

# FINAL Preliminary Assessment Report Ronkonkoma Army Aviation Support Facility #1, Ronkonkoma, New York

Perfluorooctanesulfonic Acid (PFOS) and Perfluorooctanoic  
Acid (PFOA) Impacted Sites  
ARNG Installations, Nationwide

August 2020

Prepared for:



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UNCLASSIFIED

## Table of Contents

Executive Summary .....	1
1. Introduction .....	4
1.1 Authority and Purpose .....	4
1.2 Preliminary Assessment Methods .....	4
1.3 Report Organization .....	5
1.4 Facility Location and Description .....	5
1.5 Facility Environmental Setting .....	6
1.5.1 Geology .....	6
1.5.2 Hydrogeology .....	6
1.5.3 Hydrology .....	7
1.5.4 Climate .....	8
1.5.5 Current and Future Land Use .....	8
2. Fire Training Areas .....	12
2.1 Fire Extinguisher Training Area .....	12
3. Non-Fire Training Areas .....	14
3.1 Ronkonkoma AASF#1 Hangar .....	14
4. Emergency Response Areas .....	16
5. Adjacent Sources .....	17
5.1 Long Island MacArthur Airport Fire Department .....	17
5.2 Town of Islip Hazmat Response Team .....	17
5.3 Long Island MacArthur Airport .....	17
6. Preliminary Conceptual Site Model .....	20
6.1 AOI 1: Ronkonkoma AASF #1 Hangar Release and AFFF Storage .....	20
7. Conclusions .....	24
7.1 Findings .....	24
7.2 Uncertainty .....	24
7.3 Potential Future Actions .....	25
8. References .....	27

## Figures

Figure ES-1	Summary of Findings
Figure ES-2	Preliminary Conceptual Site Model, Ronkonkoma AASF #1
Figure 1-1	Facility Location
Figure 1-2	Groundwater Features
Figure 1-3	Surface Water Features
Figure 2-1	Fire Training Area
Figure 3-1	Non-Fire Training Area
Figure 5-1	Adjacent Sources
Figure 6-1	Area of Interest
Figure 6-2	Preliminary Conceptual Site Model, Ronkonkoma AASF #1
Figure 7-1	Summary of Findings

## Tables

Table ES-1	AOI at Ronkonkoma AASF #1
Table 7-1	AOI at Ronkonkoma AASF #1
Table 7-2	Summary of Uncertainties
Table 7-3	PA Findings Summary

## Appendices

Appendix A	Data Resources
Appendix B	Preliminary Assessment Documentation
	B.1 Interview Records
	B.2 Visual Site Inspection Checklists
Appendix C	Photographic Log

## Acronyms and Abbreviations

°F	degrees Fahrenheit
AASF	Army Aviation Support Facility
AECOM	AECOM Technical Services, Inc.
AFFF	aqueous film forming foam
amsl	above mean sea level
AOI	area of interest
ARNG	Army National Guard
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
CSM	conceptual site model
EDR™	Environmental Data Resources, Inc.™
FTA	fire training area
HA	Health Advisory
Hazmat	hazardous materials
mph	miles per hour
NOAA	National Oceanic and Atmospheric Administration
NYARNG	New York Army National Guard
NYSDEC	New York State Department of Environmental Conservation
PA	Preliminary Assessment
PFAS	per- and poly-fluoroalkyl substances
PFOA	perfluorooctanoic acid
PFOS	perfluorooctanesulfonic acid
SCWA	Suffolk County Water Authority
SI	Site inspection
UCMR3	Unregulated Contaminant Monitoring Rule 3
US	United States
USACE	United States Army Corps of Engineers
USEPA	United States Environmental Protection Agency
USGS	United States Geological Survey
VSI	visual site inspection



## Executive Summary

The Army National Guard (ARNG) is performing Preliminary Assessments (PAs) and Site Inspections (SIs) for Perfluorooctanesulfonic acid (PFOS) and Perfluorooctanoic acid (PFOA) Impacted Sites at ARNG Facilities Nationwide. A PA for per- and polyfluoroalkyl substances (PFAS)-containing materials was completed for Ronkonkoma Army Aviation Support Facility (AASF) #1 (also referred to as the “facility”) in Ronkonkoma, New York to assess potential PFAS release areas and exposure pathways to receptors. The Ronkonkoma AASF #1 hangar was built prior to the 1970s, at the time that the New York ARNG (NYARNG) relocated to this facility. Ronkonkoma AASF #1 is currently on a 5-year lease, which is up for renewal in 2022, with the Town of Islip. The performance of this PA included the following tasks:

- Reviewed available administrative record documents and Environmental Data Resources, Inc.™ (EDR™) report packages to obtain information relevant to potential PFAS releases, such as drinking water well locations, historical aerial photographs, Sanborn maps, and environmental compliance actions in the area surrounding the facility;
- Conducted a 1-day site visit on 11 June 2018 and completed visual site inspections at locations where PFAS-containing materials were suspected of being stored, used, or disposed;
- Interviewed current and former Ronkonkoma AASF #1 personnel during the site visit, including the Town of Islip Commissioner of Aviation, the Long Island MacArthur Airport Fire Chief, and two Aircraft Mechanics (institutional knowledge spanning 1984 to present);
- Conducted a phone interview with the former Commander of the Flight Facility;
- Identified Area(s) of Interest (AOIs) and developed a preliminary conceptual site model (CSM) to summarize potential source-pathway-receptor linkages of potential PFAS in soil, groundwater, surface water, and sediment for each AOI.

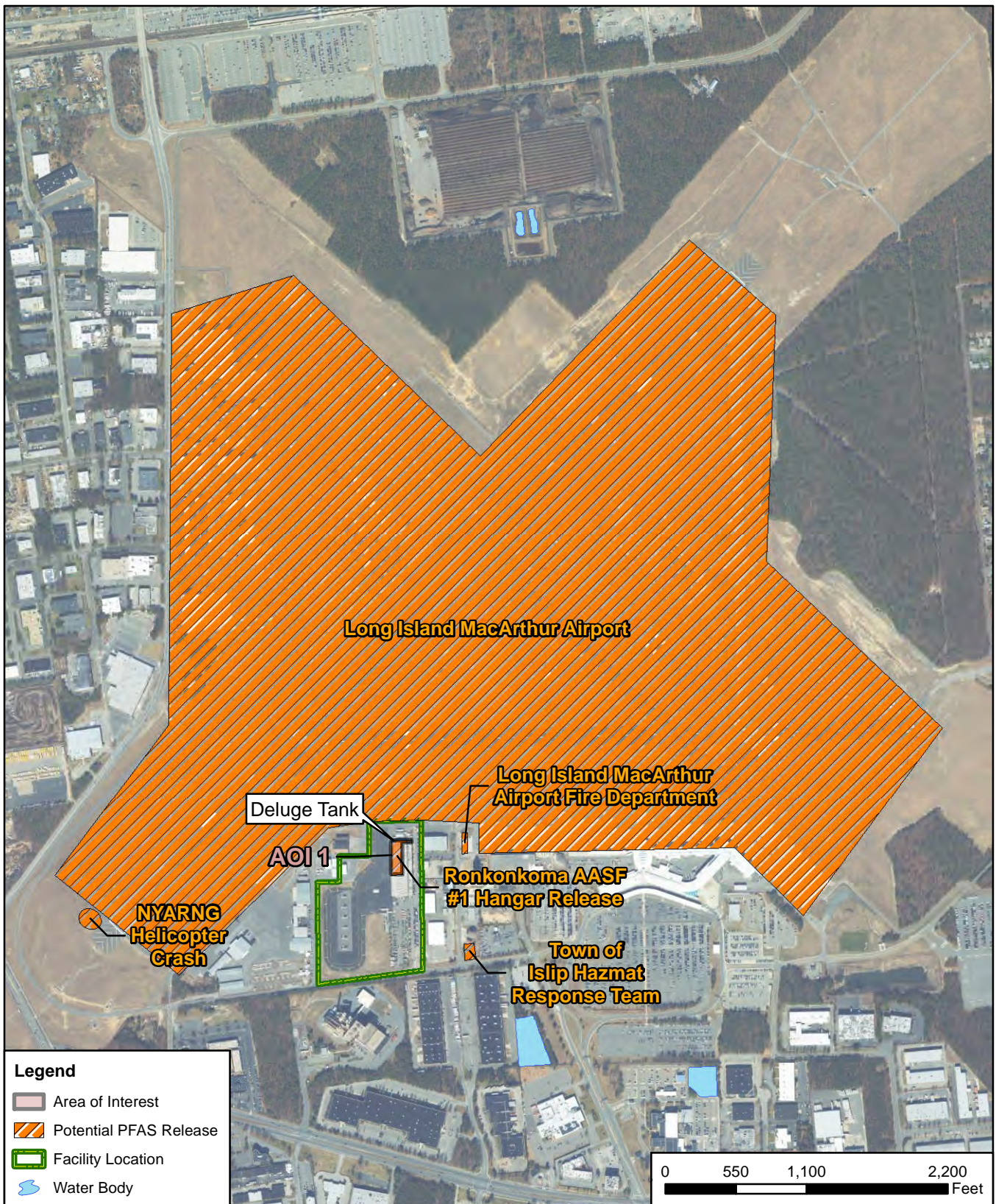
One AOI related to a potential PFAS release was identified at Ronkonkoma AASF #1 during the PA. The AOI is shown on **Figure ES-1** and described in **Table ES-1** below:


**Table ES-1: AOI at Ronkonkoma AASF #1**

Area of Interest	Name	Used by	Potential Release Date
AOI 1	Ronkonkoma AASF #1 Hangar Release and AFFF Storage	NYARNG	2007

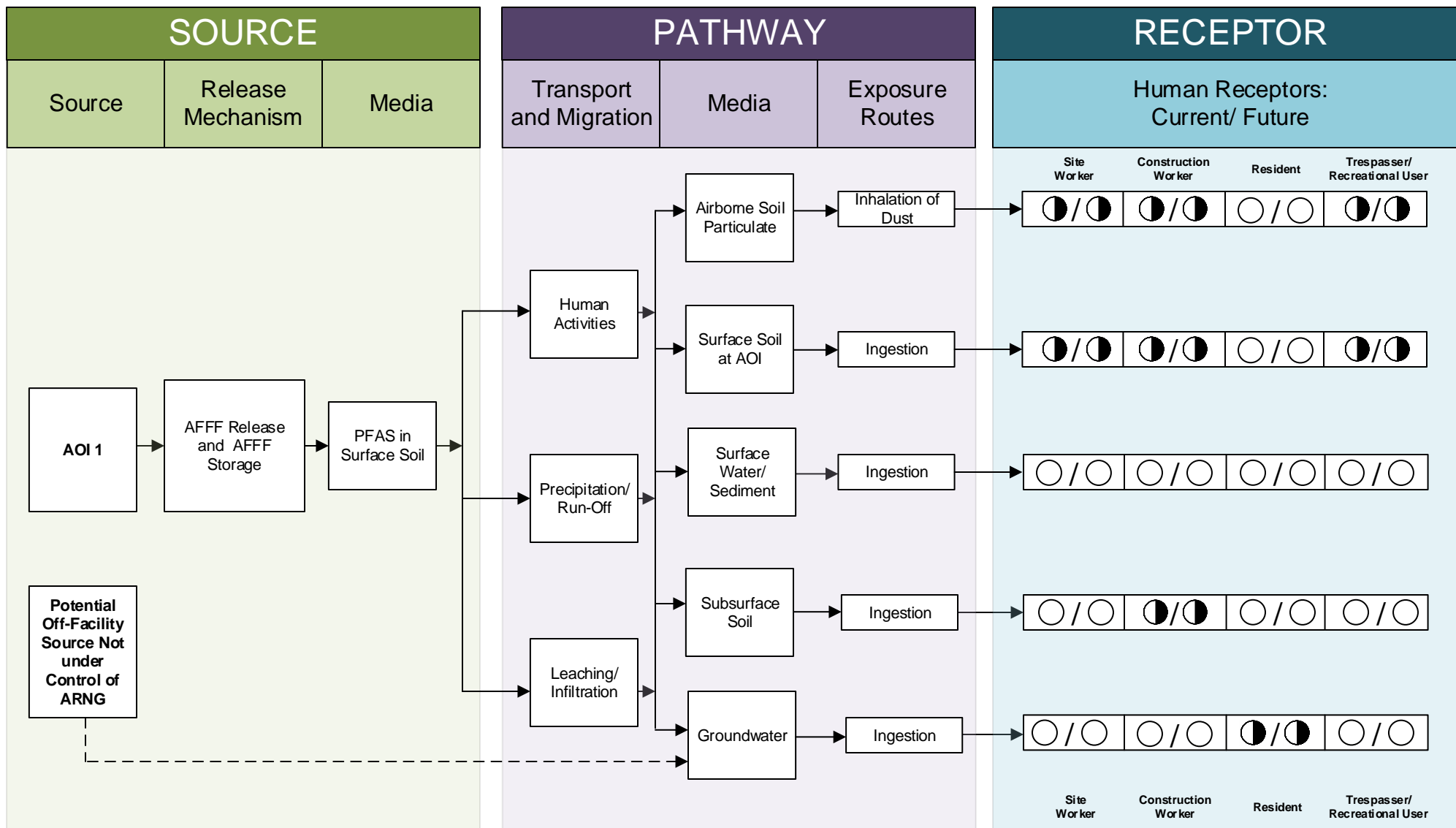
Based on potential PFAS releases at this AOI, there is potential for exposure to PFAS contamination in media at or near the facility. The preliminary CSM for Ronkonkoma AASF #1, which presents the potential receptors and media impacted, is shown on **Figure ES-2**. Based on the US Environmental Protection Agency (USEPA) Unregulated Contaminant Monitoring Rule 3 (UCMR3) data, PFAS were detected in a public water system above the USEPA's lifetime Health Advisories (HAs) within 20 miles of the facility (USEPA, 2017). The HA is 70 parts per trillion for PFOS and PFOA, individually or combined. PFAS analyses performed in 2016 had method detection limits that were higher than currently achievable. Thus, it is possible that low concentrations of PFAS were not detected during the UCMR3 but might be detected if analyzed today.





CLIENT					<div><div>N</div></div>	Summary of Findings	
NOTES Preliminary Assessment for PFAS at Ronkonkoma AASF, NY						<div><div><div>AECOM</div><div>12420 Milestone Center Drive Germantown, MD 20876</div></div><div>Figure ES-1</div></div>	
REVISED	5/14/2020	GIS BY	MS	5/14/2020			
SCALE	1:13,200	CHK BY	BP	5/14/2020			
Base Map: NYS Digital Ortho-imagery Program (NYSDOP), 2016		PM	RG	5/14/2020			

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## LEGEND

- Flow-Chart Stops
- Flow-Chart Continues
- Partial / Possible Flow
- Incomplete Pathway
- Potentially Complete Pathway
- Complete Pathway

## Notes:

1. The resident receptors refer to an off-site resident.
2. Dermal contact exposure pathway is incomplete for PFAS.

**Figure ES-2**  
Preliminary Conceptual Site Model  
Ronkonkoma AASF #1



# 1. Introduction

## 1.1 Authority and Purpose

The Army National Guard (ARNG) G9 is the lead agency in performing *Preliminary Assessments (PAs) and Site Inspections (SIs) for Perfluorooctanesulfonic acid (PFOS) and Perfluorooctanoic acid (PFOA) at Impacted Sites at ARNG Facilities Nationwide*. This work is supported by the United States (US) Army Corps of Engineers (USACE) Baltimore District and their contractor AECOM Technical Services, Inc. (AECOM) under Contract Number W912DR-12-D-0014, Task Order W912DR17F0192, issued 11 August 2017.

The ARNG is assessing potential effects on human health related to processes at facilities that used per- and poly-fluoroalkyl substances (PFAS) (a suite of related chemicals), primarily in the form of aqueous film forming foam (AFFF) released as part of firefighting activities, although other PFAS sources are possible. In addition, the ARNG is assessing businesses or operations adjacent to the ARNG facility (not under the control of ARNG) that could potentially be responsible for a PFAS release.

PFAS are classified as emerging environmental contaminants that are garnering increasing regulatory interest due to their potential risks to human health and the environment. PFAS formulations contain highly diverse mixtures of compounds. Thus, the fate of PFAS compounds in the environment varies. The regulatory framework at both federal and state levels continues to evolve. The US Environmental Protection Agency (USEPA) issued lifetime Drinking Water Health Advisories (HAs) for PFOA and PFOS in May 2016, but there are currently no promulgated national standards regulating PFAS in drinking water (USEPA, 2016a; USEPA, 2016b). The HA is 70 parts per trillion for PFOS and PFOA, individually or combined.

This report presents findings of a PA for PFAS-containing materials at the Ronkonkoma AASF #1 (also referred to as the “facility”) in Ronkonkoma, New York, in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA; USEPA, 1980), as amended, the National Oil and Hazardous Substances Pollution Contingency Plan (40 Code of Federal Regulations [CFR] Part 300; USEPA, 1994), and Army requirements and guidance.

This PA Report documents the locations where PFAS may have been released into the environment at Ronkonkoma AASF #1. The term PFAS will be used throughout this report to encompass all PFAS chemicals being evaluated, including PFOS and PFOA, which are key components of AFFF.

## 1.2 Preliminary Assessment Methods

The performance of this PA included the following tasks:

- Reviewed available administrative record documents and Environmental Data Resources, Inc.<sup>TM</sup> (EDR<sup>TM</sup>) report packages to obtain information relevant to potential PFAS releases, such as: drinking water well locations, historical aerial photographs, Sanborn maps, and environmental compliance actions in the area surrounding the facility;
- Conducted a 1-day site visit on 11 June 2018 and completed visual site inspections (VSIs) at locations where PFAS-containing materials were suspected of being stored, used, or disposed;
- Interviewed current and former Ronkonkoma AASF #1 personnel during the site visit including the Town of Islip Commissioner of Aviation, the Long Island MacArthur Airport Fire Chief, and two Aircraft Mechanics (institutional knowledge spanning 1984 to present);

- Conducted a phone interview with the former Commander of the Flight Facility;
- Identified Area(s) of Interest (AOIs) and developed a preliminary conceptual site model (CSM) to summarize potential source-pathway-receptor linkages of potential PFAS in soil, groundwater, surface water, and sediment for each AOI.

### 1.3 Report Organization

This report has been prepared in accordance with the USEPA *Guidance for Performing Preliminary Assessments under CERCLA* (USEPA, 1991). The report sections and descriptions of each are as follows:

- **Section 1 – Introduction:** identifies the project purpose and authority and describes the facility location, environmental setting, and methods used to complete the PA.
- **Section 2 – Fire Training Areas:** describes the FTAs at the facility identified during the site visit.
- **Section 3 – Non-Fire Training Areas:** describes other locations of PFAS releases at the facility identified during the site visit.
- **Section 4 – Emergency Response Areas:** describes areas of AFFF release at the facility, specifically in response to emergency situations.
- **Section 5 – Adjacent Sources:** describes sources of PFAS release adjacent to the facility that are not under the control of ARNG.
- **Section 6 – Preliminary Conceptual Site Model:** describes the pathways of PFAS transport and receptors for the AOI and the facility.
- **Section 7 – Conclusions:** summarizes the data findings and presents the conclusions of the PA.
- **Section 8 – References:** provides the references used to develop this document.
- **Appendix A – Data Resources**
- **Appendix B – Preliminary Assessment Documentation**
- **Appendix C – Photographic Log**

### 1.4 Facility Location and Description

Ronkonkoma AASF #1 is located adjacent to the Long Island MacArthur Airport (**Figure 1-1**) and is owned by the Town of Islip in Ronkonkoma, New York on Long Island. AASF #1 lies between Montauk Point (72 miles east) and Manhattan (60 miles west) and is a part of Suffolk County. Interstate 495 is 1.85 miles to the north of AASF #1, Lake Ronkonkoma is 2.69 miles to the north, and the Great South Bay is located approximately 5 miles to the south.

The Long Island MacArthur Airport (formerly known as Islip Airport) was built in 1944 by Lockheed Aircraft Corporation and consisted of three paved runways. Through the 1950s, Long Island MacArthur Airport served as an aerospace research facility; it first began operating as a commercial airport in 1960 and now covers approximately 1,311 acres with four runways and two helipads.

Ronkonkoma AASF #1 has one hangar that the New York ARNG (NYARNG) began operating in 1977. The hangar is located in the southwest portion of the Long Island MacArthur Airport and covers roughly 62,162 square feet. Aerial photographs show that the hangar was built sometime

between 1966 and 1980. The NYARNG began operations at this location in 1977. Ronkonkoma AASF #1 is currently on a 5-year lease, which is up for renewal in 2022, with the Town of Islip.

## 1.5 Facility Environmental Setting

Suffolk County is a predominantly suburban area in the Atlantic Coastal Plain and is comprised of a total of 2,373 square miles, 62 percent of which is water (US Census, 2010). The nearest residence to the facility is less than 2 miles northeast. Three miles to the southwest is the 3,473-acre Connetquot River State Park Preserve and conservation area. Wildlife in close vicinity to Ronkonkoma AASF #1 include white tail deer, rainbow trout, raccoons, squirrels, and numerous species of birds, including the blue and white heron. The terrain is generally hilly and is composed of thick glacial till-plain and end moraine deposits.

### 1.5.1 Geology

Ronkonkoma and the Town of Islip lie within the Atlantic Coastal Plain physiographic province and may be further subdivided into a small northern region of asymmetrical hills and a large southern region composed of a broad, gently sloping plain (US Geological Survey [USGS], 1974). The majority of both the surface and underlying material are roughly 700 feet of Pleistocene age deposits associated with continental glaciers (i.e., glacial drift) containing till comprised of unstratified clay, coarse sand, gravel, and boulders.

The region of irregular hills coincides with the distribution of geologic units mapped as the Ronkonkoma and Harbor Hill terminal-Moraines, which rest on Mannetto gravel. This distribution creates two ridges marking the maximum advance of continental glaciers that form the backbone of the island and are a direct continuation of Wisconsin age moraines stretching almost continuously from the Rocky Mountains to New Jersey and through Long Island (USGS, 1914).

A pitted outwash plain caused by the intermorainal belt between the ridges produced surficial deposits of sand and gravel laid down by melt-water streams (USGS, 1964). The Ronkonkoma AASF #1 area lies in the western portion within this outwash plain and is predominantly underlain by unconsolidated Pleistocene glacial sediments and gravel known as the Upper Pleistocene deposits. Below this plain is the Magothy formation, consisting of Cretaceous age deltaic and marine deposits. The Magothy formation overlies the Raritan confining clay unit, which separates the Magothy from the Lloyd Sand Member, also of Cretaceous age (USGS, 1974; USGS 1998b).

### 1.5.2 Hydrogeology

Regional and local groundwater flow follows a relatively simple surface drainage pattern that is facilitated by the Harbor Hill and Ronkonkoma terminal-Moraines, where elevation is highest on the island around 400 feet above mean sea level (amsl), and provides regional groundwater divides (USGS, 1998b). Water moves freely in a shallow groundwater subsystem due to unconsolidated soils having little to no clay coupled with underlying beds of coarse sand and gravel (USGS, 2009). This subsystem provides a system of high infiltration for recharge of groundwater and discharge to the surrounding lakes and streams of the Ronkonkoma AASF #1. Precipitation is the sole source of all naturally occurring fresh groundwater on Long Island with seasonal or long-term fluctuations in recharge reflected by water levels in all aquifers (USGS, 1998a; USGS, 2009).

Although the soils are of extreme permeability, there is little to no recharge reaches the water table during the summer. This is due to evapotranspiration, urbanization, and storms characterized by relatively short periods of intense precipitation with high surface runoff (USGS, 1998a). In this area, annual evapotranspiration rates of 20–22 inches are nearly equal to the annual precipitation rate of 22–24 inches (USGS, 1998a). Little to no evapotranspiration occurs in winter months, and winter storms are characterized by long, steady precipitation of rain, snow,

and ice that tend to produce less surface runoff and more recharge than summer storms (USGS, 1998b).

This recharge supplies the three major aquifers that make up the groundwater system of Long Island: the Upper Glacial, Magothy, and Lloyd Aquifers (USGS, 1974; USGS, 1998b). The unconfined Upper Glacial Aquifer of Pleistocene age is the uppermost unit of the Long Island groundwater reservoir, is 700 feet thick, and contains the water table throughout most of the island, except in western parts close to the mainland where the water table is in the upper Magothy aquifer (USGS, 1998a; USGS, 2009). The Magothy Aquifer is the largest hydrogeological unit in the ground water reservoir, at 1000 feet thick, and is recharged by downward movement of water from the overlying Upper Glacial Aquifer (USGS, 1998b). Large amounts of clay in the upper half of the Magothy cause the water to become increasingly confined with depth. The Lloyd Aquifer is the basal unit of the ground water reservoir and ranges from 0 feet thick (absent) in northern and western parts near the mainland to more than 500 feet thick in extreme southeastern and southwestern areas (USGS, 1998a). The Magothy Aquifer has become the principal source of water supply on Long Island for the past 50 years due to contamination concerns in the Upper Glacial Aquifer (USGS, 1998b).

The Ronkonkoma AASF #1 is situated above the Upper Glacial Aquifer, and information gathered from observation wells in this area suggest groundwater flow direction is southwards over the facility and out towards streams and the Great South Bay (**Figure 1-2**). Wells screened in the Upper Glacial Aquifer suggest depth to water ranges from 35.6 feet to 40.95 feet and can yield as much as 1,500 gallons per minute (USGS, 1964). An EDR™ Report conducted a well search within a 1-mile radius surrounding the facility (**Appendix A**). Using additional online resources, such as state and local GIS databases, wells were researched to a 4-mile radius of the facility. Although no wells exist at Ronkonkoma AASF #1, data from the USGS National Water Information System Mapper indicate there are 6 active monitoring wells within a 4-mile radius of the facility (USGS, 2020). Numerous additional inactive USGS monitoring wells were also identified within 4 miles, as shown on **Figure 1-2**. Well data from New York State indicate there are no potable water wells within a 4-mile radius of the facility (New York State, 2016).

Long Island MacArthur Airport and the Ronkonkoma AASF #1 obtain their water through the Suffolk County Water Authority (SCWA). The SCWA retrieves their water from the Magothy Aquifer formation before having it tested, treated, and distributed. Analytical data is available for some public water supply wells near this airport and in the surrounding Suffolk County. The results were reported as non-detect for PFAS related chemicals (Long Island Commission for Aquifer Protection, 2019). Based on the US Environmental Protection Agency (USEPA) Unregulated Contaminant Monitoring Rule 3 (UCMR3) data, PFOS was detected in a public water system above the USEPA's lifetime Health Advisories (HAs) within 20 miles of the facility (**Appendix A**). The HA is 70 parts per trillion for PFOS and PFOA, individually or combined. PFAS analyses performed in 2016 had method detection limits that were higher than currently achievable. Thus, it is possible that low concentrations of other PFAS compounds were not detected during the UCMR3 but might be detected if analyzed today.

### 1.5.3 Hydrology

The Ronkonkoma AASF #1 is situated within the Brown Creek-Great South Bay Watershed (**Figure 1-3**). This watershed is also part of the much larger Southern Long Island Watershed, which covers 1,310,204 acres, all of which lie in the Atlantic Coastal Plain (US Department of Agriculture, 2011). No surface water currently enters or flows in the immediate vicinity of the Ronkonkoma AASF #1.

Connequot Brook begins 5 miles northwest of the Ronkonkoma AASF#1, just south of Interstate-495, and travels south before it connects with four other tributaries to create the Connequot River. Ludlows Creek is just 0.75 miles east from the Connequot River, where they converge at an inlet

before immediately emptying into the Great South Bay. Lake Ronkonkoma, 2.95 miles northwest of the Ronkonkoma AASF #1, is part of the Connequot River watershed. However, it does not drain into any surrounding stream, tributary or other body of water and is completely recharged through groundwater (USGS, 1998b). Lake Ronkonkoma is the largest freshwater lake in Long Island: spanning 226 acres (NYSDEC, 2020b).

Brown Creek is 2.55 miles southeast of the Ronkonkoma AASF #1 and travels roughly 0.5 miles before emptying into Mill Pond, then flows back into Brown Creek. Lotus Lake is another tributary of Brown Creek that converges after Mill Pond before emptying out into the Great South Bay.

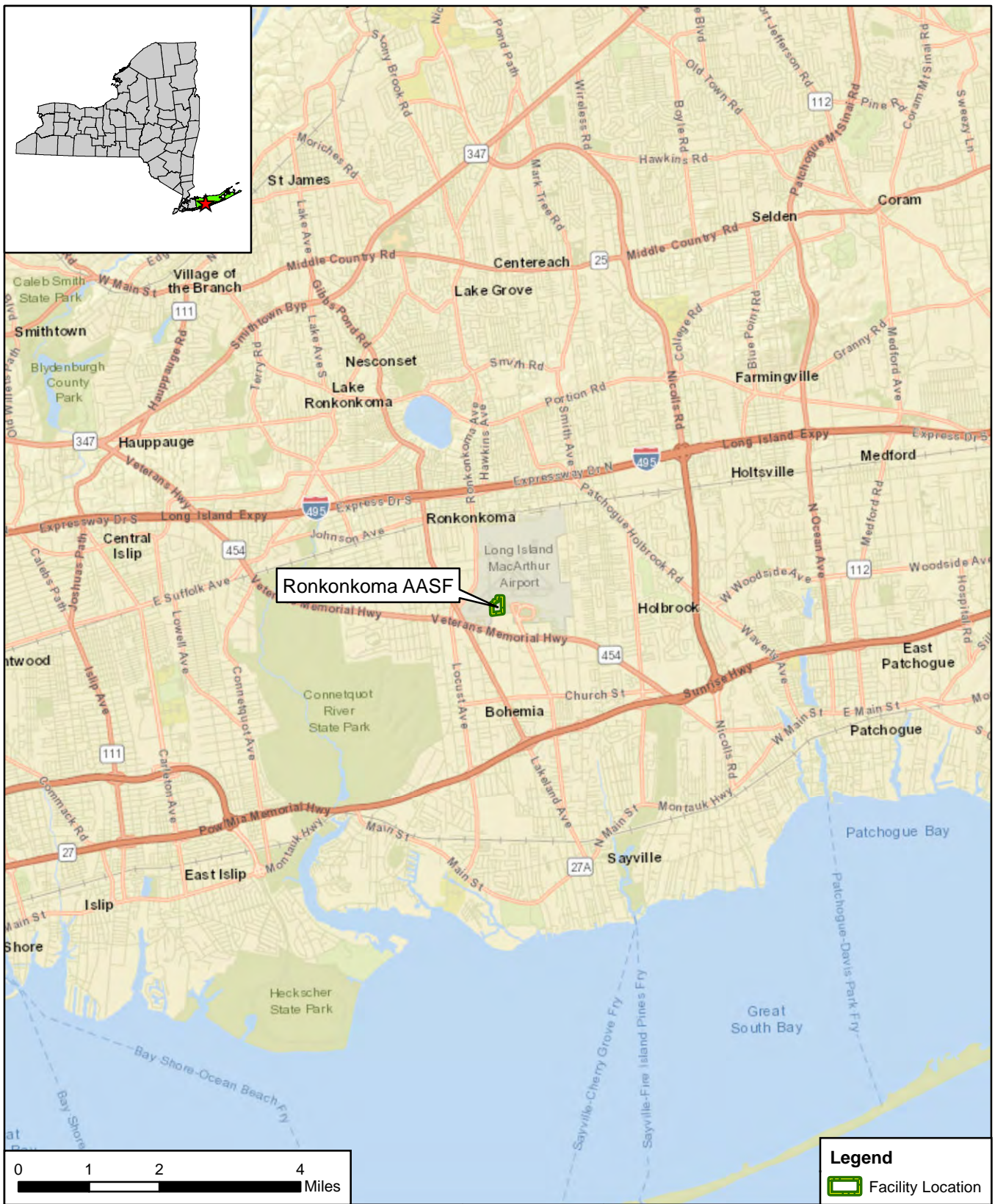
#### 1.5.4 Climate

The Ronkonkoma AASF #1 and the surrounding Suffolk County area are located in a predominantly continental climate, with an average annual temperature of 52.45 degrees Fahrenheit (°F). Seasonally, temperatures vary from an average summer high of 61.2°F, to average winter lows of 26°F (National Oceanic and Atmospheric Administration [NOAA], 2018). The annual average wind speed is 9.4 miles per hour (mph), although winter months can have gusts up to 35 mph. The total mean annual precipitation is 42.3 inches. July is the driest month, with an average of 2.91 inches of precipitation, while August is the wettest month, with 4.49 inches. Short, intense thunderstorms are the major sources of summer precipitation. The average annual snowfall is 55 inches.

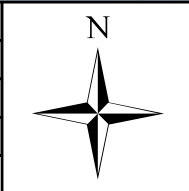
#### 1.5.5 Current and Future Land Use

The Ronkonkoma AASF #1 hangar has been the primary aviation training center for the NYARNG since the 1970s, and it is home to several aviation battalion and aviation support units from different parts of New York State, including Rochester. The training mostly consists of flying joint missions with National Guard units from other states, exercises in rescue operations for natural disasters, and pilot “extraction” training. There are no current expansion plans for the facility and, in general, the future use of the facility is not expected to change.



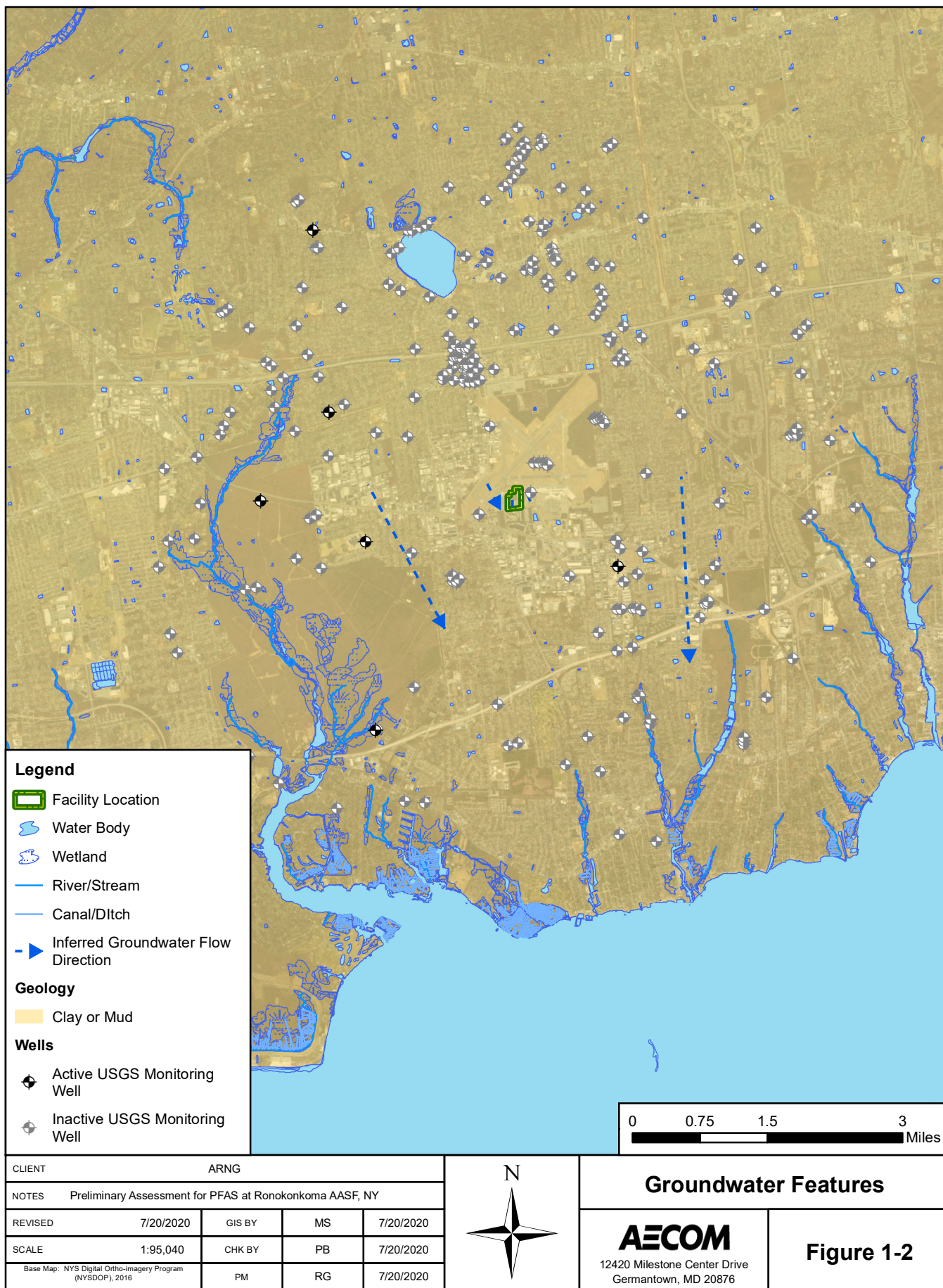


CLIENT	ARNG			
NOTES	Preliminary Assessment for PFAS at Ronkonkoma AASF, NY			
REVISED	5/8/2020	GIS BY	MS	5/8/2020
SCALE	1:126,720	CHK BY	BP	5/8/2020
Base Map: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI,		PM	RG	5/8/2020



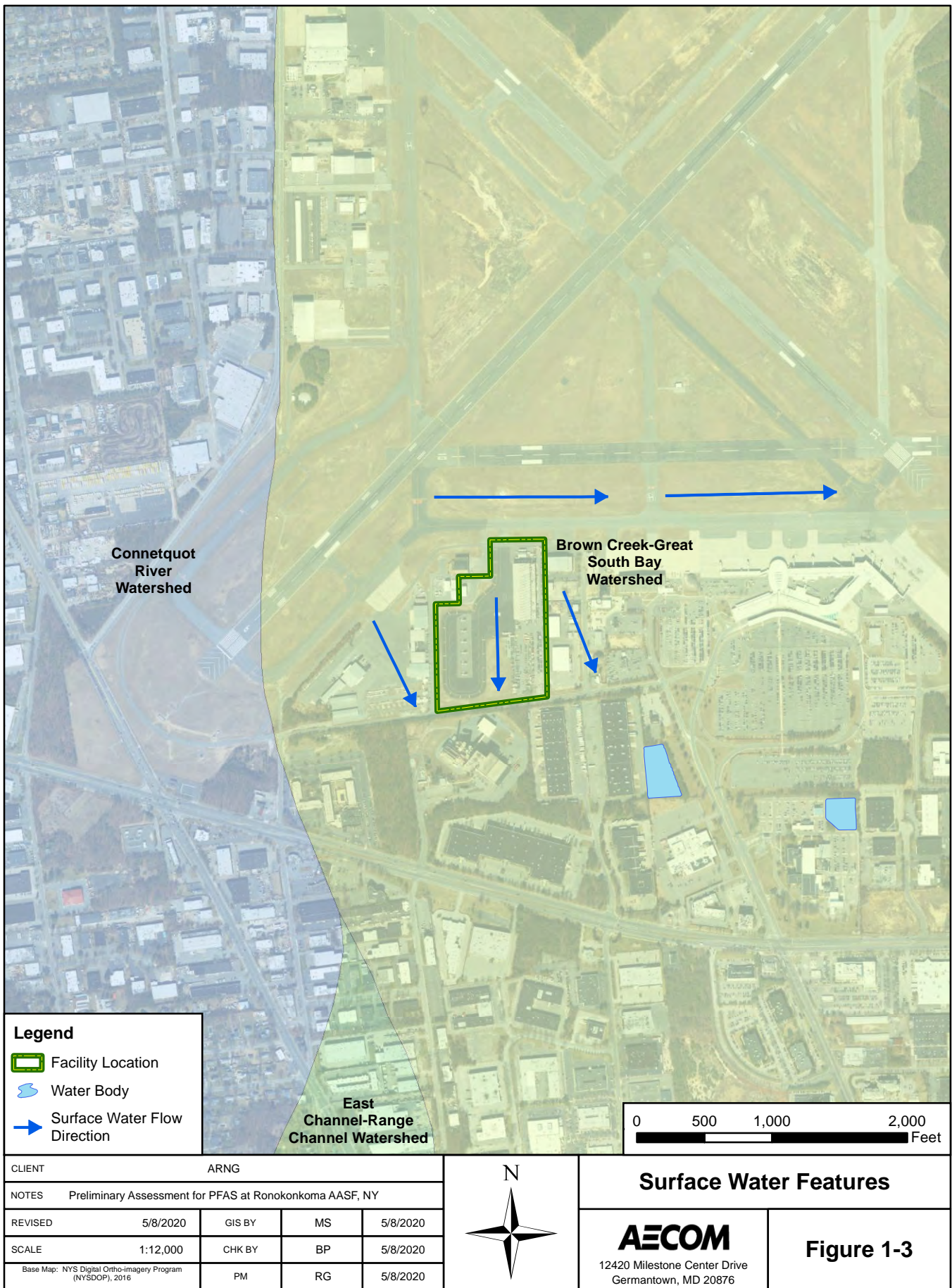
Facility Location	
 12420 Milestone Center Drive Germantown, MD 20876	<b>Figure 1-1</b>





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## 2. Fire Training Areas



One FTA was identified at the Ronkonkoma AASF #1 during the PA. According to an interview with staff during the VSI, the NYARNG has never maintained an internal fire department. A description of the FTA is presented below, and the FTA location is shown on **Figure 2-1**.

### 2.1 Fire Extinguisher Training Area

Annual NYARNG fire extinguisher training is performed jointly with the fire department at the AASF. According to interviewees, those activities do not use AFFF. The location of the FTA is shown on **Figure 2-1**; however, because AFFF is not used in the training, this FTA is not considered a potential release area.





CLIENT		ARNG					Fire Training Area	
NOTES		Preliminary Assessment for PFAS at Ronkonkoma AASF, NY					 12420 Milestone Center Drive Germantown, MD 20876	Figure 2-1
REVISED	7/20/2020	GIS BY	MS	7/20/2020				
SCALE	1:3,000	CHK BY	BP	7/20/2020				
Base Map: NYS Digital Ortho-imagery Program (NYSDOP), 2016		PM	RG	7/20/2020				

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### 3. Non-Fire Training Areas

In addition to FTAs, the PA evaluated areas where PFAS-containing materials may have been broadly used, stored, or disposed. This may include buildings with fire suppression systems, paint booths, AFFF storage areas, and areas of compliance demonstrations. Information on these features obtained during the PA are included in **Appendices A** and **B**. One non-FTA was identified during the PA. A description of the non-FTA is presented below, and the non-FTA location is shown on **Figure 3-1**. Photographs of the non-FTA appear in **Appendix C**.



#### 3.1 Ronkonkoma AASF#1 Hangar

The Ronkonkoma AASF #1 is a hangar operated by the NYARNG that is located at 201 Schaefer Ave, Ronkonkoma, New York in the southern portion of Long Island MacArthur Airport (**Figure 3-1**). The geographic coordinates are 40°47'23.6"N; 73°06'15.4"W.

The Ronkonkoma AASF #1 hangar was built between 1966 and 1980. The NYARNG moved to the location in the 1970s. In 2007, the hangar was equipped with a fire suppression deluge system containing AFFF high expansion foam. This system contains a steel-lined draining trench in the hangar floor, 1 mile of heat tape that triggers at 140°F or a manual pull, a 25,000-gallon concrete-lined dual-wall storage tank, and two emergency shut-offs. Two 500-gallon tanks filled with AFFF are connected to the deluge system. An interviewee indicated that the deluge system has only been tested one time shortly after its installation in 2007. This deluge test was documented in a 2.5-minute video and captures the entire discharge of 3% concentration Ansul AFFF. Both 500-gallon AFFF tanks were used in the test, though the actual quantity of AFFF released is unknown. The hangar is divided into different sections and only a small area of the hangar was involved and affected by the deluge system test, which is shown in **Figure 3-1**. The AFFF was flushed with water and drained out to the underground deluge storage tanks and was then pumped onto a truck and transported for disposal. NYARNG staff stated, with no evidence to the contrary, that all AFFF was properly contained, and the deluge system test was successfully drained and pumped out of the facility with no spillage or leakage. However, due to the potential for undocumented spills or leaks, the Ronkonkoma AASF Hangar #1 is considered a potential release area.





CLIENT		ARNG				Non-Fire Training Area		
NOTES		Preliminary Assessment for PFAS at Ronkonkoma AASF, NY					Figure 3-1	
REVISED	5/8/2020	GIS BY	MS	5/8/2020				
SCALE	1:3,000	CHK BY	BP	5/8/2020				
Base Map: NYS Digital Ortho-imagery Program (NYSDOP), 2016		PM	RG	5/8/2020				

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## 4. Emergency Response Areas

Emergency responses to crashes sometimes require flame suppression, which may result in the release of PFAS to the environment in the form of AFFF. No instances of emergency response were identified at the Ronkonkoma AASF #1 during the PA. An aviation official for the Town of Islip indicated that firefighting support to NYARNG is provided by the Town of Islip Fire Department, which is located near the Ronkonkoma AASF #1 on the airport ramp.

Interviewees stated during the VSI they were not aware of any reported NYARNG aircraft incidents at Long Island MacArthur Airport or at the Ronkonkoma AASF #1 to which the fire department responded; however, there is record of an off-facility crash in 1999 at the Long Island MacArthur Airport detailed in **Section 5.3** below.



## 5. Adjacent Sources

Three potential off-facility sources of PFAS adjacent to the Ronkonkoma AASF #1, not under the control of the NYARNG, were identified during the PA. A description of the adjacent sources is presented below, and the adjacent sources are shown on **Figure 5-1**.

### 5.1 Long Island MacArthur Airport Fire Department

The Long Island MacArthur Airport Fire Department lies approximately 300 ft northeast of the Ronkonkoma AASF #1 and at the northern end of Clark Drive. At the time of the VSI, the fire department was under construction as a part of ongoing renovations. Firetrucks that may contain AFFF are parked on the tarmac outside the fire station building. Long Island MacArthur Airport Fire Department staff stated that to their knowledge, an AFFF release has not occurred at the fire department or at the Long Island MacArthur Airport. Although there is no evidence to suggest a PFAS release has occurred at this location, the history of storage and use of AFFF at this location is unknown. Therefore, the Long Island MacArthur Airport Fire Department is considered a potential adjacent off-facility source of PFAS.

### 5.2 Town of Islip Hazmat Response Team

The Town of Islip Hazardous Materials (Hazmat) Response Team works in tandem with the Long Island MacArthur Airport Fire Department. During the VSI, a pallet of 5-gallon buckets that were labeled as Ansul products was observed approximately 600 ft south of the fire department in the Town of Islip Hazmat Response Team parking lot, on the northeast corner of Clark and Schaefer Drives. Photographs of the pallet are included in **Appendix C**. Access to the Town of Islip Hazmat Response Team parking area was not permitted during the site visit. Although there is no evidence to suggest a PFAS release has occurred at this location, the history of storage and use of AFFF at this location is unknown. Therefore, the Town of Islip Hazmat Response Team is considered a potential adjacent off-facility source of PFAS.

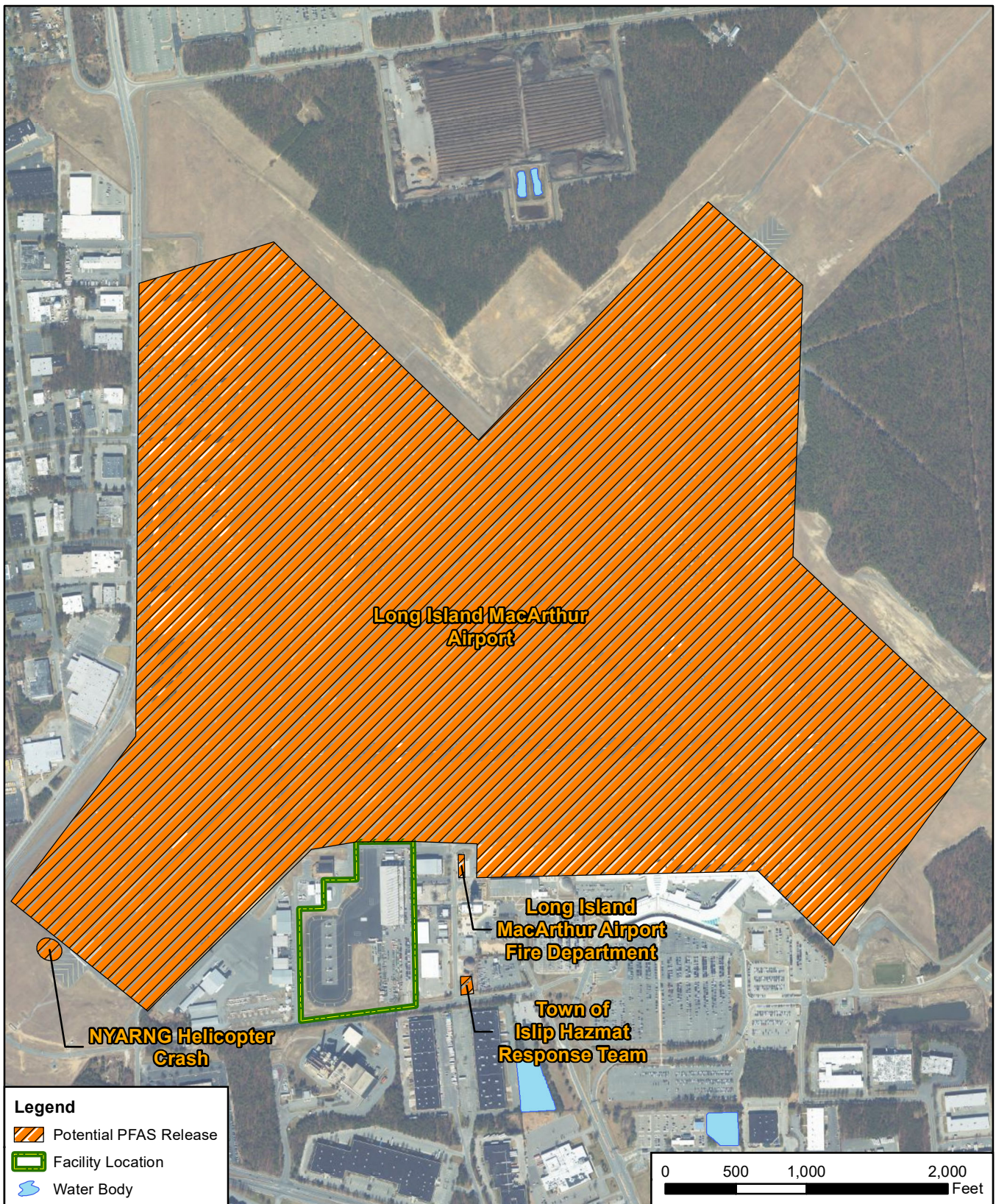
### 5.3 Long Island MacArthur Airport


The first development at Long Island MacArthur Airport occurred in 1942. Over the years, operations at the airport have included commercial flights and general aviation. Operations within private hangars located at the Long Island MacArthur Airport include aircraft maintenance, air cargo handling, ground service equipment maintenance, private aircraft rentals, and a flight school. The Ronkonkoma AASF #1 is located on the southern side of the airport property. Pilot “extraction training” from aircraft on the airport ramp is performed, but there is no history of foam use (**Appendix B**). Although more information was not available during the PA interviews regarding AFFF usage or storage at the airport, there could have been potential use of AFFF in association with typical airport operations at the airport terminal, along the flightlines, or within the associated hangars.

The New York Times reported an incident in 1999 of a NYARNG helicopter crashing on the runway at Long Island MacArthur Airport, killing two and severely injuring two others (New York Times, 1999). The crash occurred at the southwest corner of the airport near Runway 6, southwest of the Ronkonkoma AASF #1. Though emergency units responded to the scene, it is unknown if this incident required fire suppression actions involving AFFF. Therefore, the crash area is a potential adjacent off-facility source of PFAS.

Additionally, as it is unknown whether there are fire suppression systems in any of the private hangars, or if AFFF has been used for training or as a fire suppressant at any time, these hangars

have been included as potential adjacent sources at the airport. Therefore, the Long Island MacArthur Airport is considered a potential adjacent off-facility source of PFAS.



CLIENT					<div>N</div> 	Adjacent Source	
NOTES Preliminary Assessment for PFAS at Ronkonkoma AASF, NY						<div><b>AECOM</b></div> <div>12420 Milestone Center Drive Germantown, MD 20876</div>	<div>Figure 5-1</div>
REVISED	6/25/2020	GIS BY	MS	6/25/2020			
SCALE	1:12,000	CHK BY	BP	6/25/2020			
Base Map: NYS Digital Ortho-imagery Program (NYSDOP), 2016		PM	RG	6/25/2020			

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## 6. Preliminary Conceptual Site Model

Based on the PA findings, one non-FTA where PFAS may have been incidentally spilled or discharged to the ground surface was identified: AOI 1 Ronkonkoma AASF #1 Hangar Release and AFFF Storage. As such, this AOI may be a potential PFAS source area. The AOI and preliminary CSM for the AOI is shown on **Figure 6-1** and **Figure 6-2**, respectively.

The following sections describe the CSM components and the specific preliminary CSMs developed for each AOI. The CSM identifies the three components necessary for a potentially complete exposure pathway: (1) source, (2) pathway, (3) receptor. If any of these elements are missing, the pathway is considered incomplete.

In general, the potential PFAS exposure pathways are ingestion and inhalation. Human exposure via the dermal contact pathway may occur, and current risk practice suggests it is an insignificant pathway compared to ingestion; however, exposure data for dermal pathways are sparse and continue to be the subject of PFAS toxicological study. Receptors for Ronkonkoma AASF #1 include site workers, construction workers, trespassers, and off-facility residents and recreational users. The preliminary CSM for the AOI indicates which specific receptors could potentially be exposed to PFAS.

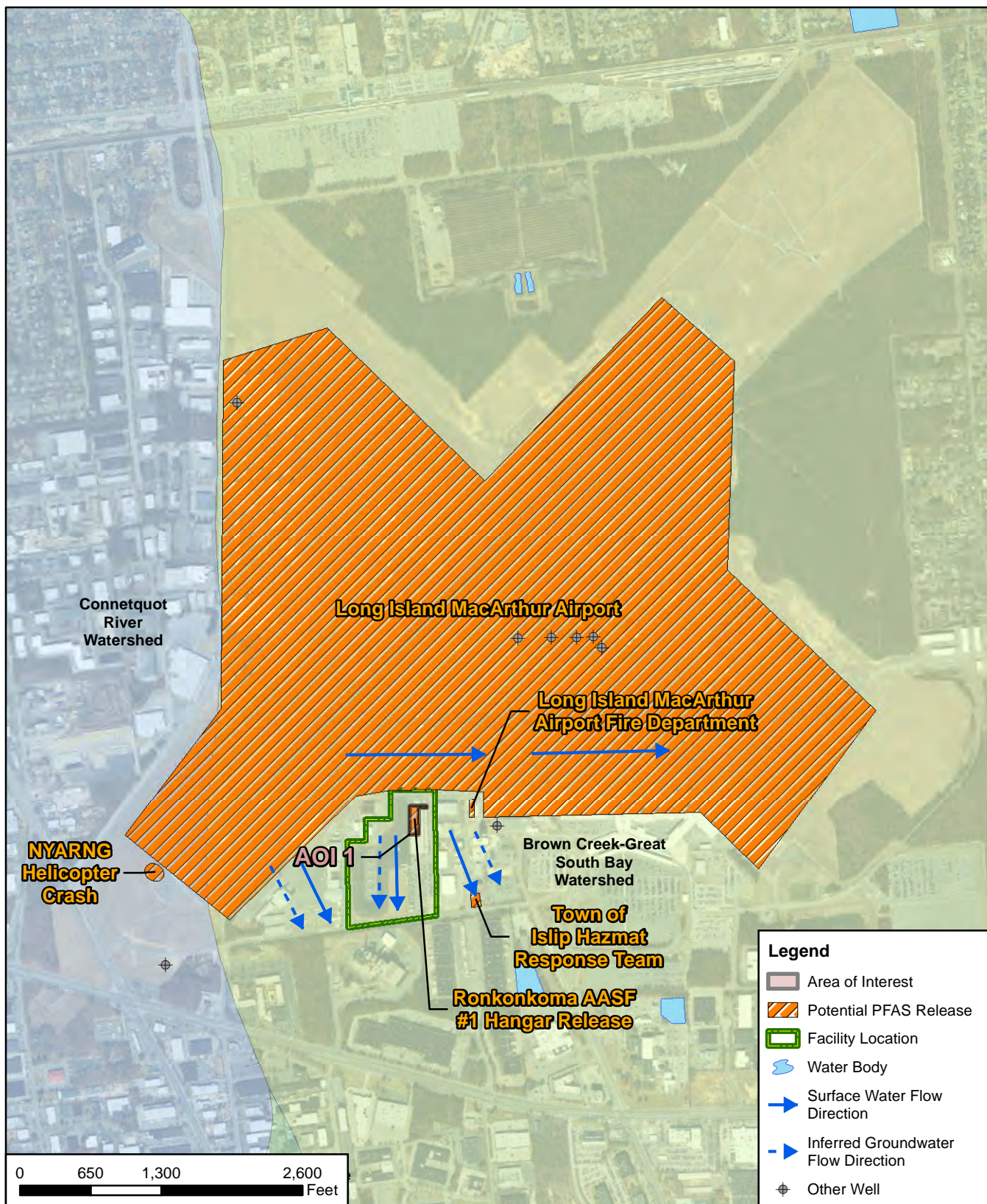
### 6.1 AOI 1: Ronkonkoma AASF #1 Hangar Release and AFFF Storage



AOI 1 includes the AFFF storage area and the release of AFFF during a deluge system test within the Ronkonkoma AASF #1 hangar. In 2007, AFFF was released from the deluge system from both 500-gallon AFFF tanks within the hangar. The hangar is divided into different sections and only a small area of the hangar was involved and affected by the deluge test. During the VSI, AFFF was said to be flushed with water, contained by the floor drains and deluge storage tanks, and then pumped onto a truck and transported for disposal. (**Figure 6-1**). However, there is potential that AFFF may have been released out of the hangar during the deluge system testing or during disposal activities, and therefore, AFFF could have been released to paved surfaces directly outside of the hangar.

While the known release of AFFF occurred and was contained within the AASF #1 hangar, it is possible that unknown or undocumented releases of AFFF occurred at AOI 1 on paved areas and grassy surfaces nearby. AFFF releases could have occurred directly onto surface soil but may also have infiltrated subsurface soil via cracks in pavement or joints between areas that are paved with different materials. Therefore, ground-disturbing activities in these areas could result in site worker, construction worker, and trespasser exposure to potential PFAS contamination via inhalation of dust or ingestion of surface soil. Additionally, ground-disturbing activities to subsurface soil could result in construction worker exposure via ingestion. Therefore, the exposure pathways for inhalation of soil particles and ingestion of soil are considered potentially complete for these receptors.

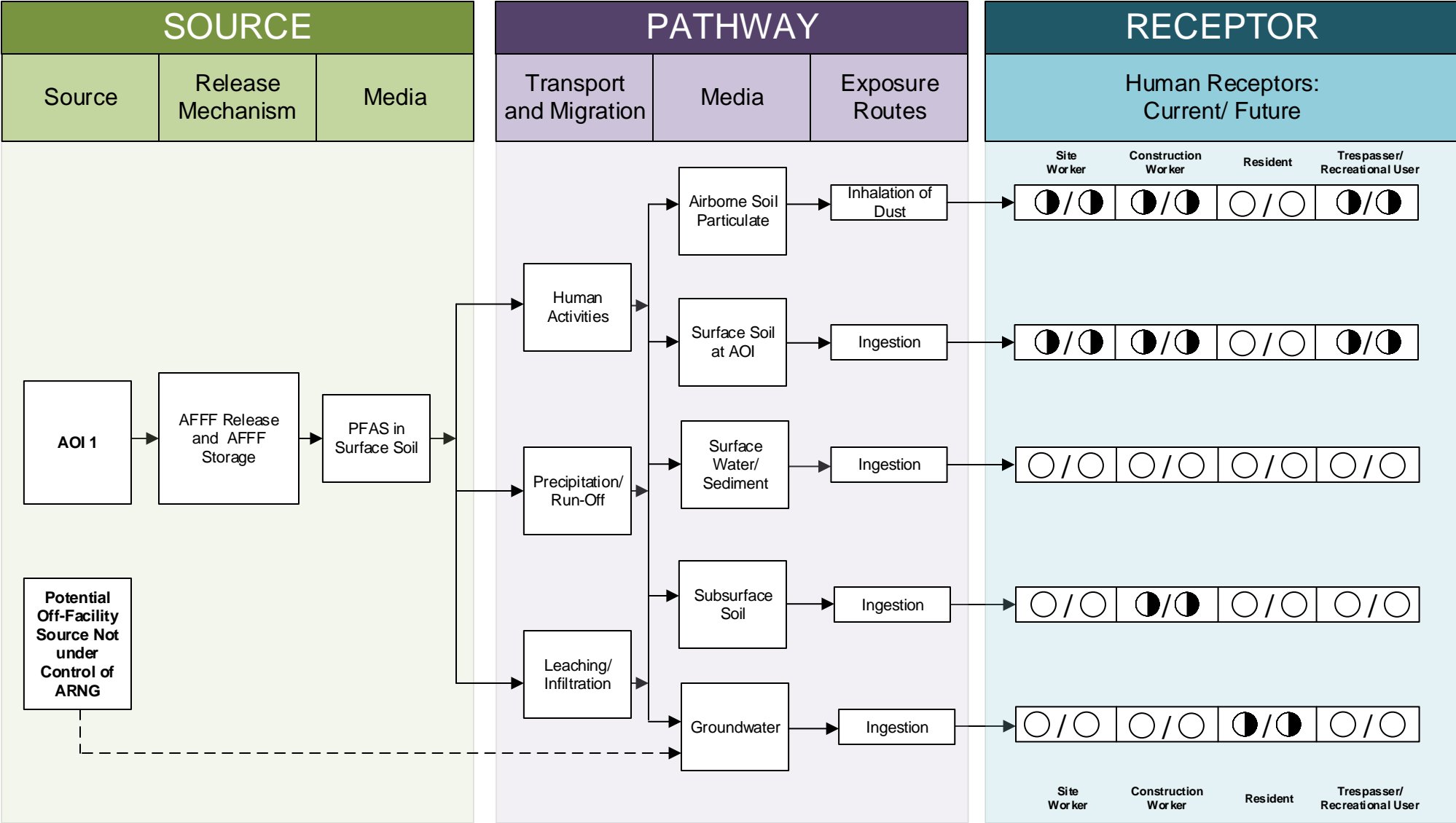
PFAS are water soluble and can migrate readily from soil to groundwater via leaching. The inferred groundwater flow is to the south/southeast. There are no potable wells at Ronkonkoma AASF #1 or at the Long Island MacArthur Airport. The facility receives water from the SCWA, and there were no private drinking water wells identified within 4 miles downgradient of the facility (**Figure 1-2**). However, due to the potential for unidentified residential wells downgradient of the facility, the ingestion exposure pathway for groundwater is potentially complete for off-facility residents that are located downgradient of AOI 1. Due to the depth to groundwater (approximately 35.6 feet to 40.95 feet), the groundwater ingestion exposure pathway for construction workers is considered incomplete.

No surface water features flow through the AOI, nor are there any surface water features within or nearby the facility boundary. Therefore, the surface water and sediment exposure pathways are incomplete for both on- and off-facility receptors. The preliminary CSM for AOI 1 is presented on **Figure 6-2**.



CLIENT		ARNG				Area of Interest		
NOTES		Preliminary Assessment for PFAS at Ronkonkoma AASF, NY				 12420 Milestone Center Drive Germantown, MD 20876	Figure 6-1	
REVISED	5/14/2020	GIS BY	MS	5/14/2020				
SCALE	1:15,600	CHK BY	BP	5/14/2020				
Base Map: NYS Digital Ortho-imagery Program (NYSDOP), 2016		PM	RG	5/14/2020				

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**Notes:**

1. The resident receptors refer to an off-site resident.

2. Dermal contact exposure pathway is incomplete for PFAS.

**Figure 6-2**  
Preliminary Conceptual Site Model  
Ronkonkoma AASF #1



## 7. Conclusions

This report presents a summary of available information gathered during the PA on the use and storage of AFFF and other PFAS-related activities at Ronkonkoma AASF #1. The PA findings are based on information presented in **Appendix A** and **Appendix B**.

### 7.1 Findings

One AOI related to potential PFAS releases was identified (**Table 7-1**) at Ronkonkoma AASF #1 during the PA (**Figure 7-1**):

**Table 7-1: AOI at Ronkonkoma AASF #1**

Area of Interest	Name	Used by	Potential Release Date
AOI 1	Ronkonkoma AASF #1 Hangar Release and AFFF Storage	NYARNG	2007

Based on potential PFAS releases at this AOI, there is potential for exposure to PFAS contamination in media at or near the facility. The preliminary CSM for Ronkonkoma AASF #1, which presents the potential receptors and media impacted, is shown on **Figure 6-2**.

Four potential off-facility sources of PFAS (NYARNG Helicopter Crash, Long Island MacArthur Airport Fire Department, the Town of Islip Hazmat Response Team, and the Long Island MacArthur Airport) were considered as potential PFAS releases in the local area based on interviews, review of previous environmental investigations, or known historical/current activities.

### 7.2 Uncertainty

A number of information sources were investigated during this PA to determine the potential for PFAS-containing materials to have been present, used, or released at the facility. Historically, documentation of PFAS use was not required because PFAS were considered benign. Therefore, records were not typically kept by the facility of available during the PA on the use of PFAS in training, other non-traditional activities, or on its disposition.

The conclusions of this PA are based on all available information, including: previous environmental reports, EDR Reports™, observations made during the VSI, and interviews. Interviews of personnel with direct knowledge of a facility generally provided the most useful insights regarding a facility's historical and current PFAS-containing materials. Sometimes, the provided information was vague or conflicted with site observations. Gathered information has a degree of uncertainty due to the absence of written documentation, the limited number of personnel with direct knowledge due to staffing changes, the time passed since PFAS were first used (1969 to present), and a reliance on personal recollection. Inaccuracies may arise in potential PFAS release locations, dates of release, volume of releases, and the concentration of AFFF used. There is also a possibility the PA has missed a source of PFAS, as the science of how PFAS may enter the environment continually evolves.

In order to minimize the level of uncertainty, readily available data regarding the use and storage of PFAS were reviewed, current personnel were interviewed, multiple persons were interviewed for the same potential source area, and potential source areas were visually inspected.

The following **Table 7-2** summarizes the uncertainties associated with the PA:



**Table 7-2: Summary of Uncertainties**

Location	Source of Uncertainty
AOI 1: Ronkonkoma AASF #1 Hangar Release and AFFF Storage	The 3% Ansul AFFF released from the deluge system test was said to be contained and disposed of properly; though the quantity of AFFF released is unknown; additionally, the potential exists for release beyond the hangar doors or accidental releases related to AFFF storage.
NYARNG Helicopter Crash (emergency response area)	The exact location of the helicopter crash and whether or not AFFF was used for emergency response is unknown.
Long Island MacArthur Airport Fire Department (adjacent source)	A complete off-facility VSI was not conducted at the Long Island MacArthur Airport Fire Department, and it is unknown if any fire training activities or AFFF releases have occurred there.
Town of Islip Hazmat Response Team (adjacent source)	A complete off-facility VSI was not conducted at the Town of Islip Hazmat Response Team, though 5-gallon buckets of Ansul products were noted from afar.
Long Island MacArthur Airport (adjacent source)	A complete off-facility VSI was not conducted at the Long Island MacArthur Airport, and it is unknown if any fire training activities or AFFF releases have occurred there. Institutional knowledge prior to 2000 was unavailable.
General	The facility has been operated by NYARNG since 1977, but first-hand interviewee knowledge does not extend back that far and may include timeline gaps due to occasional deployment.

### 7.3 Potential Future Actions

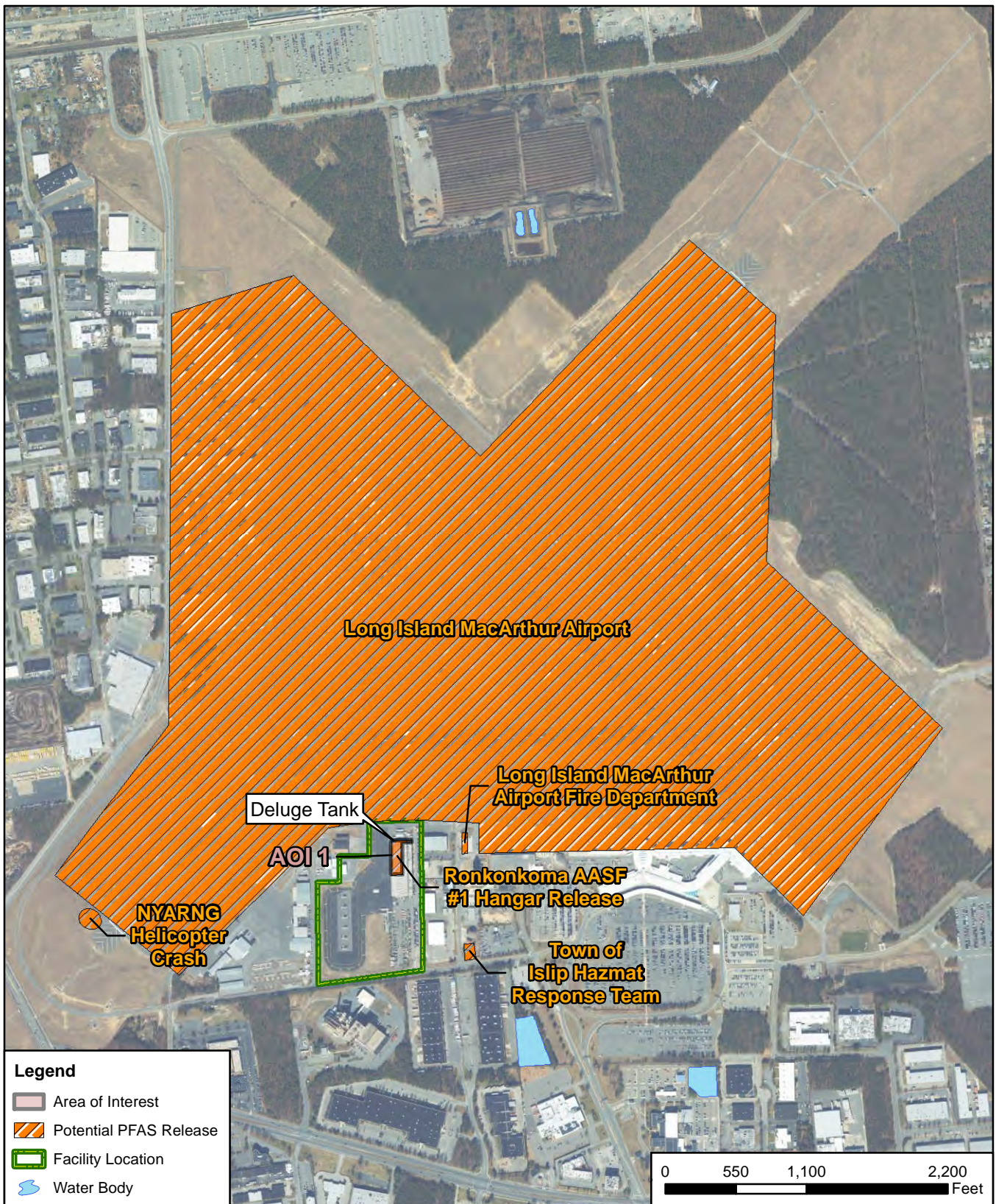
Interviews with current NYARNG facility staff whose first-hand knowledge at Ronkonkoma AASF #1 span 1984 to present indicate that ARNG activities may have resulted in a potential PFAS release at the one AOI identified during the PA. Based on the preliminary CSMs developed for the AOI, there is potential for receptors to be exposed to PFAS contamination in soil and groundwater at the AOI. **Table 7-3** summarizes the rationale used to determine if the AOI should be considered for further investigation under the CERCLA process and undergo an SI.

**Table 7-3: PA Findings Summary**

Area of Interest	AOI Location	Rationale	Potential Future Action
AOI 1: Ronkonkoma AASF #1 Hangar Release and AFFF Storage	40°47'23.6"N; 73°06'15.4"W	Location of AFFF release within hangar in 2007	Proceed to an SI, focus on soil and groundwater

ARNG will evaluate the need for an SI at Ronkonkoma AASF #1 based on the potential receptors, the potential migration of PFAS contamination off the facility, and the availability of resources.





CLIENT	ARNG			
NOTES	Preliminary Assessment for PFAS at Ronkonkoma AASF, NY			
REVISED	5/14/2020	GIS BY	MS	5/14/2020
SCALE	1:13,200	CHK BY	BP	5/14/2020
Base Map: NYS Digital Ortho-imagery Program (NYSDOP), 2016		PM	RG	5/14/2020



## Summary of Findings

**AECOM**

12420 Milestone Center Drive  
Germantown, MD 20876

**Figure 7-1**

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## 8. References

- EDR™. 2018. *The EDR Radius Map™ Report with GeoCheck®; Aerial Photo Decade Package; and Certified Sanborn® Map Report; 201 Schaefer Drive, Ronkonkoma, NY 11779*. July.
- Long Island Commission for Aquifer Protection. 2019. *State of the Aquifer: 2019 Update*. [http://www.liaquifercommission.com/images/SOTA\\_2019.pdf](http://www.liaquifercommission.com/images/SOTA_2019.pdf). Accessed 28 April 2020.
- New York State. 2016. *GIS Dataset Details: Water Wells*. Accessed 29 June 2020 at <https://gis.ny.gov/gisdata/inventories/details.cfm?DSID=1203>. December.
- New York Times. 1999. *2 Killed and 2 Hurt in Crash of Helicopter on Long Island*. <https://www.nytimes.com/1999/11/24/nyregion/2-killed-and-2-hurt-in-crash-of-helicopter-on-long-island.html>. Accessed 4 May 2020.
- NOAA. 2018. *1981-2010 Climate Normals for Long Island, NY US*. <http://www.ncdc.noaa.gov/cdo-web/datatools/normals>. Accessed 22 August 2018.
- NYSDEC. 2020a. *Guidelines for Sampling and Analysis of PFAS: Under NYSDEC's Part 375 Remedial Programs*. January.
- NYSDEC. 2020b. *Atlantic Ocean/ Long Island Sound Watershed: Published Water Quality Monitoring and Assessment Reports*. <https://www.dec.ny.gov/lands/48375.html>. Accessed 22 May 2020.
- US Census. 2010. *Census Summary File 2010*. US Census Bureau. Revised 2012.
- US Department of Agriculture, 2011. *Natural Resources Conservation Service: New York Rapid Watershed Assessment Profile*. January.
- USEPA. 1991. *Guidance for Performing Preliminary Assessments under CERCLA*. EPA/540/G-91/013. September.
- USEPA. 1994. *National Oil and Hazardous Substances Pollution Contingency Plan (Final Rule)*. 40 CFR Part 300; 59 Federal Register 47384. September.
- USEPA. 2016a. *Drinking Water Health Advisory for Perfluorooctanoic Acid (PFOA)*. Office of Water (4304T). Health and Ecological Criteria Division, Washington, DC 20460. EPA Document Number: 822-R-16-005. May.
- USEPA. 2016b. *Drinking Water Health Advisory for Perfluorooctane Sulfonate (PFOS)*. Office of Water (4304T). Health and Ecological Criteria Division, Washington, DC 20460. EPA Document Number: 822-R-16-004. May.
- USEPA. 2017. *UCMR3 (2013-2015) Occurrence Data by State. Occurrence Data for the Unregulated Contaminant Monitoring Rule*. Accessed 9 July 2019 at <https://www.epa.gov/dwucmr/occurrence-data-unregulated-contaminant-monitoring-rule>. January.
- USGS. 1914. *The Geology of Long Island, New York*. Professional Paper 82.
- USGS. 1964. *Hydrology of the Babylon-Islip Area, Suffolk County, Long Island, New York*. Geological Survey Water-Supply Paper 1768.
- USGS. 1974. *Hydrogeology of Suffolk County, Long Island, New York*. Hydrologic Investigations Atlas HA-501.

- USGS. 1998a. *Water-Table and Potentiometric-Surface Altitudes of Upper Glacial, Magothy, and Lloyd Aquifers on Long Island, New York, in March-April 1997, with a Summary of Hydrogeologic Conditions*. Water-Resources Investigation Report 98-4019.
- USGS. 1998b. *Hydrogeology of the Huntington-Smithtown Area Suffolk County, New York*. Geological Survey Water-Supply Paper 1669-D.
- USGS. 2009. *Water-Table and Potentiometric-Surface Altitudes of Upper Glacial, Magothy, and Lloyd Aquifers on Long Island, New York, in April 2006, with a Summary of Hydrogeologic Conditions*. Scientific Investigations Map 3066.
- USGS. 2020. *National Water Information System: Mapper*. Accessed 30 June 2020 at <https://maps.waterdata.usgs.gov/mapper/index.html>.

## **Appendix A**

### **Data Resources**

Data Resources will be provided separately on CD. Data Resources for Ronkonkoma AASF #1:

**Ronkonkoma AASF #1 Leases, Licenses, and Permits**

- Ronkonkoma Original Lease

**Ronkonkoma AASF #1 Environmental Data Resources, Inc.™ Report**

- 2018 Ronkonkoma EDR™ Report

**Ronkonkoma AASF #1 UCMR3 Data**

- Ronkonkoma AASF #1 UCMR3 Data

## **Appendix B**

### **Preliminary Assessment Documentation**

## **Appendix B.1**

### **Interview Records**



**PA Interview Questionnaire - Other**

Facility: AASF#1 NY  
Interviewer: [REDACTED]  
Date/Time: 06/11/2018

<b>Interviewee:</b> [REDACTED] <b>Title:</b> Commissioner of Aviation, Town of Islip <b>Phone Number:</b> [REDACTED] <b>Email:</b> [REDACTED]	Can your name/role be used in the PA Report? <input checked="" type="radio"/> Y or N Can you recommend anyone we can interview? Y or <input checked="" type="radio"/> N _____
<b>Roles or activities with the Facility/Years working at the Facility:</b>	
<p>Ms. [REDACTED] is the current Commissioner of Aviation, Town of Islip since June 2016. The Long Island MacArthur Airport in Ronkonkoma NY falls under her responsibility.</p> <p>I was referred to Ms. [REDACTED] by the MacArthur Airport Fire Chief, Mr. [REDACTED], whom I visited earlier in the same day at the Fire Station.</p>	
<b>PFAS Use:</b> Identify accidental/intentional release locations, time frame of release, frequency of releases, storage container size (maintenance, fire training, firefighting, buildings with suppression systems (as-buils), fueling stations, crash sites, pest management, recreational, dining facilities, metals plating, or waterproofing). How are materials ordered/purchased/disposed/shared with others?	
<p>Ms. [REDACTED] and I spoke by telephone after I left my card with her administrative secretary. I mentioned that I had visited the Fire Station, and that the Fire Chief had referred me to her with any questions regarding AFFF use by the fire department at MacArthur Airport.</p> <p>I explained to her that I was tasked to determine the historical use of AFFF at the NY ARNG Army Aviation Support Facility (AASF) #1, which is a tenant at MacArthur Airport. In speaking with staff at the AASF, I learned that any firefighting support to their operations would have been provided by the Town of Islip Fire Department, which is located near the AASF and on the airport ramp. There was no reported NYARNG aircraft incident at the AASF or on the airfield to which the fire department responded, according to my discussions at the AASF. I also shared that the NYARNG noted that they perform annual fire extinguisher training jointly with the fire department at the AASF, but that those activities do not use AFFF.</p> <p>Ms. [REDACTED] suggested that I review local online news resources (Newsday) for reporting on PFAS-related concerns within the community.</p> <p>She indicated that on February 1, 2018 DEC identified ISP as a "P" Potential Inactive Hazardous Waste Disposal site. The Town of Islip is currently cooperating with DEC regarding the recent classification.</p> <p>I asked whether she was aware of current or past fire training activities (location, frequency) at MacArthur Airport prior to 2000 when AFFF contained PFAS. She noted that she did not have knowledge of those activities—or if they even occurred—and that the prior Commissioner and Deputy Commissioner of Aviation prior to 2000 would have had that institutional knowledge. Unfortunately, both those individuals (whom she did not identify by name) are deceased.</p> <p>She mentioned none of the existing staff have any specific information on fire training practices prior to 2000. Ms. [REDACTED] was cooperative and supportive of the fact-finding endeavor. She also referred any further inquiries for more detailed information to the Town of Islip legal counsel.</p>	

## Preliminary Assessment – Pre-Interview Form

<b>1. Installation Name:</b> Ronkonkoma/AASF1		
<b>2. Primary Points of Contact:(Name/Title/Telephone Number/Email Address):</b>		
ARNG:	<div style="background-color: black; width: 100px; height: 1.2em;"></div>	
USACE:		
Installation:		
<b>3. Suggested Personnel to Interview (Name/Title/Number of Years at Installation/Retired):</b>		
<div style="background-color: black; width: 100px; height: 1.2em;"></div>	<div style="background-color: black; width: 250px; height: 1.2em;"></div>	25+ 4 years ret
		25+
		25+
		10+
<b>4. Is the ARNG property an enclave of a larger facility? What command or authority controls that facility? DoD or non-DoD? Does the facility have other DoD enclaves?</b>		
New York State is currently leases the facility from the Town of Islip and is not a DoD facility.		
<b>5. Installation History (dates of operation, types of activity, active airfield, firefighting training):</b>		
Dates of lease: 05 July 1977 Current facility usage; Army National Guard Armory Army Aviation Support Facility Army Field Maintenance Facility		
<b>6. Potential Sites to Investigate (hangars, airstrips, FTAs, TAs, paint shops and kitchen AFFF, plating areas):</b>		
To be determined based upon preliminary assessment.		
<b>7. Have we requested the following information from ARNG?</b>		
Lease Information	<div style="background-color: yellow; padding: 2px;">YES</div> / NO	Comment:
Material Purchase Information	YES / <div style="background-color: yellow; padding: 2px;">NO</div>	Comment:
Permit/Transfer Documents	YES / <div style="background-color: yellow; padding: 2px;">NO</div>	Comment:
Disposition Records for AFFF	YES / <div style="background-color: yellow; padding: 2px;">NO</div>	Comment:

(Attach to the front of the Interview Form)

## Preliminary Assessment – Pre-Interview Form

**8. Does the Installation have an Administrative Record or a Document Repository? If so, does the installation have the following types of documents? Circle all that apply.**

Historical Records Review 

Preliminary Assessment

Site Inspections

Remedial Investigation

Remedial Action Documentation

Cultural Resources Management Plan

Natural Resources Management Plan

Annual TAG Reports

Firefighting Training Records (if documented)

As Built Drawings for Buildings with AFFF Systems 

Fire Suppression in Dining Facilities

Responded to an Aircraft Crash 

Responded to Forest Fires

Federal Facility Agreement

State Permit

RCRA Permit 

NPDES Permit

Environmental Baseline Study

Groundwater Flow Information

Groundwater Studies

Groundwater Treatment Units

Groundwater Monitoring Well Location Map

Surface Water Flow Information

Historical Aerials

**9. What GIS data do we have (e.g., HQANG GIS)? Do we need (e.g., State GIS)? Will aerial photographs be needed? (These files will be asked for during the interview)**

Please see attached labeled Ronk Drinking Water GIS Data Layer List.

(Attach to the front of the Interview Form)

## **Appendix B.2**

### **Visual Site Inspection Checklists**



## Visual Site Inspection Checklist

Names(s) of people performing VSI: \_\_\_\_\_

Recorded by: \_\_\_\_\_

ARNG Contact: \_\_\_\_\_

Date and Time: \_\_\_\_\_

6/11/2018 9:30 AM

Method of visit (walking, driving, adjacent): \_\_\_\_\_

walking

### Source/Release Information

Site Name / Area Name / Unique ID: \_\_\_\_\_

Ronkankama

Site / Area Acreage: \_\_\_\_\_

Historic Site Use (Brief Description): \_\_\_\_\_

Airfield

Current Site Use (Brief Description): \_\_\_\_\_

AASF

Physical barriers or access restrictions: \_\_\_\_\_

Security - gate + fenced

1. Was PFAS used (or spilled) at the site/area? \_\_\_\_\_

☒ Y / ☐ N

1a. If yes, document how PFAS was used and usage time (e.g., fire fighting training 2001 to 2014): \_\_\_\_\_

Deluge system tested 2007

2. Has usage been documented? \_\_\_\_\_

☒ Y / ☐ N

2a. If yes, keep a record (place electronic files on a disk): \_\_\_\_\_

Youtube Video

3. What types of businesses are located near the site? \_\_\_\_\_

Industrial / Commercial / Plating / Waterproofing / Residential

3a. Indicate what businesses are located near the site \_\_\_\_\_

All

4. Is this site located at an airport/flightline? \_\_\_\_\_

☒ Y / ☐ N

4a. If yes, provide a description of the airport/flightline tenants: \_\_\_\_\_

Municipal

## Visual Survey Inspection Log

### Other Significant Site Features:

1. Does the facility have a fire suppression system?

☒ Y / ☐ N

1a. If yes, indicate which type of AFFF has been used:

Ansul

1b. If yes, describe maintenance schedule/leaks:

Inspection; no leaks

1c. If yes, how often is the AFFF replaced:

Never replaced since 2007 test

1d. If yes, does the facility have floor drains and where do they lead? Can we obtain an as built drawing?

Yes. Visually inspected floor drain.

### Transport / Pathway Information

#### Migration Potential:

1. Does site/area drainage flow off installation?

☒ Y / ☐ N

1a. If so, note observation and location:

Storm drain -- noted

2. Is there channelized flow within the site/area?

☒ Y / ☐ N

2a. If so, please note observation and location:

Paved all over on flight line.

3. Are monitoring or drinking water wells located near the site?

☒ Y / ☐ N

3a. If so, please note the location:

Suffolk Cty water supplies

4. Are surface water intakes located near the site?

☒ Y / ☐ N

4a. If so, please note the location:

None

5. Can wind dispersion information be obtained?

☒ Y / ☐ N

5a. If so, please note and observe the location.

NA

6. Does an adjacent non-ARNG PFAS source exist?

☒ Y / ☐ N

6a. If so, please note the source and location.

MacArthur <sup>Airport</sup> site; Town of Islip

6b. Will off-site reconnaissance be conducted?

☒ Y / ☐ N

## Visual Survey Inspection Log

### Significant Topographical Features:

1. Has the infrastructure changed at the site/area?

☒ Y / ☐ N

1a. If so, please describe change (ex. Structures no longer exist):

2. Is the site/area vegetated?

☐ Y / ☒ N

2a. If not vegetated, briefly describe the site/area composition:

Paved

3. Does the site or area exhibit evidence of erosion?

☐ Y / ☒ N

3a. If yes, describe the location and extent of the erosion:

4. Does the site/area exhibit any areas of ponding or standing water?

☐ Y / ☒ N

4a. If yes, describe the location and extent of the ponding:

### Receptor Information

1. Is access to the site restricted?

☒ Y / ☐ N

1a. If so, please note to what extent:

2. Who can access the site?

☒ Site Workers / ☐ Construction Workers / ☐ Trespassers / ☐ Residential / ☐ Recreational  
☐ Users / ☐ Ecological

2a. Circle all that apply, note any not covered above:

3. Are residential areas located near the site?

☐ Y / ☒ N

3a. If so, please note the location/distance:

4. Are any schools/day care centers located near the site?

☐ Y / ☐ N

4a. If so, please note the location/distance/type:

5. Are any wetlands located near the site?

☐ Y / ☒ N

5a. If so, please note the location/distance/type:

# Visual Survey Inspection Log

Additional Notes

AASF #1 street address is 201 Schaefer Dr, Ronkonkoma, NY 11779

## Photographic Log

Photo ID/Name	Date & Location	Photograph Description
RKNY01	6/11/2018 - Ronkonkoma AASF #1	Tank and hose for deluge system in hangar. <del>Not obvious</del> Cobwebs and dust <del>establish</del> confirm reports of <del>not use</del> non-use
RKNY03	6/11/2018 - Ronkonkoma AASF #1	Manual fire alarm. Labeled & clearly to designate foam system will be triggered if pulled.
RKNY04	6/11/2018 - Ronkonkoma AASF #1	Deluge system controller in separate room from hangar. Right side (not visible) has an emergency shut-off
RKNY05	"	Deluge system infrastructure in control room. Red tanks are 500-gallon capacity
RKNY06	"	Trench drain in hangar floor
RKNY07	"	Primary Access to 25,000 gal tank for capturing AFFF flow from deluge system

RKNY08

"

Secondary access to 25k gal tank

RKNY09

"

Exterior view of hangar door

RKNY10

6/11/2018 - MacArthur  
Airport Authority  
Fire Station

View to north of "old" fire station toward  
airfield ramp at end of Clark Rd Dr.

RKNY12

"

New Fire Station viewed from the south with  
airport tower in field of view.

RKNY11

Ronkonkoma AASF #1

Fire panel & reference sheet (panel partially visible  
at end of bottom of image). Shows Pt 8 (Hangar)

Pt 9 (System control), and Pt 13 (Kitchen Area) ST21

Note: Pt 13 was not discussed in interviews

RKNY13

"

MacArthur Airport/Town of Islip HAZMAT Response @  
NE corner of Clark Dr and Schaefer Dr. Region circled  
in yellow is a pallet of 5-gal buckets of Ansul  
being stored ~~and~~ in parking area.



## **Appendix C**

### **Photographic Log**

## APPENDIX C – Photographic Log

Army National Guard, Preliminary Assessment for PFAS	Ronkonkoma AASF	Ronkonkoma, NY
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### Photograph No. 1

#### Description:

View of the front entrance to the Ronkonkoma AASF #1 hangar

11 June 2018



### Photograph No. 2

#### Description:

These two 500 gallon tanks of Ansul are connected directly to the deluge system

11 June 2018



## APPENDIX C – Photographic Log

Army National Guard, Preliminary Assessment for PFAS	Ronkonkoma AASF	Ronkonkoma, NY
------------------------------------------------------	-----------------	----------------

### Photograph No. 3

#### Description:

After the deluge system completes, the Ansul will flow out through this drainage system, and straight to the 25,000 gallon storage tanks outside.

11 June 2018



### Photograph No. 4

#### Description:

This is the 25,000 gallon underground storage tank. The manhole cover is removed and the contents are carefully pumped out onto a truck to be transported and properly disposed of.

11 June 2018





## APPENDIX C – Photographic Log

Army National Guard, Preliminary Assessment for PFAS	Ronkonkoma AASF	Ronkonkoma, NY
------------------------------------------------------	-----------------	----------------

### Photograph No. 5

#### Description:

Second image of off-site parking lot containing 5 gallon buckets marked Ansul; Town of Islip HAZMAT Response Team.

11 June 2018



### Photograph No. 6

#### Description:

Pallet of 5 gallon buckets of Ansul at the adjacent off-site PFAS location: Town of Islip HAZMAT Response Team parking lot.

11 June 2018

