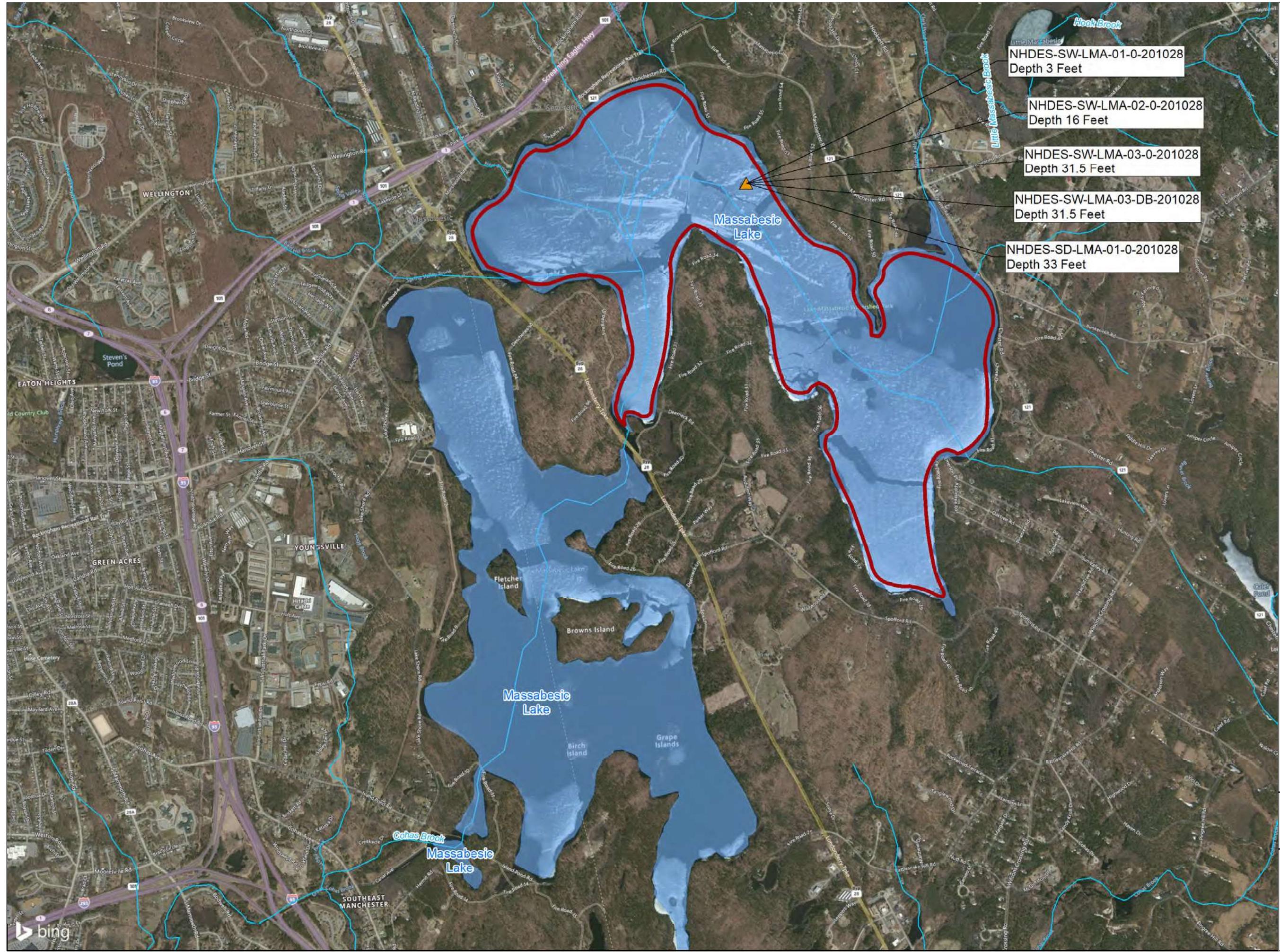
0      0.05      0.1 Miles

# PFAS Background Study Lake Fish Specimen, Surface Water, and Sediment Multiple Lakes, Southern New Hampshire

Figure 11

## Highland Lake Fish Sampling Locations





## Legend

- Lake/Pond/Reservoir
  - River/Stream
  - Small Electrofishing Boat Route
  - Approximate Surface Water/Sediment Sample Location



Imagery Source: ESRI Bing  
Mapping Service 2019

Drawn Date:4/28/2021  
Drawn By:ricksc  
Checked By: kammerl

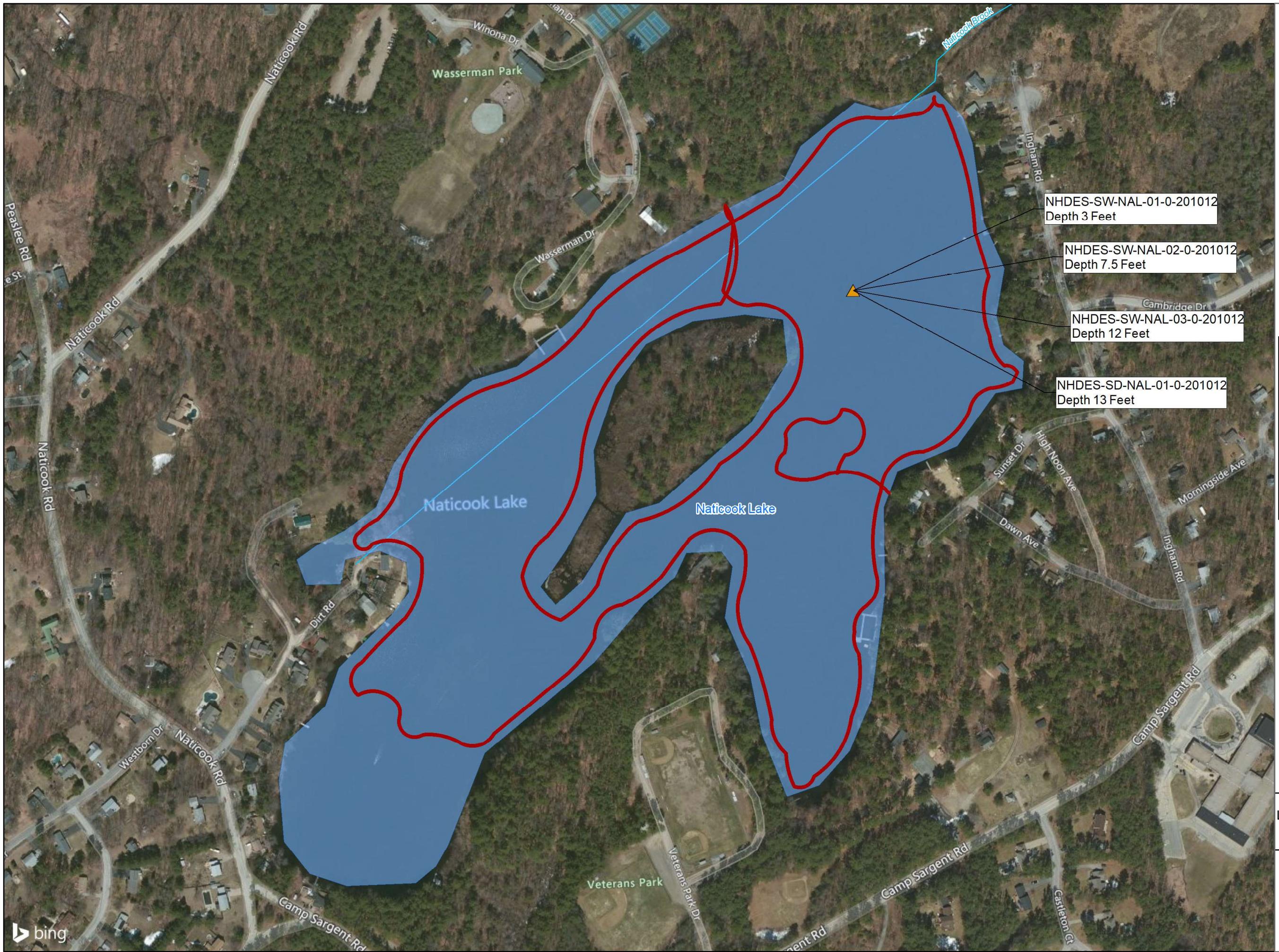


0            0.3            0.6

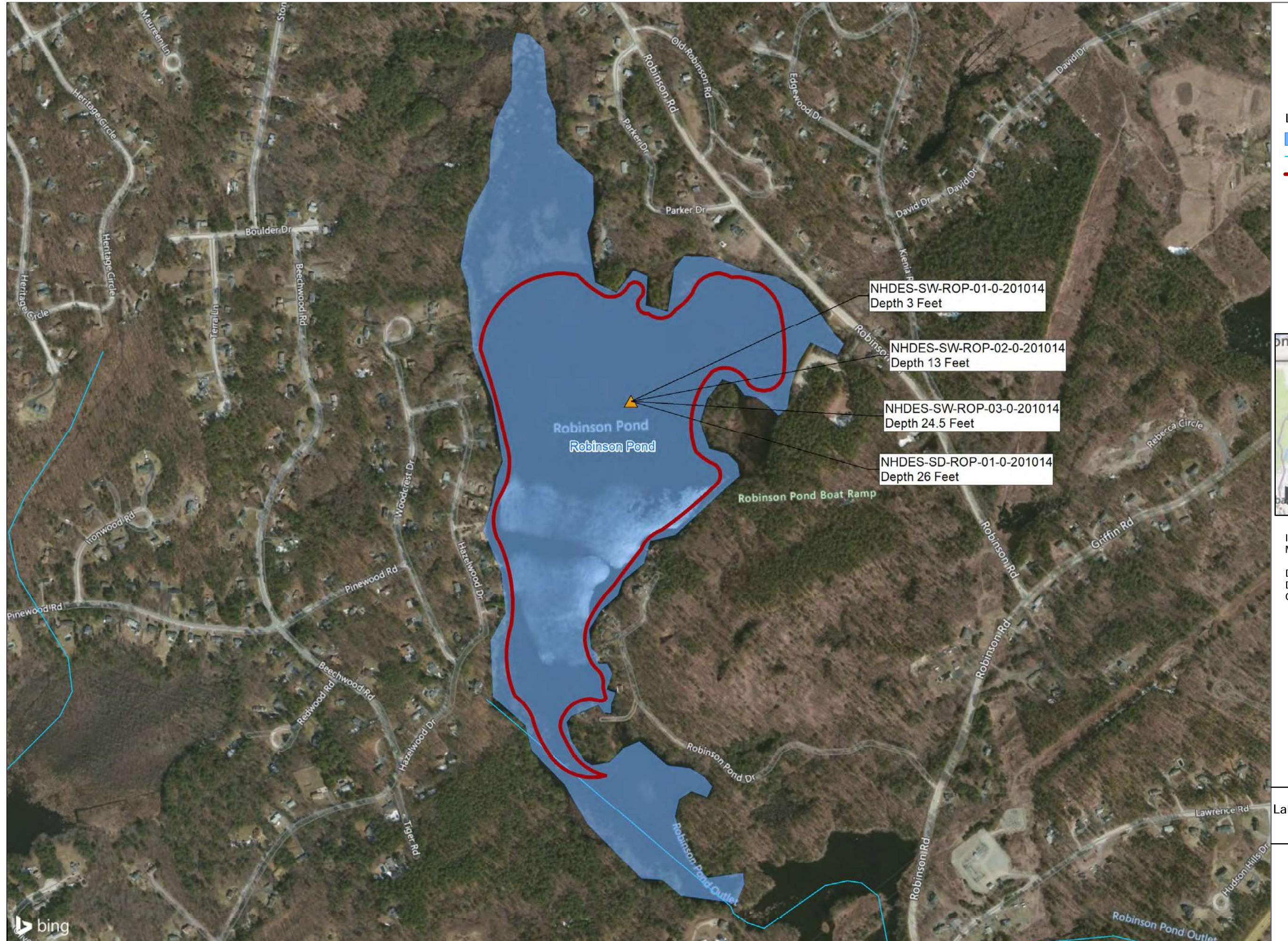
## PFAS Background Study Lake Fish Specimen, Surface Water, and Sediment Multiple Lakes, Southern New Hampshire

Figure 13

## Massabesic Lake Fish Sampling Locations



0 0.0425 0.085 Miles



## Legend

- Lake/Pond/Reservoir
  - River/Stream
  - Small Electrofishing Boat Route
  - ▲ Approximate Surface Water/  
Sediment Sample Location



Imagery Source: ESRI Bing  
Mapping Service 2019

Drawn Date:4/28/2021  
Drawn By:ricksc  
Checked By: kammerl



0 0.075 0.15 Miles

## PFAS Background Study Lake Fish Specimen, Surface Water, and Sediment Multiple Lakes, Southern New Hampshire

Figure 15

## Robinson Pond Fish Sampling Locations

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**TABLES**

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**Table 1**  
**Analytical Parameters - Fish Tissue, Surface Water, and Sediment**  
**New Hampshire Department of Environmental Services**  
**Watershed Management Bureau and Environmental Health Program**



Chemical Name (Eurofins/SGS AXYS)	Acronym	Eurofins Sacramento PFAS via Modified EPA Method 537 CAS Number	SGS AXYS PFAS via MLA110 CAS Number	Applicable Criteria			
				SWQC <sup>1</sup>	PROTECTION OF HUMAN HEALTH <sup>1</sup>	MCL VALUES FOR WATER AND FISH INGESTION <sup>2</sup>	MCL VALUES FOR DRINKING WATER <sup>3</sup> (ng/L)
<b>Per- and Polyfluoroalkyl Substances<sup>4</sup></b>							
Perfluorobutanoic acid/Perfluorobutanoate	PFBA	375-22-4	45048-62-2	--	--	--	--
Perfluoropentanoic acid/Perfluoropentanoate	PPPeA	2706-90-3	45167-47-3	--	--	--	--
Perfluorohexanoic acid/Perfluorohexanoate	PFhxA	307-24-4	92612-52-7	--	--	--	--
Perfluoroheptanoic acid/Perfluoroheptanoate	PFhPA	375-85-9	120885-29-2	--	--	--	--
Perfluoroctanoic acid/Perfluoroctanoate	PFOA	335-67-1	45285-51-6	--	--	--	12
Perfluorononanoic acid/Perfluorononanoate	PFNA	375-95-1	72007-68-2	--	--	--	11
Perfluorodecanoic acid/Perfluorodecanoate	PFDA	335-76-2	73829-36-4	--	--	--	--
Perfluoroundecanoic acid/Perfluoroundecanoate	PFUNA	2058-94-8	196859-54-8	--	--	--	--
Perfluorododecanoic acid/Perfluorododecanoate	PFDoA	307-55-1	171978-95-3	--	--	--	--
Perfluorotridecanoic acid/Perfluorotridecanoate	PFTrIa or PFTrDA	72629-94-8	862374-87-6	--	--	--	--
Perfluorotetradecanoic acid/Perfluorotetradecanoate	PFTeA or PFTeDA	376-06-7	365971-87-5	--	--	--	--
Perfluoro-n-hexadecanoic acid/-	PFhxDa/-	67905-19-5	--	--	--	--	--
Perfluoro-n-octadecanoic acid/-	PFODA/-	16517-11-6	--	--	--	--	--
Perfluorobutanesulfonic acid/Perfluorobutanesulfonate	PFBS	375-73-5	45187-15-3	--	--	--	--
Perfluoropentanesulfonic acid/Perfluoropentanesulfonate	PPPeS	2706-91-4	175905-36-9	--	--	--	--
Perfluorohexanesulfonic acid/Perfluorohexanesulfonate	PFhXS	355-46-4	108427-53-8	--	--	--	18
Perfluoroheptanesulfonic Acid/Perfluoroheptanesulfonate	PFhPS	375-92-8	146689-46-5	--	--	--	--
Perfluoroctanesulfonic acid/Perfluoroctanesulfonate	PFOS	1763-23-1	45298-90-6	--	--	--	15
Perfluorononanesulfonic acid/Perfluorononanesulfonate	PFNS	68259-12-1	474511-07-4	--	--	--	--
Perfluorodecanesulfonic acid/Perfluorodecanesulfonate	PFDS	335-77-3	126105-34-8	--	--	--	--
Perfluorododecanesulfonic acid/Perfluorododecanesulfonate	PFDoS	79780-39-5	343629-43-6	--	--	--	--
Perfluoroctanesulfonamide	FOSA/PFOSA	754-91-6	754-91-6	--	--	--	--
NetFOSA	NetFOSA/N-EtFOSA	4151-50-2	4151-50-2	--	--	--	--
NMeFOSA	NMeFOSA/N-MeFOSA	31506-32-8	31506-32-8	--	--	--	--
N-methylperfluoroctanesulfonamidoacetic acid/-sulfonamidoacetate	NMeFOSAA/MeFOSAA	2355-31-9	2355-31-9	--	--	--	--
N-ethylperfluoroctanesulfonamidoacetic acid/-sulfonamidoacetate	NetFOSAA/EtFOSAA	2991-50-6	2991-50-6	--	--	--	--
NMeFOSE	NMeFOSE/N-MeFOSE	24448-09-7	24448-09-7	--	--	--	--
NetFOSE	NetFOSE/N-EtFOSE	1691-99-2	1691-99-2	--	--	--	--
4:2 Fluorotelomer sulfonic acid/4:2 Fluorotelomersulfonate	4:2 FTS	757124-72-4	414911-30-1	--	--	--	--
6:2 Fluorotelomer sulfonic acid/6:2 Fluorotelomersulfonate	6:2 FTS	27619-97-2	425670-75-3	--	--	--	--
8:2 Fluorotelomer sulfonic acid/8:2 Fluorotelomersulfonate	8:2 FTS	39108-34-4	481071-78-7	--	--	--	--
10:2 Fluorotelomer sulfonic acid/-	10:2 FTS/-	120226-60-0	--	--	--	--	--
--/3:3 Perfluorohexanoate	--/3:3 FTCA	--	1169706-83-5	--	--	--	--
--/5:3 Perfluorotanoate	--/5:3 FTCA	--	1799325-94-2	--	--	--	--
--/7:3 Perfluorodecanoate	--/7:3 FTCA	--	1799325-95-3	--	--	--	--
DONA/ADONA	DONA/ADONA	919005-14-4	2127366-90-7	--	--	--	--
HPPO-DA (GenX)/HFPO-DA	GenX/HFPO-DA	13252-13-6	122499-17-6	--	--	--	--
F-53B Major/9Cl-PF3ONS	F-53B Major/9Cl-PF3ONS	756426-58-1	1621485-21-9	--	--	--	--
F-53B Minor/11Cl-PF3OUdS	F-53B Minor/11Cl-PF3OUdS	763051-92-9	2196242-82-5	--	--	--	--
--/Perfluoro-3,6-dioxaheptanoate	--/NFDHA	--	39187-41-2	--	--	--	--
--/Perfluoro-3-methoxypropanoate <sup>5</sup>	--/PFMMPA	--	--	--	--	--	--
--/Perfluoro-4-methoxybutanoate	--/PFMBA	--	1432017-36-1	--	--	--	--
--/Perfluoro(2-ethoxyethane)sulfonate	--/PFEESA	--	220689-13-4	--	--	--	--
<b>Dissolved Organic Carbon (mg/L) -9060A</b>							
DOC		--	--	--	--	--	--
<b>Alkalinity (mg/L) - SM2320B</b>							
Alkalinity		--	--	20	--	--	--
<b>Hardness (mg/L) - SM2340C</b>							
Hardness		--	--	--	--	--	--
<b>Chlorophyll-A (µg/L) - SM10200H</b>							
Chlorophyll-A		479-61-8	479-61-8	--	--	--	--

**Note:**

<sup>1</sup>Surface Water Quality Criteria for Fresh Chronic Criteria and Protection of Human Health for Fish Consumption Only per Env-Wq 1700, table 1703-1: *Water Quality Criteria for Toxic Substances*.

<sup>2</sup>Surface Water Quality Criteria per Env-Wq 1700, table 1703-2A: *MCL Values for Water and Fish Ingestion*.

<sup>3</sup>Organic Chemical Contaminant MCLs and MCLGs, Env-Dw 705.06 MCLs and MCLGs for Per- and Polyfluoroalkyl Substances (PFAS) Contaminants.

<sup>4</sup>Fish tissue samples were analyzed separately by SGS AXYS who reports the anionic version of the applicable compound as indicated. Eurofins has reported their results in the acid form and adjusted for the hydrogen cation (H+). Because the mass of the H+ is so minimal, there is no significant impact to the resulting concentrations.

<sup>5</sup>Although SGS AXYS analyzes and reports for Perfluoro-3-methoxypropanoate (PFMMPA), a CAS number is not provided.

CAS = Chemical Abstract Services

ng/L = nanograms per liter

µg/L = micrograms per liter

mg/L = milligrams per liter

EPA = U.S. Environmental Protection Agency

MCL = maximum contaminant level

MCLG = maximum contaminant level goal

--= not applicable

**Table 2**  
**Fish Tissue Study Target and Reference Lakes**  
**New Hampshire Department of Environmental Services**  
**Watershed Management Bureau and Environmental Health Program**

Waterbody Name, Location <sup>1</sup>	WBID <sup>2</sup>	Size (acres) Depth (meters)	Fishery <sup>3</sup>	Stocking <sup>4</sup>	Water Column Historical Total PFAS Data <sup>5</sup> (ng/L)
<a href="#">Canobie Lake, Windham</a>	<a href="#">NHLAK700061102-02 (VLAP Report)</a>	374 ac 5.5 m (ave d)	Warm: SMB, LMB, ECP, BBH, BC, BG, CSF, YP	EBT, RT	7/11/2018 Total=28
<a href="#">Armington Lake, Piermont</a>	<a href="#">NHLAK801040201-01 (VLAP report)</a>	152 ac 3m (ave d)	Warm: RT,BT,SMB,ECP,BBH,YP		None
<a href="#">Arlington Mill Reservoir, Salem</a>	<a href="#">NHLAK700061101-04 (no VLAP)</a>	268 ac 2.9 m (ave d)	Warm: SMB,LMB,ECP,BBH,WP,BC,BG	-	2/14/2018 Total=13
<a href="#">Cobbetts Pond, Windham</a>	<a href="#">NHLAK700061204-01-01 (VLAP Report)-stn1 VLAP Report-stn2)</a>	301 ac 5.2 m (ave d)	Warm: SMB,LMB,ECP,BBH,BC, BG,AE,YP	-	None
<a href="#">Beaver Lake, Derry</a>	<a href="#">NHLAK700061203-02-01 (VLAP Report)</a>	137 ac 5.0 m (ave d)	Cold/Warm: EBT,RT,SMB,LMB,ECP, BBH,BC,BG,AE,YP	EBT, RT	None
<a href="#">Big Island Pond, Derry</a>	<a href="#">NHLAK700061101-01-01 (VLAP Report)</a>	530 ac 5.4 m (ave d)	Cold/Warm: EBT,RT,BT,SMB,LMB, ECP,BBH,WP,BC,BG	BT, EBT, RT	None
<a href="#">Robinson Pond, Hudson</a>	<a href="#">NHLAK700061203-06-01 (VLAP Report)</a>	128 ac 3.3 m (ave d)	Warm: SMB,LMB,ECP,BBH,BC, BG,YP	-	None
<a href="#">Captain Pond, Salem</a>	<a href="#">NHLAK700061102-03-01 (VLAP report)</a>	86 ac 2.5 m (ave d)	Warm: LMB,ECP,BBH,BG,CSF	-	None
<a href="#">Highland Lake, Andover</a>	<a href="#">NHLAK700010804-01-01 (VLAP Report)</a>	206 ac 4 m (ave d)	Cold: EBT,RT,SMB,LMB,ECP,BBH,BC	EBT, RT	None
<a href="#">Baboosic Lake, Amherst</a>	<a href="#">NHLAK700060905-01-01 (no VLAP) (UNH LLMP)</a>	228 ac 3 m (ave d)	Warm: LMB,ECP,BBH,WP,BG	EBT, RT	None
<a href="#">Great Pond (Kingston Lake), Kingston</a>	<a href="#">NHLAK700061403-06-01 (VLAP report N</a>	268 ac 3.8 m (ave d)	Warm: LMB,ECP,BBH,WP,BC, BG,YP,CSF	-	None

**Table 2**  
**Fish Tissue Study Target and Reference Lakes**  
**New Hampshire Department of Environmental Services**  
**Watershed Management Bureau and Environmental Health Program**

Waterbody Name, Location <sup>1</sup>	WBID <sup>2</sup>	Size (acres) Depth (meters)	Fishery <sup>3</sup>	Stocking <sup>4</sup>	Water Column Historical Total PFAS Data <sup>5</sup> (ng/L)
	<a href="#">VLAP report S</a>				
<a href="#">Horseshoe Pond, Merrimack</a>	<a href="#">NHLAK700061002-03</a> (no VLAP)	44 ac 2.5 m (ave d)	Warm: LMB,ECP,BBH,WP,BC,BG,AE	-	5/23/2019 Total=65, 59, 72 & 59~
<a href="#">Naticook Lake, Merrimack</a>	<a href="#">NHLAK700061002-04-01</a> (no VLAP)	62 ac 2.7 m (ave d)	Warm: LMB,ECP,BBH,BC,BG,YP	-	5/24/2017 Total=50
<a href="#">Lake Massabesic, Manchester</a>	<a href="#">NHLAK700060702-03</a>	2,554 ac 5 m (ave d)	Cold/Warm: EBT,RT,BT,SMB,LMB,ECP, BBH,WP,NP,BC,BG,AE,YP	-	None

#### Definitions

  Highlighted rows designate selected reference lakes.

WBID = Watershed Bureau identification number

ng/L = nanograms per liter (equivalent to parts per trillion)

ac = acre/acres

m = meter/meters

ave d = average depth

#### Notes

<sup>1</sup>Link directs to bathymetry map.

<sup>2</sup>Watershed Bureau ID links to most recent trophic survey.

<sup>3</sup>Definitions related to abbreviations for common fish names can be found in Appendix G of the Sampling and Analysis Plan.

<sup>4</sup><https://www.wildlife.state.nh.us/fishing/documents/stocking-full-2019.pdf>

<sup>5</sup>Historical PFAS data provided to Weston Solutions, Inc. by New Hampshire Department of Environmental Services. Date of collection noted.

Information on the lakes included in the study can also be found at <https://www.nh.gov/safety/divisions/nhsp/fob/marine-patrol/restricted.html> and the NHDES Lake Information Mapper <http://nhdes.maps.arcgis.com/apps/webappviewer/index.html?id=1f45dc20877b4b959239b8a4a60ef540>

**Table 3**  
**Fishing Coding and Metrics**  
**New Hampshire Department of Environmental Services**  
**Watershed Management Bureau and Environmental Health Program**

Lake Name and Location	Field Sample ID	Species Collected	Fish No.	Total Weight (g)	Total Length (mm)	Fork Length (mm)	Fillet Weight1 (g)	Sample Weight (g)	Observations
Arlington Mill Reservoir, Salem	NHDES-FT-AMR-LMB	Largemouth Bass (Micropterus salmoides)	1	1101.3	428.0	410.0	68.7	181.0	none
			2	308.7	300.0	293.0	38.0		
			3	245.2	271.0	262.0	33.5		
			4	169.5	252.0	241.0	18.8		
			5	167.2	238.0	234.0	22.0		
	NHDES-FT-AMR-YP	Yellow Perch (Perca flavescens)	1	139.4	225.0	215.0	14.4	55.1	none
			2	114.0	224.0	219.0	13.5		
			3	102.3	212.0	208.0	13.0		
			4	57.0	178.0	172.0	6.4		
			5	56.2	184.0	177.0	7.8		
Armington Lake, Piermont	NHDES-FT-ARL-SMB	Smallmouth Bass (Micropterus dolomieu)	1	123.6	214.0	200	18.0/18.5	36.5	none
	NHDES-FT-ARL-YP	Yellow Perch (Perca flavescens)	1	61.9	179	170	8.5/7.2	47.7	Parasites
			2	28.5	141	137	3.2/3.2		none
			3	27.6	144	138	4.8/3.4		none
			4	22.3	135	127	2.7/2.2		none
			5	47.8	166	160	5.8/6.7		none
Baboosic Lake, Merrimack	NHDES-FT-BAL-BG	Blue Gill Sunfish (Lepomis macrochirus)	1	136.3	192	184	16.7	89.1	none
			2	161.0	205	193	18.8		
			3	147.6	205	196	18.7		
			4	141.4	200	188	18.3		
			5	115.6	191	179	16.6		
	NHDES-FT-BAL-LMB	Largemouth Bass (Micropterus salmoides)	1	377.8	335	323	43.9	204.7	none
			2	351.9	301	292	47.7		Parasites
			3	233.7	268	257	37.9		none
			4	234.7	269	255	40.2		Parasites
			5	236.4	275	264	35.0		none
Beaver Lake, Derry	NHDES-FT-BEL-SMB	Smallmouth Bass (Micropterus dolomieu)	1	893.6	428	399	88.5	229.0	none
			2	463.7	364	349	101.3		
			3	334.1	290	275	50.6		
			4	270.1	276	264	35.1		
			5	159.1	229	215	23.5		
	NHDES-FT-BEL-SMB (DB)	Smallmouth Bass (Micropterus dolomieu)	1	893.6	428	399	83.2	275.7	none
			2	463.7	364	349	95.9		
			3	334.1	290	275	47.5		
			4	270.1	276	264	33.8		
			5	159.1	229	215	15.3		
	NHDES-FT-BEL-YP	Yellow Perch (Perca flavescens)	1	233.7	270	263	24.0	87.8	Parasites observed in all specimens
			2	166.3	246	235	21.0		
			3	121.9	220	210	16.9		
			4	106.1	213	204	12.5		
			5	111.8	218	209	13.4		
	NHDES-FT-BEL-YP (DB)	Yellow Perch (Perca flavescens)	1	233.7	270	263	26.0	78.6	Parasites observed in all specimens
			2	166.3	246	235	18.7		
			3	121.9	220	210	12.7		
			4	106.1	213	204	11.5		
			5	111.8	218	209	9.7		

**Table 3**  
**Fishing Coding and Metrics**  
**New Hampshire Department of Environmental Services**  
**Watershed Management Bureau and Environmental Health Program**

Lake Name and Location	Field Sample ID	Species Collected	Fish No.	Total Weight (g)	Total Length (mm)	Fork Length (mm)	Fillet Weight1 (g)	Sample Weight (g)	Observations
Big Island Pond, Derry	NHDES-FT-BIP-LMB	Largemouth Bass (Micropterus salmoides)	1	994.9	378.5	--	79.7	437.2	none
			2	965.1	381.0	--	56.0		
			3	951.3	464.8	--	89.5		
			4	1000.0	393.7	--	101.5		
			5	942.2	452.1	--	78.7		
	NHDES-FT-BIP-YP	Yellow Perch (Perca flavescens)	1	146.1	304.8	--	10.4	48.7	none
			2	141.3	284.5	--	8.9		
			3	87.5	302.3	--	7.1		
			4	84.3	325.1	--	5.7		
			5	129.4	279.4	--	7.6		
Canobie Lake, Salem	NHDES-FT-CAL-BG	Blue Gill Sunfish (Lepomis macrochirus)	1	152.0	200	189	22.9	104.7	none
			2	117.7	183	177	16.5		
			3	138.4	195	183	20.9		
			4	133.3	191	182	21.7		
			5	140.9	185	176	22.7		
	NHDES-FT-CAL-LMB	Largemouth Bass (Micropterus salmoides)	1	654.5	357	345	113.1	450.2	none
			2	590.9	349	340	89.7		none
			3	426.3	320	307	74.3		none
			4	330.9	330	316	90.2		Parasites
			5	455.3	322	302	82.9		none
Captain Pond, Salem	NHDES-FT-CAP-LMB	Largemouth Bass (Micropterus salmoides)	1	1288.2	465	445	159.4	503.4	none
			2	458.0	331	319	37.4		
			3	804.6	400	383	90.9		
			4	839.0	390	370	100.2		
			5	895.5	410	395	115.5		
	NHDES-FT-CAP-LMB (RE)	Largemouth Bass (Micropterus salmoides)	1	870.1	390	379	135.5	722.3	none
			2	704.0	400	380	73.2		
			3	1196.2	435	415	164.5		
			4	1296.4	444	429	192.3		
			5	1165.7	422	409	156.8		
	NHDES-FT-CAP-YP	Yellow Perch (Perca flavescens)	1	215	279	270	16.1	48.7	Parasites observed in all specimens
			2	94.2	208	199	10.5		
			3	57.2	180	172	7.0		
			4	57.0	182	174	8.5		
			5	49.3	174	166	6.6		
	NHDES-FT-CAP-YP (RE)	Yellow Perch (Perca flavescens)	1	212.2	284	274	27.7	97.1	Parasites observed in all specimens
			2	191.9	299	290	14.7		
			3	141.8	250	239	15.2		
			4	190.6	268	258	27.5		
			5	101.8	223	214	12.0		

**Table 3**  
**Fishing Coding and Metrics**  
**New Hampshire Department of Environmental Services**  
**Watershed Management Bureau and Environmental Health Program**

Lake Name and Location	Field Sample ID	Species Collected	Fish No.	Total Weight (g)	Total Length (mm)	Fork Length (mm)	Fillet Weight1 (g)	Sample Weight (g)	Observations
Cobbetts Pond, Windham	NHDES-FT-COP-LMB	Largemouth Bass (Micropterus salmoides)	1	889.0	412	388	150.1	662.1	Parasites
			2	1105.2	442	420	153.2		none
			3	701.3	372	355	124.9		none
			4	864.8	400	387	148.5		none
			5	597.7	368	352	85.4		none
	NHDES-FT-COP-LMB (RE)	Largemouth Bass (Micropterus salmoides)	1	1377.9	436	420	297.1	822.5	Possible egg sac
			2	778.9	372	358	140.6		none
			3	836.1	381	369	141.1		Possible egg sac
			4	778.0	374	360	143.9		Possible egg sac
			5	603.8	348	336	99.8		none
	NHDES-FT-COP-YP	Yellow Perch (Perca flavescens)	1	167.8	276	263	15.5	85.3	Parasites
			2	132.7	233	220	20.5		Parasites
			3	128.1	242	231	16.5		Parasites
			4	149.0	255	245	15.6		
			5	109.5	208	200	17.2		Parasites
	NHDES-FT-COP-YP (RE)	Yellow Perch (Perca flavescens)	1	149.2	220	210	15.7	105.6	Parasites, female with eggs
			2	208.1	281	272	25.5		Parasites, female with eggs
			3	143.4	243	235	15.4		none
			4	155.5	233	223	30.1		External parasites on fin, internal parasites
			5	157.5	225	218	18.9		Parasites
Great Pond, Kingston	NHDES-FT-GTP-LMB	Largemouth Bass (Micropterus salmoides)	1	830.0	385	374	112.1	581	
			2	705.0	374	358	124.5		
			3	720.8	366	352	96.6		
			4	698.2	370	355	105.3		
			5	866.5	400	384	142.5		
	NHDES-FT-GTP-YP	Yellow Perch (Perca flavescens)	1	171.1	248	239	26.5	103.8	none
			2	244.9	281	265	28.3		Female with eggs
			3	139.5	246	230	18.8		Female with eggs
			4	82.5	200	192	11.2		Parasites
			5	133.0	230	218	19.0		none
Highland Lake, Andover	NHDES-FT-HIL-CSF	Pumpkinseed Sunfish (Lepomis gibbosus)	1	75.6	159	150	8.2/9.2	54.9	none
			2	52.3	145	138	5.4/5.1		none
			3	39.8	130	125	5.2/4.6		none
			4	42.1	136	130	5.2/4.7		none
			5	33.6	127	121	3.8/3.5		Parasites
	NHDES-FT-HIL-SMB	Smallmouth Bass (Micropterus dolomieu)	1	37.1	143	135	4.5	38.6	
			2	116.3	200	188	15.9		
			3	54.1	159	151	7.3		
			4	41.2	150	144	5.9		
			5	41.0	147	140	5.0		
	NHDES-FT-HIL-SMB-2	Smallmouth Bass (Micropterus dolomieu)	6	841.6	365	347	134.1	134.1	none

**Table 3**  
**Fishing Coding and Metrics**  
**New Hampshire Department of Environmental Services**  
**Watershed Management Bureau and Environmental Health Program**

Lake Name and Location	Field Sample ID	Species Collected	Fish No.	Total Weight (g)	Total Length (mm)	Fork Length (mm)	Fillet Weight1 (g)	Sample Weight (g)	Observations
Horseshoe Pond, Merrimack	NHDES-FT-HOP-LMB	Largemouth Bass (Micropterus salmoides)	1	616.3	349	335	105.2	368.9	none
			2	421.5	314	305	64.6		
			3	441.4	329	318	71.8		
			4	429.5	319	309	66.8		
			5	366.1	305	291	60.5		
	NHDES-FT-HOP-YP	Yellow Perch (Perca flavescens)	1	197.2	255	245	23.3	119.3	none
			2	164.4	246	236	24.8		Female with eggs
			3	220.2	275	263	33.5		none
			4	143.0	242	233	21.9		Parasites, female with eggs
			5	105.1	240	202	15.8		Female with eggs
Lake Massabesic, Auburn	NHDES-FT-LMA-BG	Blue Gill Sunfish (Lepomis macrochirus)	1	70.6	160	149	11.5	58.8	Parasites
			2	89.5	175	166	12.0		none
			3	73.1	165	155	12.5		none
			4	58.7	145	135	9.2		none
			5	58.8	149	141	8.6		none
	NHDES-FT-LMA-BG (DB)	Blue Gill Sunfish (Lepomis macrochirus)	1	70.6	160	149	12.4	52.0	Parasites
			2	89.5	175	166	11.7		none
			3	73.1	165	155	10.1		none
			4	58.7	145	135	9.3		none
			5	58.8	149	141	8.5		none
	NHDES-FT-LMA-LMB	Largemouth Bass (Micropterus salmoides)	1	337.4	290.0	278	62.0	280.8	none
			2	575.2	355.0	338	94.4		
			3	288.5	283.0	265	49.1		
			4	276.0	284.0	266	46.3		
			5	194.0	245.0	231	29.0		
	NHDES-FT-LMA-LMB (DB)	Largemouth Bass (Micropterus salmoides)	1	337.4	290.0	278	57.0	287.8	none
			2	575.2	355.0	338	98.6		
			3	288.5	283.0	265	47.3		
			4	276.0	284.0	266	55.6		
			5	194.0	245.0	231	29.3		
Naticook Lake, Merrimack	NHDES-FT-NAL-BC	Black Crappie (Pomoxis nigromaculatus)	1	217.1	262	253	33.0	131.5	none
			2	238.6	268	256	28.2		
			3	162.5	238	229	20.3		
			4	175.8	237	226	18.7		
			5	198.1	242	232	31.3		
	NHDES-FT-NAL-SMB	Smallmouth Bass (Micropterus dolomieu)	1	396.8	328	314	49.4	210.8	none
			2	432.8	342	329	50.5		
			3	298.5	297	284	44.8		
			4	260.8	307	295	23.9		
			5	293.5	293	284	42.2		

**Table 3**  
**Fishing Coding and Metrics**  
**New Hampshire Department of Environmental Services**  
**Watershed Management Bureau and Environmental Health Program**

Lake Name and Location	Field Sample ID	Species Collected	Fish No.	Total Weight (g)	Total Length (mm)	Fork Length (mm)	Fillet Weight <sup>1</sup> (g)	Sample Weight (g)	Observations
Robinson Pond, Hudson	NHDES-FT-ROP-LMB	Largemouth Bass (Micropterus salmoides)	1	468.4	321	311	85.9	427.3	none
			2	483.5	329	313	73.4		none
			3	509.6	336	324	75.9		Parasites
			4	470.1	326	312	90.6		none
			5	677.6	370	358	101.5		none
	NHDES-FT-ROP-YP	Yellow Perch (Perca flavescens)	1	296.2	290	283	35.4	174.6	Female with eggs
			2	202.9	274	265	23.1		Female with eggs
			3	295.4	293	281	42.7		Parasites, female with eggs
			4	265.8	271	264	30.2		Parasites, female with eggs
			5	210.5	264	253	43.2		Parasites, female with eggs

**Definitions**

-- measurement not collected

g = grams

mm = millimeter

<sup>1</sup>NHDES-FT-HIL-CSF and NHDES-FT-ARL-YP samples includes both right and left side fillets.

**Table 4**  
**Per- and Polyfluoroalkyl Substances in Fish Tissue**  
**New Hampshire Department of Environmental Services**  
**Watershed Management Bureau and Environmental Health Program**

Lake Name and Location	Field Sample ID	Species Collected	Lab Sample ID	Sample Date	PER- and POLYFLUOROALKYL SUBSTANCES <sup>1</sup>																
					Carboxylic Acids/Carboxylates																
					PFBA	PFPeA	PFHxA	PFHpA	PFOA	PFNA	PFDA	PFUNA	PFDoA	PFTrIA/PFTrDA	PFTeA/PFTeDA	PFHxDA	PFODA	PFHxDA	PFODA	PFHxDA	PFODA
					Eurofins CAS No. 375-22-4 45048-62-2	SGS AXYS CAS No. 45167-47-3	2706-90-3	307-24-4 92612-52-7	375-85-9	335-67-1 45285-51-6	375-95-1 72007-68-2	335-76-2 73829-36-4	2058-94-8	307-55-1	72629-94-8	376-06-7	67905-19-5	16517-11-6	NA	NA	
<b>Fish Tissue (µg/kg), wet weight</b>																					
Arlington Mill Reservoir, Salem	NHDES-FT-AMR-LMB	Largemouth Bass (Micropterus salmoides)	320-66289-3	10/8/2020	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.00 U	2.1	1.6	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	
	NHDES-FT-AMR-YP	Yellow Perch (Perca flavescens)	320-66289-4	10/8/2020	0.372 U	0.186 U	0.093 U	0.093 U	0.093 U	0.093 U	0.808	1.61	1.67	1.33	1.05	--	--	--	--	--	--
	NHDES-FT-AMR-YP	Smallmouth Bass (Micropterus dolomieu)	320-66289-36	10/29/2020	0.386 U	0.193 U	0.097 U	0.097 U	0.097 U	0.097 U	0.246 J	1.01	0.650	1.17	0.427	--	--	--	--	--	--
Armington Lake, Piermont	NHDES-FT-ARL-SMB	Yellow Perch (Perca flavescens)	320-66289-35	10/29/2020	0.374 U	0.187 U	0.094 U	0.094 U	0.104 J	0.623	0.942	0.961	0.581	0.485	--	--	--	--	--	--	--
	NHDES-FT-ARL-YP	Blue Gill Sunfish (Lepomis macrochirus)	320-66289-14	10/16/2020	0.394 U	0.197 U	0.099 U	0.099 U	0.099 U	0.099 U	0.592	1.36	0.928	1.05	0.552	--	--	--	--	--	--
	NHDES-FT-BAL-BG	Largemouth Bass (Micropterus salmoides)	320-66289-13	10/16/2020	0.383 U	0.191 U	0.096 U	0.096 U	0.142 J	0.096 U	0.629	1.20	0.827	0.472	0.336 J	--	--	--	--	--	--
Babooasic Lake, Merrimack	NHDES-FT-BAL-LMB	Smallmouth Bass (Micropterus dolomieu)	320-66289-9	10/10/2020	0.558 U	0.279 U	0.140 U	0.140 U	0.140 U	0.140 U	0.406 J	1.06	0.970	0.989	0.649	--	--	--	--	--	--
	NHDES-FT-BEL-SMB	Smallmouth Bass (Micropterus dolomieu)	320-66289-11	10/10/2020	0.392 U	0.196 U	0.098 U	0.098 U	0.098 U	0.098 U	0.479	1.03	0.949	1.06	0.583	--	--	--	--	--	--
	NHDES-FT-BEL-YP (DB)	Yellow Perch (Perca flavescens)	320-66289-10	10/10/2020	0.369 U	0.184 U	0.092 U	0.092 U	0.092 U	0.092 U	0.358 J	0.473	0.369 J	0.452	0.287 J	--	--	--	--	--	--
Beaver Lake, Derry	NHDES-FT-BEL-YP (DB)	Yellow Perch (Perca flavescens)	320-66289-12	10/10/2020	0.365 U	0.183 U	0.091 U	0.091 U	0.091 U	0.091 U	0.294 J	0.324 J	0.349 J	0.358 J	0.213 J	--	--	--	--	--	--
	NHDES-FT-BIP-LMB	Largemouth Bass (Micropterus salmoides)	320-66289-1	10/6/2020	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	0.91 U	1.9	1.4	1.4	1.4	0.91 U	0.91 U	--	--	--	--	--
	NHDES-FT-BIP-YP	Yellow Perch (Perca flavescens)	320-66289-2	10/6/2020	0.400 U	0.200 U	0.100 U	0.100 U	0.100 U	0.100 U	0.483	0.838	0.651	0.565	0.276 J	--	--	--	--	--	--
Canobie Lake, Salem	NHDES-FT-CAL-BG	Blue Gill Sunfish (Lepomis macrochirus)	320-66289-22	10/21/2020	0.396 U	0.198 U	0.099 U	0.099 U	0.099 U	0.099 U	0.119 J	0.663	0.535	0.244 J	0.441	0.333 J	--	--	--	--	--
	NHDES-FT-CAL-LMB	Largemouth Bass (Micropterus salmoides)	320-66289-21	10/21/2020	0.394 U	0.197 U	0.099 U	0.099 U	0.099 U	0.099 U	1.74	2.37	1.29	1.47	0.666	--	--	--	--	--	--
	NHDES-FT-CAP-LMB	Largemouth Bass (Micropterus salmoides)	320-66289-5	10/9/2020	0.374 U	0.187 U	0.094 U	0.094 U	0.094 U	0.094 U	0.728	1.44	1.01	0.824	0.530	--	--	--	--	--	--
Captain Pond, Salem	NHDES-FT-CAP-LMB (RE)	Largemouth Bass (Micropterus salmoides)	320-66289-27	10/26/2020	0.392 U	0.196 U	0.098 U	0.098 U	0.098 U	0.098 U	0.579	1.07	0.706	0.913	0.445	--	--	--	--	--	--
	NHDES-FT-CAP-YP	Yellow Perch (Perca flavescens)	320-66289-6	10/9/2020	0.369 U	0.184 U	0.092 U	0.092 U	0.092 U	0.092 U	0.114 J	0.394 J	0.660	0.477	0.541	0.296 J	--	--	--	--	--
	NHDES-FT-CAP-YP (RE)	Yellow Perch (Perca flavescens)	320-66289-28	10/26/2020	0.392 U	0.196 U	0.098 U	0.098 U	0.098 U	0.098 U	0.116 J	0.584 J	0.672	0.396	0.435	0.229 J	--	--	--	--	--
Cobbetts Pond, Windham	NHDES-FT-COP-LMB	Largemouth Bass (Micropterus salmoides)	320-66289-23	10/21/2020	0.394 U	0.197 U	0.099 U	0.099 U	0.099 U	0.099 U	2.63	3.38	2.21	1.43	0.782	--	--	--	--	--	--
	NHDES-FT-COP-LMB (RE)	Largemouth Bass (Micropterus salmoides)	320-66289-24	10/21/2020	0.376 U	0.188 U	0.094 U	0.094 U	0.094 U	0.094 U	1.13 J	2.9	2.72	1.70	1.01	0.608	--	--	--	--	--
	NHDES-FT-COP-YP	Yellow Perch (Perca flavescens)	320-66289-25	10/21/2020	0.394 U	0.197 U	0.099 U	0.099 U	0.099 U	0.099 U	0.187 J	1.39	1.51 J	1.12	0.631 J	0.512	--	--	--	--	--
Great Pond, Kingston	NHDES-FT-COP-YP (RE)	Yellow Perch (Perca flavescens)	320-66289-26	10/21/2020	0.390 U	0.195 U	0.098 U	0.098 U	0.098 U	0.098 U	0.167 J	1.78	2.20 J	1.41	0.990 J	0.533	--	--	--	--	--
	NHDES-FT-GTP-LMB (Duplicate)	Largemouth Bass (Micropterus salmoides)	320-66289-19	10/21/2020	0.365 U	0.183 U	0.091 U	0.091 U	0.091 U	0.091 U	0.544	1.26	0.842	0.997	0.523	--	--	--	--	--	--
	NHDES-FT-GTP-YP	Yellow Perch (Perca flavescens)	320-66289-20	10/21/2020	0.392 U	0.200 U	0.100 U	0.100 U	0.100 U	0.100 U	0.473	0.823	0.408	0.403	0.173 J	--	--	--	--	--	--
Highland Lake, Andover	NHDES-FT-HIL-CSF	Pumpkinseed Sunfish (Lepomis gibbosus)	320-66289-30	10/26/2020	0.383 U	0.191 U	0.096 U	0.096 U	0.096 U	0.096 U	0.198 J	0.850	0.598	0.913	0.378 J	--	--	--	--	--	--
	NHDES-FT-HIL-SMB	Smallmouth Bass (Micropterus dolomieu)	320-66289-29	10/26/2020	0.392 U	0.196 U	0.098 U	0.098 U	0.098 U	0.098 U	0.177 J	0.608	0.588	0.661	0.271 J	--	--	--	--	--	--
	NHDES-FT-HIL-SMB-2	Smallmouth Bass (Micropterus dolomieu)	320-66289-37	10/26/2020	0.398 U	0.199 U	0.100 U	0.100 U	0.100 U	0.100 U	0.241 J	1.02	1.08	1.82	0.710	--	--	--	--	--	--
Horseshoe Pond, Merrimack	NHDES-FT-HOP-LMB	Largemouth Bass (Micropterus salmoides)	320-66289-17	10/20/2020	0.376 U	0.188 U	0.094 U	0.094 U	0.094 U	0.094 U	0.653	1.11	0.900	0.803	0.390	--	--	--	--	--	--
	NHDES-FT-HOP-YP	Yellow Perch (Perca flavescens)	320-66289-18	10/20/2020	0.																

**Table 4**  
**Per- and Polyfluoroalkyl Substances in Fish Tissue**  
**New Hampshire Department of Environmental Services**  
**Watershed Management Bureau and Environmental Health Program**

Lake Name and Location	Field Sample ID	Species Collected	Lab Sample ID	Sample Date	PER- and POLYFLUOROALKYL SUBSTANCES <sup>1</sup>																			
					Sulfonic Acids/Sulfonates								Fluorotelomer Sulfonic Acids/Sulfonates						Fluorotelomer Carboxylates			Perfluoroctane Sulfonamides		
					Eurofins CAS No. SGS AXYS CAS No.	375-73-5 45187-15-3	2706-91-4 175905-36-9	355-46-4 108427-53-8	375-92-8 146689-46-5	1763-23-1 45298-90-6	68259-12-1 474511-07-4	335-77-3 126105-34-8	79780-39-5 343629-43-6	757124-72-4 414911-30-1	27619-97-2 425670-75-3	39108-34-4 481071-78-7	120226-60-0 425670-75-3	NA NA	NA NA	NA NA	754-91-6 1169706-83-5	754-91-6 1799325-94-2	4151-50-2 1799325-95-3	4151-50-2 6 4151-50-2 50-2
<b>Fish Tissue (µg/kg), wet weight</b>																								
Arlington Mill Reservoir, Salem	NHDES-FT-AMR-LMB	Largemouth Bass (Micropterus salmoides)	320-66289-3 L35040-3	10/8/2020 10/8/2020	1.0 U 0.093 U	1.0 U 0.093 U	1.0 U 0.093 U	1.0 U 0.093 U	7.4 5.76	1.0 U 0.093 U	1.0 U 0.093 U	10 U 0.372 U	10 U 0.335 U	10 U 0.372 U	10 U 0.372 U	--	1.0 U 0.372 U	--	--	--	1.0 U 0.093 U	1.0 U 0.233 U	1.0 U 0.107 U	
	NHDES-FT-AMR-YP	Yellow Perch (Perca flavescens)	320-66289-4 L35040-4	10/8/2020 10/8/2020	0.8 U 0.094 U	0.8 U 0.094 U	0.8 U 0.094 U	0.8 U 0.094 U	3.8 2.74	0.8 U 0.094 U	0.8 U 0.094 U	8 U 0.374 U	8 U 0.337 U	8 U 0.374 U	8 U 0.374 U	--	--	--	--	--	0.8 U 0.094 U	0.8 U 0.234 U	0.8 U 0.107 U	
Armington Lake, Piermont	NHDES-FT-ARL-SMB	Smallmouth Bass (Micropterus dolomieu)	320-66289-36 L35040-36	10/29/2020 10/29/2020	9.5 U 0.097 U	9.5 U 0.097 U	9.5 U 0.097 U	9.5 U 0.097 U	24 U 1.04	9.5 U 0.097 U	9.5 U 0.097 U	95 U 0.386 U	95 U 0.348 U	95 U 0.386 U	95 U 0.386 U	--	9.5 U 0.386 U	9.5 U 0.242 U	9.5 U 0.097 U	9.5 U 0.242 U	9.5 U 0.111 U	9.5 U 0.242 U	9.5 U 0.111 U	
	NHDES-FT-ARL-YP	Yellow Perch (Perca flavescens)	320-66289-35 L35040-35	10/29/2020 10/29/2020	9.2 U 0.098 U	9.2 U 0.098 U	9.2 U 0.098 U	9.2 U 0.098 U	23 U 0.953	9.2 U 0.098 U	9.2 U 0.098 U	92 U 0.392 U	92 U 0.353 U	92 U 0.392 U	92 U 0.392 U	--	--	--	--	--	9.2 U 0.392 U	9.2 U 0.245 U	9.2 U 0.113 U	
Baboosic Lake, Merrimack	NHDES-FT-BAL-BG	Blue Gill Sunfish (Lepomis macrochirus)	320-66289-14 L35040-14	10/16/2020 10/16/2020	8.2 U 0.099 U	8.2 U 0.099 U	8.2 U 0.099 U	8.2 U 0.099 U	20 U 5.25	8.2 U 0.099 U	8.2 U 0.099 U	82 U 0.394 U	82 U 0.355 U	82 U 0.394 U	82 U 0.355 U	--	8.2 U 0.394 U	8.2 U 0.246 U	8.2 U 0.099 U	8.2 U 0.246 U	8.2 U 0.113 U	8.2 U 0.246 U	8.2 U 0.113 U	
	NHDES-FT-BAL-LMB	Largemouth Bass (Micropterus salmoides)	320-66289-13 L35040-13	10/16/2020	0.096 U	0.096 U	0.096 U	0.096 U	3.67	0.096 U	0.096 U	0.096 U 0.383 U	0.096 U 0.345 U	0.096 U 0.383 U	0.096 U 0.345 U	--	0.096 U 0.383 U	0.096 U 0.239 U	0.096 U 0.096 U	0.096 U 0.239 U	0.096 U 0.110 U	0.096 U 0.239 U	0.096 U 0.110 U	
Beaver Lake, Derry	NHDES-FT-BEL-SMB	Smallmouth Bass (Micropterus dolomieu)	320-66289-9 L35040-9	10/10/2020	0.140 U	0.140 U	0.140 U	0.140 U	7.08	0.140 U	0.140 U	6.8 U 0.558 U	6.8 U 0.503 U	6.8 U 0.558 U	6.8 U 0.558 U	--	6.8 U 0.558 U	6.8 U 0.349 U	6.8 U 0.140 U	6.8 U 0.349 U	6.8 U 0.160 U	6.8 U 0.349 U	6.8 U 0.160 U	
	NHDES-FT-BEL-SMB (DB)	Smallmouth Bass (Micropterus dolomieu)	320-66289-11 L35040-11	10/10/2020	6.7 U	6.7 U	6.7 U	6.7 U	17 U	6.7 U	6.7 U	67 U 0.392 U	67 U 0.353 U	67 U 0.392 U	67 U 0.353 U	--	67 U 0.392 U	67 U 0.245 U	67 U 0.098 U	67 U 0.245 U	67 U 0.113 U	67 U 0.245 U	67 U 0.113 U	
Big Island Pond, Derry	NHDES-FT-BEL-YP	Yellow Perch (Perca flavescens)	320-66289-10 L35040-10	10/10/2020	0.68 U	0.68 U	0.68 U	0.68 U	19 U	0.68 U	0.68 U	6.8 U 0.68 U	6.8 U 0.68 U	6.8 U 0.68 U	6.8 U 0.68 U	--	6.8 U 0.68 U	6.8 U 0.68 U	6.8 U 0.68 U	6.8 U 0.68 U	6.8 U 0.68 U	6.8 U 0.68 U	6.8 U 0.68 U	
	NHDES-FT-BEL-YP (DB)	Yellow Perch (Perca flavescens)	320-66289-12 L35040-12	10/10/2020	7.1 U	7.1 U	7.1 U	7.1 U	18 U	7.1 U	7.1 U	71 U 0.365 U	71 U 0.329 U	71 U 0.365 U	71 U 0.329 U	--	71 U 0.365 U	71 U 0.228 U	71 U 0.091 U	71 U 0.228 U	71 U 0.105 U	71 U 0.228 U	71 U 0.105 U	
Canobie Lake, Salem	NHDES-FT-BIP-LMB	Largemouth Bass (Micropterus salmoides)	320-66289-1 L35040-1	10/6/2020	0.91 U	0.91 U	0.91 U	0.91 U	17 J	0.91 U	0.91 U	9.1 U 0.400 U	9.1 U 0.361 U	9.1 U 0.400 U	9.1 U 0.361 U	--	9.1 U 0.400 U	9.1 U 0.250 U	9.1 U 0.100 U	9.1 U 0.250 U	9.1 U 0.115 U	9.1 U 0.250 U	9.1 U 0.115 U	
	NHDES-FT-BIP-YP	Yellow Perch (Perca flavescens)	320-66289-2 L35040-2	10/6/2020	0.95 U	0.95 U	0.95 U	0.95 U	4.2 J	0.95 U	0.95 U	9.5 U 0.400 U	9.5 U 0.361 U	9.5 U 0.400 U	9.5 U 0.361 U	--	9.5 U 0.400 U	9.5 U 0.250 U	9.5 U 0.100 U	9.5 U 0.250 U	9.5 U 0.115 U	9.5 U 0.250 U	9.5 U 0.115 U	
Captain Pond, Salem	NHDES-FT-CAL-BG	Blue Gill Sunfish (Lepomis macrochirus)	320-66289-22 L35040-22	10/21/2020	0.78 U	0.78 U	0.78 U	0.78 U	15	0.78 U	0.78 U	7.8 U 0.399 U	7.8 U 0.357 U	7.8 U 0.399 U	7.8 U 0.357 U	--	7.8 U 0.396 U	7.8 U 0.248 U	7.8 U 0.099 U	7.8 U 0.248 U	7.8 U 0.114 U	7.8 U 0.248 U	7.8 U 0.114 U	
	NHDES-FT-CAL-LMB	Largemouth Bass (Micropterus salmoides)	320-66289-21 L35040-21	10/21/2020	8.7 U	8.7 U	8.7 U	8.7 U	22 U	8.7 U	8.7 U	87 U 0.369 U	87 U 0.322 U	87 U 0.369 U	87 U 0.322 U	--	87 U 0.369 U	87 U 0.246 U	87 U 0.099 U	87 U 0.246 U	87 U 0.113 U	87 U 0.246 U	87 U 0.113 U	
Cobbets Pond, Windham	NHDES-FT-CAP-LMB	Largemouth Bass (Micropterus salmoides)	320-66289-5 L35040-5	10/9/2020 10/9/2020	0.73 U	0.73 U	0.73 U	0.73 U	4.6	0.73 U	0.73 U	7.3 U 0.374 U	7.3 U 0.337 U	7.3 U 0.374 U	7.3 U 0.337 U	--	7.3 U 0.374 U	7.3 U 0.234 U	7.3 U 0.094 U	7.3 U 0.234 U	7.3 U 0.107 U	7.3 U 0.234 U	7.3 U 0.107 U	
	NHDES-FT-CAP-LMB (RE)	Largemouth Bass (Micropterus salmoides)	320-66289-27 L35040-27	10/26/2020	9.3 U	9.3 U	9.3 U	9.3 U	23 U	9.3 U	9.3 U	93 U 0.392 U	93 U 0.353 U	93 U 0.392 U	93 U 0.353 U	--	93 U 0.392 U	93 U 0.245 U	93 U 0.098 U	93 U 0.245 U	93 U 0.113 U	93 U 0.245 U	93 U 0.113 U	

**Table 4**  
**Per- and Polyfluoroalkyl Substances in Fish Tissue**  
**New Hampshire Department of Environmental Services**  
**Watershed Management Bureau and Environmental Health Program**

Lake Name and Location	Field Sample ID	Species Collected	Lab Sample ID	Sample Date	PER- and POLYFLUOROALKYL SUBSTANCES <sup>1</sup>													
					Perfluorooctane Sulfonamidoacetic Acids		Perfluorooctane Sulfonamide Ethanols		Per- and Polyfluoroether Carboxylic Acids/Carboxylates					Ether Sulfonic Acids/Sulfonates				
					NETFOSAA/ EtFOSAA	NMeFOSSA/ MeFOSSA	NETFOSE/ N-EtFOSE	NMeFOSE/ N-MeFOSE	NFDHA	PFMBA	PFMPA	GEN-X/ HFPO-DA	DONA/ ADONA	F-53B Major/ 9CI-PF3ONS	F-53B Minor/ 11CI-PF3OUdS	PFEESA		
					Eurofins CAS No. SGS AXYS CAS No.	2991-50-6 2991-50-6	2355-31-9 2355-31-9	1691-99-2 1691-99-2	24448-09-7 24448-09-7	NA 39187-41-2	NA 1432017-36-1	NA NA	13252-13-6 122499-17-6	919005-14-4 122499-17-6	756426-58-1 2127366-90-7	763051-92-9 1621485-21-9	2196242-82-5 220689-13-4	NA
<i>Fish Tissue (µg/kg), wet weight</i>																		
Arlington Mill Reservoir, Salem	NHDES-FT-AMR-LMB	Largemouth Bass (Micropterus salmoides)	320-66289-3 L35040-3	10/8/2020 10/8/2020	10 U 0.093 U	10 U 0.093 U	1.0 U 0.696 U	1.0 U 0.930 U	0.186 U 0.093 U	0.093 U 0.186 U	1.3 U 0.353 U	1.0 U 0.372 U	1.0 U 0.373 U	1.0 U 0.373 U	1.0 U 0.373 U	1.0 U 0.374 U	1.0 U 0.374 U	
	NHDES-FT-AMR-YP	Yellow Perch (Perca flavescens)	320-66289-4 L35040-4	10/8/2020 10/8/2020	8 U 0.094 U	8 U 0.094 U	0.8 U 0.699 U	0.8 U 0.935 U	-- 0.187 U	-- 0.094 U	-- 0.187 U	1 U 0.355 U	0.8 U 0.374 U	0.8 U 0.375 U	0.8 U 0.375 U	0.8 U 0.374 U	-- 0.094 U	
Armington Lake, Piermont	NHDES-FT-ARL-SMB	Smallmouth Bass (Micropterus dolomieu)	320-66289-36 L35040-36	10/29/2020 10/29/2020	95 U 0.097 U	95 U 0.097 U	9.5 U 0.723 UH	9.5 U 0.966 UH	0.193 U 0.097 U	0.097 U 0.193 U	12 U 0.367 U	9.5 U 0.386 U	9.5 U 0.387 U	9.5 U 0.387 U	9.5 U 0.387 U	9.5 U 0.387 U	-- 0.097 U	
	NHDES-FT-ARL-YP	Yellow Perch (Perca flavescens)	320-66289-35 L35040-35	10/29/2020 10/29/2020	92 U 0.098 U	92 U 0.098 U	9.2 U 0.733 U	9.2 U 0.980 UH	0.196 U 0.098 U	0.196 U 0.196 U	11 U 0.373 U	9.2 U 0.392 U	9.2 U 0.393 U	9.2 U 0.393 U	9.2 U 0.393 U	9.2 U 0.393 U	-- 0.098 U	
Baboosic Lake, Merrimack	NHDES-FT-BAL-BG	Blue Gill Sunfish (Lepomis macrochirus)	320-66289-14 L35040-14	10/16/2020 10/16/2020	82 U 0.099 U	82 U 0.099 U	8.2 U 0.737 U	8.2 U 0.985 U	0.197 U 0.099 U	0.197 U 0.197 U	10 U 0.374 U	8.2 U 0.394 U	8.2 U 0.395 U	8.2 U 0.395 U	8.2 U 0.395 U	8.2 U 0.395 U	-- 0.099 U	
	NHDES-FT-BAL-LMB	Largemouth Bass (Micropterus salmoides)	320-66289-13 L35040-13	10/16/2020 10/16/2020	72 U 0.096 U	72 U 0.096 U	7.2 U 0.716 U	7.2 U 0.957 U	0.191 U 0.191 U	0.196 U 0.191 U	9 U 0.364 U	7.2 U 0.383 U	7.2 U 0.384 U	7.2 U 0.383 U	7.2 U 0.383 U	7.2 U 0.383 U	-- 0.096 U	
Beaver Lake, Derry	NHDES-FT-BEL-SMB	Smallmouth Bass (Micropterus dolomieu)	320-66289-9 L35040-9	10/10/2020 10/10/2020	6.8 U 0.140 U	6.8 U 0.140 U	6.8 U 1.04 U	6.8 U 1.4 UH	0.279 U 0.140 U	0.279 U 0.279 U	8.6 U 0.530 U	6.8 U 0.558 U	6.8 U 0.559 U	6.8 U 0.559 U	6.8 U 0.559 U	6.8 U 0.559 U	-- 0.140 U	
	NHDES-FT-BEL-SMB (DB)	Smallmouth Bass (Micropterus dolomieu)	320-66289-11 L35040-11	10/10/2020 10/10/2020	67 U 0.098 U	67 U 0.098 U	6.7 U 0.733 U	6.7 U 0.980 U	0.196 U 0.098 U	0.196 U 0.196 U	8.4 U 0.373 U	6.7 U 0.392 U	6.7 U 0.393 U	6.7 U 0.393 U	6.7 U 0.393 U	6.7 U 0.393 U	-- 0.098 U	
Big Island Pond, Derry	NHDES-FT-BEL-YP	Yellow Perch (Perca flavescens)	320-66289-10 L35040-10	10/10/2020 10/10/2020	6.8 U 0.092 U	6.8 U 0.092 U	6.8 U 0.689 U	6.8 U 0.922 UH	0.184 U 0.092 U	0.184 U 0.184 U	8.9 U 0.350 U	7.1 U 0.369 U	7.1 U 0.370 U	7.1 U 0.369 U	7.1 U 0.369 U	7.1 U 0.369 U	-- 0.092 U	
	NHDES-FT-BEL-YP (DB)	Yellow Perch (Perca flavescens)	320-66289-12 L35040-12	10/10/2020 10/10/2020	71 U 0.091 U	71 U 0.091 U	7.1 U 0.683 U	7.1 U 0.913 U	0.183 U 0.091 U	0.183 U 0.183 U	8.9 U 0.347 U	7.1 U 0.365 U	7.1 U 0.366 U	7.1 U 0.366 U	7.1 U 0.366 U	7.1 U 0.366 U	-- 0.091 U	
Canobie Lake, Salem	NHDES-FT-BIP-LMB	Largemouth Bass (Micropterus salmoides)	320-66289-1 L35040-1	10/6/2020 10/6/2020	9.1 U 0.100 U	9.1 U 0.100 U	9.1 U 0.748 U	9.1 U 1 U	0.200 U 0.200 U	0.100 U 0.100 U	1.1 U 0.200 U	9.1 U 0.380 U	9.1 U 0.400 U	9.1 U 0.401 U	9.1 U 0.401 U	9.1 U 0.401 U	-- 0.100 U	
	NHDES-FT-BIP-YP	Yellow Perch (Perca flavescens)	320-66289-2 L35040-2	10/6/2020 10/6/2020	9.5 U 0.100 U	9.5 U 0.100 U	9.5 U 0.748 U	9.5 U 1 U	0.200 U 0.200 U	0.100 U 0.100 U	1.2 U 0.200 U	9.5 U 0.380 U	9.5 U 0.400 U	9.5 U 0.401 U	9.5 U 0.401 U	9.5 U 0.401 U	-- 0.100 U	
Captain Pond, Salem	NHDES-FT-CAL-BG	Blue Gill Sunfish (Lepomis macrochirus)	320-66289-22 L35040-22	10/21/2020 10/21/2020	7.8 U 0.099 U	7.8 U 0.099 U	7.8 U 0.741 UH	7.8 U 0.990 UH	0.198 U 0.099 U	0.198 U 0.198 U	9.8 U 0.376 U	7.8 U 0.396 U	7.8 U 0.397 U	7.8 U 0.397 U	7.8 U 0.397 U	7.8 U 0.397 U	-- 0.099 U	
	NHDES-FT-CAL-LMB	Largemouth Bass (Micropterus salmoides)	320-66289-21 L35040-21	10/21/2020 10/21/2020	87 U 0.099 U	87 U 0.099 U	8.7 U 0.737 UH	8.7 U 0.985 UH	0.197 U 0.099 U	0.197 U 0.197 U	11 U 0.374 U	8.7 U 0.394 U	8.7 U 0.395 U	8.7 U 0.395 U	8.7 U 0.395 U	8.7 U 0.395 U	-- 0.099 U	
Cobbets Pond, Windham	NHDES-FT-CAP-LMB	Largehead Bass (Micropterus salmoides)	320-66289-5 L35040-5	10/9/2020 10/9/2020	7.3 U 0.094 U	7.3 U 0.094 U	7.3 U 0.699 U	7.3 U 0.935 U	0.187 U 0.094 U	0.187 U 0.187 U	9.1 U 0.355 U	7.3 U 0.374 U	7.3 U 0.375 U	7.3 U 0.374 U	7.3 U 0.374 U	7.3 U 0.374 U	-- 0.094 U	
	NHDES-FT-CAP-LMB (RE)	Largehead Bass (Micropterus salmoides)	320-66289-27 L35040-27	10/26/2020 10/26/2020	93 U 0.098 U	93 U 0.098 U	9.3 U 0.733 U	9.3 U 0.980 UH	0.196 U 0.098 U	0.196 U 0.196 U	12 U 0.373 U	9.3 U 0.392 U	9.3 U 0.393 U	9.3 U 0.393 U	9.3 U 0.393 U	9.3 U 0.393 U	-- 0.098 U	
Great Pond, Kingston	NHDES-FT-CAP-YP	Yellow Perch (Perca flavescens)	320-66289-6 L35040-6	10/9/2020 10/9/2020	8.4 U 0.092 U	8.4 U 0.092 U	8.4 U 0.689 U	8.4 U 0.922 UH	0.184 U 0.092 U	0.184 U 0.184 U	1.1 U 0.350 U	8.4 U 0.369 U	8.4 U 0.370 U	8.4 U 0.369 U	8.4 U 0.369 U	8.4 U 0.369 U	-- 0.092 U	
	NHDES-FT-CAP-YP (RE)	Yellow Perch (Perca flavescens)	320-66289-28 L35040-28	10/26/2020 10/26/2020	93 U 0.098 U	93 U 0.098 U	9.3 U 0.733 U	9.3 U 0.980 UH	0.196 U 0.098 U	0.196 U 0.196 U	12 U 0.373 U	9.3 U 0.392 U	9.3 U 0.393 U	9.3 U 0.393 U	9.3 U 0.393 U	9.3 U 0.393 U	-- 0.098 U	
Highland Lake, Andover	NHDES-FT-HIL-CSF	Pumpkinseed Sunfish (Lepomis gibbosus)	320-66289-30 L35040-30	10/26/2020 10/26														

**Table 4**  
**Per- and Polyfluoroalkyl Substances in Fish Tissue**  
**New Hampshire Department of Environmental Services**  
**Watershed Management Bureau and Environmental Health Program**



**Definitions**

New Hampshire has not promulgated regulatory criteria for PFAS in fish tissue.

-- = respective laboratory does not analyze for applicable compound

Light blue shaded rows and *italic font* indicate data from SGS Axys analyzed via proprietary method MLA-110 (PFAS)

<sup>1</sup>Refer to *Table 1: Analytical Parameters - Fish Tissue, Surface Water, and Sediment* of this report for the analyte acronym list.

**Bold** font indicates a compound is detected at or above the laboratory reporting limit.

ng/L = Nanogram per liter, equivalent to parts per trillion

µg/kg = Microgram per kilogram

CAS No. = Chemical Abstract Service registry number

NA = Not applicable/standard not established

FT = Fish tissue

RE = resample per Sampling and Analysis Plan

DB = duplicate

NHDES = New Hampshire Department of Environmental Services

PFAS = Per- and polyfluoroalkyl substances

FRB = field reagent blank

J = Result is less than the reporting limit, but greater than or equal to the method detection limit, and the concentration is an approximate value.

U = Indicates constituent was not detected at or above the laboratory minimum reporting limit.

UJ = Concentration is estimated non-detect.

**Table 5**  
**Per- and Polyfluoroalkyl Substances in Surface Water and Sediment**  
**New Hampshire Department of Environmental Services**  
**Watershed Management Bureau and Environmental Health Program**

Lake Name Location	Field Sample ID	Sample Depth (feet from surface)	Lab Sample ID	Sample Date	PER- and POLYFLUOROALKYL SUBSTANCES <sup>1</sup>										
					Carboxylic Acids										
					PFBA	PFPeA	PFHxA	PFHpA	PFOA	PFNA	PFDA				
					Eurofins CAS No.	375-22-4	2706-90-3	307-24-4	375-85-9	335-67-1	375-95-1	335-76-2			
				SWQC (ng/L)	NA	NA	NA	NA	NA	NA	NA	NA			
<b>Field Samples - Surface Water (ng/L)</b>															
Arlington Mill Reservoir, Salem	NHDES-SW-AMR-01	3	320-65420-8	10/7/2020	4.1	U	2.7	2.5	2.0	4.8	1.7	U	1.7	U	
	NHDES-SW-AMR-02	15	320-65420-9	10/7/2020	4.2	U	2.8	2.4	2.0	4.5	1.7	U	1.7	U	
	NHDES-SW-AMR-03	28	320-65420-10	10/7/2020	4.5	U	2.1	2.5	2.1	4.7	1.8	U	1.8	U	
Armington Lake, Piermont	NHDES-SW-ARL-01	3	320-65915-2	10/22/2020	4.4	U	1.8	U	1.8	U	1.8	U	1.8	U	
	NHDES-SW-ARL-02	17	320-65915-3	10/22/2020	4.3	U	1.7	U	1.7	U	1.7	U	1.7	U	
	NHDES-SW-ARL-03	25	320-65915-4	10/22/2020	4.2	U	1.7	U	1.7	U	1.7	U	1.7	U	
Babooasic Lake, Merrimack	NHDES-SW-BAL-01	3	320-65677-2	10/15/2020	4.4	U	2.1	2.4	1.9	7	1.8	U	1.8	U	
	NHDES-SW-BAL-02	12	320-65677-3	10/15/2020	4.7	U	2.3	2.2	1.9	7.2	1.9	U	1.9	U	
	NHDES-SW-BAL-03	22	320-65677-4	10/15/2020	4.4	U	2	2.5	2	7.3	1.8	U	1.8	U	
Beaver Lake, Derry	NHDES-SW-BEL-01	3	320-65570-2	10/12/2020	5.6		6.2	3.5	2.9	5.4	1.7	U	1.7	U	
	NHDES-SW-BEL-02	11.5	320-65570-3	10/12/2020	4.3	U	1.8	1.7	1.7	U	3.6	1.7	U	1.7	U
	NHDES-SW-BEL-03	21.5	320-65570-4	10/12/2020	12		7.5	4	2.3	3.9	1.7	U	1.7	U	
Big Island Pond, Derry	NHDES-SW-BIP-01	3	320-65420-2	10/6/2020	4.3	U	2.1	2.1	1.9	4.0	1.7	U	1.7	U	
	NHDES-SW-BIP-02	29	320-65420-3	10/6/2020	4.3	U	1.8	1.9	1.7	U	3.7	1.7	U	1.7	U
	NHDES-SW-BIP-03	56	320-65420-4	10/6/2020	4.7	U	1.9	U	1.9	U	3.5	1.9	U	1.9	U
Canobie Lake, Salem	NHDES-SW-CAL-01	3	320-65812-2	10/19/2020	4.2	U	3.6	3.9	3.1	7.4	1.7	U	1.7	U	
	NHDES-SW-CAL-02	18	320-65812-3	10/19/2020	4.1	U	4	4.4	2.9	7.2	1.7	U	1.7	U	
	NHDES-SW-CAL-03	36.5	320-65812-4	10/19/2020	4.1	U	3.4	3.9	2.7	7.0	1.6	U	1.6	U	
Captain Pond, Salem	NHDES-SW-CAP-01	3	320-65490-4	10/9/2020	4.5	U	2	2.2	1.8	3.9	1.8	U	1.8	U	
	NHDES-SW-CAP-01 (RE)	3	320-66004-1	10/26/2020	4.5	U	1.8	2.1	2	4.1	1.8	U	1.8	U	
	NHDES-SW-CAP-01 (DB)	3	320-65490-5	10/9/2020	4.4	U	1.9	2.1	1.8	U	4.1	1.8	U	1.8	U
	NHDES-SW-CAP-02	13	320-65490-6	10/9/2020	4.6	U	2.1	2.4	1.8	4.0	1.8	U	1.8	U	
	NHDES-SW-CAP-02 (RE)	13	320-66004-2	10/26/2020	4.5	U	1.8	U	2.5	1.8	U	4.2	1.8	U	
	NHDES-SW-CAP-02 (DB)	13	320-65490-7	10/9/2020	4.6	U	1.8	2.2	1.8	4.2	1.8	U	1.8	U	
	NHDES-SW-CAP-03	23.5	320-65490-8	10/9/2020	4.7	U	1.9	2.1	1.9	U	4.0	1.9	U	1.9	U
	NHDES-SW-CAP-03 (RE)	23.5	320-66004-3	10/26/2020	4.6	U	1.9	2.3	1.8	U	4.0	1.8	U	1.8	U
	NHDES-SW-CAP-03 (DB)	23.5	320-65490-9	10/9/2020	4.6	U	1.9	2.4	1.8	U	4.2	1.8	U	1.8	U
Cobbets Pond, Windham	NHDES-SW-COP-01	3	320-65820-1	10/20/2020	4.1	U	3.1	3.5	2.6	6.1	1.7	U	1.7	U	
	NHDES-SW-COP-01 (RE)	3	320-65820-6	10/20/2020	4.6	U	3.3	3.6	2.9	6.7	1.8	U	1.8	U	
	NHDES-SW-COP-02	22	320-65820-2	10/20/2020	4.6	U	3.1	3.3	2.7	6.2	1.8	U	1.8	U	
	NHDES-SW-COP-02 (RE)	22	320-65820-7	10/20/2020	4.5	U	3.3	3.6	2.8	6.8	1.8	U	1.8	U	
	NHDES-SW-COP-03	43	320-65820-3	10/20/2020	4.6	U	3.1	3.2	2.7	6.6	1.8	U	1.8	U	
	NHDES-SW-COP-03 (RE)	43	320-65820-8	10/20/2020	4.6	U	3.1	3.2	2.6	6.6	1.8	U	1.8	U	
Great Pond, Kingston	NHDES-SW-GTP-01	3	320-65812-10	10/19/2020	4.6	U	1.8	U	1.8	U	2.6	1.8	U	1.8	U
	NHDES-SW-GTP-02	19	320-65812-11	10/19/2020	4.3	U	1.7	U	1.7	U	2.7	1.7	U	1.7	U
	NHDES-SW-GTP-03	36.5	320-65812-12	10/19/2020	4.4	U	1.8	U	1.8	U	2.2	1.8	U	1.8	U
Highland Lake, Andover	NHDES-SW-HIL-01	3	320-66004-7	10/23/2020	4.4	U	1.7	U	1.7	U	1.7	U	1.7	U	
	NHDES-SW-HIL-02	17.5	320-66004-8	10/23/2020	4.6	U	1.8	U	1.8	U	1.8	U	1.8	U	
	NHDES-SW-HIL-03	33.5	320-66004-9	10/23/2020	4.9	U	2.0	U	2.0	U	2.0	U	2.0	U	
Horseshoe Pond, Merrimack	NHDES-SW-HOP-01	3	320-65812-6	10/19/2020	4.3	U	4.9	6.6	5.3	23	1.7	U	1.7	U	
	NHDES-SW-HOP-02	6	320-65812-7	10/19/2020	4.5	U	4.9	6.2	5.4	22	1.8	U	1.8	U	
	NHDES-SW-HOP-03	12	320-65812-8	10/19/2020	5.0	U	5.9	7.4	6.3	26	2.0	U	2.0	U	
Lake Massabesic, Auburn	NHDES-SW-LMA-01	3	320-66168-4	10/28/2020	4.6	U	2.8	3.2	2.9	5.1	2.3	1.9			
	NHDES-SW-LMA-02	16	320-66168-3	10/28/2020	4.6	U	1.8	U	1.8	U	3.7	1.8	U	1.8	U
	NHDES-SW-LMA-03	31.5	320-66168-1	10/28/2020	4.8	U	1.9	U	1.9	U	3.7	1.9	U	1.9	U
	NHDES-SW-LMA-03 (DB)	31.5	320-66168-2	10/28/2020	4.7	U	1.9	U	1.9	U	3.9	1.9	U	1.9	U
Naticook Lake, Merrimack	NHDES-SW-NAL-01	3	320-65570-6	10/12/2020	4.4	U	4.1	6.3	4.1</td						

**Table 5**  
**Per- and Polyfluoroalkyl Substances in Surface Water and Sediment**  
**New Hampshire Department of Environmental Services**  
**Watershed Management Bureau and Environmental Health Program**



Lake Name Location	Field Sample ID	Sample Depth (feet from surface)	Lab Sample ID	Sample Date	PER- and POLYFLUOROALKYL SUBSTANCES <sup>1</sup>						
					Carboxylic Acids (concluded)						
					PFUNA	PFDoA	PFTriA	PFTeA	PFHxDa	PFODA	
		Eurofins CAS No.		2058-94-8	307-55-1	72629-94-8	376-06-7	67905-19-5	16517-11-6		
		SWQC (ng/L)		NA	NA	NA	NA	NA	NA	NA	
<b>Field Samples - Surface Water (ng/L)</b>											
Arlington Mill Reservoir, Salem	NHDES-SW-AMR-01	3	320-65420-8	10/7/2020	1.7	U	1.7	U	1.7	U	1.7
	NHDES-SW-AMR-02	15	320-65420-9	10/7/2020	1.7	U	1.7	U	1.7	U	1.7
	NHDES-SW-AMR-03	28	320-65420-10	10/7/2020	1.8	U	1.8	U	1.8	U	1.8
Armington Lake, Piermont	NHDES-SW-ARL-01	3	320-65915-2	10/22/2020	1.8	U	1.8	U	1.8	U	1.8
	NHDES-SW-ARL-02	17	320-65915-3	10/22/2020	1.7	U	1.7	U	1.7	U	1.7
	NHDES-SW-ARL-03	25	320-65915-4	10/22/2020	1.7	U	1.7	U	1.7	U	1.7
Baboosic Lake, Merrimack	NHDES-SW-BAL-01	3	320-65677-2	10/15/2020	1.8	U	1.8	U	1.8	U	1.8
	NHDES-SW-BAL-02	12	320-65677-3	10/15/2020	1.9	U	1.9	U	1.9	U	1.9
	NHDES-SW-BAL-03	22	320-65677-4	10/15/2020	1.8	U	1.8	U	1.8	U	1.8
Beaver Lake, Derry	NHDES-SW-BEL-01	3	320-65570-2	10/12/2020	1.7	U	1.7	U	1.7	U	1.7
	NHDES-SW-BEL-02	11.5	320-65570-3	10/12/2020	1.7	U	1.7	U	1.7	U	1.7
	NHDES-SW-BEL-03	21.5	320-65570-4	10/12/2020	1.7	U	1.7	U	1.7	U	1.7
Big Island Pond, Derry	NHDES-SW-BIP-01	3	320-65420-2	10/6/2020	1.7	U	1.7	U	1.7	U	1.7
	NHDES-SW-BIP-02	29	320-65420-3	10/6/2020	1.7	U	1.7	U	1.7	U	1.7
	NHDES-SW-BIP-03	56	320-65420-4	10/6/2020	1.9	U	1.9	U	1.9	U	1.9
Canobie Lake, Salem	NHDES-SW-CAL-01	3	320-65812-2	10/19/2020	1.7	U	1.7	U	1.7	U	1.7
	NHDES-SW-CAL-02	18	320-65812-3	10/19/2020	1.7	U	1.7	U	1.7	U	1.7
	NHDES-SW-CAL-03	36.5	320-65812-4	10/19/2020	1.6	U	1.6	U	1.6	U	1.6
Captain Pond, Salem	NHDES-SW-CAP-01	3	320-65490-4	10/9/2020	1.8	U	1.8	U	1.8	U	1.8
	NHDES-SW-CAP-01 (RE)	3	320-66004-1	10/26/2020	1.8	U	1.8	U	1.8	U	1.8
	NHDES-SW-CAP-01 (DB)	3	320-65490-5	10/9/2020	1.8	U	1.8	U	1.8	U	1.8
	NHDES-SW-CAP-02	13	320-65490-6	10/9/2020	1.8	U	1.8	U	1.8	U	1.8
	NHDES-SW-CAP-02 (RE)	13	320-66004-2	10/26/2020	1.8	U	1.8	U	1.8	U	1.8
	NHDES-SW-CAP-02 (DB)	13	320-65490-7	10/9/2020	1.8	U	1.8	U	1.8	U	1.8
	NHDES-SW-CAP-03	23.5	320-65490-8	10/9/2020	1.9	U	1.9	U	1.9	U	1.9
	NHDES-SW-CAP-03 (RE)	23.5	320-66004-3	10/26/2020	1.8	U	1.8	U	1.8	U	1.8
	NHDES-SW-CAP-03 (DB)	23.5	320-65490-9	10/9/2020	1.8	U	1.8	U	1.8	U	1.8
Cobbetts Pond, Windham	NHDES-SW-COP-01	3	320-65820-1	10/20/2020	1.7	U	1.7	U	1.7	U	1.7
	NHDES-SW-COP-01 (RE)	3	320-65820-6	10/20/2020	1.8	U	1.8	U	1.8	U	1.8
	NHDES-SW-COP-02	22	320-65820-2	10/20/2020	1.8	U	1.8	U	1.8	U	1.8
	NHDES-SW-COP-02 (RE)	22	320-65820-7	10/20/2020	1.8	U	1.8	U	1.8	U	1.8
	NHDES-SW-COP-03	43	320-65820-3	10/20/2020	1.8	U	1.8	U	1.8	U	1.8
	NHDES-SW-COP-03 (RE)	43	320-65820-8	10/20/2020	1.8	U	1.8	U	1.8	U	1.8
Great Pond, Kingston	NHDES-SW-GTP-01	3	320-65812-10	10/19/2020	1.8	U	1.8	U	1.8	U	1.8
	NHDES-SW-GTP-02	19	320-65812-11	10/19/2020	1.7	U	1.7	U	1.7	U	1.7
	NHDES-SW-GTP-03	36.5	320-65812-12	10/19/2020	1.8	U	1.8	U	1.8	U	1.8
	NHDES-SW-GTP-03 (DB)	36.5	320-65812-13	10/19/2020	1.7	U	1.7	U	1.7	U	1.7
Highland Lake, Andover	NHDES-SW-HIL-01	3	320-66004-7	10/23/2020	1.7	U	1.7	U	1.7	U	1.7
	NHDES-SW-HIL-02	17.5	320-66004-8	10/23/2020	1.8	U	1.8	U	1.8	U	1.8
	NHDES-SW-HIL-03	33.5	320-66004-9	10/23/2020	2.0	U	2.0	U	2.0	U	2.0
Horseshoe Pond, Merrimack	NHDES-SW-HOP-01	3	320-65812-6	10/19/2020	1.7	U	1.7	U	1.7	U	1.7
	NHDES-SW-HOP-02	6	320-65812-7	10/19/2020	1.8	U	1.8	U	1.8	U	1.8
	NHDES-SW-HOP-03	12	320-65812-8	10/19/2020	2.0	U	2.0	U	2.0	U	2.0
Lake Massabesic, Auburn	NHDES-SW-LMA-01	3	320-66168-4	10/28/2020	1.8	U	2.4	2.2	2.0	2.0	1.8
	NHDES-SW-LMA-02	16	320-66168-3	10/28/2020	1.8	U	1.8	U	1.8	U	1.8
	NHDES-SW-LMA-03	31.5	320-66168-1	10/28/2020	1.9	U	1.9	U	1.9	U	1.9
	NHDES-SW-LMA-03 (DB)	31.5	320-66168-2	10/28/2020	1.9	U	1.9	U	1.9	U	1.9
Naticook Lake, Merrimack	NHDES-SW-NAL-01	3	320-65570-6	10/12/2020	1.8	U	1.8	U	1.8	U	1.8
	NHDES-SW-NAL-02	7.5	320-65570-7	10/12/2020	1.7	U	1.7	U	1.7	U	1.7
	NHDES-SW-NAL-03	12	320-65570-8	10/12/2020	1.7	U	1.7	U	1.7	U	1.7
Robinson Pond, Hudson	NHDES-SW-ROP-01	3	320-65622-2	10/14/2020	1.6	U	1.6	U	1.6	U	1.6
	NHDES-SW-ROP-02	13	320-65622-3	10/14/2020	1.6	U	1.6	U	1.6	U	1.6
	NHDES-SW-ROP-03	24.5	320-65622-4	10/14/2020	1.6	U	1.6	U	1.6	U	1.6
<b>Field Samples - Sediment (ug/kg, dry weight)</b>											
Arlington Mill Reservoir	NHDES-SD-AMR-01	30	320-65420-7	10/7/2020	3.4	U	3.4	U	3.4	U	3.4
Armington Lake	NHDES-SD-ARL-01	27	320-65915-1	10/22/2020	2.1	U	2.1	U	2.1	U	2.1
Baboosic Lake	NHDES-SD-BAL-01	24	320-65677-1	10/15/2020	1.9	U	1.9	U	1.9	U	1.9
Beaver Lake	NHDES-SD-BEL-01	23	320-65570-1	10/12/2020	1.5	U	1.5	U	1.5	U	1.5
Big Island Pond	NHDES-SD-BIP-01	58	320-65420-1	10/6/2020	2.0	U	2.0	U	2.0	U	2.0
Canobie Lake	NHDES-SD-CAL-01	36.5	320-65812-1	10/19/2020							

**Table 5**  
**Per- and Polyfluoroalkyl Substances in Surface Water and Sediment**  
**New Hampshire Department of Environmental Services**  
**Watershed Management Bureau and Environmental Health Program**

Lake Name Location	Field Sample ID	Sample Depth (feet from surface)	Lab Sample ID	Sample Date	PER- and POLYFLUOROALKYL SUBSTANCES <sup>1</sup>														
					Sulfonic Acids														
					PFBS	PPeS	PFHxS	PFHpS	PFOS	PFNS	PFDS	PFDoS							
					Eurofins CAS No.	375-73-5	2706-91-4	355-46-4	375-92-8	1763-23-1	68259-12-1	335-77-3	79780-39-5						
SWQC (ng/L)																			
<b>Field Samples - Surface Water (ng/L)</b>																			
Arlington Mill Reservoir, Salem	NHDES-SW-AMR-01	3	320-65420-8	10/7/2020	2.3	1.7	U	1.9	1.7	U	2.6	1.7	U	1.7	U				
	NHDES-SW-AMR-02	15	320-65420-9	10/7/2020	2.2	1.7	U	1.8	1.7	U	2.6	1.7	U	1.7	U				
	NHDES-SW-AMR-03	28	320-65420-10	10/7/2020	2.1	1.8	U	1.8	1.8	U	2.7	1.8	U	1.8	U				
Armington Lake, Piermont	NHDES-SW-ARL-01	3	320-65915-2	10/22/2020	1.8	U	1.8	U	1.8	U	1.8	U	1.8	U					
	NHDES-SW-ARL-02	17	320-65915-3	10/22/2020	1.7	U	1.7	U	1.7	U	1.7	U	1.7	U					
	NHDES-SW-ARL-03	25	320-65915-4	10/22/2020	1.7	U	1.7	U	1.7	U	1.7	U	1.7	U					
Baboosic Lake, Merrimack	NHDES-SW-BAL-01	3	320-65677-2	10/15/2020	1.8	U	1.8	U	1.8	U	2.1	1.8	U	1.8	U				
	NHDES-SW-BAL-02	12	320-65677-3	10/15/2020	1.9	U	1.9	U	1.9	U	2.4	1.9	U	1.9	U				
	NHDES-SW-BAL-03	22	320-65677-4	10/15/2020	1.8	U	1.8	U	1.8	U	2.2	1.8	U	1.8	U				
Beaver Lake, Derry	NHDES-SW-BEL-01	3	320-65570-2	10/12/2020	1.9	U	1.7	U	2.5	1.7	U	3.0	1.7	U	1.7	U			
	NHDES-SW-BEL-02	11.5	320-65570-3	10/12/2020	1.8	U	1.7	U	2.4	1.7	U	2.3	1.7	U	1.7	U			
	NHDES-SW-BEL-03	21.5	320-65570-4	10/12/2020	1.9	U	1.7	U	2.2	1.7	U	2.2	1.7	U	1.7	U			
Big Island Pond, Derry	NHDES-SW-BIP-01	3	320-65420-2	10/6/2020	2.0	U	1.7	U	1.7	U	1.9	U	1.7	U	1.7	U			
	NHDES-SW-BIP-02	29	320-65420-3	10/6/2020	1.8	U	1.7	U	1.7	U	1.9	U	1.7	U	1.7	U			
	NHDES-SW-BIP-03	56	320-65420-4	10/6/2020	1.9	U	1.9	U	1.9	U	2.2	1.9	U	1.9	U				
Canobie Lake, Salem	NHDES-SW-CAL-01	3	320-65812-2	10/19/2020	2.8	U	1.7	U	1.9	U	1.7	U	2.7	J	1.7	U	1.7	U	
	NHDES-SW-CAL-02	18	320-65812-3	10/19/2020	2.8	U	1.7	U	1.8	U	1.7	U	2.5	1.7	U	1.7	U		
	NHDES-SW-CAL-03	36.5	320-65812-4	10/19/2020	2.8	U	1.6	U	1.8	U	1.6	U	1.8	U	1.6	U	1.6	U	
Captain Pond, Salem	NHDES-SW-CAP-01	3	320-65490-4	10/9/2020	1.8	U	1.8	U	1.8	U	1.8	U	2	1.8	U	1.8	U	1.8	U
	NHDES-SW-CAP-01 (RE)	3	320-66004-1	10/26/2020	1.9	U	1.8	U	1.8	U	1.8	U	1.8	U	1.8	U	1.8	U	
	NHDES-SW-CAP-01 (DB)	3	320-65490-5	10/9/2020	1.8	U	1.8	U	1.8	U	1.9	U	1.8	U	1.8	U	1.8	U	
	NHDES-SW-CAP-02	13	320-65490-6	10/9/2020	1.8	U	1.8	U	1.8	U	2.3	1.8	U	1.8	U	1.8	U		
	NHDES-SW-CAP-02 (RE)	13	320-66004-2	10/26/2020	1.8	U	1.8	U	1.8	U	1.8	U	1.8	U	1.8	U			
	NHDES-SW-CAP-02 (DB)	13	320-65490-7	10/9/2020	1.8	U	1.8	U	1.8	U	1.9	J	1.8	U	1.8	U	1.8	U	
	NHDES-SW-CAP-03	23.5	320-65490-8	10/9/2020	1.9	U	1.9	U	1.9	U	2.1	J	1.9	U	1.9	U	1.9	U	
	NHDES-SW-CAP-03 (RE)	23.5	320-66004-3	10/26/2020	1.8	U	1.8	U	1.8	U	2.1	1.8	U	1.8	U	1.8	U		
	NHDES-SW-CAP-03 (DB)	23.5	320-65490-9	10/9/2020	1.8	U	1.8	U	1.8	U	1.8	U	1.8	U	1.8	U	1.8	U	
Cobbets Pond, Windham	NHDES-SW-COP-01	3	320-65820-1	10/20/2020	2.2	U	1.7	U	1.7	U	1.8	U	1.7	U	1.7	U	1.7	U	
	NHDES-SW-COP-01 (RE)	3	320-65820-6	10/20/2020	2.3	U	1.8	U	1.8	U	1.9	U	1.8	U	1.8	U	1.8	U	
	NHDES-SW-COP-02	22	320-65820-2	10/20/2020	2.1	U	1.8	U	1.8	U	2.0	1.8	U	1.8	U	1.8	U		
	NHDES-SW-COP-02 (RE)	22	320-65820-7	10/20/2020	2.4	U	1.8	U	1.8	U	2.1	1.8	U	1.8	U	1.8	U		
	NHDES-SW-COP-03	43	320-65820-3	10/20/2020	2.1	U	1.8	U	1.8	U	3.3	J	1.8	U	1.8	U	1.8	U	
	NHDES-SW-COP-03 (RE)	43	320-65820-8	10/20/2020	2.0	U	1.8	U	1.8	U	2.2	J	1.8	U	1.8	U	1.8	U	
Great Pond, Kingston	NHDES-SW-GTP-01	3	320-65812-10	10/19/2020	1.8	U	1.8	U	1.8	U	1.8	U	1.8	U	1.8	U	1.8	U	
	NHDES-SW-GTP-02	19	320-65812-11	10/19/2020	1.7	U	1.7	U	1.7	U	1.7	U	1.7	U	1.7	U	1.7	U	
	NHDES-SW-GTP-03	36.5	320-65812-12	10/19/2020	1.8	U	1.8	U	1.8	U	1.8	U	1.8	U	1.8	U	1.8	U	
	NHDES-SW-GTP-03 (DB)	36.5	320-65812-13	10/19/2020	1.7	U	1.7	U	1.7	U	1.7	U	1.7	U	1.7	U	1.7	U	
Highland Lake, Andover	NHDES-SW-HIL-01	3	320-66004-7	10/23/2020	1.7	U	1.7	U	1.7	U	1.7	U	1.7	U	1.7	U	1.7	U	
	NHDES-SW-HIL-02	17.5	320-66004-8	10/23/2020	1.8	U	1.8	U	1.8	U	1.8	U	1.8	U	1.8	U	1.8	U	
	NHDES-SW-HIL-03	33.5	320-66004-9	10/23/2020	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	2.0	U	
Horseshoe Pond, Merrimack	NHDES-SW-HOP-01	3	320-65812-6	10/19/2020	6.0	U	1.7	U	5.1	U	1.7	U	5.1	U	1.7	U	1.7	U	
	NHDES-SW-HOP-02	6	320-65812-7	10/19/2020	5.9	U	1.8	U	4.8</td										

**Table 5**  
**Per- and Polyfluoroalkyl Substances in Surface Water and Sediment**  
**New Hampshire Department of Environmental Services**  
**Watershed Management Bureau and Environmental Health Program**

Lake Name Location	Field Sample ID	Sample Depth (feet from surface)	Lab Sample ID	Sample Date	PER- and POLYFLUOROALKYL SUBSTANCES <sup>1</sup>													
					Fluorotelomer Sulfonic Acids				Perfluorooctane Sulfonic Acids				Perfluorooctane Sulfonamidoacetic Acids					
					4:2 FTS	6:2 FTS	8:2 FTS	10:2 FTS	FOSA	NEtFOSA	NMeFOSA	NEtFOSAA	NMeFOSAA					
					Eurofins CAS No.	757124-72-4	27619-97-2	39108-34-4	120226-60-0	754-91-6	4151-50-2	31506-32-8	2991-50-6	2355-31-9				
					SWQC (ng/L)	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA		
<b>Field Samples - Surface Water (ng/L)</b>																		
Arlington Mill Reservoir, Salem	NHDES-SW-AMR-01	3	320-65420-8	10/7/2020	1.7	U	4.1	U	1.7	U	1.7	U	1.7	U	1.7	U	4.1	U
	NHDES-SW-AMR-02	15	320-65420-9	10/7/2020	1.7	U	4.2	U	1.7	U	1.7	U	1.7	U	1.7	U	4.2	U
	NHDES-SW-AMR-03	28	320-65420-10	10/7/2020	1.8	U	4.5	U	1.8	U	1.8	U	1.8	U	1.8	U	4.5	U
Armington Lake, Piermont	NHDES-SW-ARL-01	3	320-65915-2	10/22/2020	1.8	U	4.4	U	1.8	U	1.8	U	1.8	U	1.8	U	4.4	U
	NHDES-SW-ARL-02	17	320-65915-3	10/22/2020	1.7	U	4.3	U	1.7	U	1.7	U	1.7	U	1.7	U	4.3	U
	NHDES-SW-ARL-03	25	320-65915-4	10/22/2020	1.7	U	4.2	U	1.7	U	1.7	U	1.7	U	1.7	U	4.2	U
Baboosic Lake, Merrimack	NHDES-SW-BAL-01	3	320-65677-2	10/15/2020	1.8	U	4.4	U	1.8	U	1.8	U	1.8	U	1.8	U	4.4	U
	NHDES-SW-BAL-02	12	320-65677-3	10/15/2020	1.9	U	4.7	U	1.9	U	1.9	U	1.9	U	1.9	U	4.7	U
	NHDES-SW-BAL-03	22	320-65677-4	10/15/2020	1.8	U	4.4	U	1.8	U	1.8	U	1.8	U	1.8	U	4.4	U
Beaver Lake, Derry	NHDES-SW-BEL-01	3	320-65570-2	10/12/2020	1.7	U	4.3	U	1.7	U	1.7	U	1.7	U	1.7	U	4.3	U
	NHDES-SW-BEL-02	11.5	320-65570-3	10/12/2020	1.7	U	4.3	U	1.7	U	1.7	U	1.7	U	1.7	U	4.3	U
	NHDES-SW-BEL-03	21.5	320-65570-4	10/12/2020	1.7	U	4.3	U	1.7	U	1.7	U	1.7	U	1.7	U	4.3	U
Big Island Pond, Derry	NHDES-SW-BIP-01	3	320-65420-2	10/6/2020	1.7	U	4.3	U	1.7	U	1.7	U	1.7	U	1.7	U	4.3	U
	NHDES-SW-BIP-02	29	320-65420-3	10/6/2020	1.7	U	4.3	U	1.7	U	1.7	U	1.7	U	1.7	U	4.3	U
	NHDES-SW-BIP-03	56	320-65420-4	10/6/2020	1.9	U	4.7	U	1.9	U	1.9	U	1.9	U	1.9	U	4.7	U
Canobie Lake, Salem	NHDES-SW-CAL-01	3	320-65812-2	10/19/2020	1.7	U	4.2	U	1.7	U	1.7	U	1.7	U	1.7	U	4.2	U
	NHDES-SW-CAL-02	18	320-65812-3	10/19/2020	1.7	U	4.1	U	1.7	U	1.7	U	1.7	U	1.7	U	4.1	U
	NHDES-SW-CAL-03	36.5	320-65812-4	10/19/2020	1.6	U	4.1	U	1.6	U	1.6	U	1.6	U	1.6	U	4.1	U
Captain Pond, Salem	NHDES-SW-CAP-01	3	320-65490-4	10/9/2020	1.8	U	4.5	U	1.8	U	1.8	U	1.8	U	1.8	U	4.5	U
	NHDES-SW-CAP-01 (RE)	3	320-66004-1	10/26/2020	1.8	U	4.5	U	1.8	U	1.8	U	1.8	U	1.8	U	4.5	U
	NHDES-SW-CAP-01 (DB)	3	320-65490-5	10/9/2020	1.8	U	4.4	U	1.8	U	1.8	U	1.8	U	1.8	U	4.4	U
	NHDES-SW-CAP-02	13	320-65490-6	10/9/2020	1.8	U	4.6	U	1.8	U	1.8	U	1.8	U	1.8	U	4.6	U
	NHDES-SW-CAP-02 (RE)	13	320-66004-2	10/26/2020	1.8	U	4.5	U	1.8	U	1.8	U	1.8	U	1.8	U	4.5	U
	NHDES-SW-CAP-02 (DB)	13	320-65490-7	10/9/2020	1.8	U	4.6	U	1.8	U	1.8	U	1.8	U	1.8	U	4.6	U
	NHDES-SW-CAP-03	23.5	320-65490-8	10/9/2020	1.9	U	4.7	U	1.9	U	1.9	U	1.9	U	1.9	U	4.7	U
Cobbets Pond, Windham	NHDES-SW-CAP-03 (RE)	23.5	320-66004-3	10/26/2020	1.8	U	4.6	U	1.8	U	1.8	U	1.8	U	1.8	U	4.6	U
	NHDES-SW-CAP-03 (DB)	23.5	320-65490-9	10/9/2020	1.8	U	4.6	U	1.8	U	1.8	U	1.8	U	1.8	U	4.6	U
	NHDES-SW-COP-01	3	320-65820-1	10/20/2020	1.7	U	4.1	U	1.7	U	1.7	U	1.7	U	1.7	U	4.1	U
Great Pond, Kingston	NHDES-SW-COP-01 (RE)	3	320-65820-6	10/20/2020	1.8	U	4.6	U	1.8	U	1.8	U	1.8	U	1.8	U	4.6	U
	NHDES-SW-COP-02	22	320-65820-2	10/20/2020	1.8	U	4.6	U	1.8	U	1.8	U	1.8	U	1.8	U	4.6	U
	NHDES-SW-COP-02 (RE)	22	320-65820-7	10/20/2020	1.8	U	4.5	U	1.8	U	1.8	U	1.8	U	1.8	U	4.5	U
Highland Lake, Andover	NHDES-SW-COP-03	43	320-65820-3	10/20/2020	1.8	U	4.6	U	1.8	U	1.8	U	1.8	U	1.8	U	4.6	U
	NHDES-SW-COP-03 (RE)	43	320-65820-8	10/20/2020	1.8	U	4.6	U	1.8	U	1.8	U	1.8	U	1.8	U	4.6	U
	NHDES-SW-GTP-01	3	320-65812-10	10/19/2020	1.8	U	4.6	U	1.8	U	1.8	U	1.8	U	1.8	U	4.6	U
Horseshoe Pond, Merrimack	NHDES-SW-GTP-02	19	320-65812-11	10/19/2020	1.7	U	4.3	U	1.7	U	1.7	U	1.7	U	1.7	U	4.3	U
	NHDES-SW-GTP-03	36.5	320-65812-12	10/19/2020	1.8	U	4.4	U	1.8	U	1.8	U	1.8	U	1.8	U	4.4	U
	NHDES-SW-GTP-03 (DB)	36.5	320-65812-13	10/19/2020	1.7	U												

**Table 5**  
**Per- and Polyfluoroalkyl Substances in Surface Water and Sediment**  
**New Hampshire Department of Environmental Services**  
**Watershed Management Bureau and Environmental Health Program**

Lake Name Location	Field Sample ID	Sample Depth (feet from surface)	Lab Sample ID	Sample Date	PER- and POLYFLUOROALKYL SUBSTANCES <sup>1</sup>									
					Perfluorooctane Sulfonamide Ethanols		Ether Sulfonic Acids		Per- and Polyfluoroether Carboxylic Acids					
					NEtFOSE	NMeFOSE	F-53B Major	F-53B Minor	GenX	DONA				
					Eurofins CAS No.	1691-99-2	24448-09-7	756426-58-1	763051-92-9	13252-13-6	919005-14-4	SWQC (ng/L)		
<b>Field Samples - Surface Water (ng/L)</b>														
Arlington Mill Reservoir, Salem	NHDES-SW-AMR-01	3	320-65420-8	10/7/2020	1.7	U	3.3	U	1.7	U	3.3	U	1.7	U
	NHDES-SW-AMR-02	15	320-65420-9	10/7/2020	1.7	U	3.4	U	1.7	U	3.4	U	1.7	U
	NHDES-SW-AMR-03	28	320-65420-10	10/7/2020	1.8	U	3.6	U	1.8	U	3.6	U	1.8	U
Armington Lake, Piermont	NHDES-SW-ARL-01	3	320-65915-2	10/22/2020	1.8	U	3.5	U	1.8	U	3.5	U	1.8	U
	NHDES-SW-ARL-02	17	320-65915-3	10/22/2020	1.7	U	3.4	U	1.7	U	3.4	U	1.7	U
	NHDES-SW-ARL-03	25	320-65915-4	10/22/2020	1.7	U	3.4	U	1.7	U	3.4	U	1.7	U
Babosic Lake, Merrimack	NHDES-SW-BAL-01	3	320-65677-2	10/15/2020	1.8	U	3.6	U	1.8	U	3.6	U	1.8	U
	NHDES-SW-BAL-02	12	320-65677-3	10/15/2020	1.9	U	3.8	U	1.9	U	3.8	U	1.9	U
	NHDES-SW-BAL-03	22	320-65677-4	10/15/2020	1.8	U	3.6	U	1.8	U	3.6	U	1.8	U
Beaver Lake, Derry	NHDES-SW-BEL-01	3	320-65570-2	10/12/2020	1.7	U	3.4	U	1.7	U	280	U	1.7	U
	NHDES-SW-BEL-02	11.5	320-65570-3	10/12/2020	1.7	U	3.4	U	1.7	U	3.4	U	1.7	U
	NHDES-SW-BEL-03	21.5	320-65570-4	10/12/2020	1.7	U	3.4	U	1.7	U	850	E	1.7	U
Big Island Pond, Derry	NHDES-SW-BIP-01	3	320-65420-2	10/6/2020	1.7	U	3.5	U	1.7	U	3.5	U	1.7	U
	NHDES-SW-BIP-02	29	320-65420-3	10/6/2020	1.7	U	3.4	U	1.7	U	3.4	U	1.7	U
	NHDES-SW-BIP-03	56	320-65420-4	10/6/2020	1.9	U	3.7	U	1.9	U	3.7	U	1.9	U
Canobie Lake, Salem	NHDES-SW-CAL-01	3	320-65812-2	10/19/2020	1.7	U	3.3	U	1.7	U	3.3	U	1.7	U
	NHDES-SW-CAL-02	18	320-65812-3	10/19/2020	1.7	U	3.3	U	1.7	U	3.3	U	1.7	U
	NHDES-SW-CAL-03	36.5	320-65812-4	10/19/2020	1.6	U	3.2	U	1.6	U	3.2	U	1.6	U
Captain Pond, Salem	NHDES-SW-CAP-01	3	320-65490-4	10/9/2020	1.8	U	3.6	U	1.8	U	3.6	U	1.8	U
	NHDES-SW-CAP-01 (RE)	3	320-66004-1	10/26/2020	1.8	U	3.6	U	1.8	U	3.6	U	1.8	U
	NHDES-SW-CAP-01 (DB)	3	320-65490-5	10/9/2020	1.8	U	3.5	U	1.8	U	3.5	U	1.8	U
	NHDES-SW-CAP-02	13	320-65490-6	10/9/2020	1.8	U	3.7	U	1.8	U	3.7	U	1.8	U
	NHDES-SW-CAP-02 (RE)	13	320-66004-2	10/26/2020	1.8	U	3.6	U	1.8	U	3.6	U	1.8	U
	NHDES-SW-CAP-02 (DB)	13	320-65490-7	10/9/2020	1.8	U	3.7	U	1.8	U	3.7	U	1.8	U
	NHDES-SW-CAP-03	23.5	320-65490-8	10/9/2020	1.9	U	3.8	U	1.9	U	3.8	U	1.9	U
	NHDES-SW-CAP-03 (RE)	23.5	320-66004-3	10/26/2020	1.8	U	3.7	U	1.8	U	3.7	U	1.8	U
	NHDES-SW-CAP-03 (DB)	23.5	320-65490-9	10/9/2020	1.8	U	3.7	U	1.8	U	3.7	U	1.8	U
Cobbets Pond, Windham	NHDES-SW-COP-01	3	320-65820-1	10/20/2020	1.7	U	3.3	U	1.7	U	3.3	U	1.7	U
	NHDES-SW-COP-01 (RE)	3	320-65820-6	10/20/2020	1.8	U	3.7	U	1.8	U	3.7	U	1.8	U
	NHDES-SW-COP-02	22	320-65820-2	10/20/2020	1.8	U	3.6	U	1.8	U	3.6	U	1.8	U
	NHDES-SW-COP-02 (RE)	22	320-65820-7	10/20/2020	1.8	U	3.6	U	1.8	U	3.6	U	1.8	U
	NHDES-SW-COP-03	43	320-65820-3	10/20/2020	1.8	U	3.7	U	1.8	U	3.7	U	1.8	U
Great Pond, Kingston	NHDES-SW-COP-03 (RE)	43	320-65820-8	10/20/2020	1.8	U	3.7	U	1.8	U	3.7	U	1.8	U
	NHDES-SW-GTP-01	3	320-65812-10	10/19/2020	1.8	U	3.7	U	1.8	U	3.7	U	1.8	U
	NHDES-SW-GTP-02	19	320-65812-11	10/19/2020	1.7	U	3.4	U	1.7	U	3.4	U	1.7	U
Highland Lake, Andover	NHDES-SW-GTP-03	36.5	320-65812-12	10/19/2020	1.8	U	3.5	U	1.8	U	3.5	U	1.8	U
	NHDES-SW-GTP-03 (DB)	36.5	320-65812-13	10/19/2020	1.7	U	3.5	U	1.7	U	3.5	U	1.7	U
	NHDES-SW-HIL-01	3	320-66004-7	10/23/2020	1.7	U	3.5	U	1.7	U	3.5	U	1.7	U
Horseshoe Pond, Merrimack	NHDES-SW-HIL-02	17.5	320-66004-8	10/23/2020	1.8	U	3.6	U	1.8	U	3.6	U	1.8	U
	NHDES-SW-HIL-03	33.5	320-66004-9	10/23/2020	2.0	U	3.9	U	2.0	U	3.9	U	2.0	U
	NHDES-SW-HOP-01	3	320-65812-6	10/19/2020	1.7	U	3.4	U	1.7	U	3.4	U	1.7	U
Lake Massabesic, Auburn	NHDES-SW-HOP-02	6	320-65812-7	10/19/2020	1.8	U	3.6	U	1.8	U	3.6	U	1.8	U
	NHDES-SW-HOP-03	12	320-65812-8	10/19/2020	2.0	U	4.0	U	2.0	U	4.0	U	2.0	U
	NHDES-SW-LMA-01	3	320-66168-4	10/28/2020	1.8	U	3.7	U	1.8	U	2.0	U	1.8	U
Naticook Lake, Merrimack	NHDES-SW-LMA-02	16	320-66168-3	10/28/2020	1.8	U	3.7	U	1.8	U	3.7	U	1.8	U
	NHDES-SW-LMA-03	31.5	320-66168-1	10/28/2020	1.9	U	3.8	U	1.9	U	3.8	U	1.9	U
	N													

**Table 5**  
**Per- and Polyfluoroalkyl Substances in Surface Water and Sediment**  
**New Hampshire Department of Environmental Services**  
**Watershed Management Bureau and Environmental Health Program**

**Definitions:**

NHDES = New Hampshire Department of Environmental Services

CAS No. = Chemical Abstract Service registry number

SWQC = Surface water quality criteria

ng/L = Nanogram per liter, equivalent to parts per trillion

ug/kg = Microgram per kilogram

NA = Not applicable/standard not established

PFAS = Per- and polyfluoroalkyl substances

<sup>1</sup> Refer to Table 1 Analytical Parameters - Fish Tissue, Surface Water, and Sediment of this report for the Eurofins analyte acronym list.

**Bold** font indicates a compound is detected at or above the laboratory reporting limit.

SD = Sediment

SW = Surface water

FRB = field reagent blank

RB = rinse blank

J = Resultant concentration is an approximate value.

U = Indicates constituent was not detected at or above the laboratory minimum reporting limit.

E = Concentration is an estimated value above the calibration range of the instrument.

B = Analyte is associated with lab blank contamination.

DB = duplicate sample

RE = resample per Sampling and Analysis Plan

**Table 6**  
**Surface Water Quality Parameters**  
**New Hampshire Department of Environmental Services**  
**Watershed Management Bureau and Environmental Health Program**



Lake Name Location	Field Sample ID	Sample Date	Dissolved Organic Carbon (mg/L)	Chlorophyll-A (mg/m <sup>3</sup> )	Alkalinity (mg/L)	Hardness as calcium carbonate (mg/L)	Temperature (°C)	pH <sup>1</sup> (SU)	Dissolved Oxygen (mg/L)	Specific Conductivity (μS/cm <sup>2</sup> )
			CAS No.	7440-44-0		NA				
<b>Field Samples - Surface</b>										
Arlington Mill Reservoir, Salem	NHDES-SW-AMR-01	10/7/2020	4.8	1.1	21	34	18.5	6.74r	7.27	255
	NHDES-SW-AMR-02	10/7/2020	5.2	1.6	21	35	18.4	6.65r	6.71	257
	NHDES-SW-AMR-03	10/7/2020	5.6	5.2	24	37	17.9	6.92r	1.76	260
Armington Lake, Piermont	NHDES-SW-ARL-01	10/22/2020	2.2	2.1	6.8 J	16	12.0	7.68r	10.22	22
	NHDES-SW-ARL-02	10/22/2020	2.1	2.7	6.6 J	5.8	11.9	8.00r	10.58	30
	NHDES-SW-ARL-03	10/22/2020	2.1	5.1	6.6 J	8.6	11.9	8.24r	10.76	30
Baboosic Lake, Merrimack	NHDES-SW-BAL-01	10/15/2020	4.3	5.9	15 B	17	16.9	7.21r	6.71	135
	NHDES-SW-BAL-02	10/15/2020	4.1	6.9	16 B	19	16.1	7.24r	7.98	135
	NHDES-SW-BAL-03	10/15/2020	4.4	5.5	15 B	19	15.8	7.50r	8.87	134
Beaver Lake, Derry	NHDES-SW-BEL-01	10/12/2020	3.7	1.9	29 B	31	15.5	7.92r	NM	192
	NHDES-SW-BEL-02	10/12/2020	3.9	2.7	29 B	36	15.5	8.12r	8.54	192
	NHDES-SW-BEL-03	10/12/2020	3.9	1.3	29 B	32	15.2	8.61r	8.33	194
Big Island Pond, Derry	NHDES-SW-BIP-01	10/6/2020	4.8	3.5	16	32	18.8	6.78r	6.52	196
	NHDES-SW-BIP-02	10/6/2020	4.4	3.2	17	27	17.1	6.46r	5.58	190
	NHDES-SW-BIP-03	10/6/2020	4.4	1.1	20	30	15.4	6.66r	4.33	196
Canobie Lake, Salem	NHDES-SW-CAL-01	10/19/2020	3.3	1.3	29	50	15.1	7.85r	8.47	378
	NHDES-SW-CAL-02	10/19/2020	3.0	1.9	35	50	15.0	7.86r	8.87	378
	NHDES-SW-CAL-03	10/19/2020	2.8	1.1	30	49	14.9	7.65r	7.96	374
Captain Pond, Salem	NHDES-SW-CAP-01	10/9/2020	4.7	2.7	24	40	15.7	7.55r	8.47	238
	NHDES-SW-CAP-01 (RE)	10/26/2020	5.3	2.4	23	35	13.4	6.20r	11.6	240
	NHDES-SW-CAP-01 (DB)	10/9/2020	5.2	2.4	30	38	16.1	7.65r	7.34	238
	NHDES-SW-CAP-02	10/9/2020	5.2	2.9	25	38	15.9	8.13r	7.95	241
	NHDES-SW-CAP-02 (RE)	10/26/2020	5.3	2.7	23	33	13.4	6.06r	9.38	240
	NHDES-SW-CAP-02 (DB)	10/9/2020	5.0	3.3	24	37	15.7	7.71r	77.7J	239
	NHDES-SW-CAP-03	10/9/2020	4.9	3.2	25	44	15.8	8.95r	12.51	260
	NHDES-SW-CAP-03 (RE)	10/26/2020	5.4	2.4	23	36	13.0	5.84r	10.02	240
	NHDES-SW-CAP-03 (DB)	10/9/2020	5.0	2.7	28	36	15.7	8.63r	8.53	242
Cobbetts Pond, Windham	NHDES-SW-COP-01	10/20/2020	2.7	3.2	45	69	15.7	7.49r	9.06	336R
	NHDES-SW-COP-01 (RE)	10/20/2020	2.8	3.5	38	70	15.3	7.44r	9.28	444
	NHDES-SW-COP-02	10/20/2020	2.9	1.4	37	70	15.5	7.26r	5.17	446
	NHDES-SW-COP-02 (RE)	10/20/2020	2.8	1.9	37	66	15.3	7.05r	5.45	438
	NHDES-SW-COP-03	10/20/2020	2.8	3.9	51	78	14.0	7.58r	6.47	436
	NHDES-SW-COP-03 (RE)	10/20/2020	2.8	4.5	47	76	14.0	7.32r	1.33	433
Great Pond, Kingston	NHDES-SW-GTP-01	10/19/2020	3.5	2.4	14	32	14.6	8.06r	8.42	221
	NHDES-SW-GTP-02	10/19/2020	3.5	1.6	14	34	14.3	8.64r	8.25	221
	NHDES-SW-GTP-03	10/19/2020	4.3	8.2	28	97	13.9	7.97r	3.45	234
	NHDES-SW-GTP-03 (DB)	10/19/2020	4.3	5.7	30	130	13.9	7.97r	3.45	234
Highland Lake, Andover	NHDES-SW-HIL-01	10/23/2020	2.2	6.5	11	16	14.0	7.18r	9.05	46
	NHDES-SW-HIL-02	10/23/2020	2.1	6.1	9.5 J	8.2	13.6	7.28r	7.64	45
	NHDES-SW-HIL-03	10/23/2020	2.1	3.6	9.1 J	10	13.3	8.30r	6.87	44
Horseshoe Pond, Merrimack	NHDES-SW-HOP-01	10/19/2020	2.5	26.0	28	57	15.3	8.92r	8.29	570
	NHDES-SW-HOP-02	10/19/2020	2.7	30.0	28	64	15.1	7.85r	8.61	569
	NHDES-SW-HOP-03	10/19/2020	2.3	13.0	30	63	14.8	8.16r	8.84	570
Lake Massabesic, Auburn	NHDES-SW-LMA-01	10/28/2020	3.3	1.6 B	9.2 J	20	13.3	7.21r	9.33	211
	NHDES-SW-LMA-02	10/28/2020	3.4	1.6 B	9.6 J	16	13.3	7.33r	9.30	212
	NHDES-SW-LMA-03	10/28/2020	3.3	1.6 B	13	18	13.4	7.42r	9.62	216
	NHDES-SW-LMA-03 (DB)	10/28/2020	3.3	1.1 B	8.9 J	18	13.4	7.42r	9.62	216
Naticook Lake, Merrimack	NHDES-SW-NAL-01	10/12/2020	3.7	1.9	28 B	37	15.7	7.55r	7.75	295
	NHDES-SW-NAL-02	10/12/2020	3.5	1.6	26 B	38	15.6	7.60r	8.61	296
	NHDES-SW-NAL-03	10/12/2020	3.5	1.6	26 B	42	15.6	7.74r	8.56	296
Robinson Pond, Hudson	NHDES-SW-ROP-01	10/14/2020	5.1	8.5	24 B	27	16.1	7.39r	9.93	209
	NHDES-SW-ROP-02	10/14/2020	5.2	6.7	24 B	23	15.5	7.42r	7.80	209
	NHDES-SW-ROP-03	10/14/2020	5.1	6.7	25 B	22	14.6	7.92r	4.57	217

**Definitions:**

NHDES = New Hampshire Department of Environmental Services

CAS No. = Chemical Abstract Service registry number

NA = Not applicable/standard not established

RE = resample per Sampling and Analysis Plan

DB = duplicate

J = Result is estimated

B = Analyte is associated with lab blank contamination

<sup>1</sup> and r = pH data have been rejected. See report narrative for explanation.

R = result considered invalid; transcription error assumed

mg/L = Milligrams per liter

mg/m<sup>3</sup> = milligrams per cubic meter

°C = degrees Celsius

SU = standard units

μS/cm<sup>2</sup> = microsiemens per square centimeter

NM = not measured

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**APPENDIX A**

**LABORATORY ANALYTICAL DATA**

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**RELATIVE PERCENT DIFFERENCE CALCULATIONS**

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**Laboratory Analytical Data Review  
Relative Percent Difference Calculations  
PFAS Background Study**

**Applicable laboratory sample delivery groups: 320-66289**

Sample	Decision Criteria for Solid Matrices	Allowable RPD
Field sample	Detection >2x RL	30%
	Detection <2x RL	50%

Lab Sample ID	Sample ID	PFUNA	RPD	PFDoA	RPD	PFOS	RPD
320-66289-9	NHDES-FT-BEL-SMB	1.2	NA	1.1	NA	23	NA
320-66289-11	NHDES-FT-BEL-SMB (DB)	6.7 U		6.7 U		17 U	

Lab Sample ID	Sample ID	PFAS	RPD
320-66289-10	NHDES-FT-BEL-YP	ND	NA
320-66289-12	NHDES-FT-BEL-YP (DB)	ND	

Lab Sample ID	Sample ID	PFUNA	RPD	PFOS	RPD
320-66289-5	NHDES-FT-CAP-LMB	1.4	NA	4.6	NA
320-66289-27	NHDES-FT-CAP-LMB (RE)	9.3 U		23 U	

Lab Sample ID	Sample ID	PFAS	RPD
320-66289-6	NHDES-FT-CAP-YP	ND	NA
320-66289-28	NHDES-FT-CAP-YP (RE)	ND	

Lab Sample ID	Sample ID	PFOS	RPD
320-66289-23	NHDES-FT-COP-LMB	ND	NA
320-66289-24	NHDES-FT-COP-LMB (RE)	41	

Lab Sample ID	Sample ID	PFAS	RPD
320-66289-25	NHDES-FT-COP-YP	ND	NA
320-66289-26	NHDES-FT-COP-YP (RE)	ND	

Lab Sample ID	Sample ID	PFAS (ng/L)	RPD
320-66289-31	NHDES-FT-LMA-BG	ND	NA
320-66289-32	NHDES-FT-LMA-BG (DB)	ND	

Lab Sample ID	Sample ID	VOCs (µg/L)	RPD
320-66289-33	NHDES-FT-LMA-LMB	ND	NA
320-66289-34	NHDES-FT-LMA-LMB (DB)	ND	

Lab Sample ID	Sample ID	PFPeA	RPD	PFHxA	RPD	PFHpA	RPD
	NHDES-SW-CAP-01	2.0	5.13	2.2	4.65	1.8	10.53
	NHDES-SW-CAP-01 (DB)	1.9		2.1		2	
	NHDES-SW-CAP-01 (RE)	1.8	10.53	2.1	4.65	1.8 U	NA

PFOA	RPD	PFBS	RPD	PFOS	RPD
3.9	5.00	1.8 U	NA	2.0	NA
4.1		1.9		1.8 U	
4.1	5.00	1.8	NA	1.9	5.13

Lab Sample ID	Sample ID	PFPeA	RPD	PFHxA	RPD	PFHpA	RPD
	NHDES-SW-CAP-02	2.1	NA	2.4	4.08	1.8	NA
	NHDES-SW-CAP-02 (DB)	1.8 U		2.5		1.8 U	
	NHDES-SW-CAP-02 (RE)	1.8	15.38	2.2	8.70	1.8	0.00

PFOA	RPD	PFBS	RPD	PFOS	RPD
4.0	4.88	1.8	NA	2.3	NA
4.2		1.8 U		1.8 U	
4.2	4.88	1.8 U	NA	1.9	19.05

Lab Sample ID	Sample ID	PFPeA	RPD	PFHxA	RPD	PFHpA	RPD
	NHDES-SW-CAP-03	1.9	0.00	2.1	9.09	4.0	0.00
	NHDES-SW-CAP-03 (DB)	1.9		2.3		4.0	
	NHDES-SW-CAP-03 (RE)	1.9	0.00	2.4	13.33	4.2	4.88

PFBS	RPD	PFOS	RPD
1.9 U	NA	2.1	0.00
1.8		2.1	
1.8 U	NA	1.8	15.38

Lab Sample ID	Sample ID	PFPeA	RPD	PFHxA	RPD	PFHpA	RPD
	NHDES-SW-COP-01	3.1	6.25	3.5	2.82	2.6	10.91
	NHDES-SW-COP-01 (RE)	3.3		3.6		2.9	

PFOA	RPD	PFBS	RPD	PFOS	RPD
6.1	9.38	2.2	4.44	1.8	5.41
6.7		2.3		1.9	

Lab Sample ID	Sample ID	PFPeA	RPD	PFHxA	RPD	PFHpA	RPD
	NHDES-SW-COP-02	3.1	6.25	3.3	8.70	2.7	3.64
	NHDES-SW-COP-02 (RE)	3.3		3.6		2.8	

PFOA	RPD	PFBS	RPD	PFOS	RPD
6.2	9.23	2.1	13.33	2.0	4.88
6.8		2.4		2.1	

Lab Sample ID	Sample ID	PFPeA	RPD	PFHxA	RPD	PFHpA	RPD
	NHDES-SW-COP-03	3.1	0.00	3.2	0.00	2.7	3.77
	NHDES-SW-COP-03 (RE)	3.1		3.2		2.6	

PFOA	RPD	PFBS	RPD	PFOS	RPD
6.6	0.00	2.1	4.88	3.3	40.00
6.6		2		2.2	

Lab Sample ID	Sample ID	PFOA	RPD
	NHDES-SW-GTP-03	2.20	0.00
	NHDES-SW-GTP-03 (DB)	2.20	

Lab Sample ID	Sample ID	PFOA	RPD
	NHDES-SW-LMA-03	3.7	5.26
	NHDES-SW-LMA-03 (DB)	3.9	

Lab Sample ID	Sample ID	PFBA	RPD	NEI:FOSE	RPD
	NHDES-SD-CAP-01	ND	NA	32	46.15
	NHDES-SD-CAP-01 (DB)	ND		20	

Notes:

ND = Analyte not detected in sample

NA = Not applicable. No RPD can be calculated due to analyte not being detected in both samples.

RL = Laboratory reporting limit

Yellow highlights indicate data outside of acceptance criteria (20% for aqueous samples and per the decision criteria above for solid samples) and qualified accordingly in the applicable tables.

**Laboratory Analytical Data Review**  
**Relative Percent Difference Calculations**  
**PFAS Background Study**

**Applicable laboratory sample delivery groups:L35040**

Sample	Decision Criteria for Solid Matrices	Allowable RPD
Field sample	Detection >5x MDL	30%
	Detection <5x MDL	50%

Lab Sample ID	Sample ID	PFDA	RPD	PFUNA	RPD	PFDoA	RPD	PFTrDA	RPD	PFTeDA	RPD	PFOS	RPD
L35040-9	NHDES-FT-BEL-SMB	0.406	16.50	1.06	2.87	0.97	2.19	0.989	6.93	0.65	10.71	7.08	9.04
L35040-11	NHDES-FT-BEL-SMB (DB)	0.479		1.03		0.949		1.06		0.583		7.75	

Lab Sample ID	Sample ID	PFNA	RPD	PFDA	RPD	PFUNA	RPD	PFDoA	RPD	PFTrDA	RPD	PFTeDA	RPD	PFOS	RPD
L35040-10	NHDES-FT-BEL-YP	0.097	NA	0.358	19.63	0.473	37.39	0.369	5.57	0.452	23.21	0.287	29.60	2.47	19.56
L35040-12	NHDES-FT-BEL-YP (DB)	ND		0.294		0.324		0.349		0.358		0.213		2.03	

Lab Sample ID	Sample ID	PFDA	RPD	PFUNA	RPD	PFDoA	RPD	PFTrDA	RPD	PFTeDA	RPD	PFOS	RPD
L35040-5	NHDES-FT-CAP-LMB	0.728	22.80	1.44	29.48	1.0	35.43	0.824	10.25	0.53	17.44	4.35	17.77
L35040-27	NHDES-FT-CAP-LMB (RE)	0.579		1.07		0.706		0.913		0.445		3.64	

Lab Sample ID	Sample ID	PFNA	RPD	PFDA	RPD	PFUNA	RPD	PFDoA	RPD	PFTrDA	RPD	PFTeDA	RPD	PFOS	RPD
L35040-6	NHDES-FT-CAP-YP	0.114	1.74	0.394	38.85	0.66	1.80	0.5	18.56	0.541	21.72	0.296	25.52	2.15	4.10
L35040-28	NHDES-FT-CAP-YP (RE)	0.116		0.584		0.672		0.396		0.435		0.229		2.24	

Lab Sample ID	Sample ID	PFDA	RPD	PFUNA	RPD	PFDoA	RPD	PFTrDA	RPD	PFTeDA	RPD	PFOS	RPD
L35040-23	NHDES-FT-COP-LMB	2.63	9.76	3.38	21.64	2.2	26.09	1.43	34.43	0.782	25.04	11.9	24.35
L35040-24	NHDES-FT-COP-LMB (RE)	2.9		2.72		1.7		1.01		0.608		15.2	

Lab Sample ID	Sample ID	PFNA	RPD	PFDA	RPD	PFUNA	RPD	PFDoA	RPD	PFTrDA	RPD	PFTeDA	RPD	PFOS	RPD
L35040-25	NHDES-FT-COP-YP	0.187	11.30	1.39	24.61	1.51	37.20	1.1	22.92	0.631	44.29	0.512	4.02	1.88	76.11
L35040-26	NHDES-FT-COP-YP (RE)	0.167		1.78		2.2		1.41		0.990		0.533		4.19	

Lab Sample ID	Sample ID	PFDA	RPD	PFUNA	RPD	PFDoA	RPD	PFTrDA	RPD	PFTeDA	RPD	PFOS	RPD
L35040-31	NHDES-FT-LMA-BG	0.426	5.30	0.802	2.95	0.5	4.96	0.761	2.21	0.285	5.46	3.52	4.99
L35040-32	NHDES-FT-LMA-BG (DB)	0.404		0.826		0.537		0.778		0.301		3.7	

Lab Sample ID	Sample ID	PFDA	RPD	PFUNA	RPD	PFDoA	RPD	PFTrDA	RPD	PFTeDA	RPD	PFOS	RPD
L35040-33	NHDES-FT-LMA-LMB	0.768	1.93	1.56	7.31	1.1	0.90	1.75	8.74	0.765	3.86	6.23	5.78
L35040-34	NHDES-FT-LMA-LMB (DB)	0.783		1.45		1.1		1.91		0.736		5.88	

Notes:

ND = Analyte not detected in sample

NA = Not applicable. No RPD can be calculated due to analyte not being detected in both samples.

MDL = method detection limit

Yellow highlights indicate data outside of acceptance criteria (per the decision criteria above for solid matrices) and qualified accordingly in the applicable tables.

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**FOR LABORATORY ANALYTICAL DATA,  
PLEASE CONTACT KEN EDWARDSON (NHDES PROJECT MANAGER) AT (603) 271-8864**

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**APPENDIX B**

**FIELD DOCUMENTATION**

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**SURFACE WATER FIELD SHEETS**

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## Surface Water Sampling Form

Company: WESTON SOLUTIONS, INC.	Sample ID: NHDES-SW-LMA-03-DB-201028
Client: NHDES	Date: 10/28/20 Time: 1005
Project: PFAS Study	Sampler: RL ME
Site: Lake Magalloway	Signature: [Signature]

Water Body: STREAM WETLAND RIVER POND LAKE LAGOON BAY OTHER:	
Water Body Depth (ft): 33	Water Body Width (ft):
Sample Depth: SURFACE MIDDLE BOTTOM	Sample Location: NEAR-SHORE MID-CHANNEL
OTHER: 31.5	OTHER:
N. Coordinate:	E. Coordinate:

Sample Type: DISCRETE COMPOSITE OTHER:
Sampling Method: KEMMERER BOMB SAMPLER DIP SAMPLER DIRECT OTHER: Penstablite
Sampler Decontamination: NA DEDICATED LAB FIELD OTHER:

SAMPLE DESCRIPTION	
Appearance: SHEEN ODOR PRODUCT NA OTHER:	
Instrument: YSI	Reading:
Field Parameters:	
Temperature: 13.4	Specific Conductivity: 0.216
pH: 7.42	ORP: -195
Dissolved Oxygen: 9.62	Turbidity:
Site Sketch: Use back of form if necessary.	

33 ft 13.3

28 ft 13.3

23 ft 13.3

18 ft 13.1

13 ft 13.4

8 ft 13.4

3 ft 13.4

# Surface Water Sampling Form

2

NH/ME  
DAP

Company: WESTON SOLUTIONS, INC.	Sample ID: NHDES-SW-LMA-02-01-201028
Client: NHDES	Date: 10/28/20 Time: 10:05
Project: PFAS Study	Sampler: RL, ME
Site: Lake Muskeget	Signature:

Water Body: STREAM WETLAND RIVER POND LAKE LAGOON BAY OTHER:	
Water Body Depth (ft): 33	Water Body Width (ft):
Sample Depth: SURFACE MIDDLE BOTTOM	Sample Location: NEAR-SHORE MID-CHANNEL
OTHER: 16 ft	OTHER:
N. Coordinate:	E. Coordinate:

Sample Type: DISCRETE COMPOSITE OTHER:
Sampling Method: KEMMERER BOMB SAMPLER DIP SAMPLER DIRECT OTHER: Resistive
Sampler Decontamination: NA DEDICATED LAB FIELD OTHER:

SAMPLE DESCRIPTION					
Appearance: SHEEN ODOR PRODUCT NA OTHER:					
Instrument: YSI	Reading:				
Field Parameters:					
Temperature: 13.3	Specific Conductivity: 0.212				
pH: 7.33	ORP: -251.9				
Dissolved Oxygen: 9.30	Turbidity:				
Site Sketch: Use back of form if necessary.					

# Surface Water Sampling Form

I  
+ MSA 10/26/2026

Company: WESTON SOLUTIONS, INC.	Sample ID: NHDES-SJ-LMA-01-0201026	
Client: NHDES	Date: 10/26/20	Time: 12:25
Project: PFAS Study	Sampler: RL, ME	
Site: Lake Mascoma	Signature:	

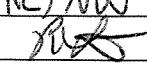
Water Body: STREAM WETLAND RIVER POND LAKE LAGOON BAY OTHER:	
Water Body Depth (ft):	Water Body Width (ft):
Sample Depth: SURFACE MIDDLE BOTTOM OTHER: 3 ft	Sample Location: NEAR-SHORE MID-CHANNEL OTHER:
N. Coordinate:	E. Coordinate:

Sample Type: DISCRETE COMPOSITE OTHER:
Sampling Method: KEMMERER BOMB SAMPLER DIP SAMPLER DIRECT OTHER: Perispheric
Sampler Decontamination: NA DEDICATED LAB FIELD OTHER:

SAMPLE DESCRIPTION		
Appearance: SHEEN ODOR PRODUCT NA	OTHER:	
Instrument: YSI	Reading:	
Field Parameters:		
Temperature: 13.3	Specific Conductivity: 0.21	
pH: 7.21	ORP: -1382	
Dissolved Oxygen: 9.33	Turbidity:	
Site Sketch: Use back of form if necessary.		

# Surface Water Sampling Form

Captain Re-3 + MS/USD

Company: WESTON SOLUTIONS, INC.	Sample ID: NHDES-SW-CAP-03-1-2010260
Client: NHDES	Date: 10/26/20 Time: 1620
Project: PFAS Study	Sampler: RL/NW
Site: Captain Re-3	Signature: 

Water Body: STREAM WETLAND RIVER POND LAKE LAGOON BAY OTHER:	
Water Body Depth (ft): 4 ft	Water Body Width (ft):
Sample Depth: SURFACE MIDDLE BOTTOM	Sample Location: NEAR-SHORE MID-CHANNEL
OTHER: 15 ft	OTHER:
N. Coordinate:	E. Coordinate:

Sample Type: DISCRETE COMPOSITE OTHER:
Sampling Method: KEMMERER BOMB SAMPLER DIP SAMPLER DIRECT OTHER: Peristaltic
Sampler Decontamination: NA DEDICATED LAB FIELD OTHER:

SAMPLE DESCRIPTION	
Appearance: SHEEN ODOR PRODUCT NA	OTHER:
Instrument: YSI	Reading:
Field Parameters:	
Temperature: 13.0	Specific Conductivity: 2400
pH: 5.84	ORP: 194
Dissolved Oxygen: 100%	Turbidity:
Site Sketch: Use back of form if necessary.	

15 ft - 12.9°

13 ft - 13.2

11 ft - 13.2

9 ft - 13.3

7 ft - 13.4

5 ft - 13.4

3 ft - 13.4

1 ft - 13.4

## Surface Water Sampling Form

*Captain Re - 2*

Company: WESTON SOLUTIONS, INC.	Sample ID: NHDES-SW-CAP 02-1-201026	
Client: NHDES	Date: 10/26/10	Time: 1630
Project: PFAS Study	Sampler: RL NW	
Site: Captain Panel	Signature: <i>[Signature]</i>	

Water Body: STREAM WETLAND RIVER <b>POND</b> LAKE LAGOON BAY OTHER:		
Water Body Depth (ft): 16	Water Body Width (ft):	
Sample Depth: SURFACE <b>MIDDLE</b> BOTTOM OTHER: 8 ft	Sample Location: NEAR-SHORE <b>MID-CHANNEL</b> OTHER:	
N. Coordinate:	E. Coordinate:	

Sample Type: <b>DISCRETE</b> COMPOSITE OTHER:		
Sampling Method: KEMMERER BOMB SAMPLER DIP SAMPLER DIRECT OTHER: <i>periscope</i>		
Sampler Decontamination: NA <b>DEDICATED</b> LAB FIELD OTHER:		

SAMPLE DESCRIPTION			
Appearance: SHEEN ODOR PRODUCT <b>NA</b> OTHER:			
Instrument:	Reading:		
Field Parameters:			
Temperature: 13.4	Specific Conductivity: 239.9		
pH: 6.06	ORP: 162.1		
Dissolved Oxygen: 9.38	Turbidity:		
Site Sketch: Use back of form if necessary.			

## Surface Water Sampling Form

Captain Re - 1

Company: WESTON SOLUTIONS, INC.	Sample ID: NHDES-SW-CAP01-1-201026
Client: NHDES	Date: 10/26/20 Time: 16:40
Project: PFAS Study	Sampler:
Site:	Signature:

Water Body: STREAM WETLAND RIVER POND LAKE LAGOON BAY OTHER:	
Water Body Depth (ft): 16	Water Body Width (ft):
Sample Depth: SURFACE MIDDLE BOTTOM OTHER: 3	Sample Location: NEAR-SHORE MID-CHANNEL
N. Coordinate:	E. Coordinate:

Sample Type: DISCRETE COMPOSITE OTHER:
Sampling Method: KEMMERER BOMB SAMPLER DIP SAMPLER DIRECT OTHER: Peristaltic
Sampler Decontamination: NA DEDICATED LAB FIELD OTHER:

SAMPLE DESCRIPTION	
Appearance: SHEEN ODOR PRODUCT NA	OTHER:
Instrument: YSI	Reading:
Field Parameters:	
Temperature: 13.4	Specific Conductivity: 240.0
pH: 6.20	ORP: 177 >
Dissolved Oxygen: 11.60	Turbidity:
Site Sketch: Use back of form if necessary.	

# Surface Water Sampling Form

*Nyland 3*

Company: WESTON SOLUTIONS, INC.	Sample ID: NHDES-SW-HIL-03-D-201023
Client: NHDES	Date: 10/23/20 Time: 1340
Project: PFAS Study	Sampler: RL, MF
Site: Nyland Lake	Signature:

Water Body: STREAM WETLAND RIVER POND <input checked="" type="checkbox"/> LAKE LAGOON BAY OTHER:	
Water Body Depth (ft): 35	Water Body Width (ft):
Sample Depth: SURFACE MIDDLE <input checked="" type="checkbox"/> BOTTOM	Sample Location: NEAR-SHORE <input checked="" type="checkbox"/> MID-CHANNEL
OTHER: 33.5	OTHER:
N. Coordinate:	E. Coordinate:

Sample Type: <input checked="" type="checkbox"/> DISCRETE COMPOSITE OTHER:
Sampling Method: KEMMERER BOMB SAMPLER DIP SAMPLER DIRECT OTHER: <i>Periscope Pump</i>
Sampler Decontamination: NA <input checked="" type="checkbox"/> DEDICATED LAB FIELD OTHER:

SAMPLE DESCRIPTION	
Appearance: SHEEN ODOR PRODUCT <input checked="" type="checkbox"/> NA OTHER:	
Instrument: YSI	Reading:
Field Parameters:	
Temperature: 13.3	Specific Conductivity: 0.044
pH: 8.30	ORP: 112.7
Dissolved Oxygen: 6.87	Turbidity:
Site Sketch: Use back of form if necessary.	

# Surface Water Sampling Form

Company: WESTON SOLUTIONS, INC.	Sample ID: <i>NHDES-SW-HIL-D2-O-201023</i>
Client: NHDES	Date: <i>10/23/20</i>
Project: PFAS Study	Time: <i>1350</i>
Site: <i>Highland Lake</i>	Sampler: <i>RL ME</i>
	Signature:

Water Body: STREAM WETLAND RIVER POND LAKE LAGOON BAY OTHER:	
Water Body Depth (ft): <i>35</i>	Water Body Width (ft):
Sample Depth: SURFACE <i>MIDDLE</i> BOTTOM	Sample Location: NEAR-SHORE <i>MID-CHANNEL</i>
OTHER: <i>17.5 ft</i>	OTHER:
N. Coordinate:	E. Coordinate:

Sample Type: <i>DISCRETE</i> COMPOSITE OTHER:
Sampling Method: KEMMERER BOMB SAMPLER DIP SAMPLER DIRECT OTHER: <i>Peristaltic pump</i>
Sampler Decontamination: NA <i>DEDICATED</i> LAB FIELD OTHER:

SAMPLE DESCRIPTION	
Appearance: SHEEN ODOR PRODUCT <i>NA</i> OTHER:	
Instrument: <i>YSI</i>	Reading:
Field Parameters:	
Temperature: <i>13.6</i>	Specific Conductivity: <i>0.045</i>
pH: <i>7.28</i>	ORP: <i>157.2</i>
Dissolved Oxygen: <i>7.64</i>	Turbidity:
Site Sketch: Use back of form if necessary.	

# Surface Water Sampling Form

*Hyland 1*

Company: WESTON SOLUTIONS, INC.	Sample ID: NHDES-SW-HDL-01-D-201023
Client: NHDES	Date: 10/03/20 Time: 1400
Project: PFAS Study	Sampler: RL, ME
Site: <i>Hyland Lake</i>	Signature:

Water Body: STREAM WETLAND RIVER POND <input checked="" type="checkbox"/> LAKE LAGOON BAY OTHER:	
Water Body Depth (ft): 35	Water Body Width (ft):
Sample Depth: <input checked="" type="checkbox"/> SURFACE MIDDLE BOTTOM	Sample Location: NEAR-SHORE MID-CHANNEL
OTHER: 3 ft	OTHER:
N. Coordinate:	E. Coordinate:

Sample Type: <input checked="" type="checkbox"/> DISCRETE COMPOSITE OTHER:
Sampling Method: KEMMERER BOMB SAMPLER DIP SAMPLER DIRECT OTHER: <i>Pristine Bay</i>
Sampler Decontamination: NA <input checked="" type="checkbox"/> DEDICATED LAB FIELD OTHER:

SAMPLE DESCRIPTION	
Appearance: SHEEN ODOR PRODUCT <input checked="" type="checkbox"/> NA OTHER:	
Instrument: YSI	Reading:
Field Parameters:	
Temperature: 14.0	Specific Conductivity: 0.046
pH: 7.18	ORP: 159.0
Dissolved Oxygen: 9.05	Turbidity:
Site Sketch: Use back of form if necessary.	

*Visibility - 7ft*

# W

## Surface Water Sampling Form

Company: WESTON SOLUTIONS, INC.	Sample ID: NHDES-SW-ARL-03-0-201022
Client: NHDES	Date: 10/22/20 Time: 11:35
Project: PFAS Study	Sampler: Lavery/Ewell
Site: Armington	Signature: <i>Lavery/Ewell</i>

Water Body: STREAM WETLAND RIVER POND LAKE LAGOON BAY OTHER:	<input checked="" type="checkbox"/>
Water Body Depth (ft): 27 ft	Water Body Width (ft):
Sample Depth: SURFACE MIDDLE <input checked="" type="checkbox"/> BOTTOM	Sample Location: NEAR-SHORE <input checked="" type="checkbox"/> MID-CHANNEL
OTHER: 25 ft	OTHER:
N. Coordinate:	E. Coordinate:

Sample Type: DISCRETE COMPOSITE OTHER:	<input checked="" type="checkbox"/>
Sampling Methods: KEMMERER BOMB SAMPLER DIP SAMPLER DIRECT <input checked="" type="checkbox"/> OTHER: Peristaltic	<input checked="" type="checkbox"/>
Sampler Decontamination: NA <input checked="" type="checkbox"/> DEDICATED LAB FIELD OTHER:	<input checked="" type="checkbox"/>

SAMPLE DESCRIPTION	
Appearance: SHEEN ODOR PRODUCT <input checked="" type="checkbox"/> NA	OTHER:
Instrument:	Reading:
Field Parameters: <input checked="" type="checkbox"/>	
Temperature: 11.9	Specific Conductivity: 30
pH: 8.24	ORP: 172
Dissolved Oxygen: 10.76	Turbidity:
Site Sketch: Use back of form if necessary.	Visibility: 4 ft

27 ft ~ 12.0 °C

22 ~ 11.9

17 ~ 11.9

12 ~ 11.9

7 ~ 12.0

2 ~ 12.0

## Surface Water Sampling Form

NHDES-SW-APL-0240-201022

Company: WESTON SOLUTIONS, INC.	Sample ID: <i>Arlington 02</i>
Client: NHDES	Date: 10/22/26 Time: 1145
Project: PFAS Study	Sampler: <i>Lavery / Ewald</i>
Site: <i>Arlington</i>	Signature: <i>Matt Ewald</i>

Water Body: STREAM WETLAND RIVER POND LAKE LAGOON BAY OTHER:	
Water Body Depth (ft): <i>27</i>	Water Body Width (ft):
Sample Depth: SURFACE MIDDLE BOTTOM	Sample Location: NEAR-SHORE MID-CHANNEL
OTHER: <i>17</i>	OTHER:
N. Coordinate:	E. Coordinate:

Sample Type: DISCRETE COMPOSITE OTHER:
Sampling Method: KEMMERER BOMB SAMPLER DIP SAMPLER DIRECT OTHER:
Sampler Decontamination: NA DEDICATED LAB FIELD OTHER:

SAMPLE DESCRIPTION	
Appearance: SHEEN ODOR PRODUCT NA OTHER:	
Instrument:	Reading:
Field Parameters:	
Temperature: <i>11.9</i>	Specific Conductivity: <i>30</i>
pH: <i>8.00</i>	ORP: <i>169.7</i>
Dissolved Oxygen: <i>10.58</i>	Turbidity:
Site Sketch: Use back of form if necessary.	

# Surface Water Sampling Form

MSMSD

NHDES-SW-ARL-01-0-201022

Company: WESTON SOLUTIONS, INC.	Sample ID: <del>03</del> 01
Client: NHDES	Date: 10/22/20 Time: 1155
Project: PFAS Study	Sampler:
Site: Acmington	Signature: Matthew Ewald

Water Body: STREAM WETLAND RIVER POND LAKE LAGOON BAY OTHER:	
Water Body Depth (ft): 27 ft	Water Body Width (ft):
Sample Depth: SURFACE MIDDLE BOTTOM	Sample Location: NEAR-SHORE MID-CHANNEL
OTHER: 3 ft	OTHER:
N. Coordinate:	E. Coordinate:

Sample Type: DISCRETE COMPOSITE OTHER:
Sampling Method: KEMMERER BOMB SAMPLER DIP SAMPLER DIRECT OTHER: fenside
Sampler Decontamination: NA DEDICATED LAB FIELD OTHER:

SAMPLE DESCRIPTION	
Appearance: SHEEN ODOR PRODUCT NA	OTHER:
Instrument:	Reading:
Field Parameters:	
Temperature: 12.0	Specific Conductivity: 822
pH: 7.68	ORP: 174.0
Dissolved Oxygen: 10.22	Turbidity:
Site Sketch: Use back of form if necessary.	

# Surface Water Sampling Form

201020  
201819

NHDES-SW-COP-03-0-2012

Company: WESTON SOLUTIONS, INC.	Sample ID: Cobblets 03 + (MSMS)
Client: NHDES	Date: 10/20/20 Time: 1445
Project: PFAS Study	Sampler: Dakin / Ewald
Site: Cobblets Pond	Signature: Matt Ewald

Water Body: STREAM WETLAND RIVER POND LAKE LAGOON BAY OTHER:	
Water Body Depth (ft): 45 ft	Water Body Width (ft):
Sample Depth: SURFACE MIDDLE BOTTOM	Sample Location: NEAR-SHORE MID-CHANNEL
OTHER: 43 ft	OTHER:
N. Coordinate:	E. Coordinate:

Sample Type: DISCRETE COMPOSITE OTHER:
Sampling Method: KEMMERER BOMB SAMPLER DIP SAMPLER DIRECT OTHER:
Sampler Decontamination: NA DEDICATED LAB FIELD OTHER:

SAMPLE DESCRIPTION	
Appearance: SHEEN ODOR PRODUCT NA	OTHER: Sulfur odors
Instrument:	Reading:
Field Parameters:	
Temperature: 14	Specific Conductivity: 436
pH: 7.58	ORP: -124.2
Dissolved Oxygen: 6.47	Turbidity:
Site Sketch: Use back of form if necessary.	

45 ft - 13.9  
 40 ft - 13.9  
 35 14.0  
 30 14.5  
 25 15.3  
 20 15.5  
 15 15.6  
 10 15.7  
 5 15.7  
 1 15.7

45 ft -

# Surface Water Sampling Form

-SW-  
NHDES-COP-02-0-20109  
20

Company: WESTON SOLUTIONS, INC.	Sample ID: 02
Client: NHDES	Date: 10/20/20 Time: 1500
Project: PFAS Study	Sampler: Dakin / Fugel
Site: Cobbefts	Signature: Matt Ewalt

Water Body: STREAM WETLAND RIVER POND LAKE LAGOON BAY OTHER:	
Water Body Depth (ft): 45	Water Body Width (ft):
Sample Depth: SURFACE MIDDLE BOTTOM	Sample Location: NEAR-SHORE MID-CHANNEL
OTHER: 22	OTHER:
N. Coordinate:	E. Coordinate:

Sample Type: DISCRETE COMPOSITE OTHER:
Sampling Method: KEMMERER BOMB SAMPLER DIP SAMPLER DIRECT OTHER:
Sampler Decontamination: NA DEDICATED LAB FIELD OTHER:

SAMPLE DESCRIPTION	
Appearance: SHEEN ODOR PRODUCT (NA)	OTHER:
Instrument:	Reading:
Field Parameters:	
Temperature: 15.5	Specific Conductivity: 446
pH: 7.26	ORP: -129.8
Dissolved Oxygen: 5.17	Turbidity:
Site Sketch: Use back of form if necessary.	

# Surface Water Sampling Form

20  
NHDES-SW-COP-01-D-2010A

Company: WESTON SOLUTIONS, INC.	Sample ID: 01
Client: NHDES	Date: 10/20/20 Time: 1510
Project: PFAS Study	Sampler: Dakin Ewald
Site: Cobbecks	Signature: Matt Ewald

Water Body: STREAM WETLAND RIVER POND LAKE LAGOON BAY OTHER:	
Water Body Depth (ft): 45	Water Body Width (ft):
Sample Depth: SURFACE MIDDLE BOTTOM	Sample Location: NEAR-SHORE MID-CHANNEL
OTHER: 3 ft	OTHER:
N. Coordinate:	E. Coordinate:

Sample Type: DISCRETE COMPOSITE OTHER:
Sampling Method: KEMMERER BOMB SAMPLER DIP SAMPLER DIRECT OTHER:
Sampler Decontamination: NA DEDICATED LAB FIELD OTHER:

SAMPLE DESCRIPTION		
Appearance: SHEEN ODOR PRODUCT NA	OTHER:	
Instrument:	Reading:	
Field Parameters:		
Temperature: 15.7	Specific Conductivity: 336	
pH: 7.49	ORP: -58.2	
Dissolved Oxygen: 9.06	Turbidity:	
Site Sketch: Use back of form if necessary.		

# Surface Water Sampling Form

NHDES-SW-COP-03-1-201020

Company: WESTON SOLUTIONS, INC.	Sample ID: Q3 Resample
Client: NHDES	Date: 10/20/20 Time: 1525
Project: PFAS Study	Sampler: Dakin/Ewald
Site: Cobbe's	Signature: Matt Ewald

Water Body: STREAM WETLAND RIVER POND LAKE LAGOON BAY OTHER:	
Water Body Depth (ft): 45	Water Body Width (ft):
Sample Depth: SURFACE MIDDLE BOTTOM	Sample Location: NEAR-SHORE MID-CHANNEL
OTHER: 43	OTHER:
N. Coordinate:	E. Coordinate:

Sample Type: DISCRETE COMPOSITE OTHER:
Sampling Method: KEMMERER BOMB SAMPLER DIP SAMPLER DIRECT OTHER:
Sampler Decontamination: NA DEDICATED LAB FIELD OTHER:

SAMPLE DESCRIPTION	
Appearance: SHEEN ODOR PRODUCT NA	OTHER: Sulfur
Instrument:	Reading:
Field Parameters:	
Temperature: 14.0	Specific Conductivity: 433
pH: 7.32	ORP: -146.2
Dissolved Oxygen: 1.33	Turbidity:
Site Sketch: Use back of form if necessary.	

## Surface Water Sampling Form

NHDES-SW-COP-02t-201020

Company: WESTON SOLUTIONS, INC.	Sample ID: 02 Resample
Client: NHDES	Date: 10/20/20 Time: 1535
Project: PFAS Study	Sampler: DaKin/Ewe. S
Site: Cossatot	Signature: Matt Ewell

Water Body: STREAM WETLAND RIVER POND LAKE LAGOON BAY OTHER:	
Water Body Depth (ft): 45	Water Body Width (ft):
Sample Depth: SURFACE MIDDLE BOTTOM	Sample Location: NEAR-SHORE MID-CHANNEL
OTHER: Z2	OTHER:
N. Coordinate:	E. Coordinate:

Sample Type: DISCRETE COMPOSITE OTHER:
Sampling Method: KEMMERER BOMB SAMPLER DIP SAMPLER DIRECT OTHER:
Sampler Decontamination: NA DEDICATED LAB FIELD OTHER:

SAMPLE DESCRIPTION	
Appearance: SHEEN ODOR PRODUCT NA OTHER:	
Instrument:	Reading:
Field Parameters:	
Temperature: 12.3	Specific Conductivity: 438
pH: 7.05	ORP: -163.2
Dissolved Oxygen: 5.45	Turbidity:
Site Sketch: Use back of form if necessary.	

## Surface Water Sampling Form

NHDES-SW-COP-01-201020

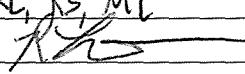
Company: WESTON SOLUTIONS, INC.	Sample ID: 01 Resample
Client: NHDES	Date: 10/20/20 Time: 1545
Project: PFAS Study	Sampler:
Site: Cossett HS	Signature: <i>Mark Ewald</i>

Water Body: STREAM WETLAND RIVER POND LAKE LAGOON BAY OTHER:	
Water Body Depth (ft): 45	Water Body Width (ft):
Sample Depth: SURFACE MIDDLE BOTTOM	Sample Location: NEAR-SHORE MID-CHANNEL
OTHER: 3	OTHER:
N. Coordinate:	E. Coordinate:

Sample Type: DISCRETE COMPOSITE OTHER:
Sampling Method: KEMMERER BOMB SAMPLER DIP SAMPLER DIRECT OTHER:
Sampler Decontamination: NA DEDICATED LAB FIELD OTHER:

SAMPLE DESCRIPTION					
Appearance: SHEEN ODOR PRODUCT NA OTHER:					
Instrument:	Reading:				
Field Parameters: 15.3					
Temperature: 65.3	Specific Conductivity: 444				
pH: 7.44	ORP: -74.3				
Dissolved Oxygen: 9.28	Turbidity:				
Site Sketch: Use back of form if necessary.					

# Surface Water Sampling Form

Company: WESTON SOLUTIONS, INC.	Sample ID: NHDES-SW-CAL-03-0-201019
Client: NHDES	Date: 10/19/20 Time: 16:15
Project: PFAS Study	Sampler: RL, KS, ML
Site: Canobie Lake	Signature: 

Water Body: STREAM WETLAND RIVER POND LAKE LAGOON BAY OTHER:	
Water Body Depth (ft): 36.5	Water Body Width (ft):
Sample Depth: SURFACE MIDDLE BOTTOM	Sample Location: NEAR-SHORE MID-CHANNEL
OTHER:	OTHER:
N. Coordinate:	E. Coordinate:

Sample Type: DISCRETE COMPOSITE OTHER:
Sampling Method: KEMMERER BOMB SAMPLER DIP SAMPLER DIRECT OTHER: Peristaltic
Sampler Decontamination: NA DEDICATED LAB FIELD OTHER:

SAMPLE DESCRIPTION	
Appearance: SHEEN ODOR PRODUCT NA OTHER:	
Instrument: YSI	Reading:
Field Parameters:	
Temperature: 14.9	Specific Conductivity: 374
pH: 7.05	ORP: 107.8
Dissolved Oxygen: 7.96	Turbidity:
Site Sketch: Use back of form if necessary.	

Temps:

35 ft - 15.0  
 30 ft - 14.9  
 25 ft - 14.9  
 20 ft - 15.0  
 15 ft - 15.1  
 10 ft - 15.1  
 5 ft - 15.2  
 2 ft - 15.2

Visibility

15 ft

## Surface Water Sampling Form

Company: WESTON SOLUTIONS, INC.	Sample ID: NHDES-SW-CAL-02-0-201019		
Client: NHDES	Date: 10/19/20	Time: 16:25	
Project: PFAS Study	Sampler: RL, KS, ML		
Site: Canobie Lake	Signature: RL		

Water Body: STREAM WETLAND RIVER POND LAKE LAGOON BAY OTHER:	
Water Body Depth (ft): 10 ft	Water Body Width (ft):
Sample Depth: SURFACE MIDDLE BOTTOM	Sample Location: NEAR-SHORE MID-CHANNEL
OTHER:	OTHER:
N. Coordinate:	E. Coordinate:

Sample Type: DISCRETE COMPOSITE OTHER:
Sampling Method: KEMMERER BOMB SAMPLER DIP SAMPLER DIRECT OTHER: River sample
Sampler Decontamination: NA DEDICATED LAB FIELD OTHER:

SAMPLE DESCRIPTION			
Appearance: SHEEN ODOR PRODUCT NA	OTHER:		
Instrument: YSE	Reading:		
Field Parameters:			
Temperature: 15.0	Specific Conductivity: 378		
pH: 7.86	ORP: 102.0		
Dissolved Oxygen: 8.87	Turbidity:		
Site Sketch: Use back of form if necessary.			

## Surface Water Sampling Form

Company: WESTON SOLUTIONS, INC.	Sample ID: NHDES-SW-CAL-O-D-201019
Client: NHDES	Date: 10/19/00 Time: 16.35
Project: PFAS Study	Sampler: RL, KS, ML
Site: Canobie Lake	Signature: RXC

Water Body: STREAM WETLAND RIVER POND LAKE LAGOON BAY OTHER:	
Water Body Depth (ft): 3 ft	Water Body Width (ft):
Sample Depth: SURFACE MIDDLE BOTTOM	Sample Location: NEAR-SHORE MID-CHANNEL
OTHER:	OTHER:
N. Coordinate:	E. Coordinate:

Sample Type: DISCRETE COMPOSITE OTHER:
Sampling Method: KEMMERER BOMB SAMPLER DIP SAMPLER DIRECT OTHER: peristaltic
Sampler Decontamination: NA DEDICATED LAB FIELD OTHER:

SAMPLE DESCRIPTION	
Appearance: SHEEN ODOR PRODUCT NA	OTHER:
Instrument: HF	Reading:
Field Parameters:	
Temperature: 15.1	Specific Conductivity: 378
pH: 7.85	ORP: 103.5
Dissolved Oxygen: 8.47	Turbidity:
Site Sketch: Use back of form if necessary.	

# Surface Water Sampling Form

NHDES-SW-BTP-03-0-201019/NHDES-SW-BTP-03-0-  
-2001K

Company: WESTON SOLUTIONS, INC.	Sample ID: 03/03D
Client: NHDES	Date: 10/19/20 Time: 1210
Project: PFAS Study	Sampler: Edward Dale
Site: Great Pond	Signature: T2

Water Body: STREAM WETLAND RIVER POND LAKE LAGOON BAY OTHER:	
Water Body Depth (ft): 38 ft	Water Body Width (ft):
Sample Depth: SURFACE MIDDLE BOTTOM	Sample Location: NEAR-SHORE MID-CHANNEL
OTHER: 36.5	OTHER:
N. Coordinate:	E. Coordinate:

Sample Type: DISCRETE COMPOSITE OTHER:
Sampling Method: KEMMERER BOMB SAMPLER DIP SAMPLER DIRECT OTHER: Peristaltic
Sampler Decontamination: NA DEDICATED LAB FIELD OTHER:

SAMPLE DESCRIPTION	
Appearance: SHEEN ODOR PRODUCT NA OTHER:	
Instrument: YSI Professional Plus 22543	Reading:
Field Parameters:	
Temperature: 13.9	Specific Conductivity: 234
pH: 7.97	ORP: -12.6
Dissolved Oxygen: 3.45	Turbidity:
Site Sketch: Use back of form if necessary.	

Temps  
 38 ft - 12.9  
 30 - 13.7  
 25 - 14.0  
 20 - 14.1  
 15 - 14.1  
 10 - 14.1  
 5 - 14.2  
 1 - 14.3

Visibility  
 8 ft

# Surface Water Sampling Form

NHDES-SW-GTP-02-201019

Company: WESTON SOLUTIONS, INC.	Sample ID: <u>02</u>
Client: NHDES	Date: <u>10/19/20</u> Time: <u>12:25</u>
Project: PFAS Study	Sampler: <u>Dakota Ewall</u>
Site: <u>Great Pond</u>	Signature: <u>Dakota Ewall</u>

Water Body: STREAM WETLAND RIVER <u>POND</u> LAKE LAGOON BAY OTHER:	
Water Body Depth (ft): <u>19 ft</u> <u>38</u>	Water Body Width (ft):
Sample Depth: SURFACE <u>MIDDLE</u> BOTTOM	Sample Location: NEAR-SHORE <u>MID-CHANNEL</u>
OTHER: <u>19</u>	OTHER:
N. Coordinate:	E. Coordinate:

Sample Type: <u>DISCRETE</u> COMPOSITE OTHER:
Sampling Method: KEMMERER BOMB SAMPLER DIP SAMPLER DIRECT <u>OTHER</u> :
Sampler Decontamination: NA <u>DEDICATED</u> LAB FIELD OTHER:

SAMPLE DESCRIPTION	
Appearance: SHEEN ODOR PRODUCT <u>NA</u> OTHER:	
Instrument:	Reading:
Field Parameters:	
Temperature: <u>14.3</u>	Specific Conductivity: <u>221</u>
pH: <u>8.64</u>	ORP: <u>-49</u>
Dissolved Oxygen: <u>8.25</u>	Turbidity:
Site Sketch: Use back of form if necessary.	

## Surface Water Sampling Form

NHDES-SW-6TP-01-0-201019

Company: WESTON SOLUTIONS, INC.	Sample ID: <u>OT</u>
Client: NHDES	Date: <u>10/19/20</u> Time: <u>1235</u>
Project: PFAS Study	Sampler: <u>Ewald / Dakin</u>
Site: <u>Great Pond</u>	Signature: <u>M.J. Ewald</u>

Water Body: STREAM WETLAND RIVER <u>POND</u> LAKE LAGOON BAY OTHER:	
Water Body Depth (ft): <u>3 ft 38</u>	Water Body Width (ft):
Sample Depth: SURFACE MIDDLE BOTTOM	Sample Location: NEAR-SHORE <u>MID-CHANNEL</u>
OTHER: <u>3 ft</u>	OTHER:
N. Coordinate:	E. Coordinate:

Sample Type: <u>DISCRETE</u> COMPOSITE OTHER:
Sampling Method: KEMMERER BOMB SAMPLER DIP SAMPLER DIRECT OTHER: <u>Peristaltic</u>
Sampler Decontamination: NA <u>DEDICATED</u> LAB FIELD OTHER:

SAMPLE DESCRIPTION			
Appearance: SHEEN ODOR PRODUCT <u>NA</u> OTHER:			
Instrument:	Reading:		
Field Parameters:			
Temperature: <u>74 14.6</u>	Specific Conductivity: <u>221</u>		
pH: <u>8.06</u>	ORP: <u>46.7</u>		
Dissolved Oxygen: <u>8.42</u>	Turbidity:		
Site Sketch: Use back of form if necessary.			

# Surface Water Sampling Form

NHDES-SW-HOP-03-0-201019

Company: WESTON SOLUTIONS, INC.	Sample ID: - 3
Client: NHDES	Date: 10/19/20 Time: 15:00
Project: PFAS Study	Sampler: D. Ken / E. mcd
Site: Horseshoe Pond	Signature: D

Water Body: STREAM WETLAND RIVER POND LAKE LAGOON BAY OTHER:	
Water Body Depth (ft): 12.4	Water Body Width (ft):
Sample Depth: SURFACE MIDDLE BOTTOM	Sample Location: NEAR-SHORE MID-CHANNEL
OTHER:	OTHER:
N. Coordinate:	E. Coordinate:

Sample Type: DISCRETE COMPOSITE OTHER:
Sampling Method: KEMMERER BOMB SAMPLER DIP SAMPLER DIRECT OTHER: Peristaltic
Sampler Decontamination: NA DEDICATED LAB FIELD OTHER: Dedicated

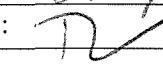
SAMPLE DESCRIPTION	
Appearance: SHEEN ODOR PRODUCT NA	OTHER:
Instrument: YSI Professional Series 22543	Reading:
Field Parameters:	
Temperature: 14.8	Specific Conductivity: 0.570 m <sup>s</sup> /cm
pH: 8.16	ORP: 134.3 mV
Dissolved Oxygen: 8.84 mg/l	Turbidity:

Site Sketch: Use back of form if necessary.

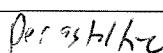
40C  
10 - 14.5  
12 - 14.6  
5 - 14.7  
1 - 15.0

# Surface Water Sampling Form

NHDES SWHOP-200-201019

Company: WESTON SOLUTIONS, INC.	Sample ID: -2
Client: NHDES	Date: 10/19/20 Time: 15:15
Project: PFAS Study	Sampler: Daker / Emily
Site: <del>Horse</del> Horseshoe Pond	Signature: 

Water Body: STREAM WETLAND RIVER POND LAKE LAGOON BAY OTHER:	
Water Body Depth (ft): 6 ft	Water Body Width (ft):
Sample Depth: SURFACE MIDDLE BOTTOM	Sample Location: NEAR-SHORE MID-CHANNEL
OTHER:	OTHER:
N. Coordinate:	E. Coordinate:

Sample Type: DISCRETE COMPOSITE OTHER:
Sampling Method: KEMMERER BOMB SAMPLER DIP SAMPLER DIRECT OTHER: 
Sampler Decontamination: NA DEDICATED LAB FIELD OTHER:

SAMPLE DESCRIPTION	
Appearance: SHEEN ODOR PRODUCT NA	OTHER:
Instrument: YSI proflex 9105 FL 22543	Reading:
Field Parameters:	
Temperature: 15.1 °C	Specific Conductivity: 0.569
pH: 7.85	ORP: 132.8
Dissolved Oxygen: 8.61 mg/l	Turbidity:
Site Sketch: Use back of form if necessary.	

## Surface Water Sampling Form

NHDES-SW-HP-01-0-201019

Company: WESTON SOLUTIONS, INC.	Sample ID: -
Client: NHDES	Date: 10/19/20 Time: 15:30
Project: PFAS Study	Sampler: Dakin/Ewald
Site: Horseshoe Pond	Signature: T

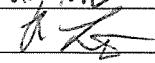
Water Body: STREAM WETLAND RIVER POND LAKE LAGOON BAY OTHER:	
Water Body Depth (ft):	Water Body Width (ft):
Sample Depth: SURFACE MIDDLE BOTTOM OTHER: 3 ft	Sample Location: NEAR-SHORE MID-CHANNEL OTHER:
N. Coordinate:	E. Coordinate:

Sample Type: DISCRETE COMPOSITE OTHER:
Sampling Method: KEMMERER BOMB SAMPLER DIP SAMPLER DIRECT OTHER: portable
Sampler Decontamination: NA DEDICATED LAB FIELD OTHER:

SAMPLE DESCRIPTION			
Appearance: SHEEN ODOR PRODUCT NA OTHER:			
Instrument: YSI 22543	Reading:		
Field Parameters:			
Temperature: 15.3	Specific Conductivity: 0.570		
pH: 8.92	ORP: 132.0		
Dissolved Oxygen: 8.29 mg/l	Turbidity: 3 ft visibility		
Site Sketch: Use back of form if necessary.			

# Surface Water Sampling Form

0-201015

Company: WESTON SOLUTIONS, INC.	Sample ID: NHDES-SW-BAL-03-201015	
Client: NHDES	Date: 10/15/20	Time: 1445
Project: PFAS Study	Sampler: ME ML	
Site: Babosic Lake	Signature: 	

Water Body: STREAM WETLAND RIVER POND LAKE LAGOON BAY OTHER:	
Water Body Depth (ft): 24	Water Body Width (ft):
Sample Depth: SURFACE MIDDLE BOTTOM	Sample Location: NEAR-SHORE MID-CHANNEL
OTHER: 22 ft	OTHER:
N. Coordinate:	E. Coordinate:

Sample Type: DISCRETE COMPOSITE OTHER:
Sampling Method: KEMMERER BOMB SAMPLER DIP SAMPLER DIRECT OTHER: Peristaltic
Sampler Decontamination: NA DEDICATED LAB FIELD OTHER:

SAMPLE DESCRIPTION	
Appearance: SHEEN ODOR PRODUCT NA OTHER:	
Instrument: YSF	Reading:
Field Parameters:	
Temperature: 15.8	Specific Conductivity: 134
pH: 7.50	ORP: 111.7
Dissolved Oxygen: 8.87	Turbidity:
Site Sketch: Use back of form if necessary.	

24 ft - 16°  
 22 ft - 16°  
 20 ft - 16°  
 18 ft - 16.1°  
 16 - 16.2°  
 14 - 16.2°  
 12 - 16.3°  
 10 - 16.4°  
 8 - 16.4°  
 6 - 16.4°  
 4 - 16.5°  
 2 - 16.5°

Visibility - 3 ft

## Surface Water Sampling Form

Company: WESTON SOLUTIONS, INC.	Sample ID: NHDES-SW-BAL-02-0-201015	
Client: NHDES	Date: 10/15/20	Time: 1450 1455
Project: PFAS Study	Sampler: ME, ML	
Site: Baboosic Lake	Signature: RKL	

Water Body: STREAM WETLAND RIVER POND LAKE LAGOON BAY OTHER:	
Water Body Depth (ft): 24	Water Body Width (ft):
Sample Depth: SURFACE MIDDLE BOTTOM	Sample Location: NEAR-SHORE MID-CHANNEL
OTHER: 12 ft	OTHER:
N. Coordinate:	E. Coordinate:

Sample Type: DISCRETE COMPOSITE OTHER:
Sampling Method: KEMMERER BOMB SAMPLER DIP SAMPLER DIRECT OTHER: Peristaltic
Sampler Decontamination: NA DEDICATED LAB FIELD OTHER:

SAMPLE DESCRIPTION	
Appearance: SHEEN ODOR PRODUCT NA	OTHER:
Instrument: TSF	Reading:
Field Parameters:	
Temperature: 16.1	Specific Conductivity: 135
pH: 7.24	ORP: 121.0
Dissolved Oxygen: 7.98	Turbidity:
Site Sketch: Use back of form if necessary.	

## Surface Water Sampling Form

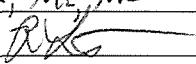
Company: WESTON SOLUTIONS, INC.	Sample ID: NHDES-SW-BAL-01-O-201015	
Client: NHDES	Date: 10/15/20	Time: 1505
Project: PFAS Study	Sampler: ME, ML	
Site: Baboosic Lake	Signature: ME, ML RA	

Water Body: STREAM WETLAND RIVER POND LAKE LAGOON BAY OTHER:	
Water Body Depth (ft): 24	Water Body Width (ft):
Sample Depth: SURFACE MIDDLE BOTTOM	Sample Location: NEAR-SHORE MID-CHANNEL
OTHER: 3 ft	OTHER:
N. Coordinate:	E. Coordinate:

Sample Type: DISCRETE COMPOSITE OTHER:
Sampling Method: KEMMERER BOMB SAMPLER DIP SAMPLER DIRECT OTHER: Peristaltic
Sampler Decontamination: NA DEDICATED LAB FIELD OTHER:

SAMPLE DESCRIPTION	
Appearance: SHEEN ODOR PRODUCT NA OTHER:	
Instrument: YSI	Reading:
Field Parameters:	
Temperature: 16.9	Specific Conductivity: 135
pH: 7.21	ORP: 121.0
Dissolved Oxygen: 6.71	Turbidity:
Site Sketch: Use back of form if necessary.	

## Surface Water Sampling Form

Company: WESTON SOLUTIONS, INC.	Sample ID: NHDES-SW-ROP-03-0-201014
Client: NHDES	Date: 10/14/2014 Time: 1430
Project: PFAS Study	Sampler: RL, ME, ML
Site: Robinson Pond	Signature: 

Water Body: STREAM WETLAND RIVER <b>POND</b> LAKE LAGOON BAY OTHER:	
Water Body Depth (ft): 20 ft	Water Body Width (ft):
Sample Depth: SURFACE MIDDLE <b>BOTTOM</b>	Sample Location: NEAR-SHORE <b>MID-CHANNEL</b>
OTHER: 24.5 ft	OTHER:
N. Coordinate:	E. Coordinate:

Sample Type: <b>DISCRETE</b> COMPOSITE OTHER:
Sampling Method: KEMMERER BOMB SAMPLER DIP SAMPLER DIRECT OTHER: Penstak
Sampler Decontamination: NA <b>DEDICATED</b> LAB <b>FIELD</b> OTHER:

SAMPLE DESCRIPTION	
Appearance: SHEEN ODOR PRODUCT <b>NA</b> OTHER:	
Instrument: YSI	Reading:
Field Parameters:	
Temperature: 14.6	Specific Conductivity: 217
pH: 7.92	ORP: -95.2
Dissolved Oxygen: 4.57	Turbidity:
Site Sketch: Use back of form if necessary.	

20 ft - 9.6 pH  
15.2 °C

24.5 ft -

*water temp 4 ft*  
*water temp 4 ft*

25 ft - 15.2 °C

23 ft - 15.3 °C

21 ft - 15.3 °C

19 ft - 15.4 °C

17 ft - 15.4 °C

15 ft - 15.4 °C

13 ft - 15.4 °C

11 ft - 15.6 °C

9 ft - 15.7 °C

7 ft - 15.7 °C

5 ft - 15.8 °C

3 - 15.9 °C

1 - 16.0 °C

15 - 4 ft

## Surface Water Sampling Form

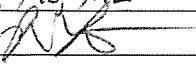
Company: WESTON SOLUTIONS, INC.	Sample ID: NHDES-SW-100-02-0-201014
Client: NHDES	Date: 10/14/20 Time: 1440
Project: PFAS Study	Sampler: RL, ME, ML
Site: Robinson Pond	Signature: 

Water Body: STREAM WETLAND RIVER POND LAKE LAGOON BAY OTHER:	
Water Body Depth (ft): 26	Water Body Width (ft):
Sample Depth: SURFACE MIDDLE BOTTOM	Sample Location: NEAR-SHORE MID-CHANNEL
OTHER: 13 ft	OTHER:
N. Coordinate:	E. Coordinate:

Sample Type: DISCRETE COMPOSITE OTHER:
Sampling Method: KEMMERER BOMB SAMPLER DIP SAMPLER DIRECT OTHER: Peristaltic
Sampler Decontamination: NA DEDICATED LAB FIELD OTHER:

SAMPLE DESCRIPTION	
Appearance: SHEEN ODOR PRODUCT NA OTHER:	
Instrument: YSI	Reading:
Field Parameters:	
Temperature: 15.5°C	Specific Conductivity: 209
pH: 7.42	ORP: -30.6
Dissolved Oxygen: 7.8	Turbidity:
Site Sketch: Use back of form if necessary.	

## Surface Water Sampling Form

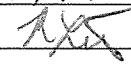
Company: WESTON SOLUTIONS, INC.	Sample ID: NHDES-SW-R0P-01-0-201014	
Client: NHDES	Date: 10/14/20	Time: 1450
Project: PFAS Study	Sampler: RL, ME ML	
Site: Robinson Pond	Signature: 	

Water Body: STREAM WETLAND RIVER <input checked="" type="checkbox"/> POND LAKE LAGOON BAY OTHER:	
Water Body Depth (ft):	Water Body Width (ft):
Sample Depth: SURFACE MIDDLE BOTTOM OTHER: 3 ft	Sample Location: NEAR-SHORE <input checked="" type="checkbox"/> MID-CHANNEL OTHER:
N. Coordinate:	E. Coordinate:

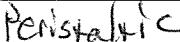
Sample Type: DISCRETE COMPOSITE OTHER:
Sampling Method: KEMMERER BOMB SAMPLER DIP SAMPLER DIRECT OTHER: Peristaltic
Sampler Decontamination: NA DEDICATED LAB FIELD OTHER:

SAMPLE DESCRIPTION	
Appearance: SHEEN ODOR PRODUCT <input checked="" type="checkbox"/> NA OTHER:	
Instrument: YSI	Reading:
Field Parameters:	
Temperature: 16.1	Specific Conductivity: 209
pH: 7.39	ORP: -13.6
Dissolved Oxygen: 9.93	Turbidity:
Site Sketch: Use back of form if necessary.	

## Surface Water Sampling Form

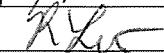
Company: WESTON SOLUTIONS, INC.	Sample ID: MDES-SW-NAL-D3-D-2010 D		
Client: NHDES	Date: 10/12/20	Time: 1250	
Project: PFAS Study	Sampler: RL, KS		
Site: Nancook	Signature: 		

Water Body: STREAM WETLAND RIVER POND LAKE LAGOON BAY OTHER:	
Water Body Depth (ft): 13	Water Body Width (ft):
Sample Depth: SURFACE MIDDLE BOTTOM	Sample Location: NEAR-SHORE MID-CHANNEL
OTHER: 12	OTHER:
N. Coordinate:	E. Coordinate:

Sample Type: DISCRETE COMPOSITE OTHER:
Sampling Method: KEMMERER BOMB SAMPLER DIP SAMPLER DIRECT OTHER: 
Sampler Decontamination: NA DEDICATED LAB FIELD OTHER:

SAMPLE DESCRIPTION		
Appearance: SHEEN ODOR PRODUCT NA	OTHER:	
Instrument: TSI	Reading:	
Field Parameters:		
Temperature: 15.6	Specific Conductivity: 0.296	
pH: 7.74	ORP: 105.1	
Dissolved Oxygen: 8.56	Turbidity:	
Site Sketch: Use back of form if necessary.		

## Surface Water Sampling Form

Company: WESTON SOLUTIONS, INC.	Sample ID: NHDES SW-NAL-02-2910 2010k	
Client: NHDES	Date: 10/12/20	Time: 1255
Project: PFAS Study	Sampler: RL, KS	
Site: Netcoor	Signature: 	

Water Body: STREAM WETLAND RIVER POND LAKE LAGOON BAY OTHER:	
Water Body Depth (ft): 13	Water Body Width (ft):
Sample Depth: SURFACE MIDDLE BOTTOM OTHER: 7.5 ft	Sample Location: NEAR-SHORE MID-CHANNEL OTHER:
N. Coordinate:	E. Coordinate:

Sample Type: DISCRETE COMPOSITE OTHER:
Sampling Method: KEMMERER BOMB SAMPLER DIP SAMPLER DIRECT OTHER: Peristaltic
Sampler Decontamination: NA DEDICATED LAB FIELD OTHER:

SAMPLE DESCRIPTION	
Appearance: SHEEN ODOR PRODUCT NA OTHER:	
Instrument: YSI	Reading:
Field Parameters:	
Temperature: 15.6	Specific Conductivity: 0.296
pH: 7.6	ORP: 101.1
Dissolved Oxygen: 8.61	Turbidity:
Site Sketch: Use back of form if necessary.	

## Surface Water Sampling Form

Company: WESTON SOLUTIONS, INC.	Sample ID: NHDES-NAL-01-0-201012
Client: NHDES	Date: 10/12/20 Time: 1300
Project: PFAS Study	Sampler: RL, RY
Site: Merrick	Signature: RL, RY

Water Body: STREAM WETLAND RIVER POND LAKE LAGOON BAY OTHER:	
Water Body Depth (ft):	Water Body Width (ft):
Sample Depth: SURFACE MIDDLE BOTTOM	Sample Location: NEAR-SHORE MID-CHANNEL
OTHER: 3 ft	OTHER:
N. Coordinate:	E. Coordinate:

Sample Type: DISCRETE COMPOSITE OTHER:
Sampling Method: KEMMERER BOMB SAMPLER DIP SAMPLER DIRECT OTHER: Peristaltic
Sampler Decontamination: NA DEDICATED LAB FIELD OTHER:

SAMPLE DESCRIPTION	
Appearance: SHEEN ODOR PRODUCT NA	OTHER:
Instrument: N.S.I	Reading:
Field Parameters:	
Temperature: 15.7	Specific Conductivity: 0.295
pH: 7.55	ORP: 96.5
Dissolved Oxygen: 7.75	Turbidity:
Site Sketch: Use back of form if necessary.	

## Surface Water Sampling Form

Company: WESTON SOLUTIONS, INC.	Sample ID: NHDES-SW-BEL-03-D-201012
Client: NHDES	Date: 10/12/20 Time: 1030
Project: PFAS Study	Sampler: RL KS
Site: Beaver Lake	Signature: RL KS

Water Body: STREAM WETLAND RIVER POND LAKE LAGOON BAY OTHER:	
Water Body Depth (ft): 23	Water Body Width (ft):
Sample Depth: SURFACE MIDDLE BOTTOM	Sample Location: NEAR-SHORE MID-CHANNEL
OTHER: 21.5	OTHER:
N. Coordinate:	E. Coordinate:

Sample Type: DISCRETE COMPOSITE OTHER:
Sampling Method: KEMMERER BOMB SAMPLER DIP SAMPLER DIRECT OTHER: Periscope/PlumO
Sampler Decontamination: NA DEDICATED LAB FIELD OTHER:

SAMPLE DESCRIPTION			
Appearance: SHEEN ODOR PRODUCT NA	OTHER:		
Instrument: YSI	Reading:		
Field Parameters:			
Temperature: 15.2	Specific Conductivity: 0.194		
pH: 8.61	ORP: 1354		
Dissolved Oxygen: 8.33	Turbidity:		
Site Sketch: Use back of form if necessary.			

## Surface Water Sampling Form

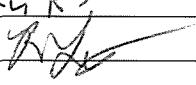
Company: WESTON SOLUTIONS, INC.	Sample ID: NHDES-SW-BEL-02-0-201012		
Client: NHDES	Date: 10/12/20	Time: 1040	
Project: PFAS Study	Sampler: RL, KS,		
Site: Beaver Lake	Signature: RKS		

Water Body: STREAM WETLAND RIVER POND LAKE LAGOON BAY OTHER:	
Water Body Depth (ft): 11.5 23	Water Body Width (ft):
Sample Depth: SURFACE MIDDLE BOTTOM	Sample Location: NEAR-SHORE MID-CHANNEL
OTHER: 11.5	OTHER:
N. Coordinate:	E. Coordinate:

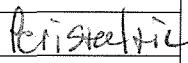
Sample Type: DISCRETE COMPOSITE OTHER:
Sampling Method: KEMMERER BOMB SAMPLER DIP SAMPLER DIRECT OTHER: Peristaltic
Sampler Decontamination: NA DEDICATED LAB FIELD OTHER:

SAMPLE DESCRIPTION			
Appearance: SHEEN ODOR PRODUCT NA OTHER:			
Instrument: YSI	Reading:		
Field Parameters:			
Temperature: 15.5	Specific Conductivity: 0.92		
pH: 8.12	ORP: 133.7		
Dissolved Oxygen: 8.54	Turbidity:		
Site Sketch: Use back of form if necessary.			

## Surface Water Sampling Form

Company: WESTON SOLUTIONS, INC.	Sample ID: NHDES-SW-BEL-01-D-201012
Client: NHDES	Date: 10/12/20 Time: 1045
Project: PFAS Study	Sampler: RL KS
Site: Beaver Lake	Signature: 

Water Body: STREAM WETLAND RIVER POND LAKE LAGOON BAY OTHER:	
Water Body Depth (ft): 23	Water Body Width (ft):
Sample Depth: SURFACE MIDDLE BOTTOM	Sample Location: NEAR-SHORE MID-CHANNEL
OTHER: 3 ft	OTHER:
N. Coordinate:	E. Coordinate:

Sample Type: DISCRETE COMPOSITE OTHER:
Sampling Method: KEMMERER BOMB SAMPLER DIP SAMPLER DIRECT OTHER: 
Sampler Decontamination: NA DEDICATED LAB FIELD OTHER:

SAMPLE DESCRIPTION	
Appearance: SHEEN ODOR PRODUCT NA OTHER:	
Instrument: YSI	Reading:
Field Parameters:	
Temperature: 15.5	Specific Conductivity: 0.92
pH: 7.92	ORP: 127.1
Dissolved Oxygen:	Turbidity:
Site Sketch: Use back of form if necessary.	

## Surface Water Sampling Form

Company: WESTON SOLUTIONS, INC.	Sample ID: NHDES-SW-CAP-03-O-201009	
Client: NHDES	Date: 10/9/20	Time: 1315
Project: PFAS Study	Sampler: KS, RL	
Site: Captain Pond	Signature: R.W.	

Water Body: STREAM WETLAND RIVER POND LAKE LAGOON BAY OTHER:	
Water Body Depth (ft): 26	Water Body Width (ft):
Sample Depth: SURFACE MIDDLE BOTTOM	Sample Location: NEAR-SHORE MID-CHANNEL
OTHER: 23.5 ft	OTHER:
N. Coordinate:	E. Coordinate:

Sample Type: DISCRETE COMPOSITE OTHER:
Sampling Method: KEMMERER BOMB SAMPLER DIP SAMPLER DIRECT OTHER: peristaltic pump
Sampler Decontamination: NA DEDICATED LAB FIELD OTHER:

SAMPLE DESCRIPTION		
Appearance: SHEEN ODOR PRODUCT NA	OTHER:	
Instrument:	Reading:	
Field Parameters:		
Temperature: 16.8 15.8	Specific Conductivity: 0.260	
pH: 8.95	ORP: 40.4	
Dissolved Oxygen: 12.51	Turbidity:	
Site Sketch: Use back of form if necessary.		

## Surface Water Sampling Form

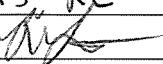
Company: WESTON SOLUTIONS, INC.	Sample ID: NHDES-SW-CAP-03-DB-201009
Client: NHDES	Date: 10/9/20 Time: 1330
Project: PFAS Study	Sampler: KS RL
Site: Captain Pond	Signature: RW

Water Body: STREAM WETLAND RIVER POND LAKE LAGOON BAY OTHER:	
Water Body Depth (ft): 26	Water Body Width (ft):
Sample Depth: SURFACE MIDDLE BOTTOM	Sample Location: NEAR-SHORE MID-CHANNEL
OTHER: 23.5 ft	OTHER:
N. Coordinate:	E. Coordinate:

Sample Type: DISCRETE COMPOSITE OTHER:
Sampling Method: KEMMERER BOMB SAMPLER DIP SAMPLER DIRECT OTHER:
Sampler Decontamination: NA DEDICATED LAB FIELD OTHER:

SAMPLE DESCRIPTION	
Appearance: SHEEN ODOR PRODUCT NA OTHER:	
Instrument:	Reading:
Field Parameters:	
Temperature: 15.7	Specific Conductivity: 0.242
pH: 8.63	ORP: 45.9
Dissolved Oxygen: 8.53	Turbidity:
Site Sketch: Use back of form if necessary.	

## Surface Water Sampling Form

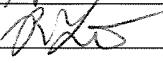
Company: WESTON SOLUTIONS, INC.	Sample ID: NHDES-SW-CAP-02-O-201009
Client: NHDES	Date: 10/19/20 Time: 1355
Project: PFAS Study	Sampler: KS, RL
Site: Captain Pond	Signature: 

Water Body: STREAM WETLAND RIVER POND LAKE LAGOON BAY OTHER:	
Water Body Depth (ft): 26	Water Body Width (ft):
Sample Depth: SURFACE MIDDLE BOTTOM	Sample Location: NEAR-SHORE MID-CHANNEL
OTHER: 13 ft	OTHER:
N. Coordinate:	E. Coordinate:

Sample Type: DISCRETE COMPOSITE OTHER:
Sampling Method: KEMMERER BOMB SAMPLER DIP SAMPLER DIRECT OTHER:
Sampler Decontamination: NA DEDICATED LAB FIELD OTHER:

SAMPLE DESCRIPTION					
Appearance: SHEEN ODOR PRODUCT NA OTHER:					
Instrument: YSI	Reading:				
Field Parameters:					
Temperature: 15, 9	Specific Conductivity: 0.241				
pH: 8.13	ORP: 61.7				
Dissolved Oxygen: 7.95	Turbidity:				
Site Sketch: Use back of form if necessary.					

## Surface Water Sampling Form

Company: WESTON SOLUTIONS, INC.	Sample ID: NHDES-SW-CAP-02-DB-201009
Client: NHDES	Date: 10/19/20 Time: 1405
Project: PFAS Study	Sampler: KS, RL
Site: Captain Pearl	Signature: 

Water Body: STREAM WETLAND RIVER POND LAKE LAGOON BAY OTHER:	
Water Body Depth (ft): 26	Water Body Width (ft):
Sample Depth: SURFACE MIDDLE BOTTOM	Sample Location: NEAR-SHORE MID-CHANNEL
OTHER:	OTHER:
N. Coordinate:	E. Coordinate:

Sample Type: DISCRETE COMPOSITE OTHER:
Sampling Method: KEMMERER BOMB SAMPLER DIP SAMPLER DIRECT OTHER: Peristaltic
Sampler Decontamination: NA DEDICATED LAB FIELD OTHER:

SAMPLE DESCRIPTION	
Appearance: SHEEN ODOR PRODUCT NA OTHER:	
Instrument: 15.7	Reading:
Field Parameters:	
Temperature: 15.7	Specific Conductivity: 0.239
pH: 7.71	ORP: 74.9
Dissolved Oxygen: 77.7	Turbidity:
Site Sketch: Use back of form if necessary.	

## Surface Water Sampling Form

Company: WESTON SOLUTIONS, INC.	Sample ID: NHDES-SW-CAP-01-D-201DD9
Client: NHDES	Date: 10/19/20 Time: 1410
Project: PFAS Study	Sampler: KS, RL
Site: Captain Pond	Signature: <i>[Signature]</i>

Water Body: STREAM WETLAND RIVER POND LAKE LAGOON BAY OTHER:	
Water Body Depth (ft):	Water Body Width (ft):
Sample Depth: SURFACE MIDDLE BOTTOM	Sample Location: NEAR-SHORE MID-CHANNEL
OTHER:	OTHER:
N. Coordinate:	E. Coordinate:

Sample Type: DISCRETE COMPOSITE OTHER:
Sampling Method: KEMMERER BOMB SAMPLER DIP SAMPLER DIRECT OTHER: Peristaltic
Sampler Decontamination: NA DEDICATED LAB FIELD OTHER:

SAMPLE DESCRIPTION	
Appearance: SHEEN ODOR PRODUCT NA	OTHER:
Instrument: YSI	Reading:
Field Parameters:	
Temperature: 15.7	Specific Conductivity: 0.236
pH: 7.55	ORP: 79.3
Dissolved Oxygen: 8.47	Turbidity:
Site Sketch: Use back of form if necessary.	

## Surface Water Sampling Form

Company: WESTON SOLUTIONS, INC.	Sample ID: NHDES-SW-CAP-01-DB-201009
Client: NHDES	Date: 10/19/20 Time: 1420
Project: PFAS Study	Sampler: KS, RL
Site: Captain Bend	Signature: [Signature]

Water Body: STREAM WETLAND RIVER POND LAKE LAGOON BAY OTHER:	
Water Body Depth (ft):	Water Body Width (ft):
Sample Depth: SURFACE MIDDLE BOTTOM	Sample Location: NEAR-SHORE MID-CHANNEL
OTHER:	OTHER:
N. Coordinate:	E. Coordinate:

Sample Type: DISCRETE COMPOSITE OTHER:
Sampling Method: KEMMERER BOMB SAMPLER DIP SAMPLER DIRECT OTHER: Peristaltic
Sampler Decontamination: NA DEDICATED LAB FIELD OTHER:

SAMPLE DESCRIPTION	
Appearance: SHEEN ODOR PRODUCT NA OTHER:	
Instrument: YSI	Reading:
Field Parameters:	
Temperature: 16.1	Specific Conductivity: 0.238
pH: 7.65	ORP: 64.8
Dissolved Oxygen: 7.34	Turbidity: -
Site Sketch: Use back of form if necessary.	

## Surface Water Sampling Form

Company: WESTON SOLUTIONS, INC.	Sample ID: NHDES-SW-AMR-03-0-201002	
Client: NHDES	Date: 10/7/20	Time: 1400
Project: PFAS Study	Sampler: MR, RL	
Site: Arlington Mill Reservoir	Signature: JMK	

Water Body: STREAM WETLAND RIVER POND LAKE LAGOON BAY OTHER:	
Water Body Depth (ft): <del>28 ft</del> 30 ft	Water Body Width (ft):
Sample Depth: SURFACE MIDDLE BOTTOM	Sample Location: NEAR-SHORE MID-CHANNEL
OTHER: 28 ft	OTHER:
N. Coordinate:	E. Coordinate:

Sample Type: DISCRETE COMPOSITE OTHER:
Sampling Method: KEMMERER BOMB SAMPLER DIP SAMPLER DIRECT OTHER: Peristaltic Pump
Sampler Decontamination: NA DEDICATED LAB FIELD OTHER:

SAMPLE DESCRIPTION			
Appearance: SHEEN ODOR PRODUCT NA OTHER:			
Instrument: 45T	Reading:		
Field Parameters:			
Temperature: 17.9	Specific Conductivity: 1260		
pH: 6.42	ORP: 13.7		
Dissolved Oxygen: 1.76	Turbidity:		
Site Sketch: Use back of form if necessary.			

V36 ft - 6.8 ft

30 ft - 16.0

20 ft - 18.4

15 ft - 18.5

10 ft - 18.6

5 ft - 18.7

2 ft - 18.7

## Surface Water Sampling Form

Company: WESTON SOLUTIONS, INC.	Sample ID: NHDES-SW-AMR-02-0-201007		
Client: NHDES	Date: 10/7/20	Time: 1410	
Project: PFAS Study	Sampler: ME, RL		
Site: Arlington Mill Reservoir	Signature: <i>Alex</i>		

Water Body: STREAM WETLAND RIVER POND LAKE LAGOON BAY OTHER:	
Water Body Depth (ft): 30	Water Body Width (ft):
Sample Depth: SURFACE MIDDLE BOTTOM	Sample Location: NEAR-SHORE MID-CHANNEL
OTHER: 15 ft	OTHER:
N. Coordinate:	E. Coordinate:

Sample Type: DISCRETE COMPOSITE OTHER: <i>Peristaltic Pump</i>
Sampling Method: KEMMERER BOMB SAMPLER DIP SAMPLER DIRECT OTHER: <i>Peristaltic Pump</i>
Sampler Decontamination: NA DEDICATED LAB FIELD OTHER:

SAMPLE DESCRIPTION		
Appearance: SHEEN ODOR PRODUCT NA	OTHER:	
Instrument: TS	Reading:	
Field Parameters:		
Temperature: 18.4	Specific Conductivity: 0.257	
pH: 6.65	ORP: 27.9	
Dissolved Oxygen: 6.71	Turbidity:	
Site Sketch: Use back of form if necessary.		

## Surface Water Sampling Form

Company: WESTON SOLUTIONS, INC.	Sample ID: NHDES-SW-AMR-01-0-201002	
Client: NHDES	Date: 10/7/20	Time: 14:15
Project: PFAS Study	Sampler: MC, AL	
Site: Arlington Mill Reservoir	Signature: JKL	

Water Body: STREAM WETLAND RIVER POND LAKE LAGOON BAY OTHER:	
Water Body Depth (ft): 20	Water Body Width (ft):
Sample Depth: SURFACE MIDDLE BOTTOM	Sample Location: NEAR-SHORE MID-CHANNEL
OTHER: 30	OTHER:
N. Coordinate:	E. Coordinate:

Sample Type: DISCRETE COMPOSITE OTHER: D
Sampling Method: KEMMERER BOMB SAMPLER DIP SAMPLER DIRECT OTHER: Peristaltic Pump
Sampler Decontamination: NA DEDICATED LAB FIELD OTHER:

SAMPLE DESCRIPTION		
Appearance: SHEEN ODOR PRODUCT NA	OTHER:	
Instrument: YSI	Reading:	
Field Parameters:		
Temperature: 18.5	Specific Conductivity: 8.255	
pH: 6.74	ORP: 38.7	
Dissolved Oxygen: 7.27	Turbidity:	
Site Sketch: Use back of form if necessary.		

## Surface Water Sampling Form

Company: WESTON SOLUTIONS, INC.	Sample ID: NHDES-SW-RIP-03-0-201006
Client: NHDES	Date: 10/6/20 Time: 1745
Project: PFAS Study	Sampler: ME, NL
Site: Big Island Pond	Signature: AKS

Water Body: STREAM WETLAND RIVER POND LAKE LAGOON BAY OTHER:	
Water Body Depth (ft): 58 ft	Water Body Width (ft):
Sample Depth: SURFACE MIDDLE BOTTOM	Sample Location: NEAR-SHORE MID-CHANNEL
OTHER: 56 ft	OTHER:
N. Coordinate:	E. Coordinate:

Sample Type: DISCRETE COMPOSITE OTHER:
Sampling Method: KEMMERER BOMB SAMPLER DIP SAMPLER DIRECT OTHER: Peristaltic Pump
Sampler Decontamination: NA DEDICATED LAB FIELD OTHER:

SAMPLE DESCRIPTION	
Appearance: SHEEN ODOR PRODUCT NA	OTHER:
Instrument: YST	Reading:
Field Parameters:	
Temperature: 15.4	Specific Conductivity: 0.196
pH: 6.66	ORP: 29.1
Dissolved Oxygen: 4.33	Turbidity:
Site Sketch: Use back of form if necessary.	

## Surface Water Sampling Form

Company: WESTON SOLUTIONS, INC.	Sample ID: NHDES-SW-BIP-02-0-201026		
Client: NHDES	Date: 10/6/20	Time: 12:55 1805	
Project: PFAS Study	Sampler: ME RL		
Site: Big Island Pond	Signature: <i>A. Kus</i>		

Water Body: STREAM WETLAND RIVER POND LAKE LAGOON BAY OTHER:	
Water Body Depth (ft): 48 ft 29 ft	Water Body Width (ft):
Sample Depth: SURFACE MIDDLE BOTTOM	Sample Location: NEAR-SHORE MID-CHANNEL
OTHER: 29 ft	OTHER:
N. Coordinate:	E. Coordinate:

Sample Type: DISCRETE COMPOSITE OTHER:
Sampling Method: KEMMERER BOMB SAMPLER DIP SAMPLER DIRECT OTHER: <i>penetrating Pump</i>
Sampler Decontamination: NA DEDICATED LAB FIELD OTHER:

SAMPLE DESCRIPTION			
Appearance: SHEEN ODOR PRODUCT NA OTHER:			
Instrument: VSI	Reading:		
Field Parameters:			
Temperature: 17.1	Specific Conductivity: 0.193 0.190		
pH: 6.46	ORP: 73.4		
Dissolved Oxygen: 5.58	Turbidity:		
Site Sketch: Use back of form if necessary.			

# Surface Water Sampling Form

Company: WESTON SOLUTIONS, INC.	Sample ID: <i>NHDESBP-BIP-01-0-20006</i>
Client: NHDES	Date: 10/6/20 Time: 1815
Project: PFAS Study	Sampler: ME RL
Site: Big Island Pond	Signature: <i>R. L. G.</i>

Water Body: STREAM WETLAND RIVER POND LAKE LAGOON BAY OTHER:	
Water Body Depth (ft): <i>29.5 ft</i>	Water Body Width (ft): <i>30</i>
Sample Depth: SURFACE MIDDLE BOTTOM	Sample Location: NEAR-SHORE MID-CHANNEL
OTHER: <i>3 ft</i>	OTHER:
N. Coordinate:	E. Coordinate:

Sample Type: DISCRETE COMPOSITE OTHER:
Sampling Method: KEMMERER BOMB SAMPLER DIP SAMPLER DIRECT OTHER: <i>Peristaltic Pump</i>
Sampler Decontamination: NA DEDICATED LAB FIELD OTHER:

SAMPLE DESCRIPTION	
Appearance: SHEEN ODOR PRODUCT NA OTHER:	
Instrument: YSI	Reading:
Field Parameters: <i>pH</i>	
Temperature: <i>18.8</i>	Specific Conductivity: <i>0.196</i>
pH: <i>6.78</i>	ORP: <i>88.3</i>
Dissolved Oxygen: <i>6.52</i>	Turbidity: —
Site Sketch: Use back of form if necessary.	

*Depth* *oC*

*2 ft* *18.1*

*4 ft* *18.1*

*6 ft* *18.1*

*8 ft* *18.1*

*10 ft* *18.1*

*12 ft* *18.1*

*14 ft* *17.9*

*16 ft* *17.6*

*18 ft* *17.2*

*20 ft* *15.4*

*22 ft* *16.5*

*Visibility - 6 ft.*

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**SEDIMENT FIELD SHEETS**

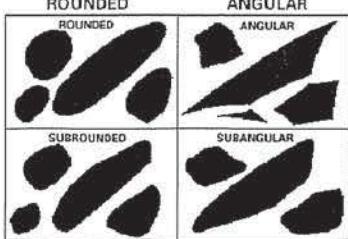
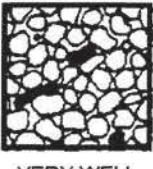
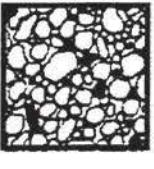
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# Sediment Sampling Form

Company: WESTON SOLUTIONS, INC.	Sample ID: NHDES-LMA-01-0-201026
Client: NHDES	Date: 10/28/20 Time: 10:35
Project: PFAS Study	Sampler: RB, ME
Site: Lake Massabesic	Signature:

Sampled Interval (ft bgs):	To:	Water Depth (ft): 33
Evidence of Overbank Flooding? <input checked="" type="checkbox"/> NO YES If YES, estimated height of flood lines above normal water level:		
N. Coordinate:	E. Coordinate:	

Sample Type: DISCRETE COMPOSITE OTHER:
Sampling Method: SCOOP AUGER DREDGE CORER OTHER: foray
Sampler Decontamination: DEDICATED LAB <input checked="" type="checkbox"/> FIELD OTHER:

SAMPLE DESCRIPTION									
Material: NATURAL FILL UNCERTAIN									
Appearance: SHEEN ODOR PRODUCT NA OTHER:									
Instrument:					Reading:				
Surface Layer: SOIL GRASS LEAVES VEGETATION GRAVEL ASPHALT CEMENT FILL									
OTHER:									
Thickness (inches):							REMOVED	SAMPLED	
Overall Color: DF Brown					Munsell GSA:			WET	DRY
Coloration: UNIFORM STAINED MOTTLED VARIABLE									
Texture:			Roundness:						
Percent Gravel: 0			Gravel: ROUNDED						
Percent Sand: 0			SUBROUNDED SUB-ANGULAR						
COARSE MEDIUM FINE			ANGULAR NA						
Percent Clay: 0			Sand: ROUNDED						
Percent Organic: 100			SUBROUNDED SUB-ANGULAR						
Sorting:			ANGULAR NA						
 VERY WELL SORTED			 WELL SORTED			 MODERATELY SORTED		 POORLY SORTED	
 VERY POORLY SORTED									
Plasticity: NON LOW MODERATE HIGH NA									
Moisture: DRY MOIST WET SATURATED									
Strength: COHESIVE NONCOHESIVE									
Site Sketch: Use back of form if necessary.									

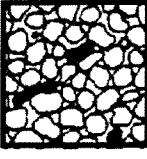
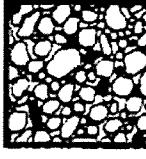
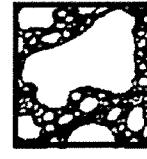
# Sediment Sampling Form

Captain Re

Company: WESTON SOLUTIONS, INC.	Sample ID: NHDES-SD-CAP-01-1-2010.26
Client: NHDES	Date: 10/26/20
Project: PFAS Study	Time: 11:50
Site: Captain Reel	Sampler: RL, NW
	Signature: RL

Sampled Interval (ft bgs):	To:	Water Depth (ft): 16
Evidence of Overbank Flooding? <input checked="" type="checkbox"/> NO YES If YES, estimated height of flood lines above normal water level:		
N. Coordinate:	E. Coordinate:	

Sample Type: <input checked="" type="checkbox"/> DISCRETE <input type="checkbox"/> COMPOSITE <input type="checkbox"/> OTHER:
Sampling Method: <input type="checkbox"/> SCOOP <input type="checkbox"/> AUGER <input type="checkbox"/> DREDGE <input type="checkbox"/> CORER <input type="checkbox"/> OTHER: Power
Sampler Decontamination: <input type="checkbox"/> DEDICATED <input type="checkbox"/> LAB <input checked="" type="checkbox"/> FIELD <input type="checkbox"/> OTHER:

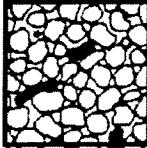
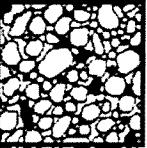
SAMPLE DESCRIPTION										
Material: <input checked="" type="checkbox"/> NATURAL <input type="checkbox"/> FILL <input type="checkbox"/> UNCERTAIN										
Appearance: SHEEN <input type="checkbox"/> ODOR <input type="checkbox"/> PRODUCT <input checked="" type="checkbox"/> NA <input type="checkbox"/> OTHER:										
Instrument: Power					Reading:					
Surface Layer: <input checked="" type="checkbox"/> SOIL <input type="checkbox"/> GRASS <input type="checkbox"/> LEAVES <input type="checkbox"/> VEGETATION <input type="checkbox"/> GRAVEL <input type="checkbox"/> ASPHALT <input type="checkbox"/> CEMENT <input type="checkbox"/> FILL										
OTHER:										
Thickness (inches):							REMOVED	SAMPLED		
Overall Color: <input checked="" type="checkbox"/> Brown					Munsell GSA:			WET	DRY	
Coloration: <input checked="" type="checkbox"/> UNIFORM <input type="checkbox"/> STAINED <input type="checkbox"/> MOTTLED <input type="checkbox"/> VARIABLE										
Texture:		Roundness:								
Percent Gravel: 0		Gravel: <input type="checkbox"/> ROUNDED <input type="checkbox"/> SUBROUNDED <input type="checkbox"/> SUB-ANGULAR <input type="checkbox"/> ANGULAR <input type="checkbox"/> NA								
Percent Sand: 0										
COARSE MEDIUM FINE										
Percent Clay: 0		Sand: <input type="checkbox"/> ROUNDED <input type="checkbox"/> SUBROUNDED <input type="checkbox"/> SUB-ANGULAR <input type="checkbox"/> ANGULAR <input type="checkbox"/> NA								
Percent Organic: 10										
Sorting:										
										
		VERY WELL SORTED	WELL SORTED	MODERATELY SORTED	POORLY SORTED	VERY POORLY SORTED				
Plasticity: <input checked="" type="checkbox"/> NON <input type="checkbox"/> LOW <input type="checkbox"/> MODERATE <input type="checkbox"/> HIGH <input type="checkbox"/> NA										
Moisture: DRY <input type="checkbox"/> MOIST <input type="checkbox"/> WET <input checked="" type="checkbox"/> SATURATED										
Strength: COHESIVE <input checked="" type="checkbox"/> NONCOHESIVE										
Site Sketch: Use back of form if necessary.										

# Sediment Sampling Form

Company: WESTON SOLUTIONS, INC.	Sample ID: NHDES-SD-HIL-01-0-201023	
Client: NHDES	Date: 10/23/20	Time: 1410
Project: PFAS Study	Sampler: RL MF	
Site: Rightbank Ledge	Signature:	

Sampled Interval (ft bgs):	To:	Water Depth (ft): 35
Evidence of Overbank Flooding? <input checked="" type="checkbox"/> NO		YES If YES, estimated height of flood lines above normal water level:
N. Coordinate:	E. Coordinate:	

Sample Type: <input checked="" type="checkbox"/> DISCRETE COMPOSITE OTHER:
Sampling Method: SCOOP AUGER DREDGE CORER OTHER: Ponar
Sampler Decontamination: DEDICATED LAB <input checked="" type="checkbox"/> FIELD OTHER:

SAMPLE DESCRIPTION							
Material: <input checked="" type="checkbox"/> NATURAL FILL UNCERTAIN							
Appearance: SHEEN ODOR PRODUCT <input checked="" type="checkbox"/> NA OTHER:							
Instrument:		Reading:					
Surface Layer: <input checked="" type="checkbox"/> SOIL GRASS LEAVES VEGETATION GRAVEL ASPHALT CEMENT FILL OTHER:							
Thickness (inches):					REMOVED SAMPLED		
Overall Color: Dark Brown				Munsell GSA:		<input checked="" type="checkbox"/> WET DRY	
Coloration: <input checked="" type="checkbox"/> UNIFORM STAINED MOTTLED VARIABLE							
Texture:		Roundness:					
Percent Gravel: 0		Gravel: ROUNDED					
Percent Sand: 0		SUBROUNDED SUB-ANGULAR					
COARSE MEDIUM FINE		ANGULAR NA					
Percent Clay: 0		Sand: ROUNDED					
Percent Organic: 100		SUBROUNDED SUB-ANGULAR					
Sorting:		ANGULAR NA					
							
		VERY WELL SORTED	WELL SORTED	MODERATELY SORTED	POORLY SORTED	VERY POORLY SORTED	
Plasticity: <input checked="" type="checkbox"/> NON LOW MODERATE HIGH NA							
Moisture: DRY MOIST WET <input checked="" type="checkbox"/> SATURATED							
Strength: COHESIVE <input checked="" type="checkbox"/> NONCOHESIVE							
Site Sketch: Use back of form if necessary.							

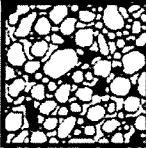
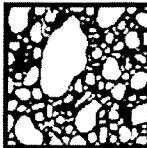
# Sediment Sampling Form

NHDES-SD-ARL-01-0201020

Company: WESTON SOLUTIONS, INC.	Sample ID: Sed 01
Client: NHDES	Date: 10/27/20 Time: 1205
Project: PFAS Study	Sampler: ME / ML
Site: Armington	Signature: Matt Ewall

Sampled Interval (ft bgs):	To:	Water Depth (ft):
Evidence of Overbank Flooding? <input checked="" type="checkbox"/> NO YES If YES, estimated height of flood lines above normal water level:		
N. Coordinate:	E. Coordinate:	

Sample Type: <input checked="" type="checkbox"/> DISCRETE <input type="checkbox"/> COMPOSITE <input type="checkbox"/> OTHER:
Sampling Method: SCOOP AUGER DREDGE CORER <input checked="" type="checkbox"/> OTHER: Ponar
Sampler Decontamination: DEDICATED LAB <input checked="" type="checkbox"/> FIELD OTHER:

SAMPLE DESCRIPTION									
Material: <input checked="" type="checkbox"/> NATURAL <input type="checkbox"/> FILL <input type="checkbox"/> UNCERTAIN									
Appearance: SHEEN ODOR PRODUCT <input checked="" type="checkbox"/> NA OTHER:									
Instrument:					Reading:				
Surface Layer: SOIL GRASS LEAVES VEGETATION GRAVEL ASPHALT CEMENT FILL OTHER:									
Thickness (inches):							REMOVED	SAMPLED	
Overall Color: Dark Brown					Munsell GSA:			WET	DRY
Coloration: UNIFORM STAINED MOTTLED VARIABLE									
Texture:			Roundness:						
Percent Gravel: 0			Gravel: <input type="checkbox"/> ROUNDED <input type="checkbox"/> SUBROUNDED <input type="checkbox"/> SUB-ANGULAR <input type="checkbox"/> ANGULAR <input checked="" type="checkbox"/> NA						
Percent Sand: 0									
COARSE MEDIUM FINE									
Percent Clay: 0			Sand: <input type="checkbox"/> ROUNDED <input type="checkbox"/> SUBROUNDED <input type="checkbox"/> SUB-ANGULAR <input type="checkbox"/> ANGULAR <input checked="" type="checkbox"/> NA						
Percent Organic: 100									
Sorting: Very Well									
 VERY WELL SORTED			 WELL SORTED			 MODERATELY SORTED		 POORLY SORTED	
 VERY POORLY SORTED									
Plasticity: <input type="checkbox"/> NON <input type="checkbox"/> LOW <input type="checkbox"/> MODERATE <input type="checkbox"/> HIGH <input type="checkbox"/> NA									
Moisture: DRY MOIST WET <input checked="" type="checkbox"/> SATURATED									
Strength: COHESIVE <input checked="" type="checkbox"/> NONCOHESIVE									
Site Sketch: Use back of form if necessary.									

# Sediment Sampling Form

NHDES-SD-COP-01-0-2020

Company: WESTON SOLUTIONS, INC.	Sample ID: NHDES	Sed-01
Client: NHDES	Date: 10/20/20	Time: 16:00
Project: PFAS Study	Sampler: Ewald	Dale
Site: Cobble's Pond	Signature:	

Sampled Interval (ft bgs): 0 To: 6"	Water Depth (ft): 4.5 ft
Evidence of Overbank Flooding? NO YES If YES, estimated height of flood lines above normal water level:	
N. Coordinate:	E. Coordinate:

Sample Type: DISCRETE COMPOSITE OTHER:
Sampling Method: SCOOP AUGER DREDGE CORER OTHER: Power
Sampler Decontamination: DEDICATED LAB FIELD OTHER: Bleach, Alcohol, Dilution

SAMPLE DESCRIPTION							
Material: NATURAL	FILL	UNCERTAIN					
Appearance: SHEEN	ODOR	PRODUCT	NA	OTHER:	Some Surface Odor		
Instrument:	Reading:						
Surface Layer: SOIL	GRASS	LEAVES	VEGETATION	GRAVEL	ASPHALT	CEMENT	FILL
OTHER:	fine needles						
Thickness (inches):					REMOVED	SAMPLED	
Overall Color: Brown with Black Vugs	Munsell GSA:				WET	DRY	
Coloration: UNIFORM	STAINED	MOTTLED	VARIABLE				
Texture:	Roundness:						
Percent Gravel: 0	Gravel: ROUNDED						
Percent Sand: 0	SUBROUNDED SUB-ANGULAR						
COARSE MEDIUM FINE	ANGULAR NA						
Percent Clay: 0	Sand: ROUNDED						
Percent Organic: 100%	SUBROUNDED SUB-ANGULAR						
Sorting: Very well	ANGULAR NA						
 VERY WELL SORTED    WELL SORTED    MODERATELY SORTED    POORLY SORTED    VERY POORLY SORTED							
Plasticity: NON	LOW	MODERATE	HIGH	NA			
Moisture: DRY	MOIST	WET	SATURATED				
Strength: COHESIVE	NONCOHESIVE						
Site Sketch: Use back of form if necessary.							

# Sediment Sampling Form

NHDES-SD-COP-01-1-201020

Company: WESTON SOLUTIONS, INC.	Sample ID: 01 Sed resample
Client: NHDES	Date: 10/20/20 Time: 16:02 1605
Project: PFAS Study	Sampler: Ewald/Dolan
Site: Cobblets Pond	Signature: N

Sampled Interval (ft bgs): 0 To: 6"	Water Depth (ft): 45 ft
Evidence of Overbank Flooding? NO YES If YES, estimated height of flood lines above normal water level:	
N. Coordinate:	E. Coordinate:

Sample Type: DISCRETE COMPOSITE OTHER:
Sampling Method: SCOOP AUGER DREDGE CORER OTHER: Ponar
Sampler Decontamination: DEDICATED LAB FIELD OTHER: Bleach, Alcohol, Disinfect

SAMPLE DESCRIPTION								
Material: NATURAL	FILL	UNCERTAIN						
Appearance: SHEEN	ODOR	PRODUCT	NA	OTHER:	Some sulfur odor			
Instrument:	Reading:							
Surface Layer: SOIL	GRASS	LEAVES	VEGETATION	GRAVEL	ASPHALT	CEMENT	FILL	
OTHER:	pine needles							
Thickness (inches):					REMOVED	SAMPLED		
Overall Color: brown, black mottled	Munsell GSA:				(WET)	DRY		
Coloration: UNIFORM	STAINED	MOTTLED	VARIABLE					
Texture:	Roundness:							
Percent Gravel: 0	Gravel: ROUNDED							
Percent Sand: 0	SUBROUNDED SUB-ANGULAR							
COARSE MEDIUM FINE	ANGULAR NA							
Percent Clay: 0	Sand: ROUNDED							
Percent Organic: 100%	SUBROUNDED SUB-ANGULAR							
Sorting: very well sorted	ANGULAR NA							
 VERY WELL SORTED    WELL SORTED    MODERATELY SORTED    POORLY SORTED    VERY POORLY SORTED								
Plasticity: NON	LOW	MODERATE	HIGH	NA				
Moisture: DRY	MOIST	WET	SATURATED					
Strength: COHESIVE	NONCOHESIVE							
Site Sketch: Use back of form if necessary.								

# Sediment Sampling Form

Company: WESTON SOLUTIONS, INC.	Sample ID: NHDES-SD-CAL-DI-D-201019	
Client: NHDES	Date: 10/19/20	Time: 16:50
Project: PFAS Study	Sampler:	
Site: Canabie Lake	Signature:	

Sampled Interval (ft bgs):	To:	Water Depth (ft): 36.5
Evidence of Overbank Flooding?	<input checked="" type="radio"/> NO	YES If YES, estimated height of flood lines above normal water level: Low
N. Coordinate:	E. Coordinate:	

Sample Type: <input checked="" type="radio"/> DISCRETE COMPOSITE OTHER:
Sampling Method: SCOOP AUGER DREDGE CORER OTHER: Ponar
Sampler Decontamination: DEDICATED LAB <input checked="" type="radio"/> FIELD OTHER:

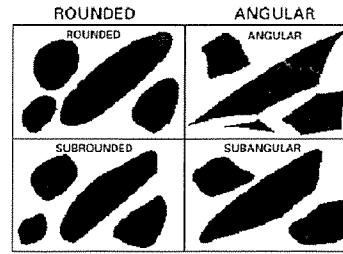
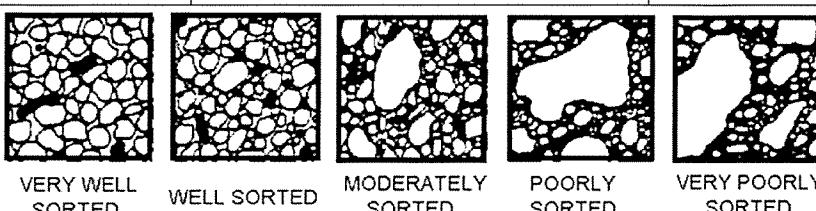
SAMPLE DESCRIPTION					
Material: <input checked="" type="radio"/> NATURAL FILL UNCERTAIN					
Appearance: SHEEN ODOR PRODUCT <input checked="" type="radio"/> NA OTHER:					
Instrument: Ponar	Reading:				
Surface Layer: SOIL GRASS LEAVES VEGETATION GRAVEL ASPHALT CEMENT FILL					
OTHER: Organic					
Thickness (inches):				REMOVED	SAMPLED
Overall Color: Dark Greenish Brown	Munsell GSA:			<input checked="" type="radio"/> WET	DRY
Coloration: <input checked="" type="radio"/> UNIFORM STAINED MOTTLED VARIABLE					
Texture: <input checked="" type="radio"/>	Roundness:				
Percent Gravel: <input checked="" type="radio"/>	Gravel: ROUNDED				
Percent Sand: <input checked="" type="radio"/>	SUBROUNDED SUB-ANGULAR				
COARSE MEDIUM FINE	ANGULAR NA				
Percent Clay: <input checked="" type="radio"/>	Sand: ROUNDED				
Percent Organic: 100%	SUBROUNDED SUB-ANGULAR				
Sorting:	ANGULAR NA				
 VERY WELL SORTED    WELL SORTED    MODERATELY SORTED    POORLY SORTED    VERY POORLY SORTED					
ROUNDED	ANGULAR				
Plasticity: <input checked="" type="radio"/> NON LOW MODERATE HIGH NA					
Moisture: DRY MOIST <input checked="" type="radio"/> WET SATURATED					
Strength: COHESIVE <input checked="" type="radio"/> NONCOHESIVE					
Site Sketch: Use back of form if necessary.					

# Sediment Sampling Form

Company: WESTON SOLUTIONS, INC.	Sample ID: NHDES-SD-64P-01-0-201019
Client: NHDES	Date: 10/19/20 Time: 1250
Project: PFAS Study	Sampler: Dakin/Ewall
Site: Great Pond	Signature: Matt Ewall

Sampled Interval (ft bgs):	To:	Water Depth (ft): 38
Evidence of Overbank Flooding? NO YES		If YES, estimated height of flood lines above normal water level:
N. Coordinate:		E. Coordinate:

Sample Type: DISCRETE COMPOSITE OTHER:
Sampling Method: SCOOP AUGER DREDGE CORER OTHER: Ponar
Sampler Decontamination: DEDICATED LAB FIELD OTHER:

SAMPLE DESCRIPTION								
Material: NATURAL FILL UNCERTAIN								
Appearance: SHEEN ODOR PRODUCT NA OTHER:								
Instrument:				Reading:				
Surface Layer: SOIL GRASS LEAVES VEGETATION GRAVEL ASPHALT CEMENT FILL								
OTHER:								
Thickness (inches):						REMOVED	SAMPLED	
Overall Color:				Munsell GSA:			WET	DRY
Coloration: UNIFORM STAINED MOTTLED VARIABLE								
Texture:		Roundness:						
Percent Gravel:		Gravel: ROUNDED						
Percent Sand:		SUBROUNDED SUB-ANGULAR						
COARSE MEDIUM FINE		ANGULAR NA						
Percent Clay:		Sand: ROUNDED						
Percent Organic: 100%		SUBROUNDED SUB-ANGULAR						
Sorting:		ANGULAR NA						
								
								
Plasticity: NON LOW MODERATE HIGH NA								
Moisture: DRY MOIST WET SATURATED								
Strength: COHESIVE<NONCOHESIVE								
Site Sketch: Use back of form if necessary.								

# Sediment Sampling Form

NHDES-SD-HOP-01-0-2019

Company: WESTON SOLUTIONS, INC.	Sample ID: Sed
Client: NHDES	Date: 10/19/20 Time: 15:40
Project: PFAS Study	Sampler: Ewald / Daker
Site: Horse Shoe Pond	Signature:

Sampled Interval (ft bgs): 12, 4 To:	Water Depth (ft): 12.4
Evidence of Overbank Flooding? NO YES If YES, estimated height of flood lines above normal water level:	
N. Coordinate:	E. Coordinate:

Sample Type: DISCRETE COMPOSITE OTHER:
Sampling Method: SCOOP AUGER DREDGE CORER OTHER: Paper
Sampler Decontamination: DEDICATED LAB FIELD OTHER: Bleach / liquidwax / DIH2O

SAMPLE DESCRIPTION								
Material: NATURAL FILL UNCERTAIN								
Appearance: SHEEN ODOR PRODUCT NA OTHER: Organic								
Instrument:				Reading:				
Surface Layer: SOIL GRASS LEAVES VEGETATION GRAVEL ASPHALT CEMENT FILL								
OTHER:								
Thickness (inches):						REMOVED	SAMPLED	
Overall Color: Brown				Munsell GSA:			WET	DRY
Coloration: UNIFORM STAINED MOTTLED VARIABLE								
Texture:		Roundness:						
Percent Gravel: 0		Gravel: ROUNDED SUBROUNDED SUB-ANGULAR ANGULAR NA						
Percent Sand: 0								
COARSE MEDIUM FINE								
Percent Clay:		Sand: ROUNDED SUBROUNDED SUB-ANGULAR ANGULAR NA						
Percent Organic: 100%								
Sorting: Well Sorted								
		VERY WELL SORTED	WELL SORTED	MODERATELY SORTED	POORLY SORTED	VERY POORLY SORTED		
Plasticity: NON LOW MODERATE HIGH NA								
Moisture: DRY MOIST WET SATURATED								
Strength: COHESIVE NONCOHESIVE								
Site Sketch: Use back of form if necessary.								

# Sediment Sampling Form

Company: WESTON SOLUTIONS, INC.	Sample ID: NHDES-SD-BAL-01-0-201015	
Client: NHDES	Date: 10/15/20	Time: 1520
Project: PFAS Study	Sampler: ME, ML	
Site: Baboosic Lake	Signature: RK	

Sampled Interval (ft bgs):	To:	Water Depth (ft): 24
Evidence of Overbank Flooding? NO YES If YES, estimated height of flood lines above normal water level:		
N. Coordinate:	E. Coordinate:	

Sample Type: DISCRETE COMPOSITE OTHER:
Sampling Method: SCOOP AUGER DREDGE CORER OTHER: PONI
Sampler Decontamination: DEDICATED LAB FIELD OTHER:

SAMPLE DESCRIPTION									
Material: NATURAL FILL UNCERTAIN									
Appearance: SHEEN ODOR PRODUCT NA OTHER:									
Instrument:					Reading:				
Surface Layer: SOIL GRASS LEAVES VEGETATION GRAVEL ASPHALT CEMENT FILL									
OTHER:									
Thickness (inches):						REMOVED	SAMPLED		
Overall Color: Dark Brown				Munsell GSA:			WET	DRY	
Coloration: UNIFORM STAINED MOTTLED VARIABLE									
Texture:			Roundness:						
Percent Gravel: 0			Gravel: ROUNDED						
Percent Sand: 0			SUBROUNDED SUB-ANGULAR						
COARSE MEDIUM FINE			ANGULAR NA						
Percent Clay: 0			Sand: ROUNDED						
Percent Organic: 100			SUBROUNDED SUB-ANGULAR						
Sorting:			ANGULAR NA						
			VERY WELL SORTED    WELL SORTED    MODERATELY SORTED    POORLY SORTED    VERY POORLY SORTED						
Plasticity: NON LOW MODERATE HIGH NA									
Moisture: DRY MOIST WET SATURATED									
Strength: COHESIVE NONCOHESIVE									
Site Sketch: Use back of form if necessary.									

# Sediment Sampling Form

Company: WESTON SOLUTIONS, INC.	Sample ID: NHDES-SD-RP-01-0-201014
Client: NHDES	Date: 10/14/20 Time: 1500
Project: PFAS Study	Sampler: RL, ME, ML
Site: Robinson Pond	Signature: [Signature]

Sampled Interval (ft bgs):	To:	Water Depth (ft): 26
Evidence of Overbank Flooding? NO YES		If YES, estimated height of flood lines above normal water level:
N. Coordinate:	E. Coordinate:	

Sample Type: DISCRETE COMPOSITE OTHER:
Sampling Method: SCOOP AUGER DREDGE CORER OTHER: Ponar
Sampler Decontamination: DEDICATED LAB FIELD OTHER:

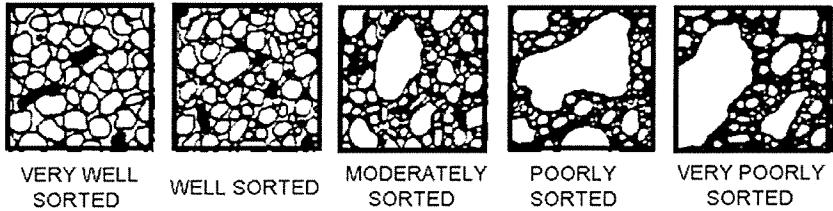
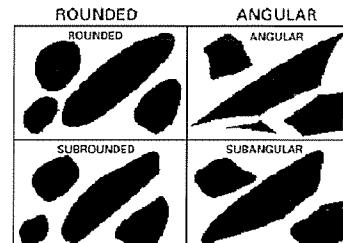
SAMPLE DESCRIPTION								
Material: NATURAL FILL UNCERTAIN								
Appearance: SHEEN ODOR PRODUCT NA OTHER:								
Instrument:		Reading:						
Surface Layer: SOIL GRASS LEAVES VEGETATION GRAVEL ASPHALT CEMENT FILL								
OTHER:								
Thickness (inches):					REMOVED	SAMPLED		
Overall Color: Dark Brown					Munsell GSA:	WET	DRY	
Coloration: UNIFORM STAINED MOTTLED VARIABLE								
Texture:		Roundness:						
Percent Gravel: 0		Gravel: ROUNDED						
Percent Sand: 0		SUBROUNDED SUB-ANGULAR						
COARSE MEDIUM FINE		ANGULAR NA						
Percent Clay: 0		Sand: ROUNDED						
Percent Organic: 100		SUBROUNDED SUB-ANGULAR						
Sorting:		ANGULAR NA						
 VERY WELL SORTED    WELL SORTED    MODERATELY SORTED    POORLY SORTED    VERY POORLY SORTED								
Plasticity: NON LOW MODERATE HIGH NA								
Moisture: DRY MOIST WET SATURATED								
Strength: COHESIVE NONCOHESIVE								
Site Sketch: Use back of form if necessary.								

# Sediment Sampling Form

Company: WESTON SOLUTIONS, INC.	Sample ID: NHDES-SD-NL-01-0-201062	
Client: NHDES	Date: 10/12/20	Time: 1315
Project: PFAS Study	Sampler: RL, KS	
Site: Newcoot Lake	Signature: [Signature]	

Sampled Interval (ft bgs):	To:	Water Depth (ft): 13
Evidence of Overbank Flooding? NO		YES If YES, estimated height of flood lines above normal water level:
N. Coordinate:		E. Coordinate:

Sample Type: DISCRETE COMPOSITE OTHER:
Sampling Method: SCOOP AUGER DREDGE CORER OTHER: Ponar
Sampler Decontamination: DEDICATED LAB FIELD OTHER:

SAMPLE DESCRIPTION									
Material: NATURAL FILL UNCERTAIN									
Appearance: SHEEN ODOR PRODUCT NA OTHER:									
Instrument:					Reading:				
Surface Layer: SOIL GRASS LEAVES VEGETATION GRAVEL ASPHALT CEMENT FILL									
OTHER:									
Thickness (inches):							REMOVED	SAMPLED	
Overall Color: Brt Brown & D Green					Munsell GSA:			WET	DRY
Coloration: UNIFORM STAINED MOTTLED VARIABLE									
Texture:			Roundness:						
Percent Gravel: 0			Gravel: ROUNDED						
Percent Sand: 0			SUBROUNDED SUB-ANGULAR						
COARSE MEDIUM FINE			ANGULAR NA						
Percent Clay: 0			Sand: ROUNDED						
Percent Organic: 100			SUBROUNDED SUB-ANGULAR						
Sorting:			ANGULAR NA						
 VERY WELL SORTED    WELL SORTED    MODERATELY SORTED    POORLY SORTED    VERY POORLY SORTED									
 ROUNDED    SUBROUNDED    ANGULAR    SUBANGULAR									
Plasticity: NON LOW MODERATE HIGH NA									
Moisture: DRY MOIST WET SATURATED									
Strength: COHESIVE NONCOHESIVE									
Site Sketch: Use back of form if necessary.									

# Sediment Sampling Form

Company: WESTON SOLUTIONS, INC.	Sample ID: NHDES-SI-BEL-01-6-201012	
Client: NHDES	Date: 10/12/20	Time: 1055
Project: PFAS Study	Sampler: RL, KS	
Site: Beaver Lake	Signature: RWK	

Sampled Interval (ft bgs):	To:	Water Depth (ft): 23
Evidence of Overbank Flooding? NO YES		If YES, estimated height of flood lines above normal water level:
N. Coordinate:		E. Coordinate:

Sample Type: DISCRETE COMPOSITE OTHER:
Sampling Method: SCOOP AUGER DREDGE CORER OTHER: Power
Sampler Decontamination: DEDICATED LAB FIELD OTHER:

SAMPLE DESCRIPTION									
Material: NATURAL	FILL	UNCERTAIN							
Appearance: SHEEN	ODOR	PRODUCT	NA	OTHER:					
Instrument:	Reading:								
Surface Layer: SOIL	GRASS	LEAVES	VEGETATION	GRAVEL	ASPHALT	CEMENT	FILL		
OTHER:									
Thickness (inches):						REMOVED	SAMPLED		
Overall Color: Dark Brown				Munsell GSA:			WET	DRY	
Coloration: UNIFORM STAINED MOTTLED VARIABLE									
Texture:		Roundness:							
Percent Gravel: 0	Gravel: ROUNDED								
Percent Sand: 0	SUBROUNDED SUB-ANGULAR								
COARSE MEDIUM FINE	ANGULAR NA								
Percent Clay: 0	Sand: ROUNDED								
Percent Organic: 100	SUBROUNDED SUB-ANGULAR								
Sorting:	ANGULAR NA								
VERY WELL SORTED		WELL SORTED	MODERATELY SORTED	Poorly SORTED	Very Poorly SORTED				
Plasticity: NON LOW MODERATE HIGH NA									
Moisture: DRY MOIST WET SATURATED									
Strength: COHESIVE NONCOHESIVE									
Site Sketch: Use back of form if necessary.									

# Sediment Sampling Form

Company: WESTON SOLUTIONS, INC.	Sample ID: NHDES-SI-CAP-01-O-201009	
Client: NHDES	Date: 10/19/20	Time: 13:15 14:30
Project: PFAS Study	Sampler: KS, RL	
Site: Captain Pond	Signature: RKL	

Sampled Interval (ft bgs): 0	To: 6	Water Depth (ft): 26
Evidence of Overbank Flooding? NO YES If YES, estimated height of flood lines above normal water level:		
N. Coordinate:	E. Coordinate:	

Sample Type: DISCRETE COMPOSITE OTHER:
Sampling Method: SCOOP AUGER DREDGE CORER OTHER: PONAR
Sampler Decontamination: DEDICATED LAB FIELD OTHER:

SAMPLE DESCRIPTION							
Material: NATURAL FILL UNCERTAIN							
Appearance: SHEEN ODOR PRODUCT NA OTHER:							
Instrument:		Reading:					
Surface Layer: SOIL GRASS LEAVES VEGETATION GRAVEL ASPHALT CEMENT FILL							
OTHER:							
Thickness (inches):				REMOVED SAMPLED			
Overall Color: Dark brown				Munsell GSA:			WET DRY
Coloration: UNIFORM STAINED MOTTLED VARIABLE							
Texture:		Roundness:					
Percent Gravel: 0%		Gravel: ROUNDED					
Percent Sand: 0%		SUBROUNDED SUB-ANGULAR					
COARSE MEDIUM FINE		ANGULAR NA					
Percent Clay: 0%		Sand: ROUNDED					
Percent Organic: 100%		SUBROUNDED SUB-ANGULAR					
Sorting:		ANGULAR NA					
		VERY WELL SORTED	WELL SORTED	MODERATELY SORTED	Poorly SORTED	Very Poorly SORTED	
Plasticity: NON LOW MODERATE HIGH NA							
Moisture: DRY MOIST WET SATURATED							
Strength: COHESIVE NONCOHESIVE							
Site Sketch: Use back of form if necessary.							

# Sediment Sampling Form

DB

Company: WESTON SOLUTIONS, INC.	Sample ID: NHDES-SD-CAP-01-DOP-201009	
Client: NHDES	Date: 10/19/20	Time: 1435
Project: PFAS Study	Sampler: KS, RL	
Site: Captain Pond	Signature: JK	

Sampled Interval (ft bgs):	To:	Water Depth (ft): 26
Evidence of Overbank Flooding? NO YES If YES, estimated height of flood lines above normal water level:		
N. Coordinate:	E. Coordinate:	

Sample Type: DISCRETE COMPOSITE OTHER:
Sampling Method: SCOOP AUGER DREDGE CORER OTHER: Sonar
Sampler Decontamination: DEDICATED LAB FIELD OTHER:

SAMPLE DESCRIPTION								
Material: NATURAL FILL UNCERTAIN								
Appearance: SHEEN ODOR PRODUCT NA OTHER:								
Instrument:		Reading:						
Surface Layer: SOIL GRASS LEAVES VEGETATION GRAVEL ASPHALT CEMENT FILL								
OTHER:								
Thickness (inches):						REMOVED	SAMPLED	
Overall Color: Dark Brown				Munsell GSA:			WET	DRY
Coloration: UNIFORM STAINED MOTTLED VARIABLE								
Texture:		Roundness:						
Percent Gravel: 0		Gravel: ROUNDED SUBROUNDED SUB-ANGULAR ANGULAR NA						
Percent Sand: 0								
COARSE MEDIUM FINE								
Percent Clay: 0		Sand: ROUNDED SUBROUNDED SUB-ANGULAR ANGULAR NA						
Percent Organic: 100								
Sorting:								
		VERY WELL SORTED    WELL SORTED    MODERATELY SORTED    POORLY SORTED    VERY POORLY SORTED						
Plasticity: NON LOW MODERATE HIGH NA								
Moisture: DRY MOIST WET SATURATED								
Strength: COHESIVE NONCOHESIVE								
Site Sketch: Use back of form if necessary.								

# Sediment Sampling Form

MR  
1

Company: WESTON SOLUTIONS, INC.	Sample ID: NHDES-SD-01-0-201007	
Client: NHDES	Date: 10/17/20	Time: 1425
Project: PFAS Study	Sampler: ME RL	
Site: Arlington Mill Reservoir	Signature: TRK	

Sampled Interval (ft bgs):	To:	Water Depth (ft): 30 ft
Evidence of Overbank Flooding? NO		YES If YES, estimated height of flood lines above normal water level:
N. Coordinate:		E. Coordinate:

Sample Type: DISCRETE COMPOSITE OTHER:
Sampling Method: SCOOP AUGER DREDGE CORER OTHER: Ponar
Sampler Decontamination: DEDICATED LAB FIELD OTHER:

SAMPLE DESCRIPTION									
Material: NATURAL FILL UNCERTAIN									
Appearance: SHEEN ODOR PRODUCT NA OTHER:									
Instrument:	Reading:								
Surface Layer: SOIL GRASS LEAVES VEGETATION GRAVEL ASPHALT CEMENT FILL									
OTHER:									
Thickness (inches):					REMOVED	SAMPLED			
Overall Color:					Munsell GSA:	WET DRY			
Coloration: UNIFORM STAINED MOTTLED VARIABLE									
Texture:	Roundness:								
Percent Gravel: 20	Gravel: ROUNDED								
Percent Sand: 30	SUBROUNDED SUB-ANGULAR								
COARSE MEDIUM FINE	ANGULAR NA								
Percent Clay:	Sand: ROUNDED								
Percent Organic: 50	SUBROUNDED SUB-ANGULAR								
Sorting:	ANGULAR NA								
Plasticity: NON LOW MODERATE HIGH NA									
Moisture: DRY MOIST WET SATURATED									
Strength: COHESIVE NONCOHESIVE									
Site Sketch: Use back of form if necessary.									

# Sediment Sampling Form

25

Company: WESTON SOLUTIONS, INC.	Sample ID: NHDES-SP-BIP-01-0-201806	
Client: NHDES	Date: 10/6/20	Time: 1825
Project: PFAS Study	Sampler: ME RL	
Site: Big Island Pond	Signature: RLS	

Sampled Interval (ft bgs):	To:	Water Depth (ft): 58
Evidence of Overbank Flooding? NO YES		If YES, estimated height of flood lines above normal water level: N/A
N. Coordinate:	E. Coordinate:	

Sample Type: DISCRETE COMPOSITE OTHER:
Sampling Method: SCOOP AUGER DREDGE CORER OTHER: Penar
Sampler Decontamination: DEDICATED LAB FIELD OTHER:

SAMPLE DESCRIPTION									
Material: NATURAL	FILL	UNCERTAIN							
Appearance: SHEEN	ODOR	PRODUCT	NA	OTHER:					
Instrument: Penar			Reading:						
Surface Layer: SOIL	GRASS	LEAVES	VEGETATION	GRAVEL	ASPHALT	CEMENT	FILL		
OTHER:									
Thickness (inches):					REMOVED	SAMPLED			
Overall Color: Dark brown			Munsell GSA:			WET	DRY		
Coloration: UNIFORM STAINED MOTTLED VARIABLE									
Texture:	Roundness:								
Percent Gravel: 0	Gravel: ROUNDED								
Percent Sand: 0	SUBROUNDED SUB-ANGULAR								
COARSE MEDIUM FINE	ANGULAR NA								
Percent Clay: 0	Sand: ROUNDED								
Percent Organic: 100	SUBROUNDED SUB-ANGULAR								
Sorting:	ANGULAR NA								
 VERY WELL SORTED      WELL SORTED      MODERATELY SORTED      POORLY SORTED      VERY POORLY SORTED									
Plasticity: NON	LOW	MODERATE	HIGH	NA					
Moisture: DRY	MOIST	WET	SATURATED						
Strength: COHESIVE	NONCOHESIVE								
Site Sketch: Use back of form if necessary.									

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**FISH TISSUE FIELD SHEETS**

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## FISH CODING SHEET

NHDES PFAS Fish Study

LAKE: Big Island Pond  
Fish Metrics

page \_\_\_\_ of \_\_\_\_

SPECIES	Sample #	Fish #	Total Weight (lb)	Total Length (mm)	Fork Length (mm, in)	Fillet Weight (g, lb)	Sample Weight (g, lb)	Date	Time	Comments
Smallmouth Bass/Largemouth Bass	NHDES-FT-BIP-LMB-0-201006	5	437.7			437.2	437.2	10/6/20	20:20	
		1	994.9	14.9		79.4				
		2	965.1	15.0		56.0				
		3	957.3	18.3		89.5				
		4	1000.0	15.5		101.5				
		5	942.2	17.8		78.7				
Yellow Perch/Bluegill/Sunfish	NHDES-OF-BIP-YP-0-201006					2510.1	10/6/20	20:50		
	PT	1	146.1	12.0		10.4				
	NHDES-YP-BIP-YP-0-201006	2	146.1	12.0	12.0	8.9	48.7	10/6/20	20:45	
		3	87.5	11.9		7.1				
		4	84.3	12.8		5.7				
		5	129.4	11.0		7.6				
	NHDES-OF-BIP-YP-0-201006					220.8	10/6/20			

BEP  
LMB - 79.7 101.5 | BEP YP  
Fillet (g) 56.0 78.7 |  
56.0 78.7 |  
89.5



## FISH CODING SHEET

NHDES PFAS Fish Study

LAKE: Arlington Mill Reservoir (AMR)  
Fish Metrics

Species	Sample #	Fish #	Total Weight (lb)	Total Length (in)	Fork Length (in)	Fillet Weight (lb)	Sample Weight (lb)	Date	Time	Comments
Smallmouth Bass/Largemouth Bass	NHDES-FT-AMR-LMB-0-201008	1	1101.3	428	410	168.7	181.0	10/8/20	1800	
		2	308.7	300	293	38.0				
		3	245.2	271	262	33.5				
		4	169.5	252	241	18.8				
		5	167.2	238	234	22.6				
	NHDES-DF-AMR-LMB-0-201008						1706.6 #73 151.9	10/8/20		
Yellow Perch/Bluegill/Sunfish	NHDES-FF-AMR-YP-0-201008	1	139.4	22.5	21.5	14.4	55.1	10/8/20	1900	
		2	114.0	22.4	21.9	13.5				
		3	102.3	21.2	20.8	13.0				
		4	57.0	17.8	17.2	6.4				
		5	56.2	18.4	18.0	7.8				
	NHDES-DF-AMR-YP-0-201008						3916	10/8/20		



**FISH CODING SHEET**  
NHDES PFAS Fish Study  
LAKE: *Captain Pond* (CAP)  
Fish Metrics

Species	Sample #	Fish #	Total Weight	Total Length	Fork Length	Fillet Weight	Sample Weight	Date	Time	Comments
			(lb)	(in)	(in)	(g, lb)	(g, lb)			
Smallmouth Bass/Largemouth Bass	NHDES-FT-CAP-LMB-O-201009	1	1288.2	465	445	159.4	503.4	10/9/20	1700	
		2	458.0	331	319	37.4				
		3	804.6	383	383	90.9				
		4	839.0	390	370	100.2				
		5	895.5	410	395	115.5				
Yellow Perch/Bluegill Sunfish	NHDES-OF-CAP-YP-O-201009						3832.3	10/9/20	1710	
White Perch/Catfish	NHDES-FT-CAP-YP-O-201009	1	215.0	279	270	16.1	10 48.7	10/9/20	1725	Parasites
		2	94.2	208	199	10.5				Parasites
		3	57.2	180	172	7.0				Parasites
		4	57.0	182	174	8.5				Parasites
		5	49.3	174	166	6.6				Parasites
Bluegill Sunfish	NHDES-OF-CAP-YP-O-201009						413.3	10/9/20	1730	

FISH CODING SHEET  
NHDES PFAS Fish Study

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LAKE:

## Fish Metrics

SPECIES	Sample #	Fish #	Total Weight (g, lb)	Total Length (mm, in)	Fork Length (mm, in)	Fillet Weight (g, lb)	Sample Weight (g, lb)	Date	Time	Comments
Smallmouth Bass/Largemouth Bass	NHDES-FT-NAL-SMB-0-201011	1	396.8	328	314	49.4	210.8	10/11/20	1850	
		2	432.8	342	329	50.5				
		3	298.5	297	284	44.8				
		4	260.8	307	295	23.9				
		5	293.5	293	284	42.2				
	NHDES-OF-NAL-SMD-0-201011						1480.0	10/11/20	1900	
Yellow Perch/Bluegill/Sunfish	NAL-BC-0-201011	1	217.1	262	253	33.0	131.5	10/11/20	1920	
	NHDES-FT-BC-0-201011	2	238.6	268	256	38.2				
		3	162.5	238	229	20.3				
		4	175.8	237	226	18.7				
		5	198.1	242	232	31.3				
	NHDES-OF-NAL-BC-0-201011						663.3	10/11/20	1930	



**FISH CODING SHEET**

LAKE:

## Fish Metrics

Species	Sample #	Fish #	Total Weight (g, lb)	Total Length (mm, in)	Fork Length (mm, in)	Fillet Weight (g, lb)	Sample Weight (g, lb)	Date	Time	Comments
Smallmouth Bass/Largemouth Bass	NHDES-FT-BEL-SMB-O-201010	1	893.6	428	399	88.5	2299.0	10/10/20	2010	
		2	463.7	364	349	101.3				
		3	334.1	290	275	50.6				
		4	270.1	276	264	35.1				
		5	159.1	299	215	23.5				
	NHDES-DF-BEL-SMB-O-201010									
Yellow Perch/Bluegill Sunfish	NHDES-FT-BEL-YP-O-201010	1	233.7	270	263	24.0	87.8	10/10/20	2030	Parasites
		2	166.3	246	235	21.0				Parasites
		3	121.9	220	210	16.9				Parasites
		4	106.1	213	204	12.5				Parasites
		5	111.8	218	209	13.4				Parasites
	NHDES-DF-BEL-YP-O-201010									



FISH CODING SHEET  
NHDES PFAS Fish Study

LAKE:

## Fish Metrics

Species	Sample #	Fish #	Total Weight (g, lb)	Total Length (mm, in)	Fork Length (mm, in)	Fillet Weight (g, lb)	Sample Weight (g, lb)	Date	Time	Comments
Smallmouth Bass/Largemouth Bass	NHDES-FT-BEL-SMB-DB-201010	1	893.6	428	399	83.2	275.7	10/10/20	2015	
		2	463.7	364	349	68.3				
		3	334.1	290	275	47.5				
		4	270.1	276	264	33.8				
		5	159.1	229	215	15.3				
Yellow Perch/Bluegill/Sunfish	NHDES-FT-BEL-YP-DB-201010	1	233.7	270	263	26.0	78.6	10/10/20	2015	Parasites
		2	166.3	246	235	18.7				Parasites
		3	121.9	220	210	12.4				Parasites
		4	106.1	213	204	11.5				Parasites
		5	111.8	218	209	9.7				Parasites



**FISH CODING SHEET**  
NHDES PFAS Fish Study

**LAKE:**

## Fish Metrics

Species	Sample #	Fish #	Total Weight (g, lb)	Total Length (mm, in)	Fork Length (mm, in)	Fillet Weight (g, lb)	Sample Weight (g, lb)	Date	Time	Comments
Smallmouth Bass/Largemouth Bass	BAL NHDES-FT-LMB-0-201016	1	377.8	335	323	43.9	204.7	10/16/20	0835	
		2	351.9	301	292	47.7			0840	Parasites
		3	233.7	268	257	37.9			0845	
		4	234.7	269	255	40.2			0850	Parasites
		5	236.4	275	264	35.0			0855	
	NHDES-OP-BAL-LMB-0-201016						1233.9	10/16/20	0900	
Yellow Perch/Bluegill/Sunfish	BG NHDES-FT-BAL-YP-0-201016	1	136.3	192	184	16.7	89.1	10/16/20	0920	
		2	121.0	205	193	18.8			0925	
		3	147.6	205	196	18.7			0930	
		4	141.4	200	188	18.3			0925	
		5	115.6	191	179	16.6			0930	
	NHDES-OP-BAL-YP-0-201016						607.7	10/16/20	0935	



**FISH CODING SHEET**  
NHDES PFAS Fish Study

LAKE:

## Fish Metrics

Species	Sample #	Fish #	Total Weight (g, lb)	Total Length (mm, in)	Fork Length (mm, in)	Fillet Weight (g, lb)	Sample Weight (g, lb)	Date	Time	Comments
Smallmouth Bass/Largemouth Bass	NHDES-FT-RDP-LMB-0-201016	1	468.4 20 321.0	311	85.9		427.3	10/16/20	0950	
		2	483.5 229	313	73.4				0945	
		3	509.6 336	324	75.9				0955	
		4	470.1 326	312	90.6			10/16/20	1000	
		5	677.6 370	358	101.5			10/16/20	1000	
	NHDES-DF-RDP-LMB-0-201016						2,209.5	10/16/20	1005	
Yellow Perch/Bluegill/Sunfish	NHDES-FT-RDP-YP-0-201016	1	296.2 290	283	35.4				1010	Female with eggs
		2	202.9 274	265	23.1		174.6	10/16/20	1005	Female with eggs
		3	295.4 293	281	42.7				1010	Parasites, female with eggs
		4	265.8 271	261	30.2				1020	Parasites, female with eggs
		5	210.5 264	253	43.2			10/16/20	1015	Female with eggs, parasites
	NHDES-DF-RDP-YP-0-201016						1,098	10/16/20	1020	

LAKE:

## Fish Metrics

Species	Sample #	Fish #	Total Weight (lb)	Total Length (mm, in)	Fork Length (mm, in)	Fillet Weight (g, lb)	Sample Weight (g, lb)	Date	Time	Comments
Smallmouth Bass/Largemouth Bass	NHDES-FT-HOP-LMB-O-201020	1	616.3	349	335	105.2		10/20/20	1753	
		2	421.5	314	305	64.6			1804	
		3	441.4	329	318	71.8		10/20/20	1810	
		4	429.5	319	309	66.8			1820	
		5	366.1	305	291	60.5	387.2 868.9	10/20/20	1826	
Yellow Perch/Bluegill/Sunfish	NHDES-OF-HOP-LMB-O-201020						1921.0	10/20/20	1830	
	NHDES-FT-HOP-YP-O-201020	1	197.2	255	245	23.3		10/20/20	18:40	
		2	164.4	246	236	24.8			18:45	Female w/ eggs
		3	220.2	275	263	33.5			18:50	
		4	143.0	242	233	21.9	19.3		18:55	Parasites, Females w/ eggs
		5	105.1	210	202	15.8	128.5		19:02	Female w/ eggs
	NHDES-OF-HOP-YP-O-201020						713.3	10/20/20	19:05	

21  
58

21.4  
114

FISH CODING SHEET  
NHDES PFAS Fish Study

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LAKE:

## Fish Metrics

Species	Sample #	Fish #	Total Weight (lb)	Total Length (in, in)	Fork Length (in)	Fillet Weight (lb)	Sample Weight (lb)	Date	Time	Comments
Smallmouth Bass/Largemouth Bass	NHDES-FT-GTP-LMB-O- 201021	1	830.0	385	374	112.1	581	10/21/20	0720	
		2	705.0	374	358	124.5				
		3	720.8	366	352	96.6				
		4	698.2	370	355	105.3				
		5	866.5	400	384	142.5				0735
Yellow Perch/Bluegill/Sunfish	NHDES-OF-GTP-LMB-O- 201021						3273	10/21/20	0740	
	NHDES-FT-GTP-YP-O- 201021	1	171.1	248	239	26.5	103.8	10/21/20	0750	
		2	244.9	281	265	28.3				Eggs
		3	139.5	246	230	18.8				Eggs
		4	82.5	200	192	11.2				Parasites
	NHDES-OF-GTP-YP-O-201021	5	133.0	230	218	19.0			0810	
							(669.1)	10/21/20		



**FISH CODING SHEET**  
NHDES PFAS Fish Study

**LAKE:**

## Fish Metrics



LAKE:

## Fish Metrics

Species	Sample #	Fish #	Total Weight (g, lb)	Total Length (mm, in)	Fork Length (mm, in)	Fillet Weight (g, lb)	Sample Weight (g, lb)	Date	Time	Comments
Smallmouth Bass/Largemouth Bass	NHDES-FT-COP-LMB-D-201021	1	889.0	412	388	150.1	662.1	10/21/20	0855-	Parasite
		2	1105.2	442	420	153.2				
		3	701.3	372	355	124.9				
		4	864.8	400	387	148.5				
		5	597.7	368	352	85.4				
Yellow Perch/Bluegill Sunfish	NHDES-OF-COP-YP-D-201021					3518.7	10/21/20			Parasites
										Parasites
										Parasites
	NHDES-FT-COP-YP-D-201021	1	167.8	276	263	15.5	85.3	10/21/20	0910	Parasites
		2	132.7	233	220	20.5				Parasites
Yellow Perch/Bluegill Sunfish		3	128.1	242	231	16.5				Parasites
		4	149.0	255	245	15.6				
		5	109.5	208	200	17.2				Parasites
	NHDES-OF-COP-YP-D-201021					604.9	10/21/20	0925		
Yellow Perch/Bluegill Sunfish										

LAKE:

## Fish Metrics

Species	Sample #	Fish #	Total Weight (g, lb)	Total Length (mm, in)	Fork Length (mm, in)	Fillet Weight (g, lb)	Sample Weight (g, lb)	Date	Time	Comments
Smallmouth Bass/Largemouth Bass	NHDES-FT-COP-LMB- 1-201021	1	1377.9	436	420	297.1	822.5	10/21/20	0950	Eggs?
		2	778.9	372	358	140.6				
		3	836.1	381	369	141.1				Possible egg sac
		4	778.0	374	360	143.9				Eggs?
		5	603.8	348	336	99.8				
	NHDES-OF-COP-LMB- 1-201021						3621.2	10/21/20	0955	
Yellow Perch/Bluegill/Sunfish	NHDES-FT-COP-YP- 1-201021	1	149.2	220	210	15.7	105.6	10/21/20	1010	Female with eggs, parasites.
		2	208.1	281	272	25.5				Parasites, female with eggs
		3	143.4	243	235	15.4				
		4	155.5	233	223	30.1				
		5	157.5	225	218	18.9				External parasite on fin, internal parasite also
	NHDES-OF-COP-YP- 1-201021						713.7	10/21/20	1015	Parasites



FISH CODING SHEET  
NHDES PFAS Fish Study

LAKE.

## Fish Metrics

Species	Sample #	Fish #	Total Weight	Total Length	Fork Length	Fillet Weight	Sample Weight	Date	Time	Comments
			(lb)	(in)	(in)	(lb)	(g, lb)			
Smallmouth Bass/Largemouth Bass	NHDES-FT-CAP-LMB-1-201026	1	870.1	390	379	135.5	722.3	10/26/20	2030	
		2	704.0	400	380	73.2				
		3	1196.2	435	415	164.5				
		4	1296.4	444	429	192.3				
		5	1165.7	422	409	156.8				
Yellow Perch/Bluegill/Sunfish	NHDES-FP-CAP-YP-1-201026	1	212.2	284	274	27.7	97.1	10/26/20	2010	Parasites
		2	191.9	299	290	14.7				
		3	141.8	250	239	15.2				
		4	190.6	268	258	27.5				
		5	101.8	223	214	12.0				
	NHDES-OF-CAP-YP-1-201026						740.1	10/26/20	2015	
	NHDES-OF-CAP-YP-1-201026	LMB					4574.8	10/26/20	2040	



**FISH CODING SHEET**  
NHDES PFAS Fish Study

**LAKE:**

## Fish Metrics



FISH CODING SHEET  
NHDES PFAS Fish Study

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LAKE.

## Fish Metrics

FISH CODING SHEET  
NHDES PFAS Fish Study

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LAKE:

## Fish Metrics

	Fish #	Length (mm, in)	Total length (mm, in)	Weight (g, lbs)	Sample ID	Date	Time	Comments
NHDES-FT-ARL-YR-0-201029	1	61.9	179	170	8.5/1.2	47.7	10/29/20	0950
	2	28.5	141	137	3.2/3.2			
	3	27.6	141	138	4.8/3.4			
	4	22.3	135	127	2.7/2.2			
	5	47.8	166	160	5.8/6.7			
NHDES-OF-ARL-YR-0-201029					131.8	10/29/20	1005	
NHDES-FT-ARL-SMB-0-201029	1	123.6	214	200	18.0/4.5	36.5	10/29/20	1010
NHDES-OF-ARL-SMB-0-201029					85.6	10/29/20	1015	
NHDES-FT-LMA-LMB-0-201029	1	337.4	290	278	944			
	2	575.2	355	338	94.4/28.6	1045	10/29/20	1045
	3	268.5	283	265	49.1	289.8		
	4	276.0	284	266	46.3			
	5	194.0	245	231	29.0			
NHDES-FT-LMA-LMB-DB2002	1	337.4	290	278	57.0			
	2	575.2	355	338	98.6	1045	10/29/20	1045
	3	268.5	283	265	47.3	287.8		
	4	276.0	284	266	255.6			
	5	194.0	245	231	24.3	287.8		

NHDES-OF-LMA-LMB-0-201029

1050

1056.9

1029/20

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**FISH CODING FIELD SHEETS**

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## SPECIES CODING SHEET

NHDES PFAS Fish Study

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LAKE:

Species:

Date:

## Data

Date	#	Total Weight (g, lb)	Total Length (mm, in)	Fork Length (mm, in)	Species Sampled	DELTS/Comments
10/5	10/5				Bluegill Chain Pickerel Grass Pickerel Pumpkinseed Small mouth bass Large mouth bass Red breasted sunfish Black Crappie Eel Brown Bullhead Catfish Yellow Perch White Perch	Big Island Pond (BIP)
10/6	10/6				Pumpkinseed Bluegill Small mouth Bass Large mouth Bass American Eel Black Crappie Chain Pickerel Perch	Big Big Island Pond (BIP)
10/7	10/7				Largemouth Bass Smallmouth Bass Perch Yellow Perch Northern Pike Brown Bullhead Catfish White Perch Pumpkinseed Bluegill American Eel	Arlington Mill Reservoir (AMR)
10/8	10/8				Largemouth Perch Pumpkinseed	



## SPECIES CODING SHEET

NHDES PFAS Fish Study

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LAKE.

**Species:** \_\_\_\_\_ **Date:** \_\_\_\_\_

Data



## SPECIES CODING SHEET

NHDES PFAS Fish Study

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**LAKE:**

Species: \_\_\_\_\_ Date: \_\_\_\_\_

Data

Date #	Total Weight (g, lb)	Total Length (mm, in)	Fork Length (mm, in)	Species Sampled	DELTs/Comments Location
10/14				Largemouth Smallmouth Yellow Perch Pikeperch Brown Bullhead American Eel Pumpkinseed Bluegill	Robinson Pond
10/15				Largemouth Pikeperch Brown Bullhead Bluegill Pumpkinseed Yellow Perch Smallmouth Eel & Fish Carp	Baboozie Lake
10/17				Black Carp American Eel Common Carp Largemouth Yellow Perch Bluegill Pumpkinseed Pikeperch Brown Bullhead	Horseshoe Pond



## SPECIES CODING SHEET

NHDES PFAS Fish Study

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LAKE:

Species:

Date:

## Data

Date	Total Weight (g, lb)	Total Length (mm, in)	Fork Length (mm, in)	Species Sample ID	DELTs/Comments	Location
10/18				Largemouth Yellow Perch Brown Bullhead Pumpkinseed Bluegill American Eel Pikeperch White Perch Black Crappie		Great Pond
10/19				Smallmouth Largemouth Bluegill Yellow Perch Pumpkinseed Common Carp Pikeperch		Crandie
10/20				Largemouth Bluegill Pumpkinseed Yellow Perch Pikeperch American Eel Brown Bullhead		Coldwater
10/22				Smallmouth Brown Bullhead		Arlington



## SPECIES CODING SHEET

NHDES PFAS Fish Study

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## LAKE:

**Species:** \_\_\_\_\_ **Date:** \_\_\_\_\_

Data

Date #	Total Weight (g, lb)	Total Length (mm, in)	Fork Length (mm, in)	Species Sample ID	DELTs/Comments	Location
10/23				Smallmouth Brown Bullhead Brook trout Pumpkinseed Suckers Shiners		Highland
10/24				Smallmouth Brook trout Pumpkinseed Suckers Shiners		Highland
10/25				Smallmouth Pickerel Brown Bullhead Yellow Perch Pumpkinseed		Arlington
10/26				Yellow Perch Largemouth Pumpkinseed Bluegill Smallmouth American Eel		Arlington Captain
10/27				Largemouth Smallmouth Pickerel Bluegill		Bat Massabesic
10/29				Yellow Perch		Arlington



## SPECIES CODING SHEET

NHDES PFAS Fish Study

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## LAKE:

**Species:** \_\_\_\_\_ **Date:** \_\_\_\_\_

## Data

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## **INSTRUMENT CALIBRATION AND MAINTENANCE LOGS**

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## YSI Calibration Log

Date 00/0000	Instrument ID	pH	Post-Cal Reading	DO %	Post-Cal Reading	Cond μS/cm <sup>3</sup>	Post-Cal Reading	ORP	Post-Cal Reading	Turb	Post-Cal Reading
10/6/20	22543	4	4.10								
		7	7.10	98		982	1000				
		10	10.20			4502	NL				
		4	4.200								
10/7/20	22543	7	6.90	100		1017	1000				
		10	9.80								
10/14/20	22543	4	4.10			96		1015	1000		
		7	6.88								
		10	10.15								
10/12/20	22512	4	4.20	100		950	1001				
		7	6.90								
		10	9.44								
10/14/20	22512	4	3.85								
		7	6.90	99		1020	1000				
		10	9.90								
10/15/20	22512	4	4.15	100		1010	1000				
		7	6.90								
		10	9.60								
10/19/20	22512	4	4.16	100		1000	1000				
		7	7.10								
		10	9.92								
10/20/20	22512	4	4.26			97		1021	1000		
		7	7.03								
		10	10.13								
10/22/20	22512	4	4.11			100		996	1000		
		7	6.92								
		10	9.90								
10/23/20	22512	4	4.20	100		1010	1000				
		7	6.90								
		10	9.89								
10/26	22512	4	4.13			98		978	1000		
		7	7.18								
		10	10.21								
		4	3.90								
10/28	22543	7	7.11	99		780	1000				
		10	10.10			1000	1000				
		4									
		7									
		10									
		4									
		7									
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## **EQUIPMENT LIST**

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**EQUIPMENT LIST - OCTOBER 2020**  
**Lake Fish Specimen Collection and Subsequent Tissue PFAS Analysis**  
**Various Locations, New Hampshire**

INSTRUMENT/EQUIPMENT	MODEL	SERIAL NUMBER
16 ft Alumicraft V-hull boat with Evinruse 25HP motor	Alumikraft	PA 6683 DS
11 ft Jon boat with 35 and 55 lb trolling motor(s)	PolarKRAFT	J 5623 R
12 volt marine battery and charger (x2)	Deka	BATTERY12
Ponar petite sampler	--	PONARSPL
Smith-Root Electrofisher	VI-A	ELESHOK5
Smith-Root Electrofisher	KVA	28535
Honda EU2200i generator	EU2200i	GENERAT2
Trimble Geo 7x GPS with floodlight (x2)	Geo 7x	GPSGEO7X
Geopump peristaltic pump 120VAC/12VDC with battery (x2)	--	GEOPUMP2

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**PHOTO LOG**

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Project Name:	Date:	Site Location:	Project No.
Lake Fish Specimen Collection and Subsequent Tissue PFAS Analysis	October 2020	Various, New Hampshire	20139.012.001.0003



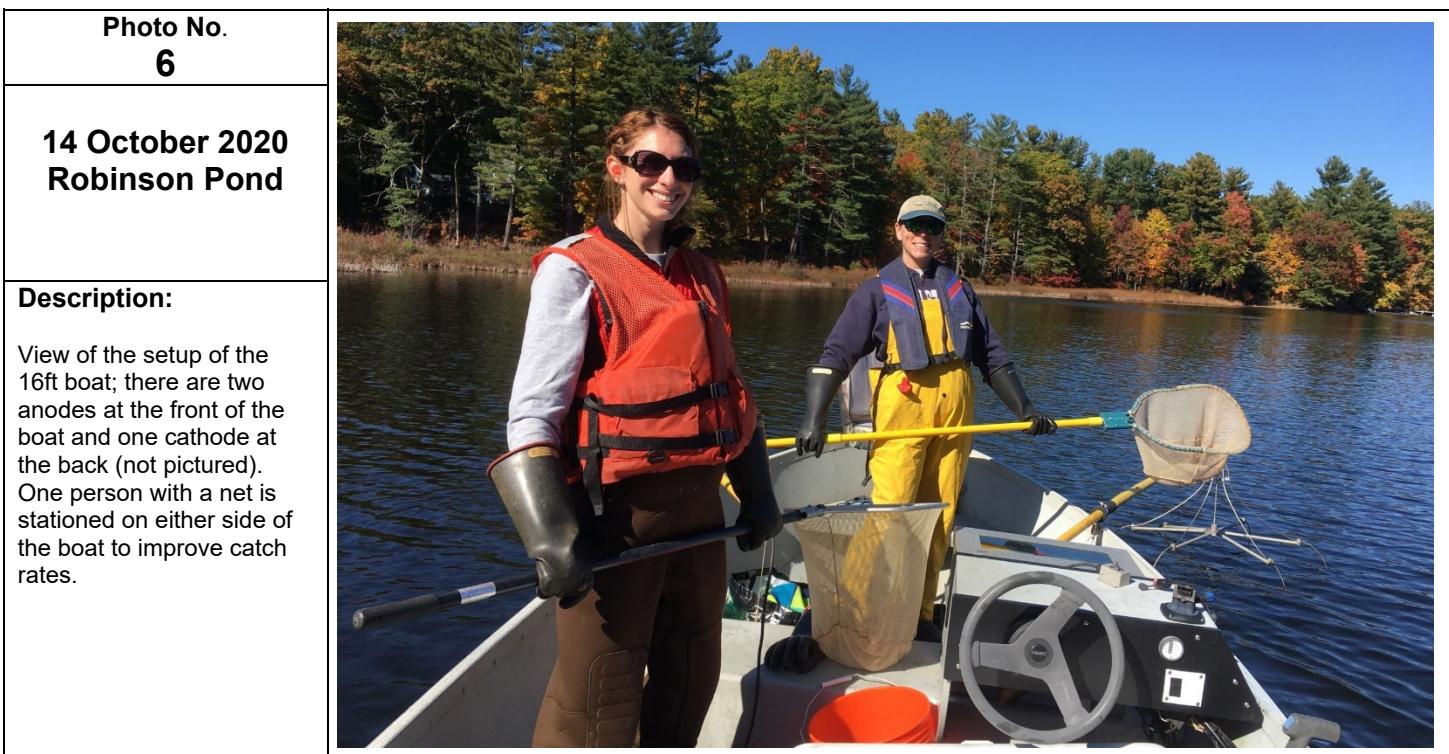
<b>Project Name:</b> Lake Fish Specimen Collection and Subsequent Tissue PFAS Analysis	<b>Date:</b> October 2020	<b>Site Location:</b> Various, New Hampshire	<b>Project No.</b> 20139.012.001.0003
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<b>Photo No.</b> <b>3</b>	
<b>9 October 2020 Captain Pond</b>	

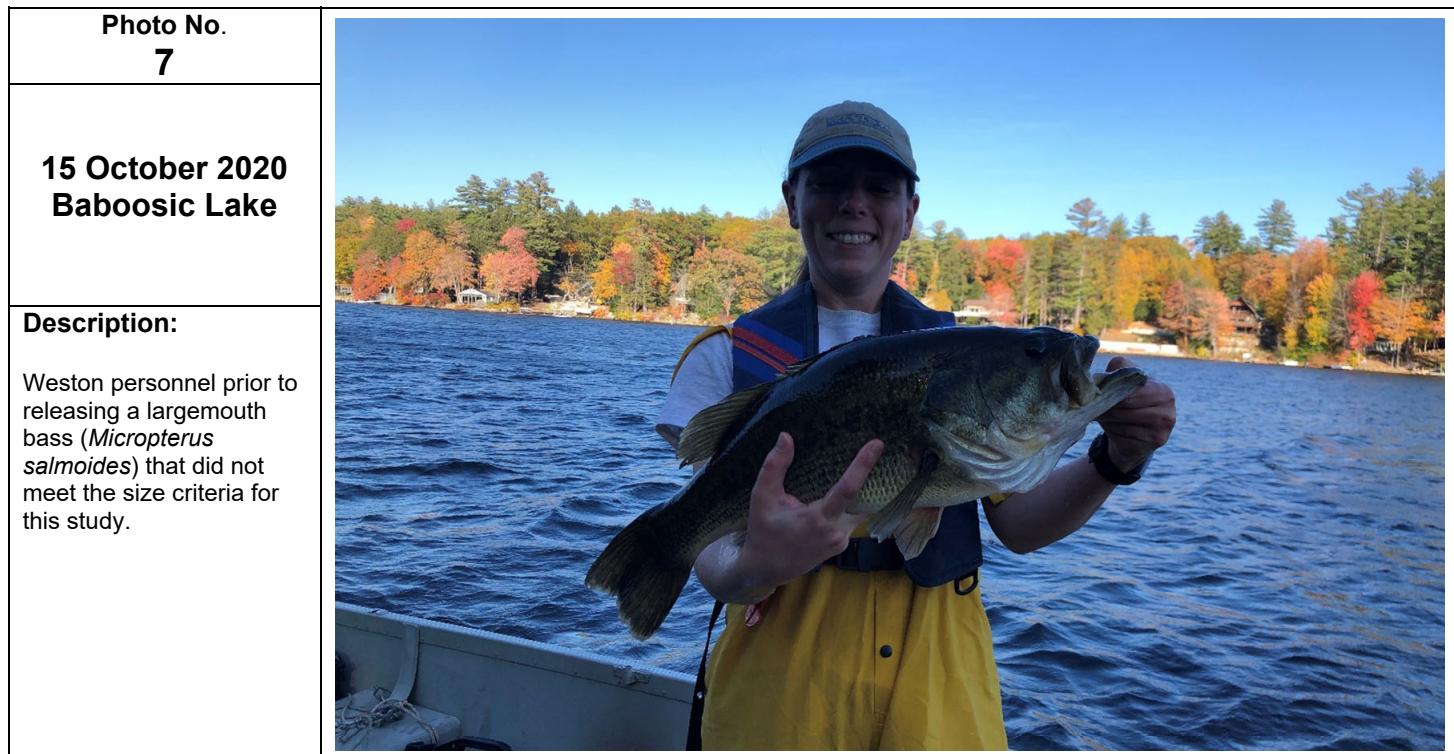
<b>Photo No.</b> <b>4</b>	
<b>10 October 2020 Beaver Lake</b>	

**Description:**  
Parasites (likely trematodes) were found while collecting a tissue sample from this yellow perch (*Perca flavescens*).

<b>Project Name:</b>	<b>Date:</b>	<b>Site Location:</b>	<b>Project No.</b>
Lake Fish Specimen Collection and Subsequent Tissue PFAS Analysis	October 2020	Various, New Hampshire	20139.012.001.0003



<b>Project Name:</b>	<b>Date:</b>	<b>Site Location:</b>	<b>Project No.</b>
Lake Fish Specimen Collection and Subsequent Tissue PFAS Analysis	October 2020	Various, New Hampshire	20139.012.001.0003



<b>Project Name:</b> Lake Fish Specimen Collection and Subsequent Tissue PFAS Analysis	<b>Date:</b> October 2020	<b>Site Location:</b> Various, New Hampshire	<b>Project No.</b> 20139.012.001.0003
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<b>Photo No.</b> <b>9</b>	
<b>18 October 2020 Great Pond</b>	<b>Description:</b> View from the Great Pond boat ramp; photo taken facing north.

<b>Photo No.</b> <b>10</b>	
<b>19 October 2020 Great Pond</b>	<b>Description:</b> View from the sediment collected from the deepest part of Great Pond; sediment is characterized, homogenized in clean trays, and poured into sample jars.

<b>Project Name:</b>	<b>Date:</b>	<b>Site Location:</b>	<b>Project No.</b>
Lake Fish Specimen Collection and Subsequent Tissue PFAS Analysis	October 2020	Various, New Hampshire	20139.012.001.0003

<b>Photo No.</b> <b>11</b>	
<b>19 October 2020 Canobie Lake</b>	

**Description:**  
A juvenile smallmouth bass (*Micropterus dolomieu*) collected via electrofishing; photograph taken prior to releasing the fish.

<b>Photo No.</b> <b>12</b>	
<b>20 October 2020 Cobbett's Pond</b>	

**Description:**  
View from the sediment collected from the deepest part of Cobbett's Pond; sediment is characterized, homogenized in clean trays, and poured into sample jars.

<b>Project Name:</b> Lake Fish Specimen Collection and Subsequent Tissue PFAS Analysis	<b>Date:</b> October 2020	<b>Site Location:</b> Various, New Hampshire	<b>Project No.</b> 20139.012.001.0003
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<b>Photo No.</b> <b>13</b>	A photograph showing two people in small boats on a lake. One person is in a white motorboat on the left, and another is in a smaller boat on the right, both near a rocky shoreline. The lake reflects the surrounding forested hills under a cloudy sky.
<b>22 October 2020 Armington Lake</b>	

<b>Photo No.</b> <b>14</b>	A close-up photograph of a person's hand wearing a blue glove, holding a large, dark, textured sample of sediment from a white tray. The sample appears thick and homogenized. The background shows a person's denim jacket and a white container.
<b>22 October 2020 Armington Lake</b>	

<b>Project Name:</b>	<b>Date:</b>	<b>Site Location:</b>	<b>Project No.</b>
Lake Fish Specimen Collection and Subsequent Tissue PFAS Analysis	October 2020	Various, New Hampshire	20139.012.001.0003

<b>Photo No.</b> <b>15</b>	
<b>23 October 2020</b> <b>Highland Lake</b>	

**Description:**  
Weston personnel electrofishing at Highland Lake. Photograph taken facing southeast.

<b>Photo No.</b> <b>16</b>	
<b>23 October 2020</b> <b>Highland Lake</b>	

**Description:**  
View from the sediment collected from the deepest part of Highland Lake; sediment is characterized, homogenized in clean trays, and poured into sample jars.

<b>Project Name:</b> Lake Fish Specimen Collection and Subsequent Tissue PFAS Analysis	<b>Date:</b> October 2020	<b>Site Location:</b> Various, New Hampshire	<b>Project No.</b> 20139.012.001.0003
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<b>Photo No.</b> <b>17</b>	
<b>28 October 2020</b> <b>Massabesic Lake</b>	
<b>Description:</b>  Heading toward a snag of branches in the water. This type of structure is the preferred habitat of several bass and sunfish species.	

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**APPENDIX C**

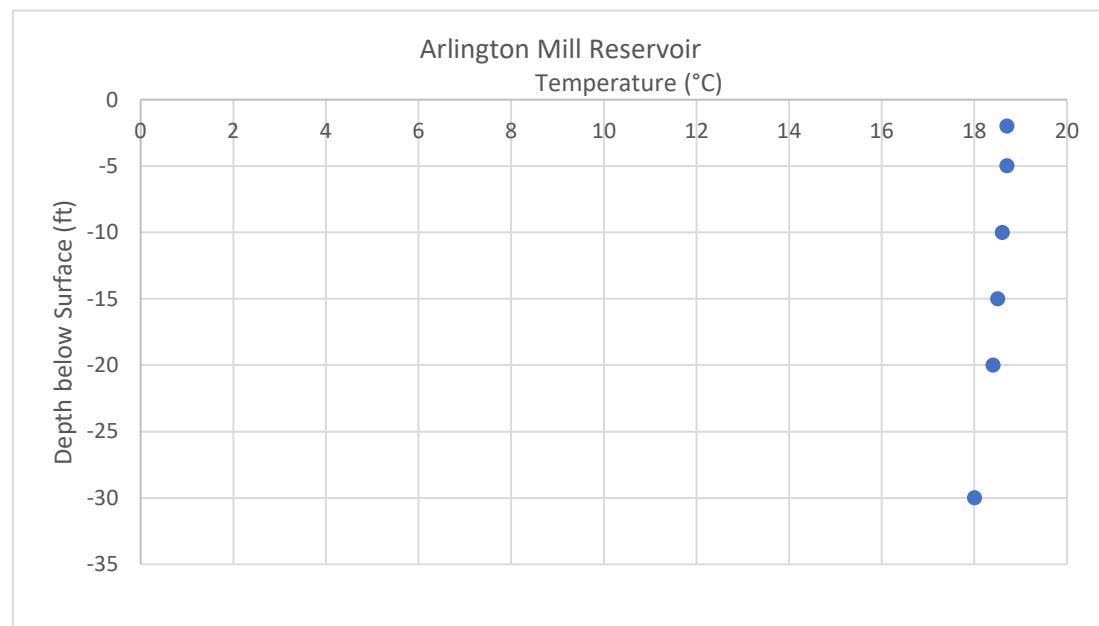
**THERMOCLINE GRAPHS**

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### Arlington Mill Reservoir

T      z

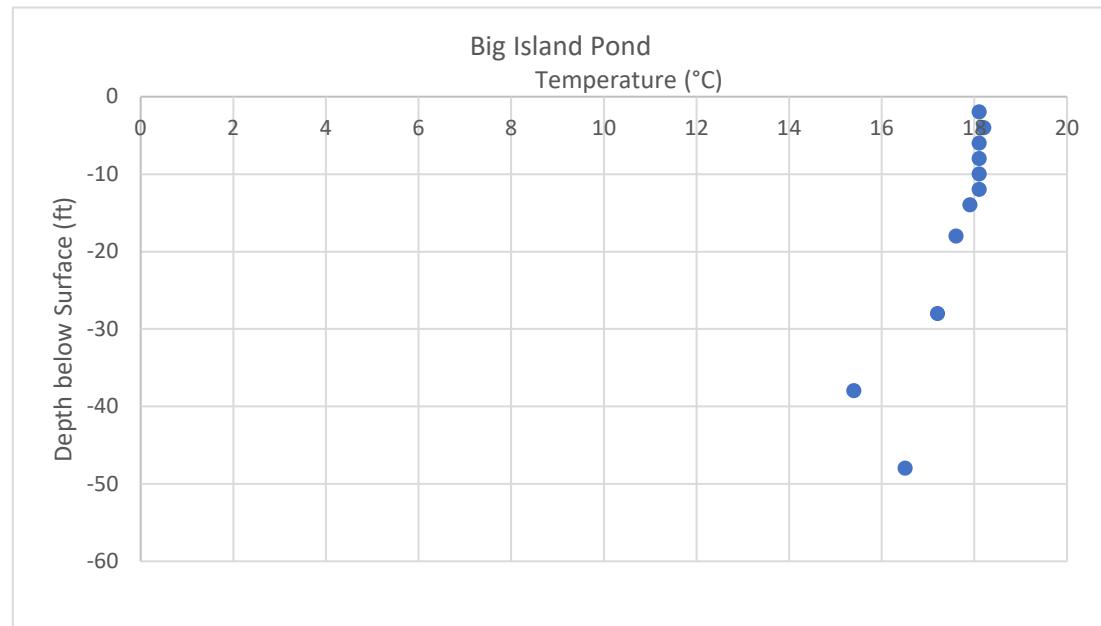
18.7	-2
18.7	-5
18.6	-10
18.5	-15
18.4	-20
18	-30



### Big Island Pond

T      z

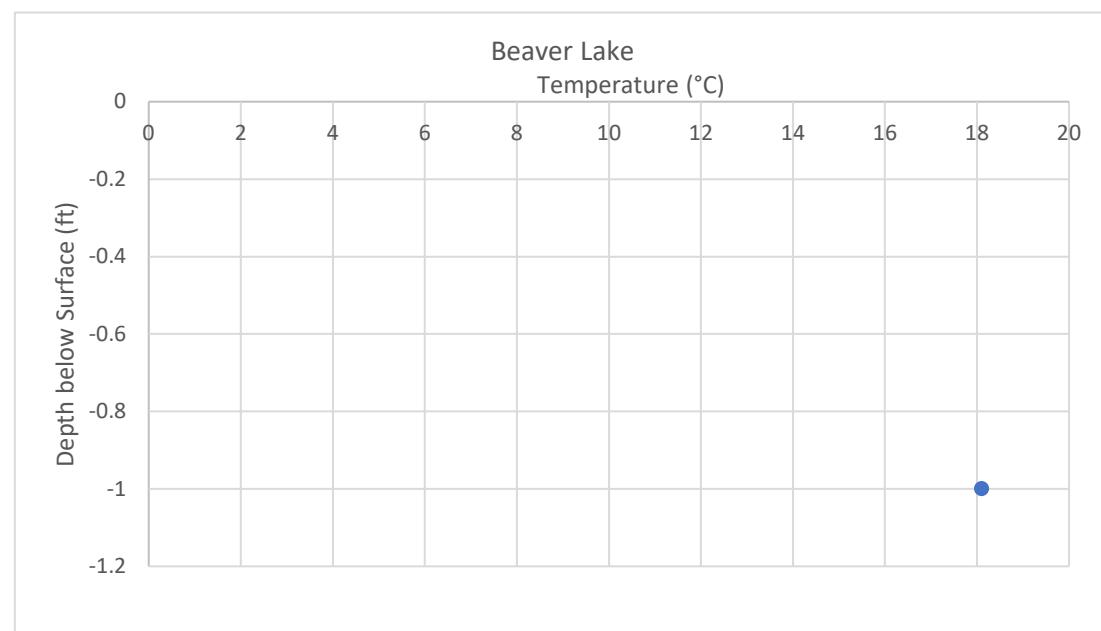
18.1	-2
18.2	-4
18.1	-6
18.1	-8
18.1	-10
18.1	-12
17.9	-14
17.6	-18
17.2	-28
15.4	-38
16.5	-48



Beaver Lake  
T      ?  
18.1

No Data

-1



Naticook Lake

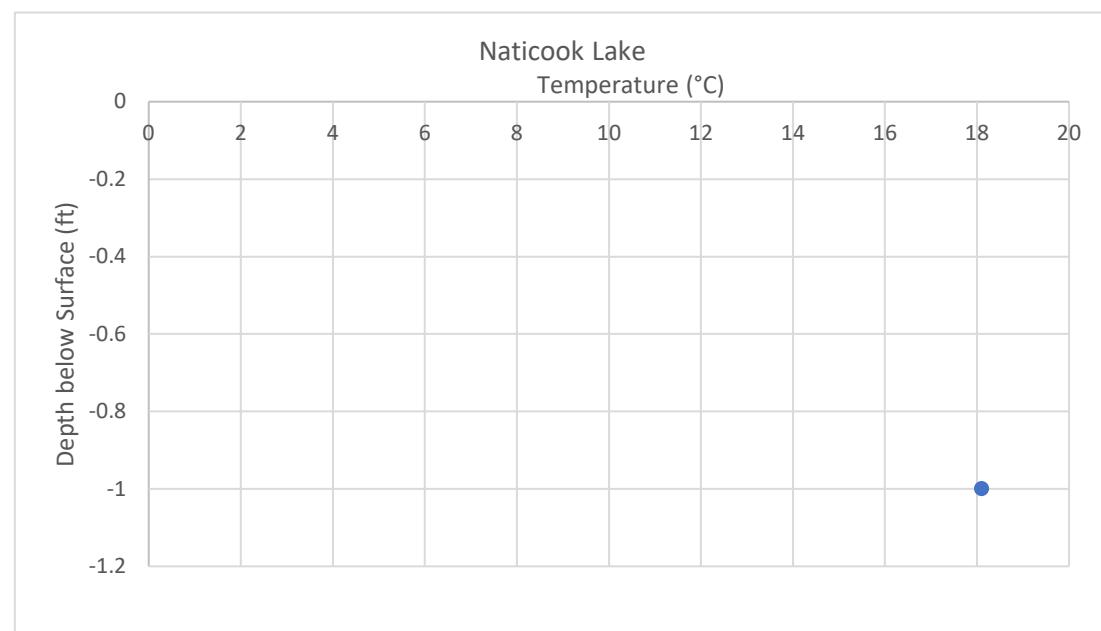
?

No data

T z

18.1

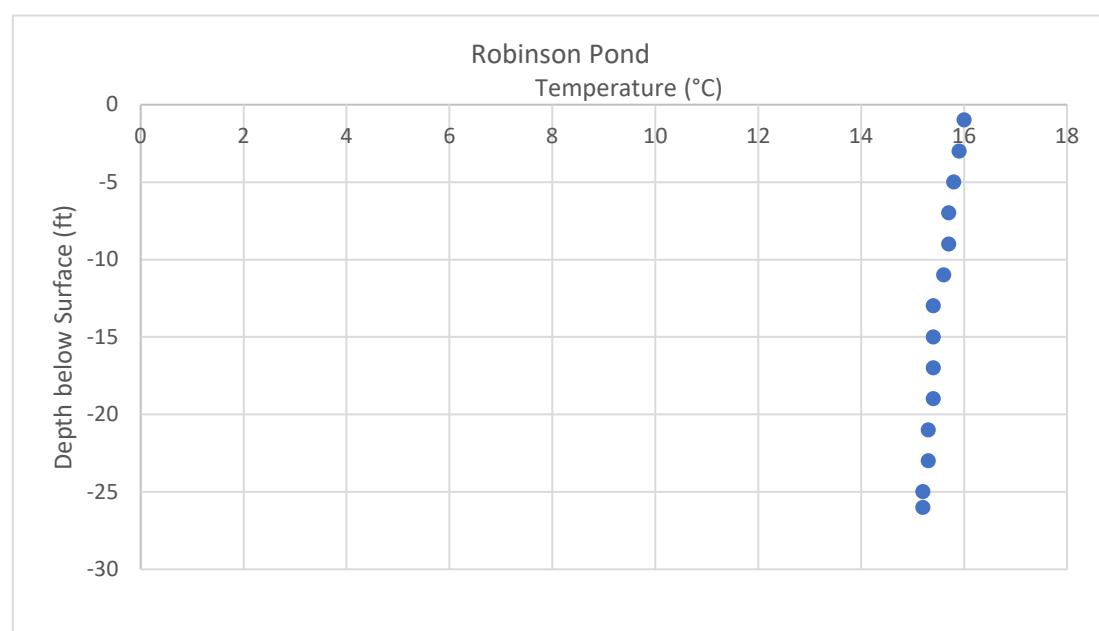
-1



### Robinson Pond

T      z

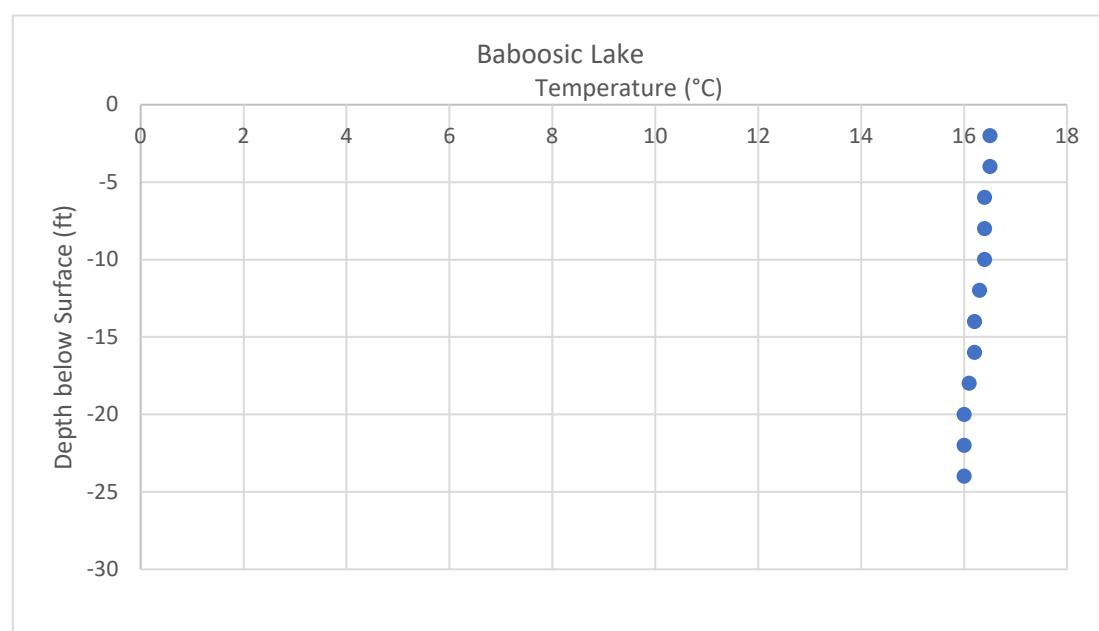
16	-1
15.9	-3
15.8	-5
15.7	-7
15.7	-9
15.6	-11
15.4	-13
15.4	-15
15.4	-17
15.4	-19
15.3	-21
15.3	-23
15.2	-25
15.2	-26



### Baboosic Lake

T      z

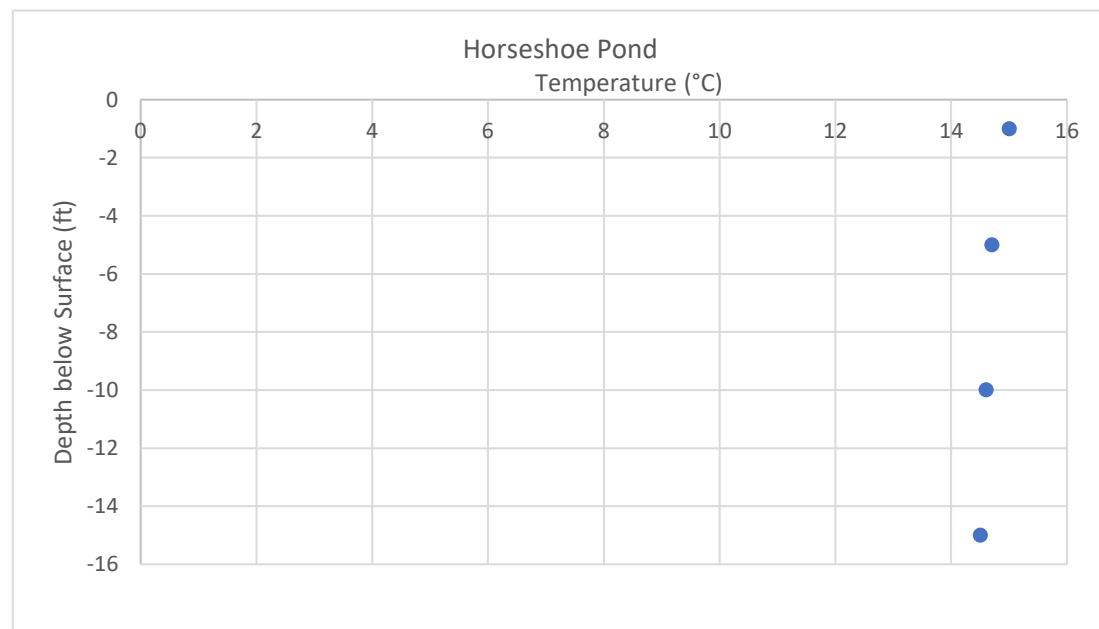
16.5	-2
16.5	-4
16.4	-6
16.4	-8
16.4	-10
16.3	-12
16.2	-14
16.2	-16
16.1	-18
16	-20
16	-22
16	-24



### Horseshoe Pond

T      z

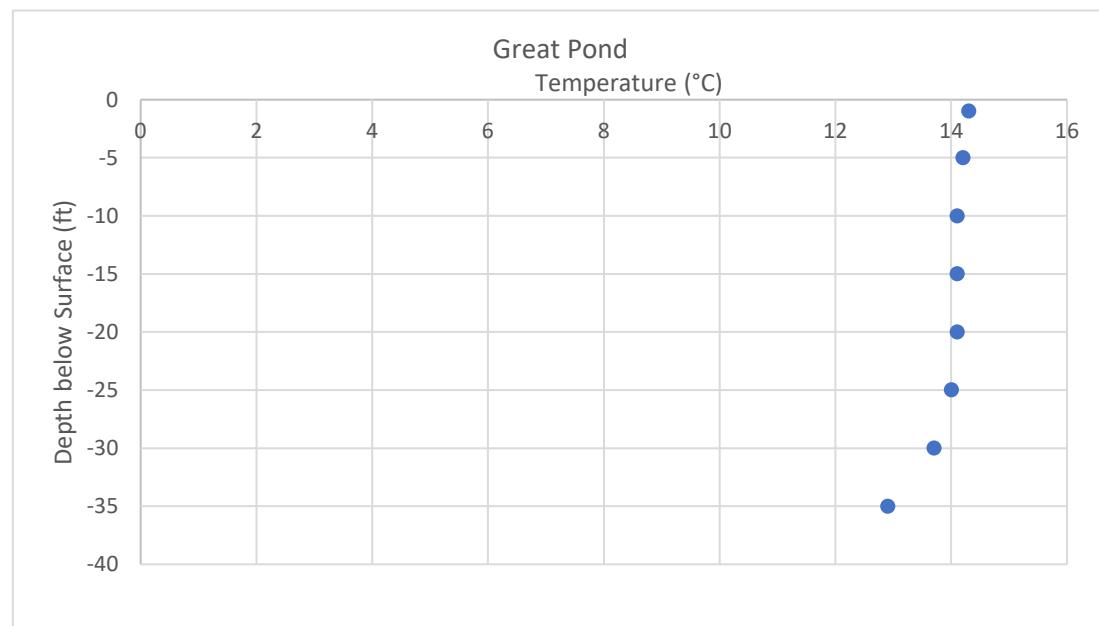
15	-1
14.7	-5
14.6	-10
14.5	-15



Great Pond

T z

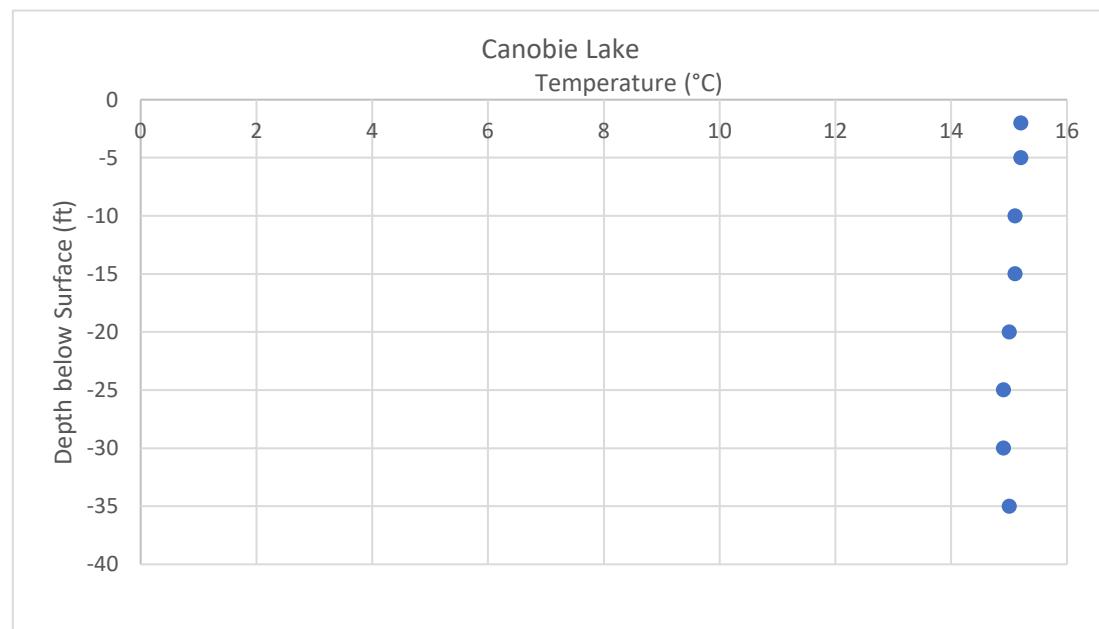
14.3	-1
14.2	-5
14.1	-10
14.1	-15
14.1	-20
14	-25
13.7	-30
12.9	-35



### Canobie Lake

T      z

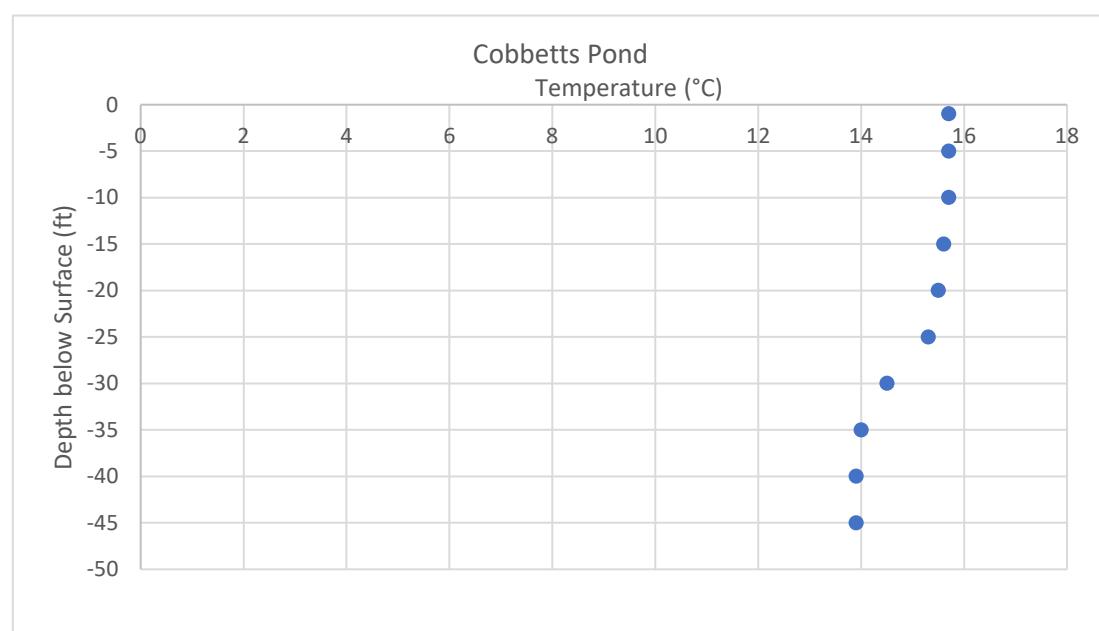
15.2	-2
15.2	-5
15.1	-10
15.1	-15
15	-20
14.9	-25
14.9	-30
15	-35



### Cobbetts Pond

T      z

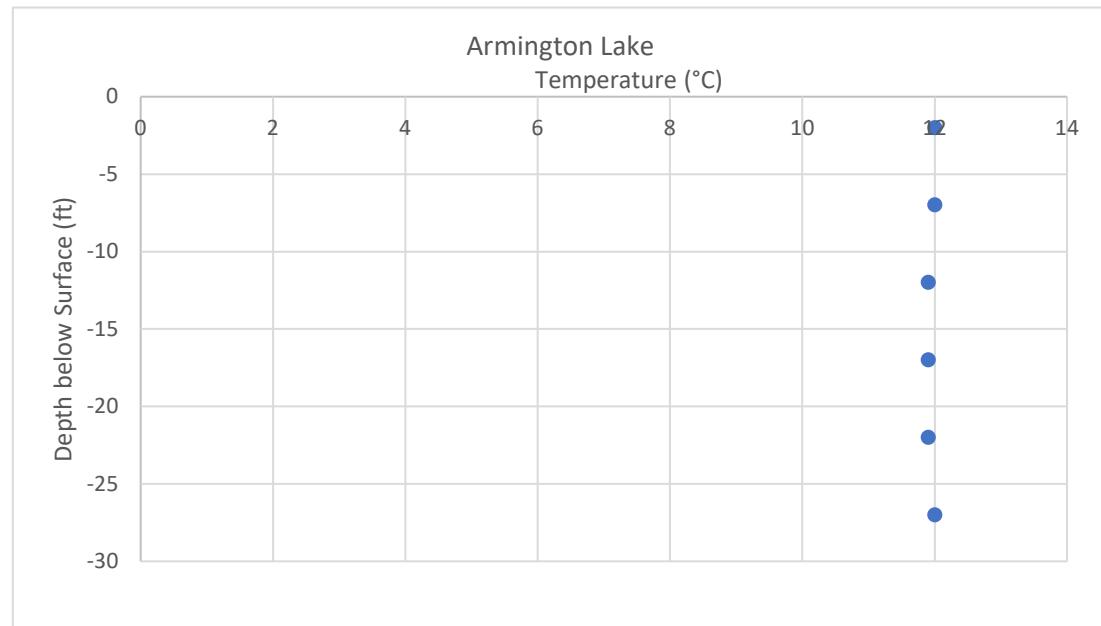
15.7	-1 ?
15.7	-5
15.7	-10
15.6	-15
15.5	-20
15.3	-25
14.5	-30
14	-35
13.9	-40
13.9	-45



### Armington Lake

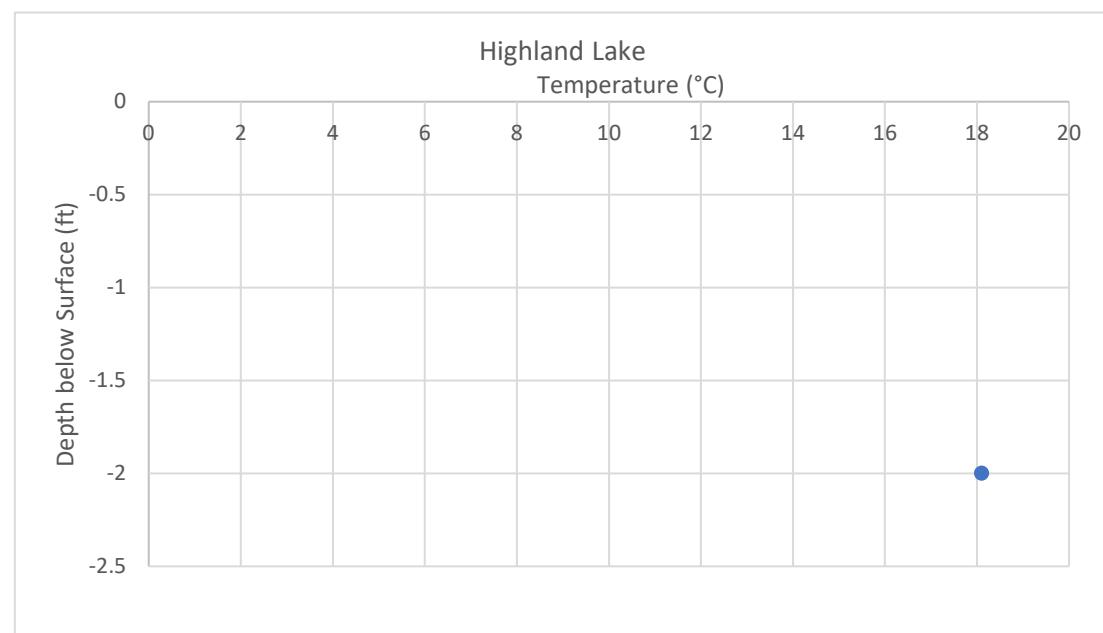
T      z

12	-2
12	-7
11.9	-12
11.9	-17
11.9	-22
12	-27



Highland Lake  
T      z  
18.1    -2

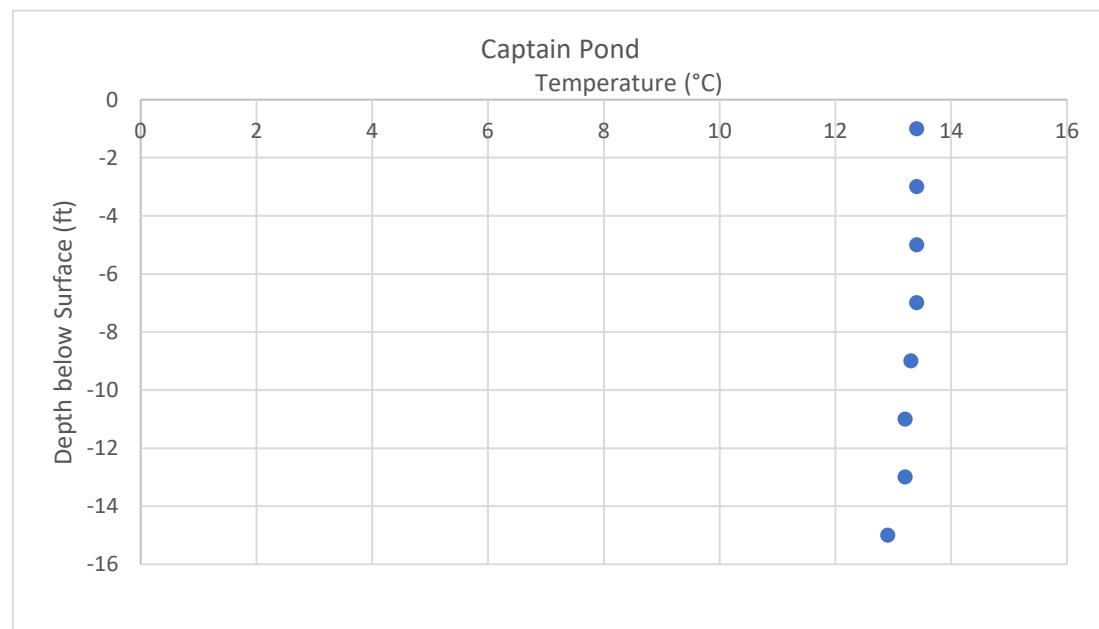
No Temp Data!



### Captain Pond

T      z

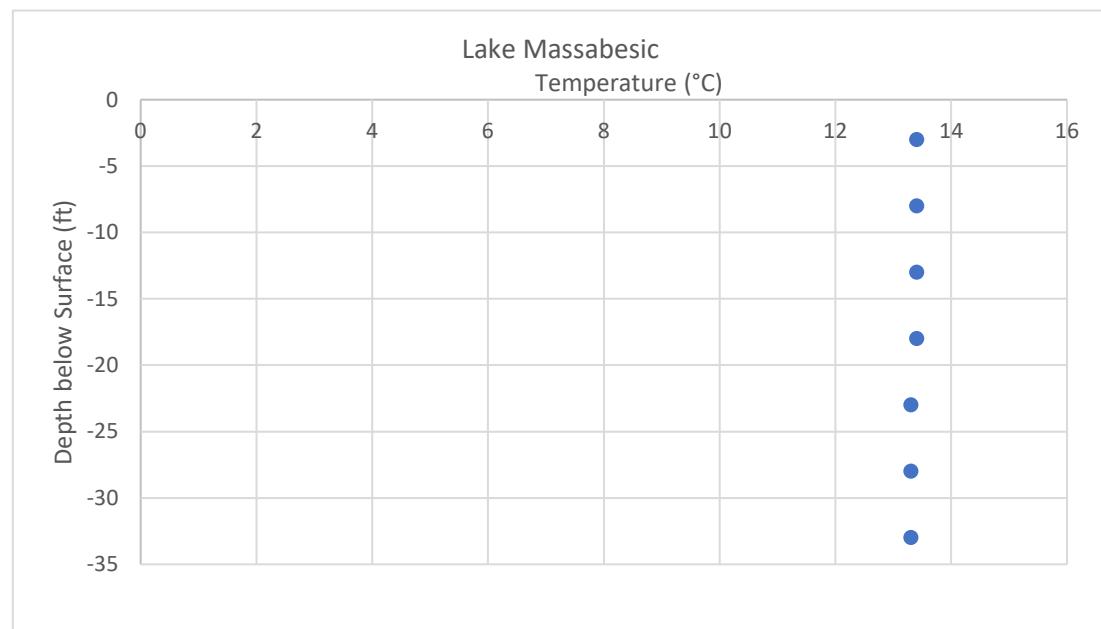
13.4	-1
13.4	-3
13.4	-5
13.4	-7
13.3	-9
13.2	-11
13.2	-13
12.9	-15



### Lake Massabesic

T      z

13.4	-3
13.4	-8
13.4	-13
13.4	-18
13.3	-23
13.3	-28
13.3	-33



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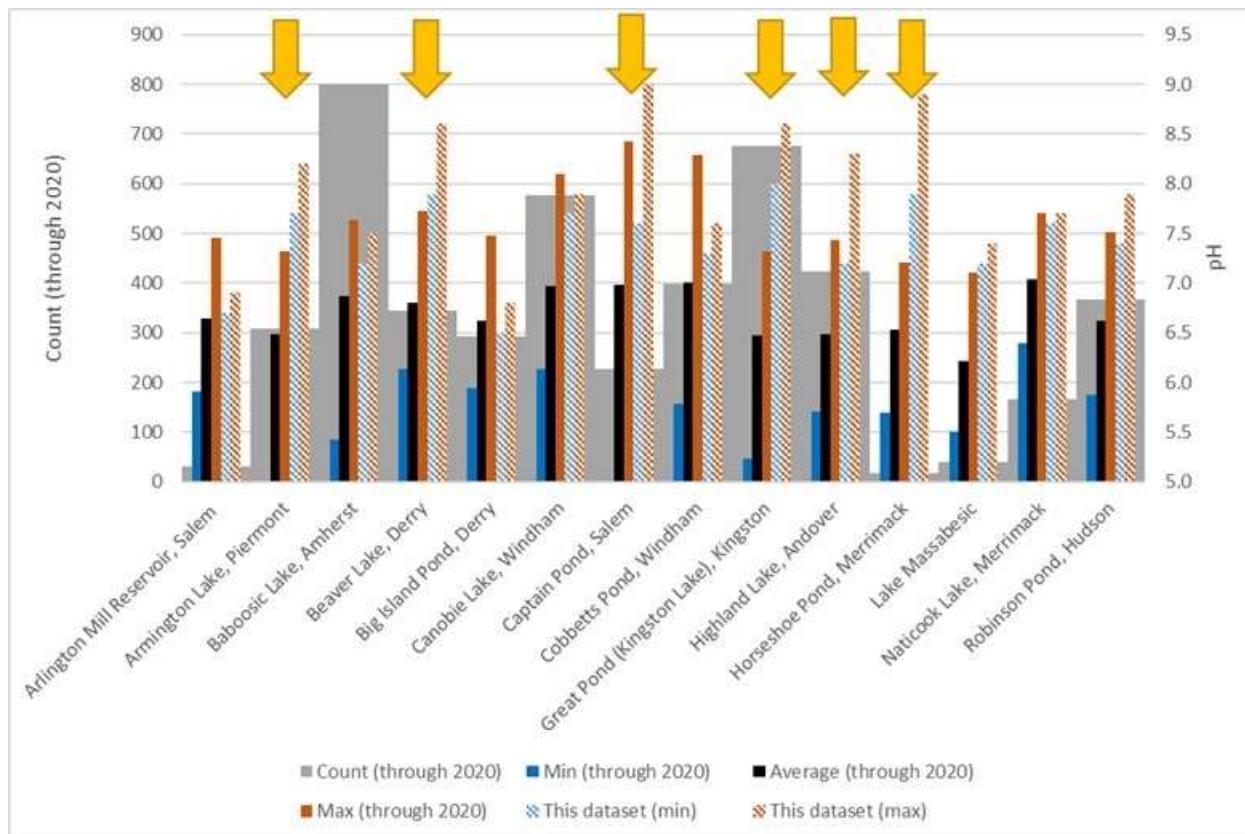
**APPENDIX D**

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**ADDITIONAL DATA AND INFORMATION**

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## pH



Graph D-1: Graphical representation of historical pH data in comparison to the pH data collected at each lake included in the PFAS Baseline Study. Upon review, NHDES requested pH data not be considered as valid data. Therefore, it is qualified as rejected and is used for informational purposes only.