FINAL
Preliminary Assessment Report
Plant City Readiness Center
Plant City, Florida

Perfluorooctanesulfonic 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

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Acronyms and Abbreviations

°F	degrees Fahrenheit
AECOM	AECOM Technical Services, Inc.
AFFF	aqueous film forming foam
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
FLARNG	Florida Army National Guard
FMS	Field Maintenance Shop
FTA	fire training area
NGVD	North Geodetic Vertical Datum
NOAA	National Oceanic and Atmospheric Administration
PA	Preliminary Assessment
PFAS	per- and poly-fluoroalkyl substances
PFOA	perfluorooctanoic acid
PFOS	perfluorooctanesulfonic acid
PWDED	Public Works Department/Engineering Division
RC	Readiness Center
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
USDA	United States Department of Agriculture
VSI	visual site inspection

Executive Summary

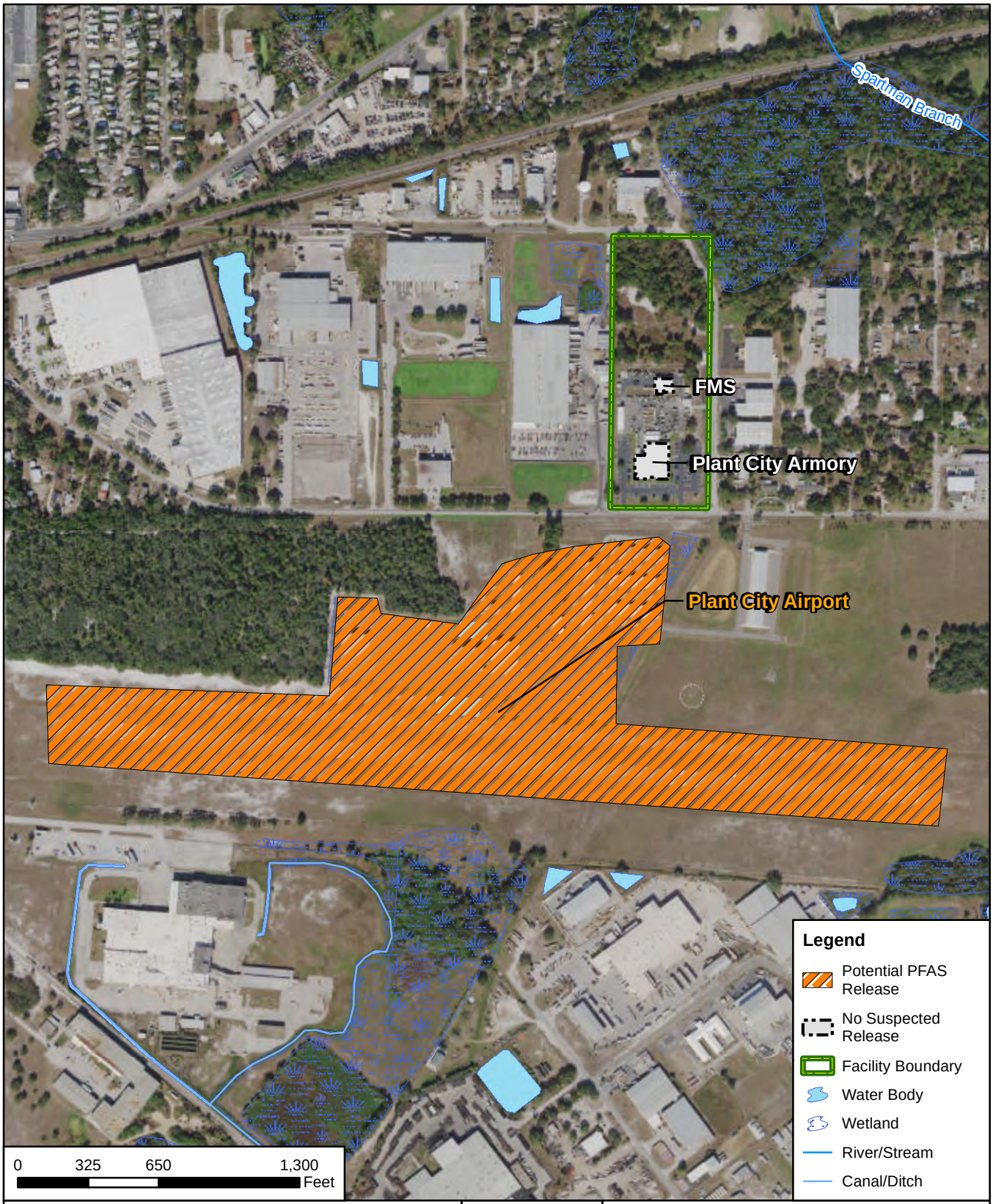
The United States (US) Army Corps of Engineers (USACE) Baltimore District on behalf of the Army National Guard (ARNG) G9, Cleanup Branch contracted AECOM Technical Services, Inc. (AECOM) to perform *Preliminary Assessments (PAs) and Site Inspections (SIs) for Perfluorooctanesulfonic acid (PFOS) and Perfluorooctanoic acid (PFOA) Impacted Sites at ARNG Facilities Nationwide*. 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 during firefighting activities or training, although other PFAS sources are possible.

AECOM completed a PA for PFAS at Plant City Readiness Center (RC) in Plant City, Florida, to assess potential PFAS release areas and exposure pathways to receptors. Historical aerials imagery shows an armory as early as 1991. Plant City RC (also referred to as "the facility") under the current lease, which began in July 1983, extends for a period of 99 years between Florida ARNG (FLARNG) and Plant City. Based on the USEPA Unregulated Contaminant Monitoring Rule 3 (UCMR3) data, it was indicated that PFAS were detected in a public water system above the USEPA Health Advisory level within 20 miles of the facility.

The performance of this PA included the following tasks:

- Reviewed data resources to obtain information relevant to suspected PFAS releases
- Conducted a 1-day site visit on 5 February 2019
- Interviewed current Plant City RC personnel during the site visit including FLARNG operations staff and Plant City Fire Department Station No. 1 staff
- Completed visual site inspections (VSIs) at known or suspected PFAS release locations and documented with photographs

Two areas, Plant City RC Armory and Field Maintenance Shop (FMS), have been identified as No Suspected Release (**Figure ES-1**). Based on the documented absence (1986-present) of the use or release of PFAS-containing materials at Plant City RC, no areas of interest (AOIs) were identified during the PA. Evidence does not indicate that current or former ARNG activities contributed PFAS contamination to soil, groundwater, surface water, or sediment at the facility or adjacent areas. Plant City RC will not move forward in the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) process.



CLIENT	ARNG			
NOTES	Preliminary Assessment for PFAS at Plant City Readiness Center, FL			
REVISED	6/3/2019	GIS BY	MS	6/3/2019
SCALE	1:7,800	CHK BY	MG	6/3/2019
Base Map: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics,		PM	RG	6/3/2019

Summary of Findings

AECOM
12420 Milestone Center Drive
Germantown, MD 20876

Figure ES-1

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1. Introduction

1.1 Authority and Purpose

The United States (US) Army Corps of Engineers (USACE) Baltimore District on behalf of the Army National Guard (ARNG) G9, Cleanup Branch contracted AECOM Technical Services, Inc. (AECOM) to perform *Preliminary Assessments (PAs) and Site Inspections (SIs) for Perfluorooctanesulfonic acid (PFOS) and Perfluorooctanoic acid (PFOA) Impacted Sites at ARNG Facilities Nationwide* under Contract Number W912DR-12-D-0014, Task Order W912DR17F0192, issued 11 August 2017, and Modification 01 issued 30 September 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 these PFAS compounds in the environment will vary. The regulatory framework at both federal and state levels continues to evolve. The US Environmental Protection Agency (USEPA) issued Drinking Water Health Advisories for PFOA and PFOS in May 2016, but there are currently no promulgated national standards regulating PFAS in drinking water.

This report presents findings of a PA for PFAS at Plant City Readiness Center (RC) in Plant City, Florida, in accordance with the CERCLA, as amended, the National Oil and Hazardous Substances Pollution Contingency Plan (40 Code of Federal Regulations [CFR] Part 300), and USACE requirements and guidance.

This PA documents locations where PFAS may have been released into the environment at Plant City RC (also referred to as “the facility”). 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 data resources to obtain information relevant to suspected PFAS releases
- Conducted a 1-day site visit on 5 February 2019
- Interviewed current Plant City RC personnel during the site visit including Florida ARNG (FLARNG) operations staff and Plant City Fire Department Station No. 1 staff
- Completed visual site inspections (VSI) at known or suspected PFAS release locations and documented with photographs

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 include the following:

- **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 potential PFAS releases at the facility identified during the site visit.
- **Section 4** – **Emergency Response Areas:** describes areas of potential PFAS release at the facility, specifically in response to emergency situations.
- **Section 5** – **Adjacent Sources:** describes sources of potential PFAS release adjacent to the facility that are not under the control of ARNG.
- **Section 6** – **Conceptual Site Model:** describes the pathways of PFAS transport and receptors at each area of interest (AOI).
- **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

Plant City RC is located at 4004 North Airport Road, Plant City, Florida in Hillsborough County, western central Florida (**Figure 1-1**). The facility is surrounded by urban and suburban developments, including the Plant City Municipal Airport to the south. Over one third of the land use in Plant City is agricultural, and a quarter of the city is residential. Over 89% of this residential land use is in the low to medium density category (Public Works Department/Engineering Division [PWDED] 2002).

The facility contains an armory with dining, office space, and an associated vehicle storage and vehicle maintenance shop. The facility's perimeter is bounded by fences. The Plant City RC has a 99-year lease from Plant City that began in 1983.

1.5 Facility Environmental Setting

Hillsborough County lies within the Polk Upland and Zephyrhills Gap physiographic units. Land elevations vary from approximately 30 feet to over 100 feet above the National Geodetic Vertical Datum (NGVD) (PWDED 2002).

1.5.1 Geology

The facility is underlain by a thick sequence of sedimentary strata divided into an upper zone of unconsolidated sediments and a lower zone of consolidated carbonate rock.

At land surface, undifferentiated sediments including silt, sand, and clay form surficial deposits that vary in thickness from less than 10 feet in coastal areas to over 100 feet in paleokarst depressions or in sand ridges. Typical thickness of the surficial deposits varies from 20 to 50 feet. In low lying areas near lakes and streams, thin layers of organic material mix with the surficial deposits. At Plant City RC, it is estimated that the sediments range from 20 to 50 feet thick below

ground surface (bgs). Pleistocene-aged silts and clays form the base of the undifferentiated sediments (Spechler 2007).

Underlying the unconsolidated material is a series of Tertiary-aged limestones and dolomites that form the carbonate platform of peninsular Florida. The sequence of carbonate rocks includes, in descending order, the following formations: Bone Valley formation, Peace River formation, and Tampa Member of the of the Arcadia Formation of the Hawthorn Group, Suwannee Limestone, Ocala Group, Avon Park, Oldsmar, and Cedar Key Formations. A lithographic change from limestone and dolomite to a sequence of gypsiferous dolomite begins in the lower portion of the Avon Park Formation and continues into the Oldsmar and Cedar Key Formations. The top of this lithologic change marks the middle confining unit of the Floridan aquifer system. The middle confining unit is generally considered the base of the freshwater production zone of the Upper Floridan aquifer (Spechler 2007).

The Tampa Member of the Arcadia Formation of the Hawthorn Group is a tan-colored carbonate and sand mixture, which can contain variable amounts of clay. The Tampa Member can be fossiliferous and may also contain phosphate grains and chert. The Tampa Member ranges from 50 to 150 feet in thickness. The Suwannee Limestone consists of two rock types; the upper portion is tan-colored, crystalline limestone containing prominent gastropod and pelecypod molds, and the lower portion is cream-colored limestone containing foraminifera and pellets of micrite in a finely crystalline limestone matrix. The Suwannee Limestone varies from 150 to 300 feet in thickness (Spechler 2007).

The Peace River Formation is composed of interbedded quartz sand, clay, and carbonates, with variable amounts of phosphate. Siliciclastics, however, are the predominant lithology, comprising more than two-thirds of the formation. The top of the unit generally ranges from about 125 feet above to 125 feet below NGVD 1929. The Bone Valley Member is a clastic unit consisting of pebble- or gravel-sized phosphate fragments and sand-sized phosphate grains in a matrix of quartz sand and clay (Spechler 2007).

The Ocala Group contains a series of limestones that are generally soft, friable, porous, and fossiliferous. This unit is late Eocene in age and ranges in thickness from 90 to 300 feet. The Avon Park Formation comprises brown, highly fossiliferous, soft to well-indurated, chalky limestone and a gray to brown, very fine microcrystalline dolomite. The Avon Park Formation ranges from 300 to 500 feet in thickness (PWDED 2002).

1.5.2 Hydrogeology

The principal hydrogeologic units within the watershed are the surficial aquifer, the intermediate confining unit, the Upper Floridan aquifer, middle confining unit and the Lower Floridan aquifer (Trommer 2009). The discussion below focuses on the uppermost aquifer, as it is the most likely to be affected by PFAS releases.

The surficial aquifer resides within unconsolidated deposits of fine-grained sand with an average thickness of 30 feet. Due to the karst geology of the region, the thickness of the sand can be highly variable. Rainfall is the primary influence on water table elevation, with annual highs in most years occurring during the end of the wet season, and annual lows occurring near the end of the dry season. The direction of groundwater flow varies locally and is significantly influenced by the topography of the land surface (PWDED 2002).

The depth to water table at Plant City RC is approximately 3.5 to 6 feet (US Department of Agriculture [USDA] 2019). Locally at Plant City RC, the groundwater flow direction is predominantly to the north-northeast (**Figure 1-2**). There are three public supply wells within 0.5 miles of Plant City RC which range in depth from to 290 to 746 feet, and one public supply well within 1 mile of Plant City RC which has a depth of 746 feet. The public supply wells are not

immediately downgradient of the facility. There are no drinking water/public supply wells on the facility, and drinking water for Plant City RC is supplied by public utilities, City of Plant City Utility. Based on the USEPA UCMR3 data, it was indicated that PFAS were detected in a public water system above the USEPA Health Advisory level within 20 miles of the facility (**Appendix A**).

1.5.3 Hydrology

Plant City RC is within the Pemberton Creek Watershed (**Figure 1-3**). The Pemberton Creek Watershed is approximately six miles in length and receives stormwater runoff from Spartman Branch, which serves as major stormwater conveyance feature for Plant City. Spartman Branch located north of Plant City RC. This channel at one time may have been a shallow natural creek, but over the years has experienced extensive channelization through a variety of projects and man-accelerated erosion processes. Pemberton Creek watershed flows to the west after passing under Wallace Branch Road. The character of the creek is a rather flat-bottomed channel that is densely vegetated. The system passes through several wetlands (PWDED 2002).

1.5.4 Climate

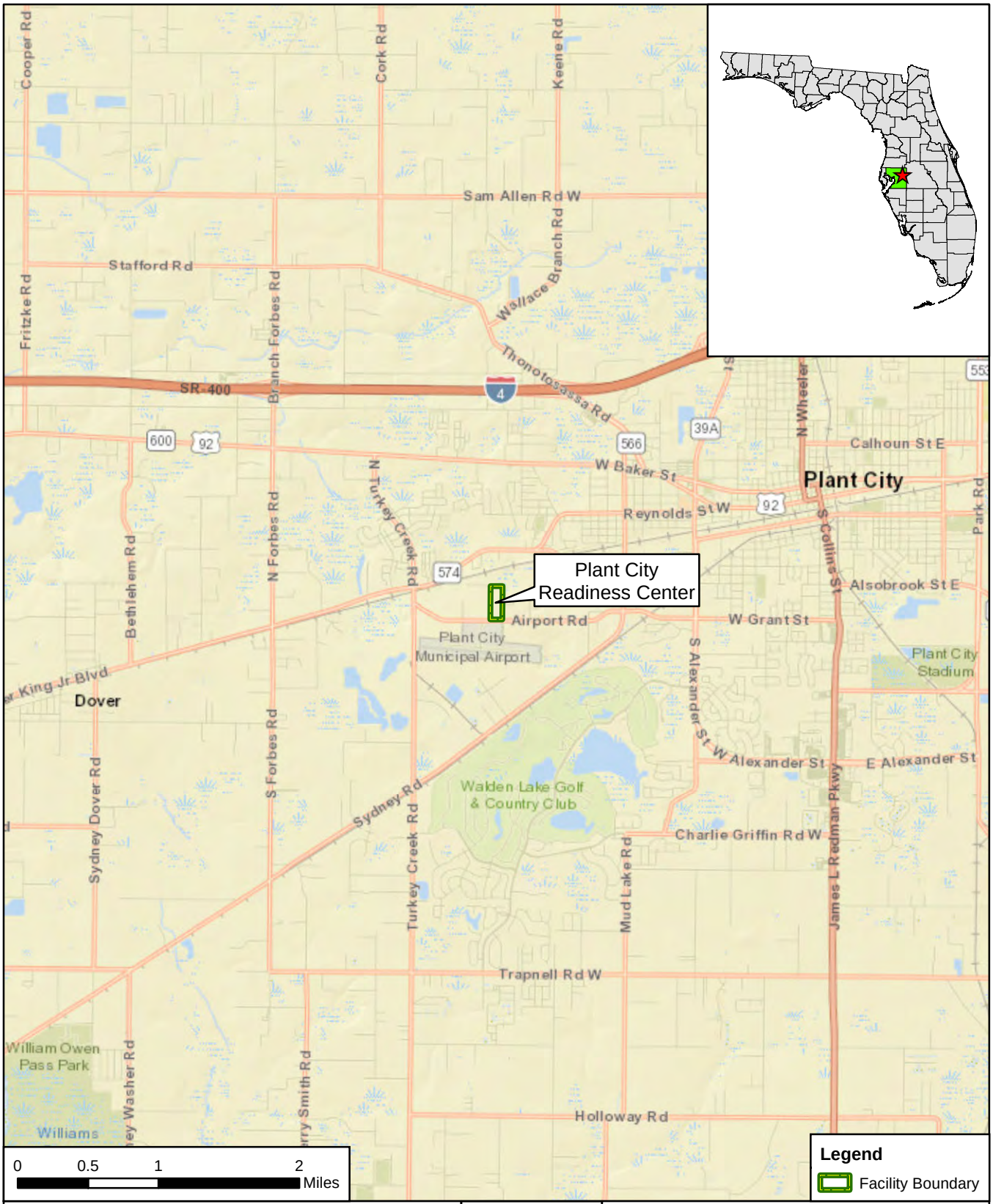
The climate of the Pemberton Creek Area watershed, and for Hillsborough County as a whole, is classified as humid subtropical. Winter rainfall is, for the most part, relatively light and is generally associated with the weak cold fronts that descend from the northern part of the country and travel south through the region (PWDED 2002).

In January, the average temperature is 70.1 degrees Fahrenheit (°F). June, July, and August have the highest average temperatures, at 90°F. The greatest mean monthly precipitation occurs in July and August. The average annual precipitation is 46.3 inches (National Oceanic and Atmospheric Administration [NOAA] 2019).

The Rainy season coincides with the occurrence of most tropical storms and hurricanes. The conditions are conducive for regular, convective afternoon and evening thunderstorms. These summer events, which can be very localized, are highly variable in both intensity and volume. The larger, normal summer storm events and those associated with tropical systems can cause flooding problems (PWDED 2002).

1.5.5 Current and Future Land Use

Plant City RC currently contains an armory with dining, office space, an outdoor vehicle storage area for the ARNG, and a vehicle maintenance shop. The armory complex includes parking areas. Access to the facility is controlled, and land use is not expected to change.



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Base Map: Sources: Esri, HERE, DeLorme, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI,		PM	RG	4/1/2019

Facility Location

AECOM
12420 Milestone Center Drive
Germantown, MD 20876

Figure 1-1

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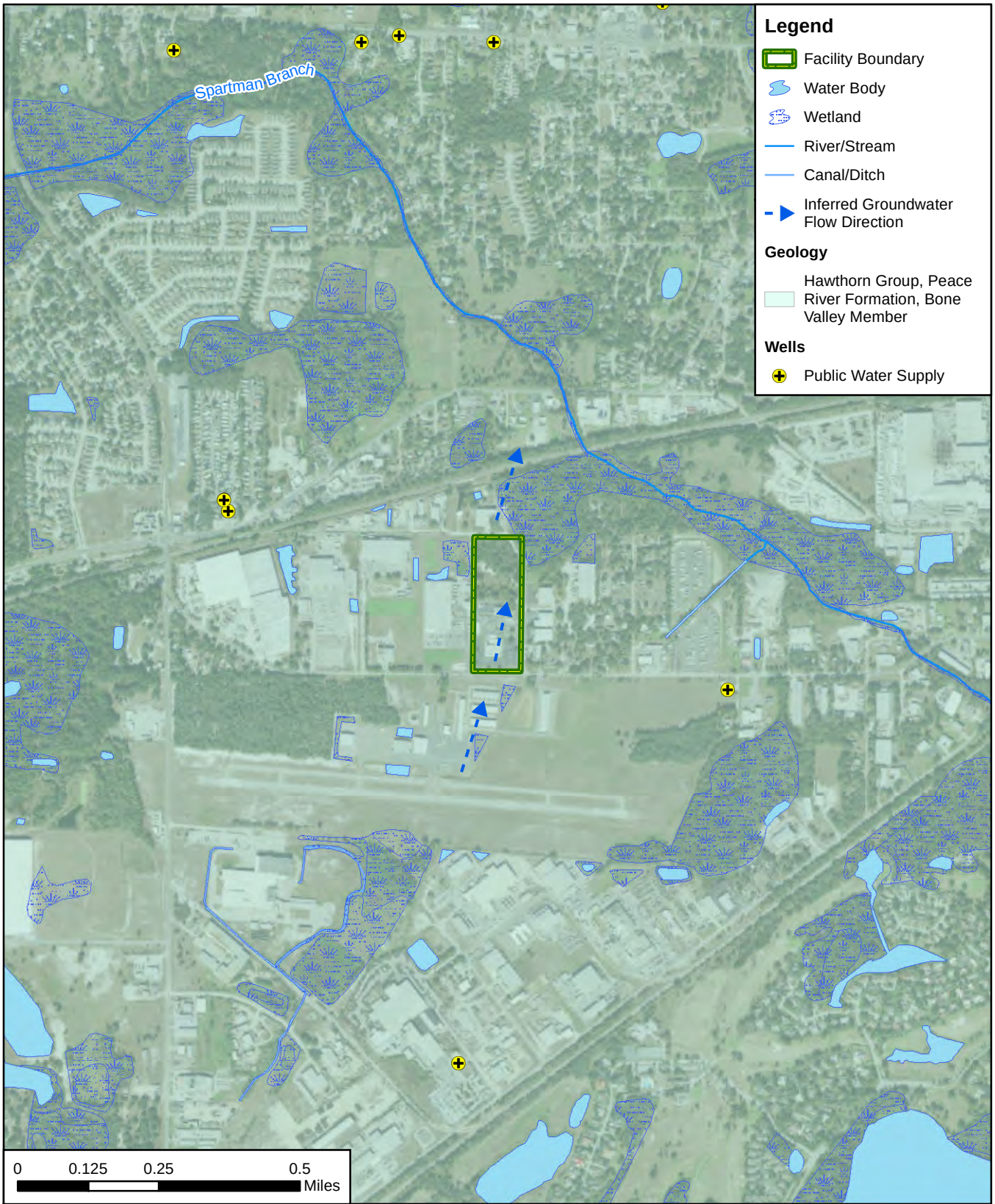

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Base Map: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics,		PM	RG	4/4/2019

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Groundwater Features

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Figure 1-2

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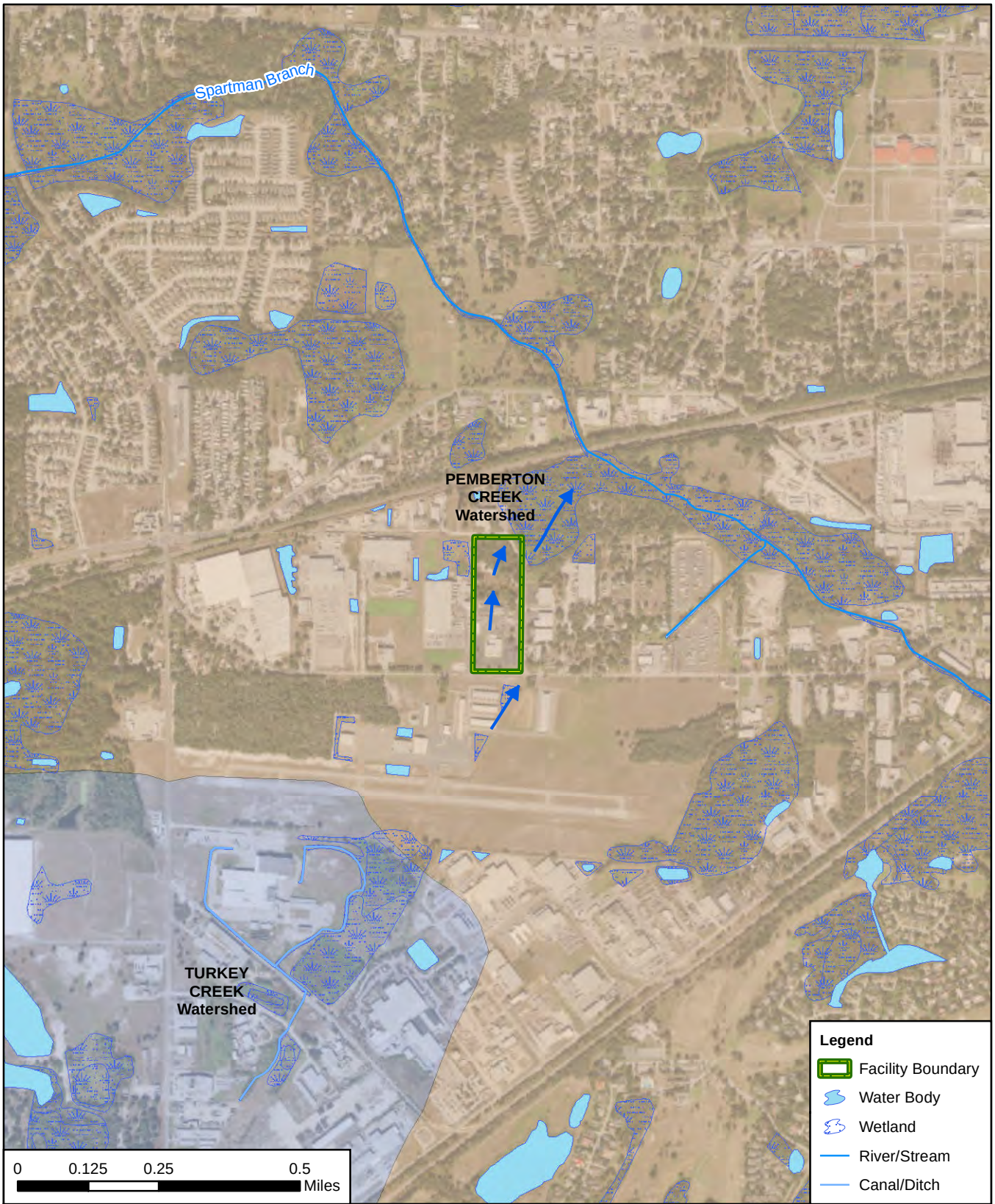

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NOTES	Preliminary Assessment for PFAS at Lakeland Readiness Center, FL			
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SCALE	1:15,840	CHK BY	MG	4/2/2019
Base Map: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics,		PM	RG	4/2/2019

Surface Water Features

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Figure 1-3

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2. Fire Training Areas

Through Environmental Data Resource Reports and interviews with Plant City RC personnel who had knowledge dating back to 1999, no FTAs were identified within the Plant City RC facility during the PA. Aerial photos covering 1991 to present show no sign of an FTA, and development of the property has remained relatively unchanged from 1991 to present. Interview records appear in **Appendix B**.

3. Non-Fire Training Areas

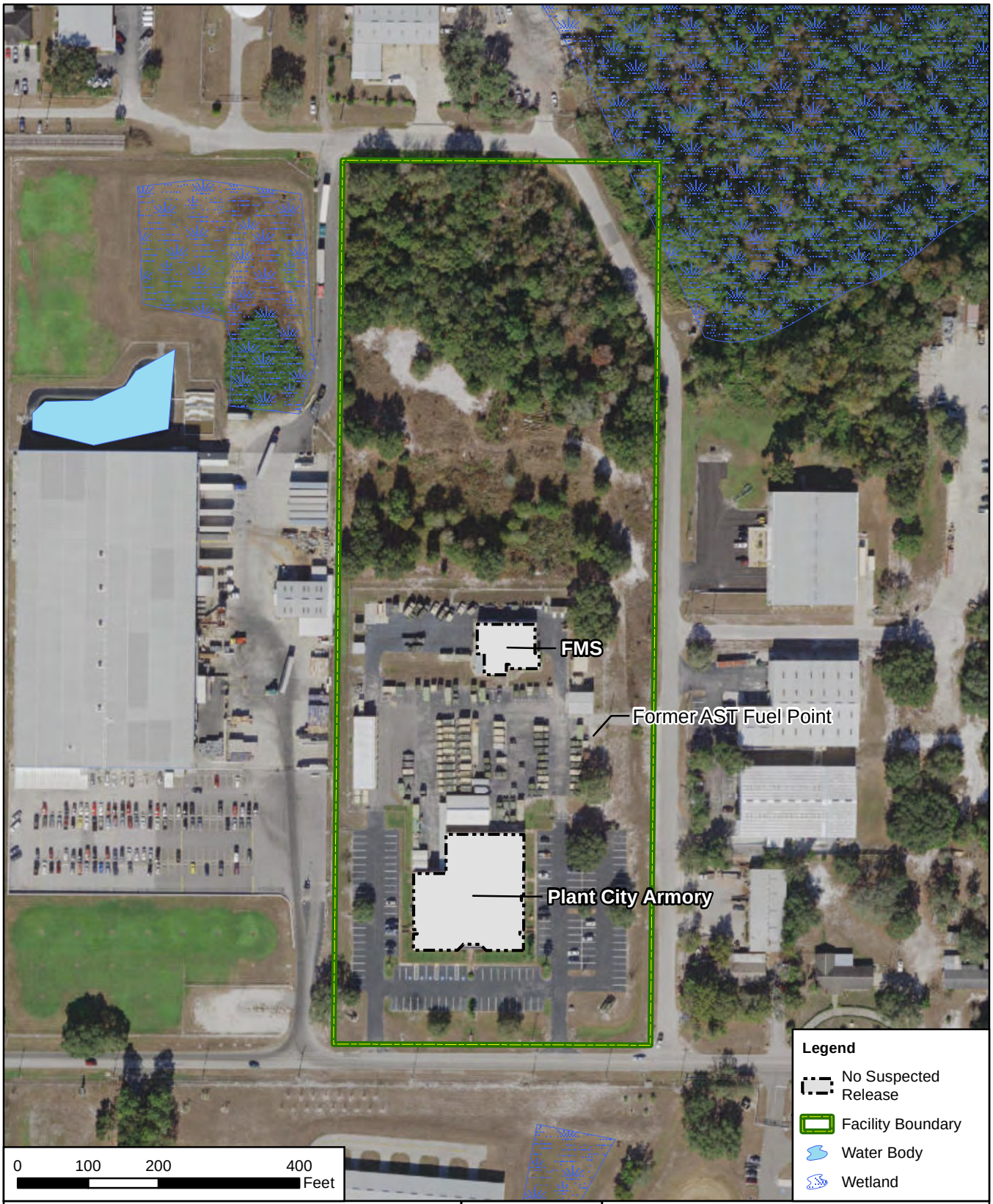
Two non-FTAs where PFAS were potentially released were also inspected during the PA. A description of each non-FTA is presented below, and the non-FTAs are shown on **Figure 3-1**. Interview records appear in **Appendix B**. Photographs appear in **Appendix C**.

3.1 Armory

The Armory is located in the center of the property (**Figure 3-1**). The geographic coordinates are 28° 0'14.57"N; 82° 9'39.66"W. The armory is used for training drills and is outfitted with a water fire suppression system that was installed approximately 4 years prior to the site visit. During the site visit, ABC Dry chemical extinguishers were found throughout the facility. The kitchen portion of the armory is outfitted with a fire suppression system. At the time of the visit and to interviewee knowledge dating back to 1999, the fire suppression system contained potassium carbonate solution. However, FLARNG confirmed no AFFF-containing materials were used at the facility since its construction. A potential PFAS release to the environment at the armory is not suspected.

3.2 Field Maintenance Shop (FMS)

The FMS is located in the north east portion of the property (**Figure 3-1**). The geographic coordinates are 28°0'17.94"N; 82°9'39.25"W. During the site visit, ABC Dry chemical extinguishers were found throughout the facility. At the time of the visit and to interviewee knowledge dating back to 2013, there have been no fires on site at the FMS. The FMS is equipped with an overhead water fire suppression system. Firetrucks were not serviced for maintenance at the FMS. A fuel point previously existed on site that was decommissioned, and the tank was removed. A potential PFAS release to the environment at the FMS is not suspected.



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Base Map: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics,		PM	RG	11/6/2019

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Non-Fire Training Areas

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Figure 3-1

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4. Emergency Response Areas

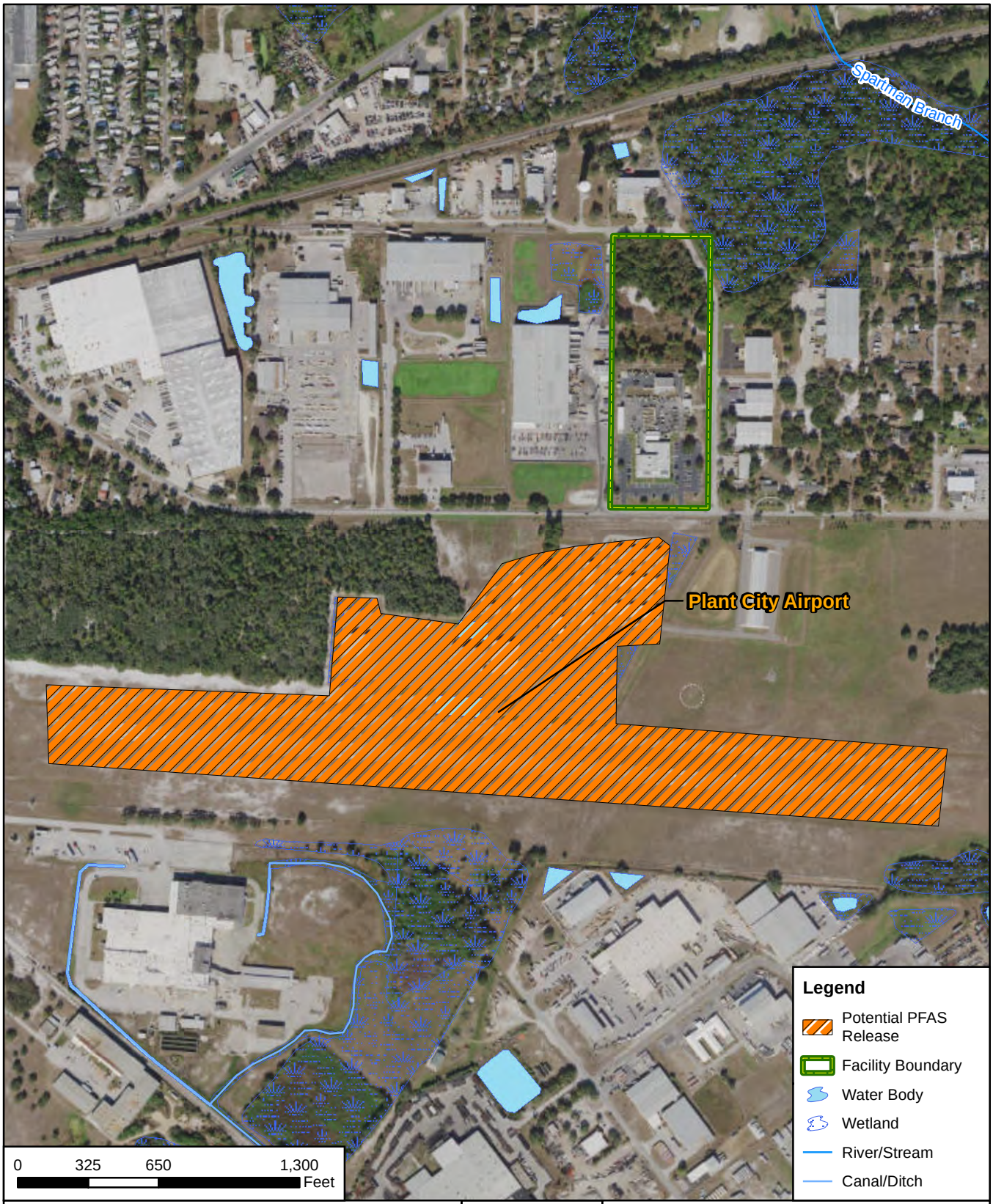
Based on interviews with FLARNG personnel whose knowledge covers 1999 to present and review of Environmental Data Resource Reports, no emergency response areas were identified within the Plant City RC facility during the PA. All emergency services for the current Plant City RC are provided by the City of Plant City Fire Department. Interview records appear in **Appendix B**.

5. Adjacent Sources

One potential off-facility source of PFAS contamination was identified during the PA. The off-facility source is shown on **Figure 5-1**.

5.1 Plant City Airport

The Plant City Airport is adjacent to the south of Plant City RC. The geographic coordinates are 28° 0'4.10"N; 82° 9'45.09"W. Plant City Fire Chief of Station No. 1 stated dish washing foams are used for simulations and training purposes. No airport hangars contain AFFF fire suppression systems. The fire department Deputy Chief recalled two emergency response events in which AFFF was used. The location, date of the events, and the amount of AFFF used is unknown.



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NOTES	Preliminary Assessment for PFAS at Plant City Readiness Center, FL			
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Base Map: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics,		PM	RG	6/3/2019

Adjacent Source

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Figure 5-1

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6. Preliminary Conceptual Site Model

Based on the PA findings, no release areas were identified, therefore, there are no AOIs at Plant City RC. A conceptual site model (CSM) identifies three components necessary for potentially complete exposure pathways related to a site: (1) source, (2) pathway, and (3) receptor. If any of these elements are missing, the pathway is considered incomplete. Based on the findings of this PA, there are no PFAS sources that originate at Plant City RC or from activities associated with Plant City RC.

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 Plant City RC. The PA findings are based on the information presented in **Appendix A** and **Appendix B**.

7.1 Findings

No PFAS releases relating to current or historical activities at Plant City RC were identified during this PA. **Table 7-1** summarizes the areas discussed in **Section 3** and shown in **Figure 7-1**, which were determined to have no suspected release:

Table 7-1: No Suspected Release Areas

No Suspected Release Area	Used by	Rationale for No Suspected Release Determination
Armory	FLARNG	Interviewees indicated the fire extinguishers located around the facility have been ABC dry chemical. The fire suppression system installed in the facility kitchen contains potassium carbonate.
FMS	FLARNG	Interviewees indicated the fire extinguishers located around the facility have been ABC dry chemical. The fire suppression system installed in the facility contains water.

7.2 Uncertainties

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 on the disposition of PFAS or the use of PFAS in training, firefighting, or other non-traditional activities, were not typically kept by the facility or available during the PA.

The conclusions of this PA are predominantly based on the information provided during interviews with personnel who had direct knowledge of the facility. Sometimes the provided information was vague. 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 was first used (1969 to present), and a reliance on personal recollection. There is also a possibility the PA 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, and potential source areas were visually inspected.

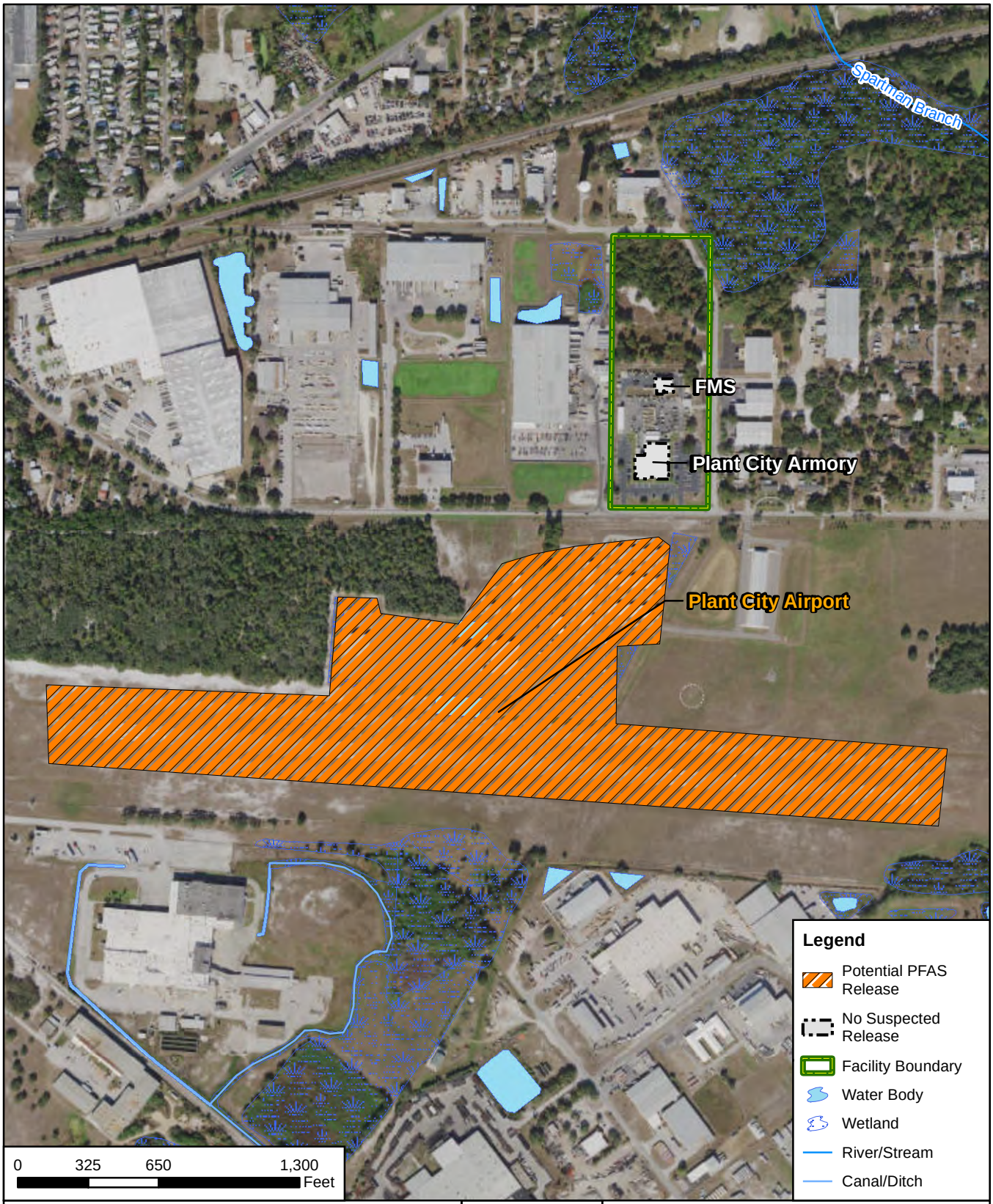
Table 7-2 summarizes the uncertainties associated with the PA:

Table 7-2: Uncertainties within the PA

Area Evaluated	Source of Uncertainty
Plant City RC	Limited information was available on the use and/or storage of AFFF at the facility, prior to FLARNG occupancy. Interviewees did not have knowledge prior to 1999, however FLARNG confirmed no AFFF-containing materials were used at the facility since its construction. EDR aerial photographs provided limited information on site development over time.

7.3 Potential Future Actions

Based on the documented absence (1986-present) of the use or release of PFAS-containing materials at Plant City RC, no AOIs were identified during the PA. Evidence does not indicate that current or former ARNG activities contributed PFAS contamination to soil, groundwater, surface water, or sediment at the facility or adjacent areas. Plant City RC will not move forward in the CERCLA process.



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SCALE	1:7,800	CHK BY	MG	6/3/2019
Base Map: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics,		PM	RG	6/3/2019

Summary of Findings

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Figure 7-1

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8. References

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United States Department of Agriculture (USDA). 2019. Custom *Soil Resource Report for Hillsborough County, Florida*: Natural Resources Conservation Service.

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

Appendix A
Data Resources

Data resources will be provided separately on CD. Data resources for Plant City Readiness Center include:

Plant City Leases, Licenses, and Permits

- 1983 Armory Board, State of Florida Lease No. 30-1983 located at Plant City Armory, Florida

Environmental Data Resources, Inc. Geocheck Report

- 2019 Environmental Data Resources, Inc. Geocheck Report for Plant City Readiness Center, Florida

Miscellaneous Data Resources

- 2002 Pemberton Creek/ Baker Canal Area Stormwater Management Master Plan: Hollsborough County Board of County Commissioners
- 2007 Hydrology of Polk County, Florida: U.S. Geological Survey Scientific Investigations Report
- 2009 Surface-Water and Groundwater Interactions along the Withlacoochee River, West-Central Florida
- 2019 Soil Resource Report for Hillsborough County, Florida: Natural Resources Conservation Service
- Plant City USEPA Unregulated Contaminant Monitoring Rule 3 Data

Appendix B
Preliminary Assessment Documentation

Appendix B.1
Interview Records

PA Interview Questionnaire - Other

Facility: PLANT CITY FC
Interviewer: [redacted]
Date/Time: 02/05/19 12:00

Interviewee: [redacted] **Title:** DEPUTY CHIEF **Phone Number:** [redacted] **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:

DEPUTY CHIEF AT STATION ; FIRE STATION NO 1
CITY OF PLANT CITY FIRE DEPARTMENT

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?

	Known Uses
• HAVE TRUCK WITH AFFF	Use
• RESPOND TO AIRPORT CALLS	Procurement
• 2018 CRASH AT AIRPORT. NO AFFF WAS USED.	Disposition
• 2 EVENTS DID REQUIRE FOAM USE	Storage (Mixed)
• NO AIRPORT HANGARS HAVE AFFF SUPPRESSION SYSTEMS.	Storage (Solution)
• SOAP SIMULATION USED FOR TRAINING	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: PLANT CITY RC
Interviewer: [redacted]
Date/Time: 02/05/19 11:10

Interviewee: [redacted]	Can your name/role be used in the PA Report? Y or (N)
Title: SURFACE MAINT MECH SUPERVISOR	Can you recommend anyone we can interview?
Phone Number: NOT PROVIDED	Y or (N)
Email: NOT PROVIDED	

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

6+ YEARS, MECHANIC AT FMS

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?

	Known Uses
• NO FOAM OVERHEAD SUPPRESSION SYSTEM IN FMS	Use
• ABC DRY CHEMICAL EXT	Procurement
• NO ENGINE FIRES OR VEHICLE FIRES	Disposition
• DEPLOYMENT VEHICLES COME TO FMS, NO FIRE EXT ON FACILITY.	Storage (Mixed)
• NO FIRE TRUCKS ON SITE AT FMS FOR MAINT.	Storage (Solution)
• NOT AWARE OF ANY CRASHES AT AIRPORT	Inventory, Off-Spec
• FUEL POINT PREVIOUSLY ON SITE. WAS DECOMISSIONED AND TANK REMOVED	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: PLANT CITY RC
Interviewer: [redacted]
Date/Time: 02/05/19 10:45

Interviewee: [redacted]	Can your name/role be used in the PA Report? (Y) or N
Title: VARIES FLARNG	Can you recommend anyone we can interview?
Phone Number:	(Y) or N STAFF SGT [redacted]
Email:	

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

[redacted] - 20 YEARS (1998/1999)

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?

	Known Uses
• WATER FIRE SUPPRESSION INSTALLED 4 YEARS AGO (2015)	Use
• DRY CHEMICAL EXT SERVICED BY OUTSIDE CONTRACTOR	Procurement
• FIELD ARTILLERY UNIT FOR LIFE OF FACILITY	Disposition
• FMS BUILDING	Storage (Mixed)
• PURPLE K OR ABC EXT.	Storage (Solution)
• COUNTY FIRE DEPARTMENT RESPONDS TO EMERGENCIES AND TO AIRPORT.	Inventory, Off-Spec
• NO FIRE TRAINING WITH FIRE DEPARTMENT	Containment
• FUELING POINT FOR FMS.	SOP on Filling
• NO FIRE TRUCK ON SITE	Leaking Vehicles
• FOOD PACKING FACILITY NEAR BY.	Nozzle and Suppression System Testing
	Dining Facilities
	Vehicle Washing
	Ramp Washing
	Fuel Spill Washing and Fueling Stations
	Chrome Plating or Waterproofing

Appendix B.2
Visual Site Inspection Checklists

Facility ST
Visual Survey Inspection Log

Recorded by: [redacted]
ARNG Contact: [redacted]
Date: 02/05/19

Site Name / Area Name / Unique ID: PLANT CITY READINESS CENTER
Site / Area Acreage:
Historic Site Use (Brief Description): FMS ; ARMORY ; FUELING STATION
Current Site Use (Brief Description): FMS ; ARMORY

1. Was AFFF used at the site/area? Y / (N)
   3a. If yes, document how AFFF 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

Significant Topographical Features:

1. Has the infrastructure changed at the site/area? (Y) / N
   1a. If so, please describe change: (*ex. Structures structures longer exist.*) FUEL STATION REMOVED
2. Is the site/area vegetated? (Y) / N
   2a. If not vegetated, briefly describe the site/area composition:
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:

Migration Potential:

1. Does site/area drainage flow off installation? (Y) / N
   1a. If so, please note observation and location: STORMWATER NORTH TO POND
2. Is there standing water or drainage issues within the site/area? Y / (N)
   2a. If so, please note observation and location:
3. Is there channelized flow within the site/area? Y / (N)
   3a. If so, please note observation and location:
4. Have man-made drainage channels been constructed within the site/area? Y / (N)
   4a. If so, please note the location of the channel:

Additional Notes

Appendix B.3
Conceptual Site Model Information

Preliminary Assessment – Conceptual Site Model Information

Site Name: PLANT CITY READINESS CENTER

Why has this location been identified as a site?

FACILITY IS A WAREHOUSE AREA WITH AN FMS

Are there any other activities nearby that could also impact this location?

AIRPORT

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? NORTH

Average rainfall? 51" PER YEAR

Any flooding during rainy season? NO

Direct or indirect pathway to ditches? NO

Direct or indirect pathway to larger bodies of water? NO

Does surface water pond any place on site? NO

Any impoundment areas or retention ponds? YES

Any NPDES location points near the site? NO

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

Preliminary Assessment – Conceptual Site Model Information

Groundwater:

Groundwater flow direction? NORTH - NORTHWEST

Depth to groundwater? UNKNOWN

Uses (agricultural, drinking water, irrigation)? N/A

Any groundwater treatment systems? NO

Any groundwater monitoring well locations near the site? WITHIN 1/2 MILE RADIUS

Is groundwater used for drinking water? NO

Are there drinking water supply wells on installation? NO

Do they serve off-post populations? N/A

Are there off-post drinking water wells downgradient YES TO NORTH WITHIN 1/4 MILE RADIUS

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? N/A

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?

N/A

3. Other? N/A

Preliminary Assessment – Conceptual Site Model Information

Identify Potential Receptors:

Site Worker YES

Construction Worker YES

Recreational User NO

Residential YES

Child YES

Ecological NO

Note what is located near by the site (e.g. daycare, schools, hospitals, churches, agricultural, livestock)?

Documentation

Ask for Engineering drawings (if applicable).

Has there been a reconstruction or changes to the drainage system? When did that occur?

Appendix C
Photographic Log

Appendix C - Photographic Log

Army National Guard, Preliminary Assessment for PFAS	Plant City Readiness Center	Plant City, Florida

Photograph No. 1

Date 2/5/2019

Time 11:37

Description:
Facility kitchen fire suppression, potassium acetate solution.

Orientation:
W

Photograph No. 2

Date 2/5/2019

Time 11:37

Description:
Facility kitchen fire suppression, potassium carbonate solution.

Orientation:
W