FINAL
Preliminary Assessment Report
Madison Army Aviation Support Facility #2
Madison, Wisconsin

Perfluorooctane-Sulfonic Acid (PFOS) and Perfluorooctanoic Acid (PFOA) Impacted Sites
ARNG Installations, Nationwide

August 2020

Prepared for:

Army National Guard Bureau
111 S. George Mason Drive
Arlington, VA 22204

UNCLASSIFIED

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Acronyms and Abbreviations

AASF	Army Aviation Support Facility
AECOM	AECOM Technical Services, Inc.
AFFF	aqueous film forming foam
AOI	Area of Interest
ARNG	Army National Guard
bgs	below ground surface
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CSM	conceptual site model
DEQ	Department of Environmental Quality
EDR™	Environmental Data Resources, Inc.™
HEF	High Expansion Foam
°F	degrees Fahrenheit
FTA	fire training area
PA	Preliminary Assessment
PFA	perfluoroalkoxy
PFAS	per- and poly-fluoroalkyl substances
PFOA	perfluorooctanoic acid
PFOS	perfluorooctanesulfonic acid
SI	Site Inspection
US	United States
USACE	United States Army Corps of Engineers
USAF	United States Air Force
USEPA	United States Environmental Protection Agency
WIARNG	Wisconsin Army National Guard
WIANG	Wisconsin Air National Guard

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 the Madison Army Aviation Support Facility (AASF) #2 (also referred to as the "facility") in Madison, Wisconsin to assess potential PFAS release areas and exposure pathways to receptors. The land is split into two different parcels of land. The parcel where the ramps, hangars, and main AASF building are situated, is owned by Dane County Regional Airport, who leases it to the United States Air Force (USAF) for the term of 1982-2050. The USAF permits the parcel of land to the United States Army, who licenses the parcel to the Wisconsin Army National Guard (WIARNG) from 1988-2041.

The performance of this PA included the following tasks:

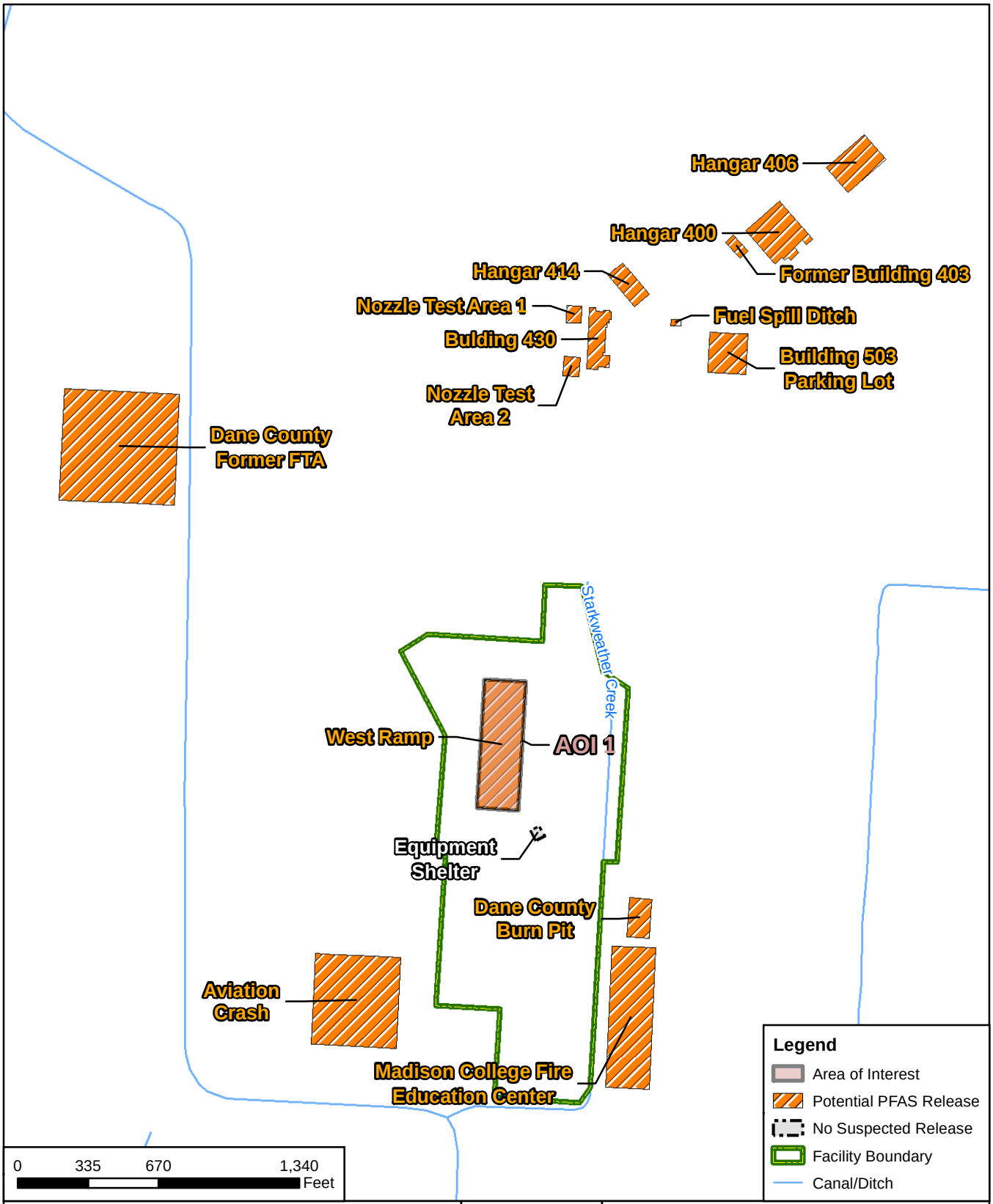
- Reviewed available administrative record documents and Environmental Data Resources, Inc. (EDR)™ report packages to obtain information relevant to potential PFAS releases, such as: drinking water well locations, historical aerial photographs, Sanborn maps, and environmental compliance actions in the area surrounding the facility;
- Conducted a site visit on 7 May 2019 and completed visual site inspections at locations where PFAS-containing materials were suspected of being stored, used, or disposed;
- Interviewed current Wisconsin ARNG personnel during the site visit as well as environmental managers and operations staff;
- 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 the facility during the PA. The AOI is shown on **Figure ES-1** and described in **Table ES-1** below:

Table ES-1: AOI at Madison AASF #2

Area of Interest	Name	Used By	Potential Release Date
AOI 1	West Ramp	WIARNG	Prior to 2008

Based on potential PFAS releases at AOI 1, there is potential for exposure to PFAS contamination in media at or near the facility. The preliminary CSM for AOI 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, it was indicated that no PFAS were detected in a public water system above the USEPA's lifetime Health Advisories (HAs) within 20 miles of the facility. 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	ARNG			
Preliminary Assessment for PFAS at Madison AASF #2, WI				
REVISED	6/11/2020	GIS BY	MS	6/11/2020
SCALE	1:8,040	CHK BY	SI	6/11/2020
Base Map:		PM	RG	6/11/2020

Summary of Findings

AECOM
12420 Milestone Center Drive
Germantown, MD 20876

Figure ES-1

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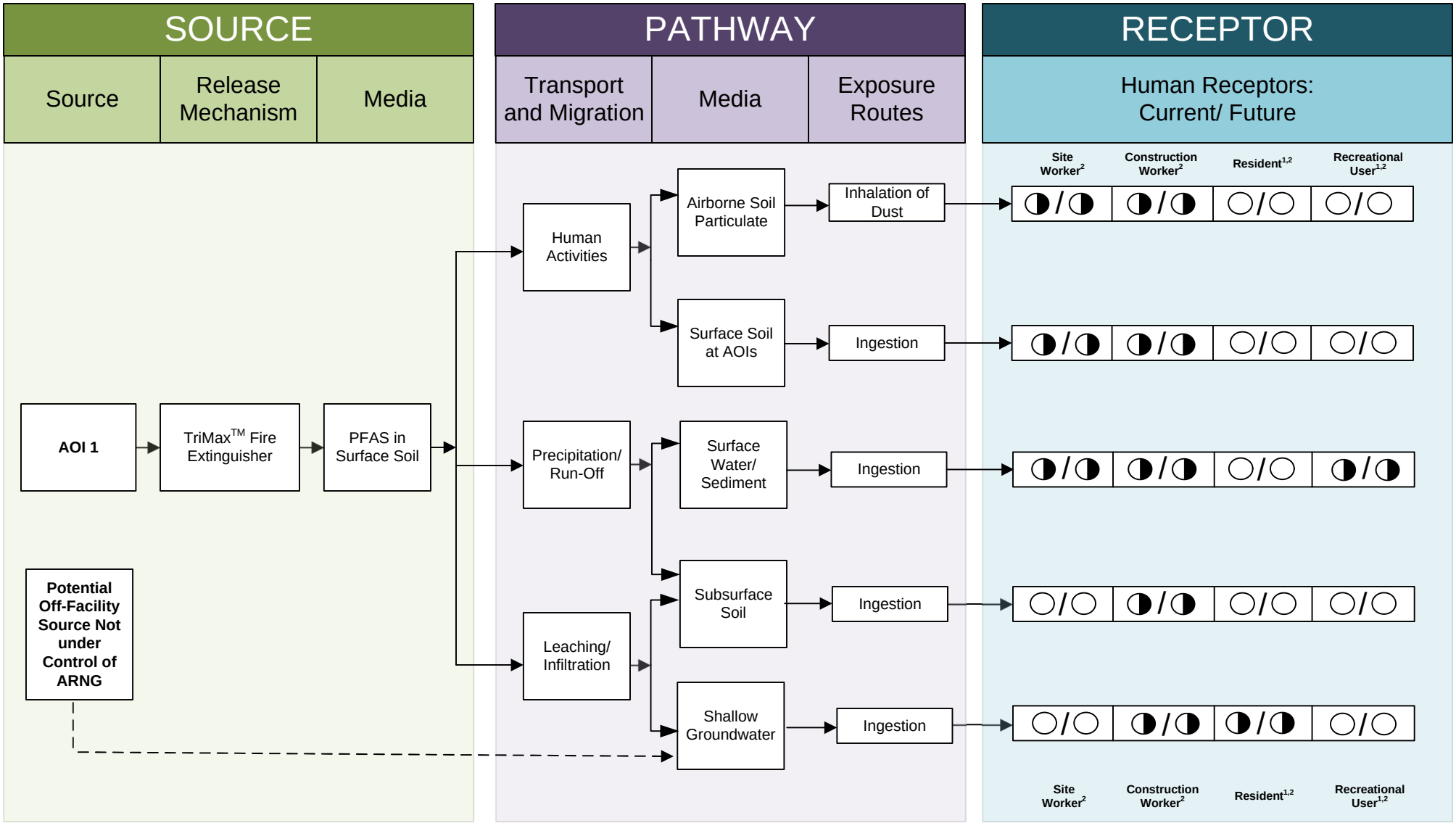


LEGEND

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

Notes:
1. The resident and recreational users receptors refer to an off-facility resident and off-facility recreational users.
2. Dermal contact exposure pathway is incomplete for PFAS.

Figure ES-2
Preliminary Conceptual Site Model
Madison AASF #2

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 their facilities that used per- and poly-fluoroalkyl substances (PFAS) (a suite of related chemicals), primarily releases of aqueous film forming foam (AFFF) although other sources of PFAS 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 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. The HA is 70 parts per trillion for PFOS and PFOA, individually or combined. In the absence of federal maximum contaminant levels, some states have adopted their own drinking water standards for PFAS.

This report presents findings of a PA for PFAS at the Madison Army Aviation Support Facility (AASF) #2 (also referred to as the “facility”) in Madison, Wisconsin, in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended, the National Oil and Hazardous Substances Pollution Contingency Plan (40 Code of Federal Regulations Part 300), and Army requirements and guidance.

This PA documents potential locations where PFAS containing materials are stored and have the potential to be released into the environment at or adjacent to the AASF. 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. (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 site visit on 7 May 2019 and completed visual site inspections at locations where PFAS-containing materials were suspected of being stored, used, or disposed;
- Interviewed current Wisconsin ARNG (WIARNG) personnel during the site visit as well as environmental managers and operations staff;

- 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:

- **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 fire training areas (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 Areas of Interest (AOIs) 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

The AASF is in the southern portion of the Dane County Regional Airport in Madison, Wisconsin (**Figure 1-1**). The facility is on the northeastern city limits of Madison and is adjacent to Lake Mendota and Lake Monona. The city of Madison and communities of Token Creek, Westport, Maple Bluff, and Burke lie within 5 miles of the AASF.

The AASF land ownership is split into two different parcels of land. The 14.7 acre parcel where the ramps, hangars, and main AASF building are situated, is owned by Dane County Regional Airport, who leases it to the United States Air Force (USAF) for the term of 1982-2050. The USAF permits the parcel of land to the United States Army, who licenses the parcel to the WIARNG. The term of the permit to the United States Army and license to the WIARNG is from 1988-2041. The second parcel of land includes approximately 5.11 acres of land that leases directly to the WIARNG from Dane County Regional Airport for the term of 2011 to 2045. See **Appendix A** for real estate documents.

1.5 Facility Environmental Setting

The AASF is in the city of Madison, south-central Wisconsin, and on predominantly level ground near the western margin of the Great Lakes Section of the Central Lowlands Physiographic Province. This section is characterized by numerous lakes with associated lacustrine plains, prominent end moraines, poorly integrated drainage, and a still partially exposed cuestaform topography (PEER, 1988). There are three lakes within 10 miles of the AASF. Lakes Monona and Waubesa to the south of the AASF, and Lake Mendota is southwest of the AASF. The AASF is at an elevation of approximately 890 feet above mean sea level.

1.5.1 Geology

The AASF is in the Central Lowlands Physiographic Province, which is characterized by mostly Paleozoic bedrock, with some Cretaceous rocks underlying the western boundary. The underlying glacial deposits in the region are largely horizontal Paleozoic sandstones, shales, limestones, conglomerates, and coals. (National Park Service, 2018). The topography of the region is a result of glaciation and is characterized structurally by numerous domes, and uplifts control regional dips. With the exception of the southern border, the entire province is bounded by topography that is higher in elevation (PEER, 1988). The glacial deposits in the southern Wisconsin vary in thickness from only a few feet to several hundred feet. The AASF is located directly above a section of glacial drift that is approximately 300 feet thick.

The native soils present at the AASF are represented by three series as defined by the US Department of Agriculture Soil Conservation Service. In the northern region, the Wacousta Series, consists of poorly drained soils formed in silty sediments. The surface layer is a black, silty, clay loam, the subsoil is a dark gray and olive gray mottled silty loam. In the southwest region, the Hayfield Series consists of moderately well drained soils formed in loamy glacial outwash underlain by sand and gravel. The surface layer consists of dark gray loam, the subsurface consists of brown mottled loam, and the substratum consists of a yellow/brown, mottled, coarse sand. The third series of soil found at the AASF is the Batavia Series, which occupies all of the south central and southeastern regions. The surface soil is a dark gray, silty loam, the subsoil is a brown silt loam and brown, gravelly, loamy sand, and the substratum is a pale brown stratified sand and gravel (PEER, 1988).

1.5.2 Hydrogeology

An Environmental Data Resources, Inc. (EDR)™ report conducted a well search for a 1-mile radius surrounding the facility (**Appendix A**). There are two types of aquifers at the AASF. The Sandstone and Dolomite Aquifers consist of layers of sandstone and dolomite bedrock that vary greatly in their water-yielding properties. The Dolomite Aquifer has groundwater within the fractures of the rocks, while the Sandstone Aquifer groundwater occurs in pore spaces between loosely cemented sand grains. The sandstone aquifer is further broken down into an Upper Sandstone Aquifer and Lower Sandstone Aquifer. The Upper Sandstone Aquifer is composed of sandstone and dolomite of the Ancell and Prairie du Chien Groups of Ordovician age. This aquifer is not a major source of groundwater in the region due to erosion by other formations. The Lower Sandstone Aquifer is composed of a thick sedimentary sequence of Cambrian sandstone. The aquifer is wedge-shaped, and the water yields increase to the southeast. The Lower Sandstone Aquifer is an important source of water for municipalities and industries due to the ability to yield approximately 1,000 gallons of water per minute. Infiltration from snowmelt and precipitation are the main sources of recharge for the shallow aquifers. The majority of recharge to the aquifers occurs in the winter months, where precipitation and snowmelt are high, and evapotranspiration is low. (Southeastern Wisconsin Regional Planning Commission, 2002). Groundwater at the facility has been encountered at depths ranging from 5 to 10 feet below ground surface (bgs).

Groundwater flow direction around the facility is generally to the southeast, towards Starkweather Creek (**Figure 1-2**).

Using the EDR™ report and additional online resources, such as state and local GIS databases, wells were researched to a 4-mile radius of the facility. No potable water wells are located within the boundary of the AASF; however, unknown wells exist within 4 miles of the facility (**Figure 1-2**). No domestic or drinking well locations were available. Drinking water for the AASF is supplied by the city of Madison, which obtains its public water supply from the Lower Sandstone Aquifer (Madison Water Utility, 2018). The nearest municipal water supply well is located approximately 1 mile southeast of the facility. The USEPA Unregulated Contaminant Monitoring Rule 3 (UCMR3) data indicate that PFOS/PFOA were not detected in a public water system above the USEPA HA within a 20-mile radius of the facility. 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.

1.5.3 Hydrology

The AASF is in the Starkweather Creek Watershed, which is a 24-square mile basin that encompasses parts of the city of Madison, and the towns of Burke and Blooming Grove. The bodies of water that are in the surrounding regions of the AASF include Lake Mendota to the west, Lake Monona to the south, and Starkweather Creek, which surrounds the facility. Lake Mendota is a 9,781-acre lake located in Dane County and has a maximum depth of 83 feet. Lake Monona is connected to Lake Mendota by the Yahara River, which is located on the southern border of Lake Mendota. Lake Monona is a 3,359-acre lake located in Dane County and has a maximum depth of 74 feet. Both lakes are accessible by recreational users via public beaches and boating activities. Starkweather Creek consists of two branches that total 20 miles in length. The West Branch of the creek originates in Token Creek Country Park, and the East Branch of the creek originates near the city of Sun Prairie. Both branches eventually converge and empty into Lake Monona, located in the Lake Monona-Yahara River Watershed (**Figure 1-3**) (Nelson Institute for Environmental Studies 2006).

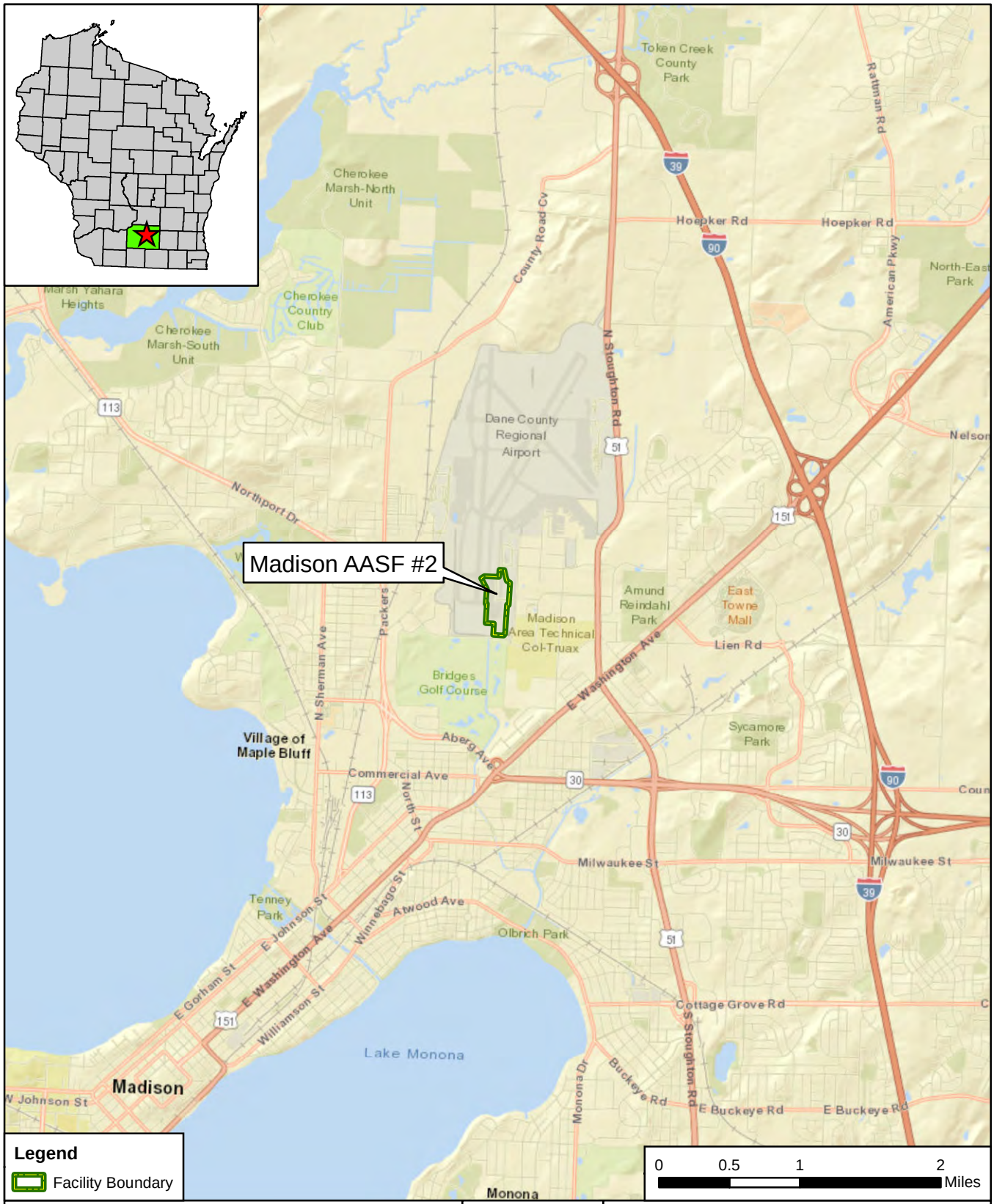
The AASF has a storm water collection system consisting of a storm sewer system on the northern portion, and man-made ditches with underdrains around the south ramp. The storm water system discharges east into Starkweather Creek, which surrounds the AASF on the west, east and south sides. The Starkweather Creek empties into Lake Monona, which is approximately 2 miles to the south (**Figure 1-3**).

1.5.4 Climate

The climate at the AASF consists of four clearly separated seasons, with a humid continental climate that is characterized by variable weather patterns. Seasonally, temperatures vary from average summer highs of 83.3 degrees Fahrenheit (°F) to average winter lows of 8.1 °F. The mean annual rainfall is 31.0 inches. The average snowfall is 50.9 inches (NOAA, 2019).

1.5.5 Current and Future Land Use

The AASF is a controlled access facility with public roads and is adjacent to the Dane County Regional Airport and the Wisconsin Air National Guard (WIANG) at Truax Field. Reasonably anticipated future land use is not expected to change from the current land use; however, future infrastructure improvements, land acquisitions, and land use controls at the Dane County Regional Airport and WIANG at Truax Field are unknown.



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Base Map: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI,		PM	RG	6/13/2019

Facility Location

AECOM
12420 Milestone Center Drive
Germantown, MD 20876

Figure 1-1

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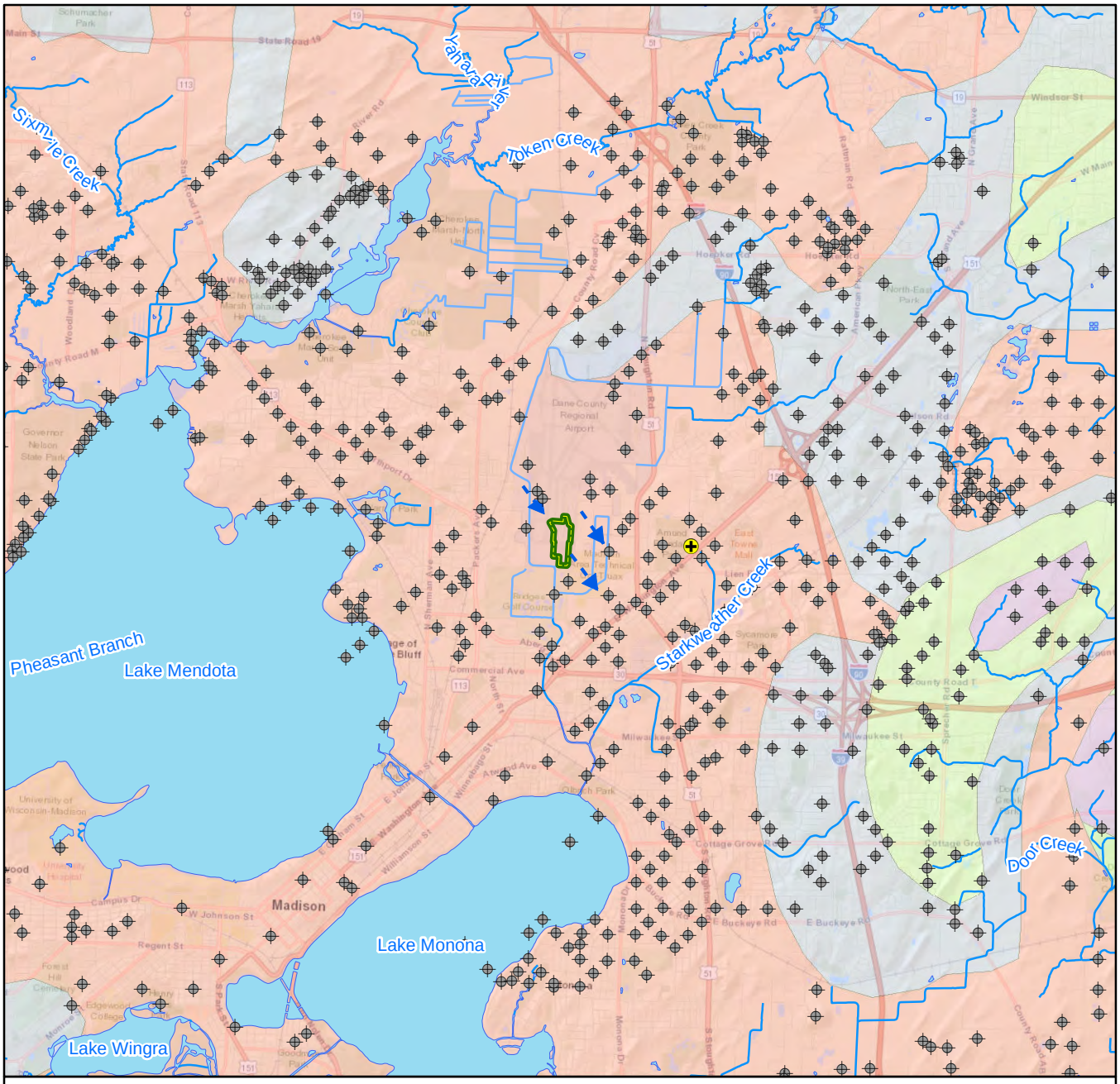

Legend

- Facility Boundary
- Water Body
- River/Stream
- Canal/Ditch
- Inferred Groundwater Flow Direction

Geology

- Cambrian, undivided
- Ordovician Sinnipee Group
- Ordovician Ancell Group
- Ordovician Prairie du Chien Group

Wells

- Municipal Well 15
- Unknown Well

0 0.75 1.5 3 Miles

CLIENT	ARNG			
Preliminary Assessment for PFAS at Madison AASF #2, WI				
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Base Map: Sources: Esri, HERE, Garmin, USGS, Intermap, INCREMENT P, NRCan, Esri Japan, METI,		PM	RG	8/17/2020

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Groundwater Features

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Figure 1-2

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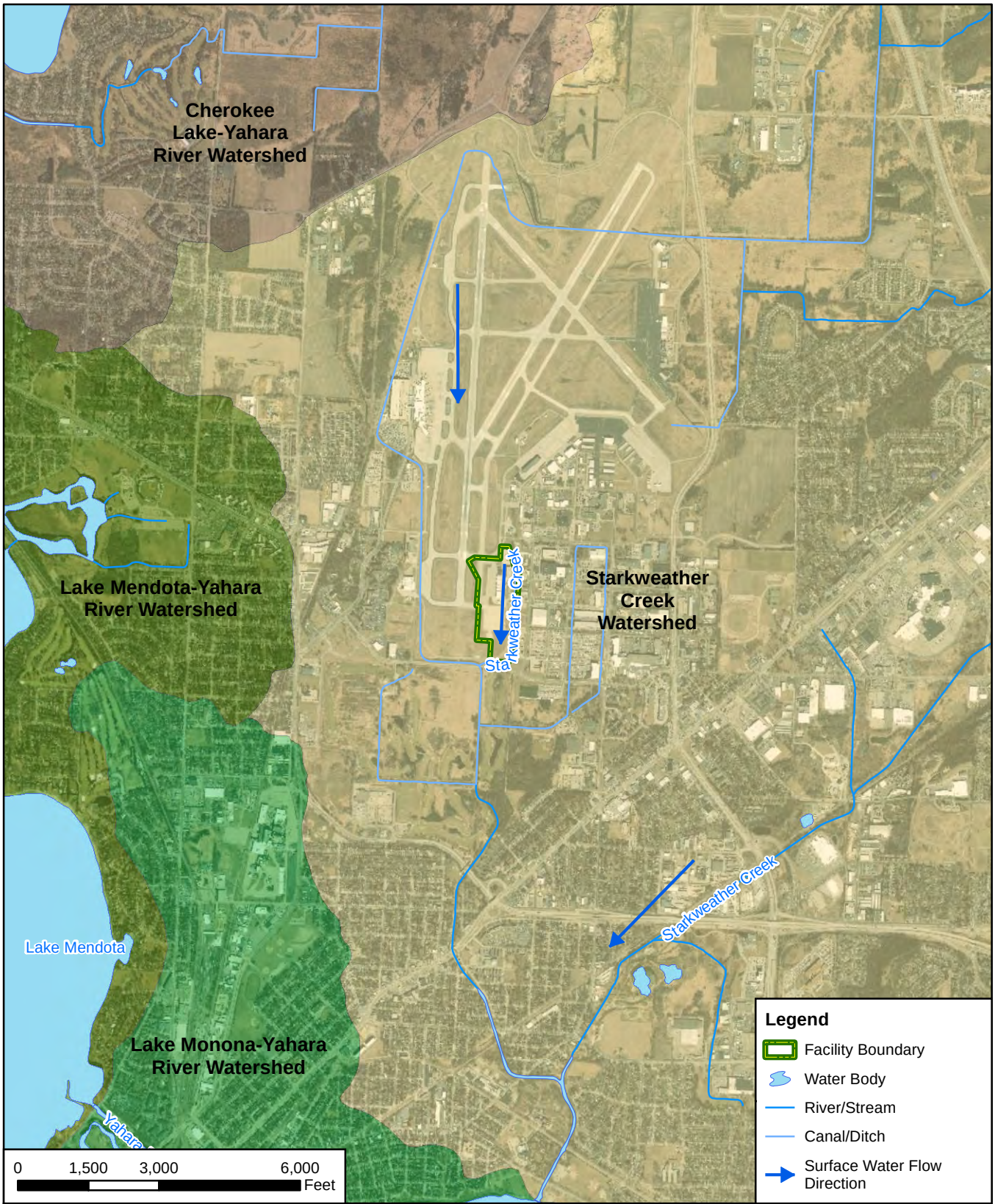

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Surface Water Features

AECOM
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Germantown, MD 20876

Figure 1-3

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2. Fire Training Areas

No FTAs were identified at the AASF during the PA through interviews (**Appendix B**), historical document review, or the Environmental Data Resource Report.

3. Non-Fire Training Areas

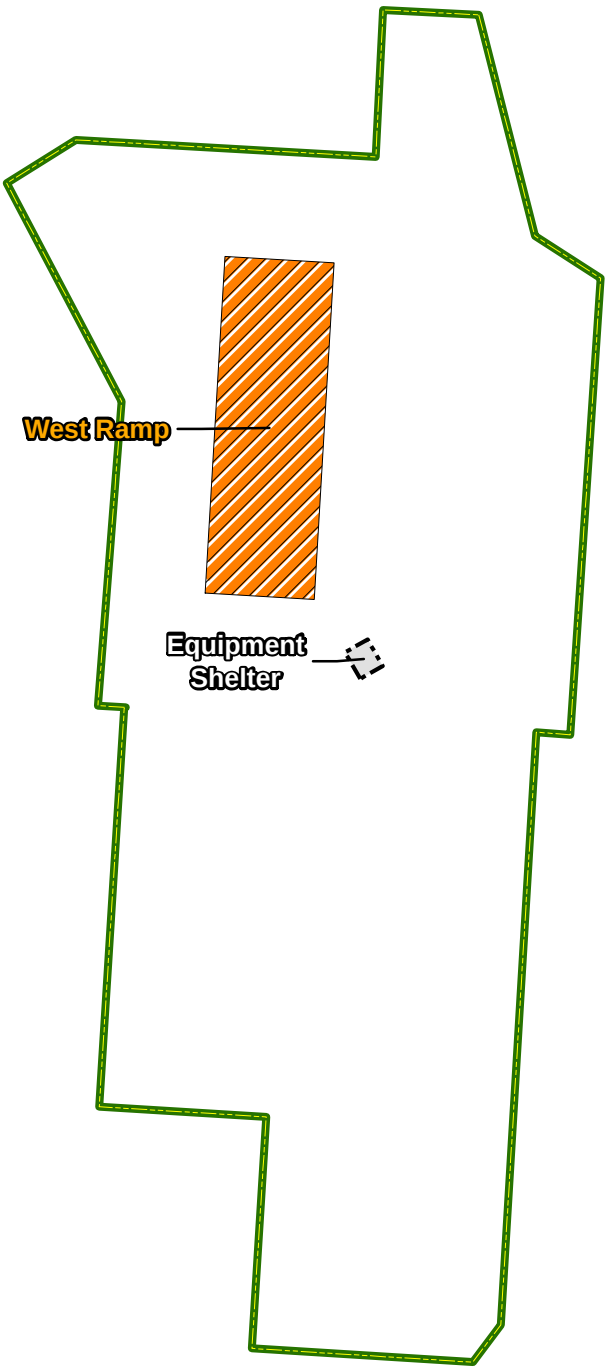
In addition to FTAs, the PA evaluated areas where PFAS-containing materials may have been broadly used, stored, or disposed. This may include buildings with fire suppression systems, paint booths, AFFF storage areas, and areas of compliance demonstrations. Information on these features obtained during the PA are included in **Appendices A** and **B**. Two non-FTAs where AFFF was stored and/or potentially released were identified during the PA. A description of each non-FTA is presented below, and the non-FTAs are shown on **Figure 3-1**. Additionally, no fire suppression systems are present within any facility building.

3.1 Fire Extinguishers – West Ramp

The AASF facility housed several 60-gallon TriMax™ fire extinguishers in various locations on the West Ramp area. It is unknown when the TriMax™ fire extinguishers arrived at the AASF; however, they were present until 2008. There was no documentation of training with the fire extinguishers. No records of routine or annual maintenance were located during the site visit; however, any maintenance would have been conducted off the facility by contractors. There were no reported leaks or AFFF releases from the TriMax™ units. In 2008, the TriMax™ units were removed from the facility and sent to Volk Field, Wisconsin. Purple K mobile fire extinguishers have been present on the ramps ever since 2008 and were present during the site visit. Based on the presence of the TriMax™ fire extinguishers, the West Ramp is considered a potential PFAS release area.

3.2 Equipment Shelter

At the south end of the AASF, there is an equipment shelter that houses two fire baskets that can be used for firefighting in remote areas (**Figure 3-1**). One fire basket contains a tank that has the capability to hold AFFF but has never been filled with water or AFFF. The fire baskets have never been used by the WIARNG. The exact date in which the fire baskets were brought to the AASF is unknown, but they have been there for at least 10 years.



Legend

- Potential PFAS Release
- No Suspected Release
- Facility Boundary

0 175 350 700 Feet

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CLIENT	ARNG			
Preliminary Assessment for PFAS at Madison AASF #2, WI				
REVISED	6/11/2020	GIS BY	MS	6/11/2020
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Base Map:		PM	RG	6/11/2020

Non-Fire Training Areas

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Figure 3-1

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4. Emergency Response Areas

No emergency response areas or incidents were identified within the AASF during the PA through interviews (**Appendix B**), historical document review, or the Environmental Data Resource Report. The WIANG at Truax Field Fire Department responds to all emergency incidents at the AASF.

5. Adjacent Off-Facility Sources

Several potential off-facility sources of PFAS adjacent to the AASF, not under the control of the ARNG, were identified during the PA. Based on interviews with WIARNG personnel (**Appendix B**) and historical document review, all identified adjacent areas with potential AFFF releases are outside the AASF boundaries. Descriptions of the adjacent sources are presented below and are shown on **Figure 5-1**.

5.1 Wisconsin Air National Guard Property

According to a PA conducted by engineering firm BB&E in 2015, several potential areas of potential use, storage, or release of AFFF have historically occurred at the WIANG at Truax Field (BB&E, 2015). These locations are described below.

- Hangar 406: The former fire suppression system was supplied with AFFF until 2006 when it was then retrofitted for use of High Expansion Foam (HEF). There were no documented releases, however any release would have been routed to the trench drains, from which is then discharged to the sanitary sewer system.
- Hangar 400: The former fire suppression system was supplied with AFFF until 2009 when it was then retrofitted for use of HEF. Fire suppression system testing occurred at an unknown frequency; however, any release would have been routed to the trench drains, from which it is then discharged to an oil/water separator and ultimately to the sanitary sewer system.
- Former Building 403: Prior to relocation to Building 430, the Truax Fire Department was stationed in Building 403. AFFF was in use and stored at Building 403 from 1988 until it was demolished in 1995/1996. There is no record of AFFF nozzle testing from this time period.
- Fuel Spill Ditch: In 1981, approximately 2,000 gallons of jet fuel were spilled due to an overflow. In response to the spill, the Truax Fire Department foamed the fuel and flushed it down the ditch, where it soaked into the ground and was covered with straw. One month after the spill, the affected soil in the ditch was removed to a depth of 6 feet. The type of foam used to cover the fuel is unknown.
- Building 503 Parking Lot: The soil that was excavated from the Fuel Spill Ditch was relocated to what is now the parking lot west of Building 503. The contaminated soil was placed on concrete pads and spread out to elicit volatilization. The area was then excavated to 3 feet, and all of the soil and concrete was disposed of off-site. The parking lot was paved the same year.
- Hangar 414: Hangar 414 has had an AFFF fire suppression since 1994. Annual testing of the hangar fire suppression system has been conducted since 1994 and included discharging foam every other year. No other AFFF releases were documented. The hangar is outfitted with trench drains that discharge to a sanitary sewer system.
- Nozzle Test Area 1 and Area 2: The Truax Fire Department vehicles require nozzle testing every 6 months. The tests were conducted in the grassy areas on the northwest and southwest sides of Building 430. After the foam was released, the grassy area was typically watered down, and the foam was allowed to soak into the grass.
- Building 430: Building 430 has been the location of the Truax Fire Station since 1995 and is where the fire department keeps the firetrucks and bulk storage of AFFF. AFFF is transferred to vehicles within the fire station via overhead fill. Additionally, Truax Fire Department vehicles are washed within the fire station or at the outside truck bays when necessary. There are trench drains both in the fire station and downgradient of the truck bays; therefore, any AFFF

releases due to vehicle washing would be captures by the trench drains, which discharge into the sanitary sewer system.

Based on the proximity of these locations to WIARNG property as well as fluctuation in groundwater flow direction, there is the potential for AFFF releases from WIANG property to impact the AASF. Surface water flow is directed by a man-made surface drainage system that connects to Starkweather Creek and generally discharges to the south towards Lake Monona (BB&E, 2015).

5.2 Aviation Crash

A small aviation plane crash occurred at the south end of the air strip, just north of Anderson Street. The exact type of aircraft, date, and owner information of the aviation crash are unknown. The approximate geographic coordinates are 43°7'20.91"N; 89°20'31.91"W. The WIANG responded to the crash, and it is unknown if AFFF were dispensed at the crash site by the WIANG.

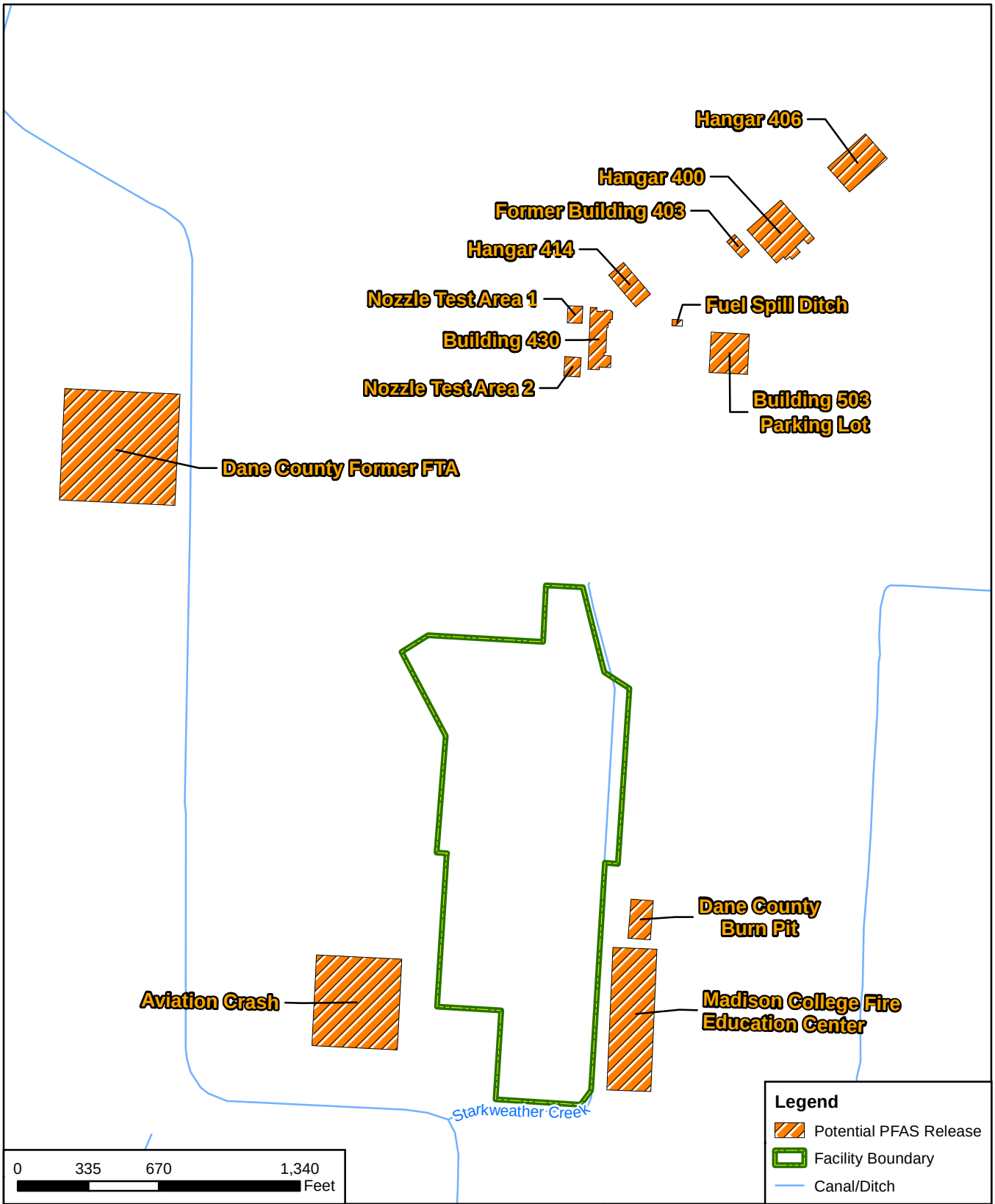
5.3 Dane County Former FTA and Dane County Burn Pit

Based on WIANG PFAS investigations, the Dane County former FTA and Dane County Burn Pit were identified as potential AFFF release sources due to reported accounts of firefighting training activities potentially using perfluoroalkoxy (PFA) foams. The geographic coordinates for the Dane County Former FTA are 43°7'44.83"N; 89°20'50.56"W and the Dane County Burn Pit are 43° 7'25.39"N; 89°20'13.70"W.

5.4 Madison College Fire Education Center and Dane County Burn Pit

The Madison College Fire Education Center is a public technical college which teaches several different types of firefighting courses for firefighter certifications. There is no information regarding the types of firefighting training that occurs; however, based on the nature of the activities that take place at the Madison College Fire Education Center, there is a possibility of the use of AFFF.

The Dane County burn pit is adjacent to the Madison College Fire Education Center, where several firefighting courses are taught. The type and volume of PFAS foams that were used is unknown.



CLIENT	ARNG			
Preliminary Assessment for PFAS at Madison AASF #2, WI				
REVISED	8/17/2020	GIS BY	MS	8/17/2020
SCALE	1:8,040	CHK BY	SI	8/17/2020
Base Map:		PM	RG	8/17/2020

Adjacent Sources

AECOM
12420 Milestone Center Drive
Germantown, MD 20876

Figure 5-1

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6. Preliminary Conceptual Site Model

Based on the PA findings, one non-FTA was identified where PFAS may have been spilled or discharged to the ground surface: AOI 1 West Ramp. As such, this area is determined to be an AOI and may be a potential PFAS source area. The AOI location is shown in **Figure 6-1**.

The following section describes the CSM components and the specific preliminary CSM developed for AOI 1. 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. The preliminary CSM for AOI 1 is shown in **Figure 6-2**.

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 (National Ground Water Association, 2018). Receptors for the facility include site workers, construction workers, off-facility residents, and off-facility recreational users. The preliminary CSM for the facility indicates which specific receptors could potentially be exposed to PFAS.

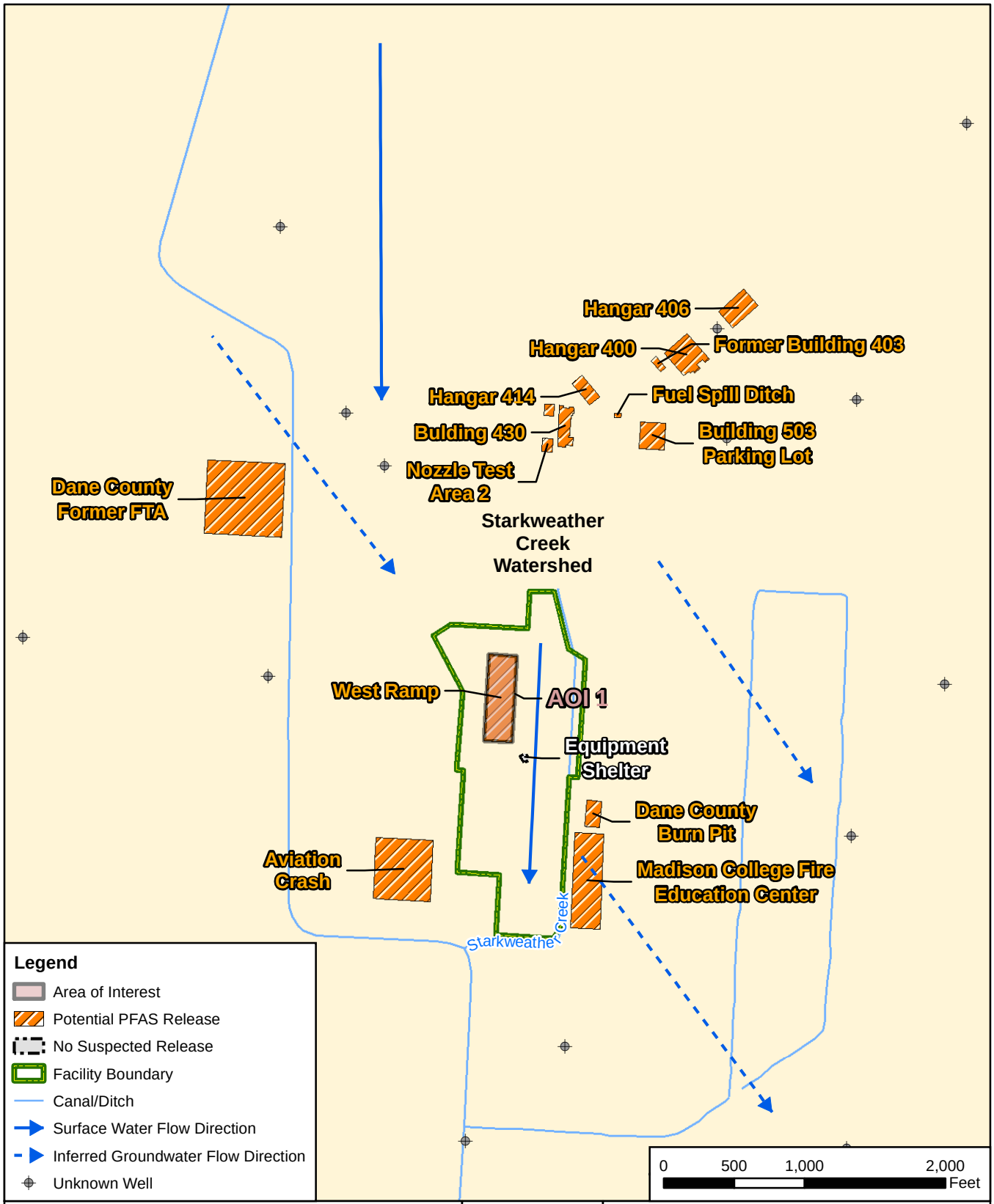
6.1 AOI 1 West Ramp

AOI 1 is the West Ramp, which historically had several 60-gallon TriMax™ fire extinguishers in various locations on the West Ramp area. It is unknown when the TriMax™ fire extinguishers arrived at the AASF; however, they were present until 2008. There are no records of training, routine maintenance, or annual maintenance. There were no reported leaks or AFFF releases from the TriMax™ fire extinguishers, however it is possible that leakages may have occurred.

Potential AFFF releases identified at the AASF may have occurred on paved surfaces. Releases to the paved surfaces could have migrated a short distance onto the surrounding surface soil. Ground-disturbing activities in these grassy areas as well as, beneath the paved surfaces may result in potential exposure to surface soils via ingestion and inhalation of dust particles for site workers and construction workers. AFFF releases to the paved surfaces could have infiltrated the subsurface via cracks in the pavement or joints between areas that are paved with different materials. Ground-disturbing activities may result in potential exposure to subsurface soils and groundwater for construction workers.

PFAS are water soluble and can migrate readily from soil to groundwater via leaching. Drinking water for the AASF is supplied by the City of Madison, which obtains its public water supply from the Lower Sandstone Aquifer (Madison Water Utility, 2018). The nearest municipal water supply wells are located approximately 1 mile southeast of the facility. Additionally, it is possible unregistered, private, domestic wells exist downgradient of the identified AOIs which may result in potential exposure via ingestion of groundwater; therefore, the exposure pathway for groundwater is considered potentially complete for off-facility residents.

The AASF has a storm water collection system consisting of a storm sewer system that discharges east into Starkweather Creek, which surrounds the AASF on the west, east and south sides. The Starkweather Creek empties into Lake Monona, which is approximately 2 miles to the south. It is possible that PFAS migrated to the nearby surface waters, resulting in potential exposure via ingestion of surface water and/or sediment to recreational users. Maintenance activities on the storm water systems may result in potential exposure to surface water and/or sediment via ingestion to site workers and construction workers. The preliminary CSM for AOI 1 is shown on **Figure 6-2**.



CLIENT	ARNG			
Preliminary Assessment for PFAS at Madison AASF #2, WI				
REVISED	7/29/2020	GIS BY	MS	7/29/2020
SCALE	1:12,000	CHK BY	SI	7/29/2020
Base Map:		PM	RG	7/29/2020

Area of Interest

AECOM
12420 Milestone Center Drive
Germantown, MD 20876

Figure 6-1

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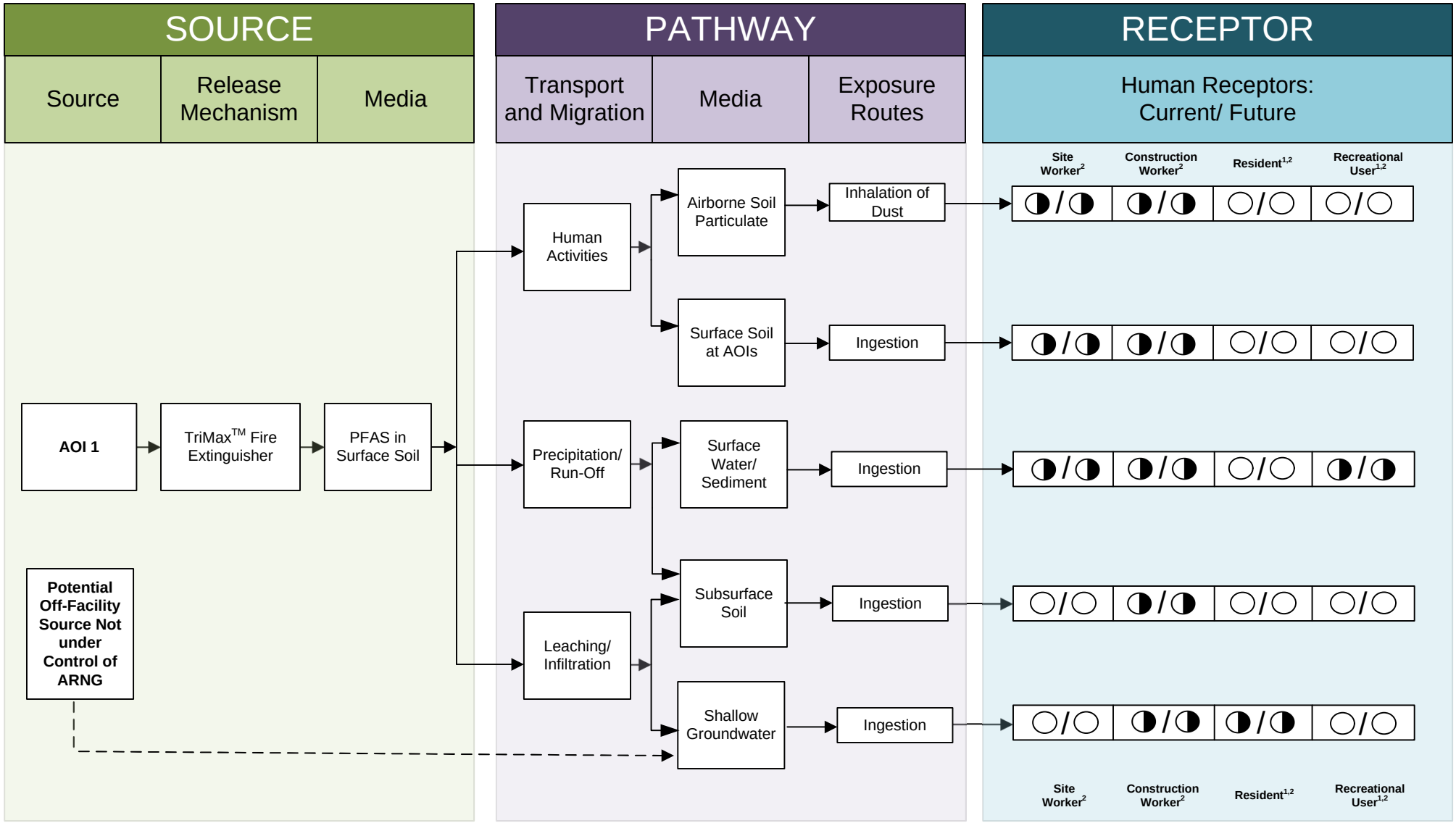


LEGEND

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

Notes:
1. The resident and recreational users receptors refer to an off-facility resident and off-facility recreational users.
2. Dermal contact exposure pathway is incomplete for PFAS.

Figure 6-2
Preliminary Conceptual Site Model
AOI 1 West Ramp

7. Conclusions

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

7.1 Findings

One AOI related to a potential PFAS release was identified at the AASF during the PA. The AOI is shown on **Figure 7-1** and described in **Table 7-1** below:

Table 7-1: AOI at Madison AASF #2

Area of Interest	Name	Used By	Potential Release Date
AOI 1	West Ramp	WIARNG	Prior to 2008

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

The following areas discussed in Section 2 through Section 5 were determined to have no suspected PFAS releases (**Table 7-2**).

Table 7-2: No Suspected Release Areas

No Suspected Release Area	Used by	Rationale for No Suspected Release Determination
Equipment Shelter	WIARNG	The Fire Baskets had the capability of holding AFFF, however, the tanks were never filled or used.

7.2 Uncertainties

A number of information sources were investigated during this PA to determine the potential for PFAS-containing materials to have been stored, 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 or available during the PA on the disposition and use of PFAS in training, firefighting, or other non-traditional activities.

The conclusions of this PA are based on all available information, including: previous environmental reports, EDRs™, 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 other sources. 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 uncertainties associated with the PA are summarized in **Table 7-3**.

Table 7-3: Uncertainties

Area	Source of Uncertainty
AASF	Direct interviewee knowledge is not available before 1985. Whether potential use, storage, or release of PFAS-containing materials occurred at this facility prior to 1985 is unknown.
AOI 1 West Ramp	It is unknown when the TriMax™ fire extinguishers arrived at the facility.

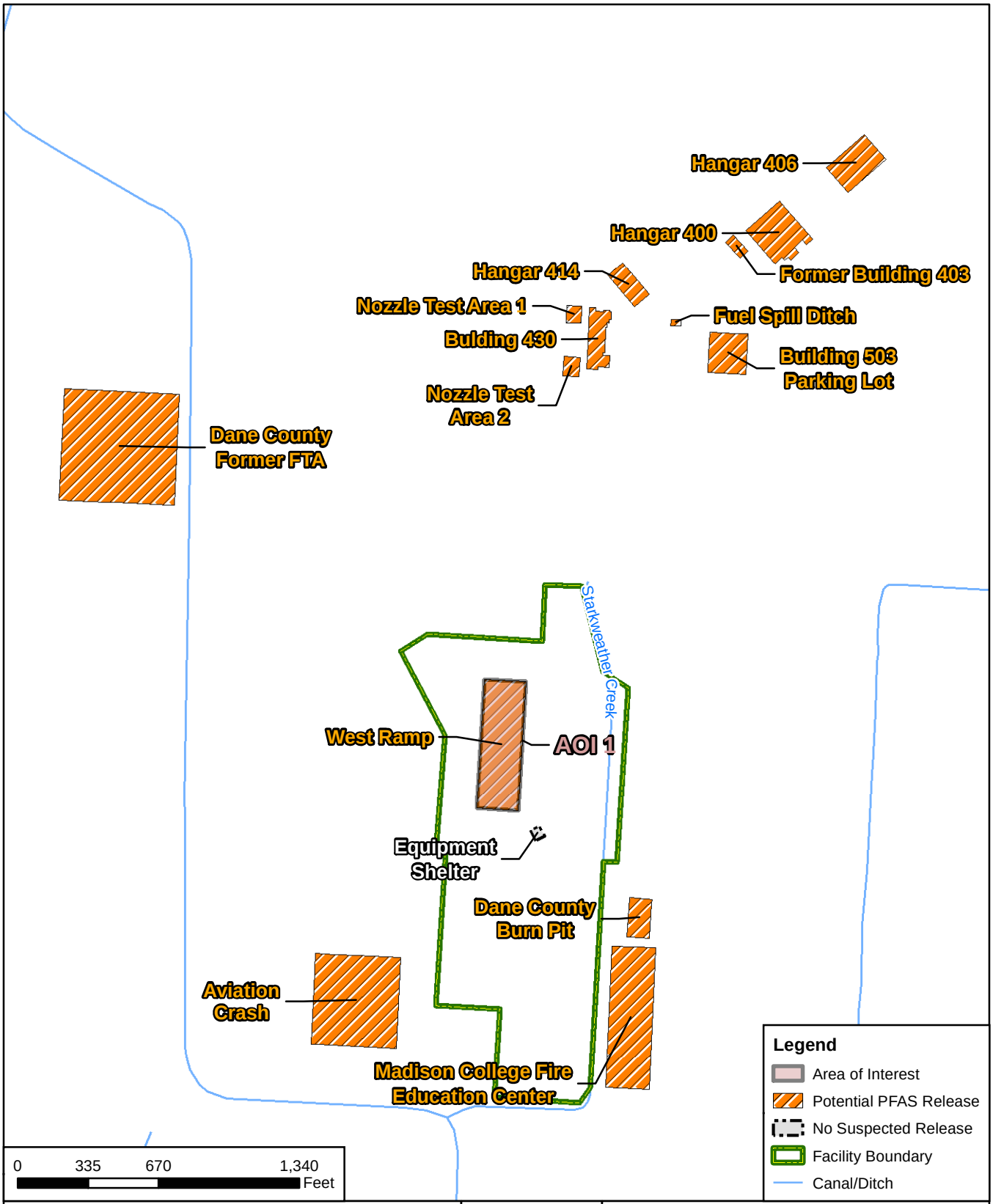
7.3 Potential Future Actions

Interviews and records (covering 1985 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 CSM developed for the AOI, there is potential for receptors to be exposed to PFAS contamination in media at or near the facility. **Table 7-4** summarizes the rationale used to determine if the AOI should be considered for further investigation under the CERCLA process and undergo an SI.

ARNG will evaluate the need for an SI at Madison AASF #2 based on the potential receptors, the potential migration of PFAS contamination off the facility, and the availability of resources.

Table 7-4: PA Findings Summary

Area of Interest	AOI Location	Rationale	Potential Future Action
AOI 1 West Ramp	43°7'33.37"N 89°20'22.60"W	Several 60-gallon TriMax™ fire extinguishers were located on the West Ramp area.	Proceed to SI, focus on soil, groundwater, surface water, sediment



CLIENT	ARNG			
Preliminary Assessment for PFAS at Madison AASF #2, WI				
REVISED	6/11/2020	GIS BY	MS	6/11/2020
SCALE	1:8,040	CHK BY	SI	6/11/2020
Base Map:		PM	RG	6/11/2020

Summary of Findings

AECOM
12420 Milestone Center Drive
Germantown, MD 20876

Figure 7-1

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Madison Water Utility. 2018. *Annual Water Quality Report.*

National Ground Water Association, 2018. *Groundwater and PFAS: State of Knowledge and Practice*. January.

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National Oceanic and Atmospheric Administration (NOAA). 2019. *Local Climate Data from Dane County Airport.* Retrieved June 2019, from https://www.weather.gov/images/mkx/climate/avg_30_year_snowfall.png

Nelson Institute for Environmental Studies, University of Wisconsin-Madison. 2006. *Starkweather Creek Watershed: Current Conditions and Improvement Strategies in an Urban Context.*

PEER Consultants, P.C (PEER). 1988. Final Preliminary Assessment, 128th Tactical Fighter Wing, Wisconsin Air National Guard, Truax Field, Madison, Wisconsin. August.

United States Environmental Protection Agency (USEPA). 1991. *Guidance for Performing Preliminary Assessments under CERCLA.* September.

Southeastern Wisconsin Regional Planning Commission. 2002. *Groundwater Resources of Southeastern Wisconsin*. June.

Appendix A
Data Resources

Data Resources will be provided separately on CD. Data Resources for Madison AASF #2.

Madison AASF #2 Leases, Licenses, and Permits

- 1983 DACA Lease Renewal for Air National Guard
- 2003 DACA Supplemental Agreement No. 3

Madison AASF #2 Documentation

- 2015 Final Perfluorinated Compounds Preliminary Assessment Site Visit Report for Wisconsin Air National Guard, Truax Field
- 2016 Storm Water Pollution Prevention Plan for Dane County Regional Airport and Tenants
- 2018 Wisconsin Department of Natural Resources Letter Regarding Dane County Burn Pit and Former FTA
- 2019 Final Report FY16 Phase 1 Regional Site Inspections for Perfluorinated Compounds, Truax Field Air National Guard Base, Madison, Wisconsin

EDR Report

- 2019 Madison AASF #2 EDR Report

Appendix B
Preliminary Assessment Documentation

Appendix B.1
Interview Records

PA Interview Questionnaire - Other

Facility: Madison AASF #2
Interviewer: [redacted]
Date/Time: 5/7/19 0900

Interviewee: [redacted] **Title: Maintenance Supervisor** **Phone Number:** **Email:** [redacted]	Can your name/role be used in the PA Report? **Y** or N Can you recommend anyone we can interview? Y or **N** _____

Roles or activities with the Facility/Years working at the Facility:

[redacted] has been the Maintenance Supervisor for 34 years at Madison AASF #2.

All the hangars were built in the early 1950s. There were approximately 35 aircrafts at the AASF from 1985 to 1998.

PFAS Use: Identify accidental/intentional release locations, time frame of release, frequency of releases, storage container size (maintenance, fire training, firefighting, buildings with suppression systems (as builts), fueling stations, crash sites, pest management, recreational, dining facilities, metals plating, or waterproofing). How are materials ordered/purchased/disposed/shared with others?

[redacted] stated that there were 4 – 60 gallon TriMax mobile fire extinguishers present on the ramps at the AASF until 2008. Any maintenance that was needed for the TriMax fire extinguishers were handled by a contractor off the facility. No solution changing occurred at the AASF. To the best of [redacted] knowledge, AFFF was never dispensed at the AASF. In 2008, the TriMax units were removed from the facility and sent to Volk Field. Purple K mobile fire extinguishers have been present on the ramps ever since the removal of the TriMax units. There has never been bulk AFFF storage at the AASF.

None of the hangars are equipped with a fire suppression system.

[redacted] was unaware of any fires at the AASF. There was an aviation crash west of the AASF property boundary and on the south end of the flight-line.

One of the hangars is equipped with a wash rack and trench drains in the building. No washing occurred outside of the wash rack. Two hangars have drains/trench drains that go to an oil/water separator, then to the sanitary WWTP.

There is a college fire training center on the other side of Starkweather Creek on the east side of the property. [redacted] stated that it has been there for about 15 years. There was an Olympic sized pool where the college would fill with waste oil and fuels, then light it on fire and practice putting the fire out. It is unknown is water or foam was used to extinguish these fires.

Known Uses
Use
Procurement
Disposition
Storage (Mixed)
Storage (Solution)
Inventory, Off-Spec
Containment
SOP on Filling
Leaking Vehicles
Nozzle and Suppression System Testing
Dining Facilities
Vehicle Washing
Ramp Washing
Fuel Spill Washing and Fueling Stations
Chrome Plating or Waterproofing

PA Interview Questionnaire - Other

Facility: Madison AASF #2
Interviewer: [redacted]
Date/Time: 5/7/19 0900

Interviewee: [redacted] **Title: Maintenance Officer** **Phone Number:** **Email:** [redacted]	Can your name/role be used in the PA Report? **Y** or N Can you recommend anyone we can interview? Y or **N** _____

Roles or activities with the Facility/Years working at the Facility:

[redacted] has been a Maintenance Officer for 10 years at the Madison AASF #2.

.

PFAS Use: Identify accidental/intentional release locations, time frame of release, frequency of releases, storage container size (maintenance, fire training, firefighting, buildings with suppression systems (as builts), fueling stations, crash sites, pest management, recreational, dining facilities, metals plating, or waterproofing). How are materials ordered/purchased/disposed/shared with others?

[redacted] states confirmed with [redacted] that the TriMax fire extinguishers had never been dispensed at the AASF and they were removed in 2008 to be replaced with Purple K mobile fire extinguishers.

The emergency fire fighting services are provided by the Air National Guard at Truax Field, adjacent to the AASF. [redacted] stated that for certification drills, they only ever used water; not foam for fire drills.

All outside drains on the ramps discharge to Starweather Creek to the east of the property boundary.

Known Uses
Use
Procurement
Disposition
Storage (Mixed)
Storage (Solution)
Inventory, Off-Spec
Containment
SOP on Filling
Leaking Vehicles
Nozzle and Suppression System Testing
Dining Facilities
Vehicle Washing
Ramp Washing
Fuel Spill Washing and Fueling Stations
Chrome Plating or Waterproofing

PA Interview Questionnaire - Other

Facility: Madison AASF #2
Interviewer: [redacted]
Date/Time: 5/7/2019 1300

Interviewee: Wisconsin Air National Guard Truax Field Personnel **Title:** **Phone Number:** **Email:**	Can your name/role be used in the PA Report? **Y** or N Can you recommend anyone we can interview? Y or **N** _____

Roles or activities with the Facility/Years working at the Facility:

The following Air National Guard Truax Field personnel were present and contributed to the information brief that occurred at 1300 at the WI DMA HQ:

[redacted] (State Environmental Manager for Truax Field, 12 years at facility)

[redacted] (Truax Field, 15 years at facility)

[redacted] (115 W Environmental Manager, 21 years at facility)

PFAS Use: Identify accidental/intentional release locations, time frame of release, frequency of releases, storage container size (maintenance, fire training, firefighting, buildings with suppression systems (as builts), fueling stations, crash sites, pest management, recreational, dining facilities, metals plating, or waterproofing). How are materials ordered/purchased/disposed/shared with others?

The following topics were discussed at the meeting at 1300 on May 7, 2019.

The Wisconsin Air National Guard (WIANG) had contracted a PFAS site inspection (SI), where several areas of interest within the boundary of the WI ANG Truax Field facility were identified. During the investigation, soil and groundwater samples were taken, but no surface water/sediment samples were taken. The PFAS SI report provided outlines which areas of the facility exceeds regulatory criteria. The WIANG stated that the recommendation of the PFAS SI report is to proceed to a remedial inspection for certain areas of interest at ANG Truax Field facility.

One potential adjacent source to the ANG facility that was discussed included an aviation crash fire that occurred at the south side of the flight line and southwest of the Madison AASF facility, where it is unknown if AFFF was used to put out the fire.

The WIANG confirmed that there has never been an AFFF fire suppression system at the Madison AASF. The WIANG provides emergency support services to the AASF and inspects the buildings on an annual basis. No fire training activities ever occurred at the Madison AASF.

Known Uses
Use
Procurement
Disposition
Storage (Mixed)
Storage (Solution)
Inventory, Off-Spec
Containment
SOP on Filling
Leaking Vehicles
Nozzle and Suppression System Testing
Dining Facilities
Vehicle Washing
Ramp Washing
Fuel Spill Washing and Fueling Stations
Chrome Plating or Waterproofing

PA Interview Questionnaire - Other

Facility: Madison AASF #2
Interviewer: [redacted]
Date/Time: 5/7/2019 0800

Interviewee: Wisconsin Army National Guard personnel **Title:** **Phone Number:** **Email:**	Can your name/role be used in the PA Report? **Y** or N Can you recommend anyone we can interview? Y or **N** _____

Roles or activities with the Facility/Years working at the Facility:

The following WI ARNG personnel were present and contributed to the information brief that occurred at 0800 at the WI DMA HQ:

[redacted] (WI ARNG Water Resources Manager, 4 years at facility)

[redacted] (Buildings and grounds supervisor, 15 years at facility)

[redacted] (Real Estate Specialist, 1 year at facility)

[redacted] (Real Estate Specialist, 2 years at facility)

[redacted] (Architect, 32 years at facility)

[redacted] (Environmental Branch Chief, 10 years at facility)

[redacted] (CFMO, 19 years at facility)

PFAS Use: Identify accidental/intentional release locations, time frame of release, frequency of releases, storage container size (maintenance, fire training, firefighting, buildings with suppression systems (as builts), fueling stations, crash sites, pest management, recreational, dining facilities, metals plating, or waterproofing). How are materials ordered/purchased/disposed/shared with others?

The following topics were discussed at the brief that occurred at 0800 on May 7, 2019. Both the Madison AASF #2 and the West Bend AASF #1 were discussed in this meeting.

Madison AASF #2:

Real estate information: The AASF land ownership is split into two different parcels of land. The ramps, hangars, and main AASF building are leased to the Wisconsin Air National Guard (WIANG) and is licensed to the WIARNG. The term of the license is from 1988 to 2041, and the parcel of land is approximately 14.74 acres. The southern ramp area and helicopter pad are leased from the Dane County Regional Airport. The term of the lease is from 2011 to 2045, and the parcel of land is approximately 5.36 acres.

Additionally, AFFF was never used or stored at the Madison AASF. Historically, they had halon mobile extinguishers. The Madison AASF was mainly used for the storage and maintenance of aircrafts for the WI ARNG.

Known Uses
Use
Procurement
Disposition
Storage (Mixed)
Storage (Solution)
Inventory, Off-Spec
Containment
SOP on Filling
Leaking Vehicles
Nozzle and Suppression System Testing
Dining Facilities
Vehicle Washing
Ramp Washing
Fuel Spill Washing and Fueling Stations

Appendix B.2
Visual Site Inspection Checklists

Visual Site Inspection Checklist

Names(s) of people performing VSI: [redacted]

Recorded by: [redacted]

ARNG Contact: [redacted]

Date and Time: 5/7/2019 8am

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

Source/Release Information

Site Name / Area Name / Unique ID: Madison AASF #2

Site / Area Acreage: approximately 20.1 acres

Historic Site Use (Brief Description): Madison AASF #2 has building built as early as the 1950's, and is adjacent to the WIANG Truax Field.

Current Site Use (Brief Description): The AASF supports the Wisconsin Army National Guard (WIARNG).

Physical barriers or access restrictions: Access to the area is restricted to WIARNG.

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):

2. Has usage been documented? **Y** / **N**

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

N/A

3. What types of businesses are located near the site? **Industrial / Commercial / Plating / Waterproofing / Residential**

3a. Indicate what businesses are located near the site

WIANG Truax Field, Dane County Regional Airport, and residental are adjacent.

4. Is this site located at an airport/flightline? **Y** / **N**

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

Dane County Regional Airport

Visual Site Inspection Checklist

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:

No fire suppression system.

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

n/a

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

n/a

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

n/a

Transport / Pathway Information

Migration Potential:

1. Does site/area drainage flow off installation? **Y / N**

1a. If so, note observation and location:

Surface water flows south-east from ramp

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

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

Yes, the stormwater system includes both ditches with underdrains and subsurface storm sewers.

3. Are monitoring or drinking water wells located near the site? **Y / N**

3a. If so, please note the location:

There are unknown wells off-facility, within 2 miles.

4. Are surface water intakes located near the site? **Y** / N

4a. If so, please note the location:

East and south of the facility, there are culverts and ditches for surface water run-off.

5. Can wind dispersion information be obtained? **Y / N**

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

N/A

6. Does an adjacent non-ARNG PFAS source exist? **Y / N**

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

Yes, WIANG Truax Field, and Dane County Regional Airport.

6b. Will off-site reconnaissance be conducted? Y / N

Visual Site Inspection Checklist

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):

N/A

2. Is the site/area vegetated? **Y** / N

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

vegetated except for ramp and parking areas

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:

The facility has controlled access

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:

Residents to the south and west

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

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

Technical college within 2 miles.

5. Are any wetlands located near the site? **Y / N**

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

creeks and riverines on the west, east, and south regions of the facility that all collect and drain the south towards Lake Mendota and Lake Monona.

Visual Site Inspection Checklist

Additional Notes

Photographic Log

Photo ID/Name	Date & Location	Photograph Description
1	5/7/2019, AASF Ramps	The mobile Purple K fire extinguishers that are scattered around the ramps at the AASF.
2	5/7/2019, Starkweather Creek	Starkweather Creek that runs on the east side of the facility.
3	5/7/2019, Hangar Buildings	Hangar Pod 7. These hangars were built in the 1950's and do not contain fire suppression systems.
4	5/7/2019, Starkweather Creek	A stormwater drain to direct surface water off the ramps and into Starkweather Creek.

Appendix B.3
Conceptual Site Model Information

Preliminary Assessment – Conceptual Site Model Information

Site Name: Madison Army Aviation Support Facility #2

Why has this location been identified as a site?
Facility is an aviation support site with aircraft hangars, high probability of release due to asset type and historical site usage.

Are there any other activities nearby that could also impact this location?
Yes, the WIANG, Dane County Former FTA, and Dane County Burn Pit.

Training Events

Have any training events with AFFF occurred at this site? *No*

If so, how often? *N/A*

How much material was used? Is it documented*? N/A*

Identify Potential Pathways: Do we have enough information to fully understand over land surface water flow, groundwater flow, and geological formations on and around the facility? Any direct pathways to larger water bodies?

Surface Water:

Surface water flow direction? *Southeast toward Starkweather Creek.*

Average rainfall? *31 inches*

Any flooding during rainy season? *Yes*

Direct or indirect pathway to ditches? *Direct*

Direct or indirect pathway to larger bodies of water? *Direct Starkweather Creek; Indirect Lake Monona*

Does surface water pond any place on site? *Did not appear to be areas with ponded water.*

Any impoundment areas or retention ponds? *No*

Any NPDES location points near the site? *Yes, but ANG permit*

How does surface water drain on and around the flight line? *N/A*

Groundwater:

Groundwater flow direction? *Southeast toward Starkweather Creek.*

Depth to groundwater? *5 to 10 feet*

Uses (agricultural, drinking water, irrigation)? *Not used.*

Any groundwater treatment systems? *None known*

Any groundwater monitoring well locations near the site? I

Is groundwater used for drinking water? *Drinking water is supplied by the City of Madison, which obtains its public water supply from the Lower Sandstone Aquifer.*

Preliminary Assessment – Conceptual Site Model Information

Are there drinking water supply wells on installation? *No*

Do they serve off-post populations? *No*

Are there off-post drinking water wells downgradient? *No potable water wells are located within the boundary of the AASF; however, wells exist within one mile of the facility.*

Waste Water Treatment Plant:

Has the installation ever had a WWTP, past or present? *No*

If so, do we understand the process and which water is/was treated at the plant? *N/A*

Do we understand the fate of sludge waste? *N/A*

Is surface water from potential contaminated sites treated? *N/A*

Equipment Rinse Water

1. Is firefighting equipment washed? Where does the rinse water go?
The AASF has no firefighting equipment.

2. Are nozzles tested? How often are nozzles tested? Where are nozzles tested? Are nozzles cleaned after use? Where does the rinse water flow after cleaning nozzles?
The AASF has two mobile fire baskets stored in the canvas shelter building on the fuel tanker pad, on the south side of the hangar areas. There has never been any AFFF in the baskets and they have never been used for any other purpose.

3. Other?
Firefighting services for the AASF are provided by WIANG at Truax Field Fire Department.

Identify Potential Receptors:

Site Worker *Yes*

Construction Worker *Yes*

Recreational User N*o*

Residential *No*

Child *No*

Ecological *No*

Note what is located near by the site (e.g. daycare, schools, hospitals, churches, agricultural, livestock)? Homes and farmland *Light industrial, airport, Madison College, and Fire Education Center.*

Documentation

Ask for Engineering drawings (if applicable). Has there been a reconstruction or changes to the drainage system? When did that occur? *The AASF has a man-made drainage system, that eventually drains to the Starkweather Creek, which empties into Lake Monona. The AASF is bounded on three sides (east, west, south) by the Starkweather Creek.*

Appendix C
Photographic Log

APPENDIX C – Photographic Log

Army National Guard, Preliminary Assessment for PFAS	Madison AASF #2	Wisconsin

Photograph No. 1

Description:

The mobile Purple K fire extinguishers that are placed around the ramps at the AASF.

Photograph No. 2

Description:

Starkweather Creek that runs on the east side of the facility.

APPENDIX C – Photographic Log

Army National Guard, Preliminary Assessment for PFAS	Madison AASF #2	Wisconsin

Photograph No. 3

Description:

Hangar Pod 7. These hangars were built in the 1950's and do not contain fire suppression systems.

Photograph No. 4

Description:

A stormwater drain to direct surface water off the ramps and into Starkweather Creek.