U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION 8
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM
STATEMENT OF BASIS

PERMITTEE:	United States Department of the Air Force (DoAF)
FACILITY NAME AND ADDRESS:	United States Air Force Academy (USAFA) Municipal Separate Storm Sewer System (MS4) 8120 Edgerton Drive US Air Force Academy, CO 80840
PERMIT NUMBER:	COR-042007
RESPONSIBLE OFFICIAL:	Brian S. Hartless, Colonel USAF Commander, 10th Air Base Wing
FACILITY CONTACT:	Robert Fant, Chief Installations Management 8120 Edgerton Drive US Air Force Academy, CO 80840 719-333-9739 Robert.fant.1@us.af.mil
PERMIT TYPE:	Federal Facility, Municipal Separate Storm Sewer Systems, Permit Renewal
FACILITY LOCATION:	8120 Edgerton Drive US Air Force Academy, CO 80840 Latitude, Longitude: 38.9903, -104.8583
DISCHARGE LOCATION(S):	Multiple outfalls to: Smith Creek, Deadmans Creek, Monument Creek, Monument Branch, West Monument Creek, and Kettle Creek
RECEIVING WATERS:	Smith Creek, Deadmans Creek, Monument Creek, Monument Branch, West Monument Creek, and Kettle Creek

1. INTRODUCTION

This statement of basis (SoB) is for the issuance of a NPDES permit (the Permit) to the United States Department of Air Force (DoAF), for United States Air Force Academy's (USAFA) municipal separate storm sewer systems (MS4). The Permit establishes discharge limitations for any discharge of municipal stormwater from USAFA. The SoB explains the nature of the discharges, and the EPA's decisions for limiting the pollutants in the stormwater, as well as the regulatory and technical basis for these decisions.

The EPA Region 8 is the permitting authority for Colorado federal facilities and provides implementation of federal and state environmental laws within Colorado.

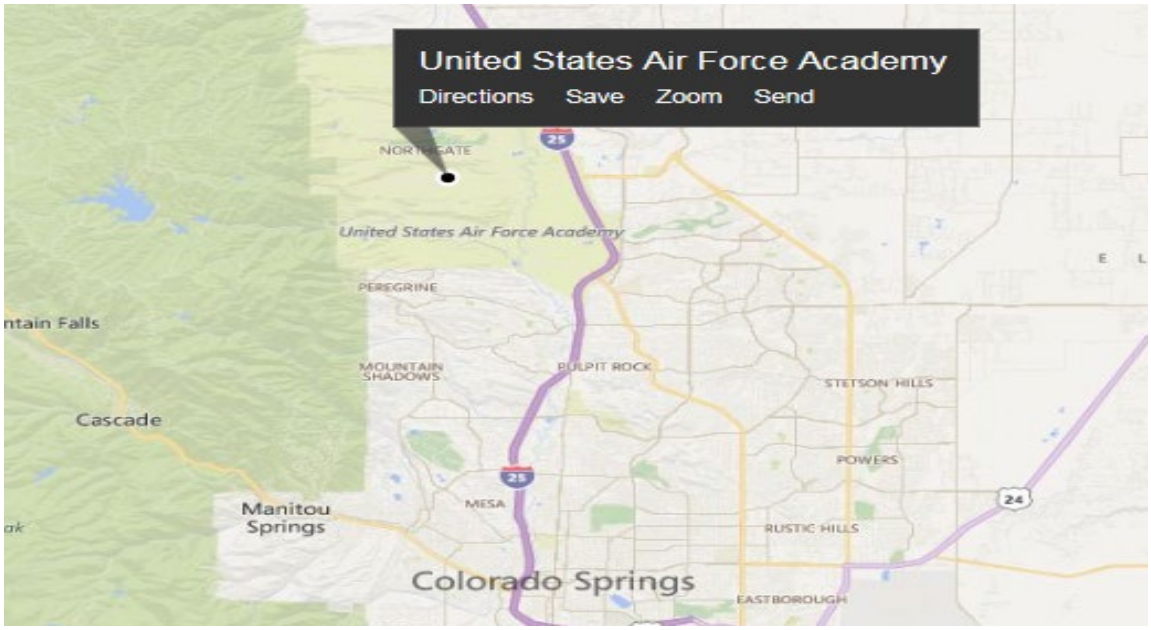
2. FACILITY BACKGROUND INFORMATION

2.1. Facility Overview

The USAFA is unique in that it serves a dual role as both an Air Force installation and a university. The university, referred to as the USAFA, is a military academy for officer candidates for the DoAF. The Air Force Installation, known as the 10th Air Base Wing, provides logistical, medical, fire response, security, civil engineering, family care, and medical support. Both the Air Force installation and university will hereinafter be referred to interchangeably as the USAFA.

The USAFA is approximately 18,000 acres and is located approximately 10 miles north of the city of Colorado Springs in El Paso County, Colorado. The facility supports a community of approximately 25,000 people including base residents, cadets, employees and contractors. The facility includes all elements of a college campus including sporting facilities and privatized housing. The facility supports numerous activities, which include but are not limited to engineering planning and support, a heating (boiler) plant, water storage, wastewater treatment, vehicle maintenance, airfield support and maintenance, grounds and road maintenance, and hazardous waste storage.

Figure 1 – USAFA Map



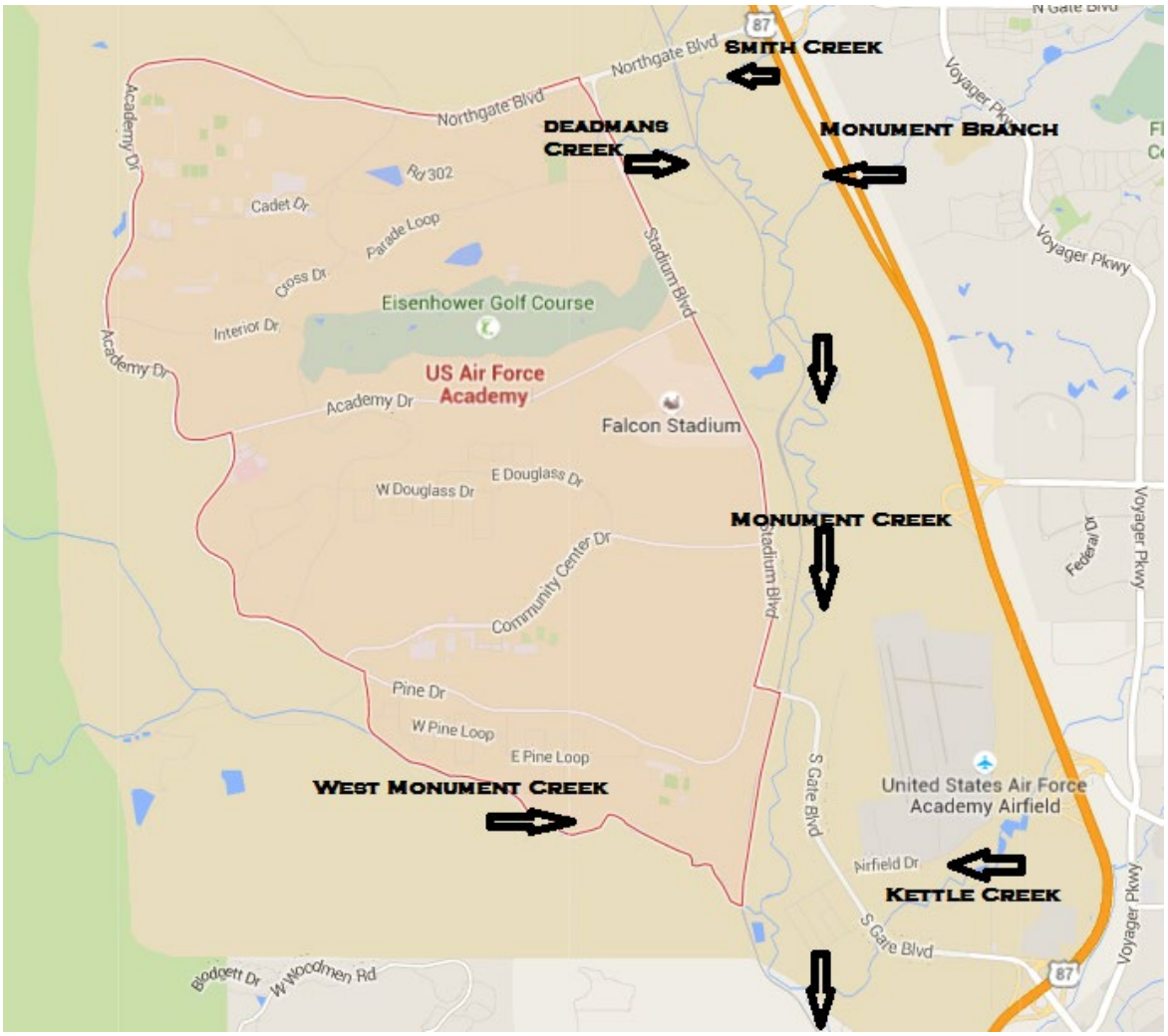
The USAFA is located approximately 10 miles north of the city of Colorado Springs and occupies an area immediately adjacent to Interstate 25.

3. WATER QUALITY CONSIDERATIONS

3.1. Description of Receiving Waters

Stormwater discharging from the facility's MS4s drains off-site into several receiving waters including Smith Creek, Deadmans Creek, Monument Creek, Monument Branch, West Monument Creek, and Kettle Creek. All of these receiving waters, when flowing, ultimately discharge to Monument Creek as it flows south from the USAFA.

Figure 2 – USAFA MS4 Receiving Waters



Monument Creek is a tributary of Fountain Creek and is included in the larger Fountain Creek Watershed. Water quality standards approved by the Colorado Department of Public Health and Environment (CDPHE) for the receiving waters from this facility are attributed to four different segments. These water body segments are defined as follows:

1. COARFO03a - All tributaries to Fountain Creek which are within the boundaries of National Forest or Air Force Academy lands, including all wetlands, from a point immediately above the confluence with Monument Creek to the confluence with the Arkansas River, except for the mainstem of Monument Creek in the Air Force Academy lands and specific listings in segment 3b

   Designated uses: Aquatic Life Cold 1, Recreation E, Water Supply, Agriculture

2. COARFO06 – Mainstem of Monument Creek, from the boundary of National Forest lands to the confluence with Fountain Creek.

   Designated uses: Aquatic Life Warm 2, Recreation E, Water Supply, Agriculture

3. COARFO10 - All lakes and reservoirs tributary to Fountain Creek which are within the boundaries of National Forest or Air Force Academy lands from a point immediately above the confluence with Monument Creek to the confluence with the Arkansas River, except for specific listings in Segment 11. This segment includes Rampart Reservoir.

   Designated uses: Aquatic Life Cold 1, Recreation E, Water Supply, Agriculture, Direct Use Water Supply

4. COARFO11 – AFA Non Potable Reservoir #1 (38.70939, -104.82928) and all lakes and reservoirs tributary to Fountain Creek from a point immediately above the confluence with Monument Creek to the confluence with the Arkansas River, excluding lakes and reservoirs within the boundaries of the National Forest and other lakes on Air Force Academy lands and the specific listings in segments 7a and 7b.

   Designated uses: Aquatic Life Warm 2, Recreation E, Water Supply, Agriculture

Water Quality Impairments:

The receiving water COARFO03a is listed as impaired for microinvertebrates and *E. coli* in the Colorado Section 303(d) List of Impaired Waters and Monitoring and Evaluation List (Colorado Control Regulation #93).

The receiving water COARFO06 microinvertebrates, temperature, manganese (dissolved) and *E. coli* in the Colorado Section 303(d) List of Impaired Waters and Monitoring and Evaluation List (Colorado Control Regulation #93).

At the time of this Permit issuance, a TMDL to address these water quality impairments has not been developed. If there is a Total Maximum Daily Load (TMDL) issued for this water which includes a wasteload allocation or specific control measure for municipal stormwater point source discharges, it will be included in the Permit upon reissuance. This Permit may also be reopened and modified prior its expiration date to include wasteload allocations or specific control measures prescribed in a TMDL.

COARFO03a	3a. All tributaries to Fountain Creek which are within the boundaries of National Forest or Air Force Academy lands, including all wetlands, from a point immediately above the confluence with Monument Creek to the confluence with the Arkansas River, except for the mainstem of Monument Creek in the Air Force Academy lands and specific listings in segment 3b.			
Listed portion:	**COARFO03a_B** West Monument Creek and tributaries			
	Affected Use	**Analyte**	**Category / List**	**Priority**
	Aquatic Life Use	Macroinvertebrates (Provisional)	5. - 303(d) list	L
Listed portion:	**COARFO03a_C** Tributaries and wetlands to Cheyenne Creek not within National Forest boundaries. Bear Creek below Gold Camp Road to the confluence with Fountain Creek. Rock Creek from the National Forest boundary to Highway 115. North Monument and Beaver creeks from the source to the confluence with Monument Creek.			
	Affected Use	**Analyte**	**Category / List**	**Priority**
	Recreational Use	E. coli	5. - 303(d) list	H

COARFO06	6. Mainstem of Monument Creek, from the boundary of National Forest lands to the confluence with Fountain Creek.			
Listed portion:	**COARFO06_B** Mainstem of Monument Creek, from the boundary of National Forest lands to the confluence with Jackson Creek.			
	Affected Use	**Analyte**	**Category / List**	**Priority**
	Aquatic Life Use	Macroinvertebrates (Provisional)	5. - 303(d) list	M
	Water Supply Use	Manganese (Dissolved)	5. - 303(d) list	L
	Recreational Use	E. coli (May-Oct)	5. - 303(d) list	H
	Aquatic Life Use	Temperature	5. - 303(d) list	M
Listed portion:	**COARFO06_C** Mainstem of Monument Creek, from the confluence with Jackson Creek to the confluence with Fountain Creek.			
	Affected Use	**Analyte**	**Category / List**	**Priority**
	Recreational Use	E. coli	5. - 303(d) list	H
	Aquatic Life Use	Macroinvertebrates (Provisional)	5. - 303(d) list	M
	Water Supply Use	Manganese (Dissolved)	5. - 303(d) list	L
	Aquatic Life Use	Temperature	5. - 303(d) list	M

4. PERMIT HISTORY

USAFA is considered a non-traditional phase II Small MS4. Prior to the issuance of the most recent individual permit, stormwater discharges from USAFA MS4 were authorized under EPA Region 8's General Permit for Storm Water Discharges from Federal Facility Small Municipal Separate Storm Sewer Systems in Colorado (COR42000F). This general permit was issued on June 23, 2003 and expired on June 22, 2008. This general permit was not reissued after expiration. The eight facilities covered under the general permit have instead been issued individual permits for discharges from their MS4s. The USAFA MS4's general permit coverage was administratively continued until issuance of an individual permit in 2016. USAFA was issued an individual permit on December 2, 2015 which was effective January 1, 2016 and expired on December 31, 2020. USAFA submitted a

timely and complete permit application on July 16, 2020, so the permit was administratively continued. This proposed Permit will be the second iteration of the facility's individual permit.

An individual permit approach was taken so that terms specific to the operations, industrial activities, and receiving water conditions of each facility could be included in each individual permit. This approach has resulted in permits with more streamlined conditions specifically tailored to the goal of reducing pollutant loading in stormwater runoff.

5. MAJOR CHANGES FROM PREVIOUS PERMIT

- The Phase II stormwater rule was challenged in petitions for review filed by environmental groups, municipal organizations, and industry groups, resulting in a partial remand of the rule. Environmental Defense Center v. U.S. Environmental Protection Agency, 344 F.3d. 832 (9th Cir. 2003) (EDC). The court remanded the Phase II rule's provisions for small MS4 general permits because they lacked procedures for permitting authority review and public notice and the opportunity to request a hearing on Notices of Intent (NOIs) for authorization to discharge under a general permit. In response to the court's remand, EPA revised its Phase II stormwater rules for Phase II permits in 2016 (i.e. Remand Rule). One of the new requirements is that all Phase II MS4 permits have "clear, specific and measurable" conditions. Therefore, all terms and conditions have changed to be "clear, specific and measurable" to comply with the Remand Rule. Additionally, the standard for reducing pollutants to the "maximum extent practicable" (MEP) has been revised (as required by the Remand Rule) to be determined by the permitting authority (EPA) rather than determined by the permittee (DoAF) in this Permit.

- Additionally, EPA added nutrient management terms and conditions to the Permit. In October 2017, the Water Quality Control Commission made changes to Colorado's nutrient management control regulations (Colorado Regulations 85 and 31.17). In response to changing regulations and water quality, both the State of Colorado and EPA have added nutrient provisions to all re-issued Phase II MS4 permits.

- USAFA shall sample quarterly for per- and polyfluoroalkyl substances (PFAS) using CWA wastewater analytical method 1633 at Outfalls 001, 002, and 003. This is because PFAS substances have historically been used at USAFA (see Section 8.1 of the SoB), and such monitoring is consistent with EPA's December 5, 2022 memo, "Addressing PFAS Discharges in NPDES Permits and Through the Pretreatment Program and Monitoring Programs."

6. FINAL PERMIT LIMITATIONS

6.1.Technology Based Limitations

NPDES permit coverage for these discharges is required in accordance with the 1987 Amendments to the Clean Water Act (CWA) and final EPA regulations for Phase II stormwater discharges (64 FR 68722, December 8, 1999). The 1987 Water Quality Act (WQA) amended the Clean Water Act (CWA) by adding section 402(p) which requires that NPDES permits be issued for various

categories of stormwater discharges. Section 402(p)(2) requires permits for the following five categories of stormwater discharges:

6.1.1. Discharges permitted prior to February 4, 1987;

6.1.2. Discharges associated with industrial activity;

6.1.3. Discharges from large municipal separate storm sewer systems (MS4s) (systems serving a population of 250,000 or more);

6.1.4. Discharges from medium MS4s (systems serving a population of 100,000 or more, but less than 250,000); and

6.1.5. Discharges judged by the permitting authority to be significant sources of pollutants or which contribute to a violation of a water quality standard.

The five categories listed above are generally referred to as Phase I of the stormwater program. In Colorado, Phase I MS4 permits have been issued by CDPHE to the cities of Denver, Lakewood, Aurora, Colorado Springs, and the highway system operated by the Colorado Department of Transportation within those cities. In Colorado, NPDES permitting authority for Federal Facilities has not been delegated to CDPHE. Therefore, EPA maintains NPDES primacy for those facilities.

Phase II stormwater regulations were promulgated by EPA on December 8, 1999 (64 FR 68722). These regulations set forth the additional categories of discharges to be permitted and the requirements of the program. The additional stormwater discharges to be permitted include:

6.1.6. Small MS4s (USAFA is considered a small Phase II MS4) as defined by 40 CFR 122.26(b)(16);

6.1.7. Small construction sites (i.e., sites which disturb one to five acres); and

6.1.8. Industrial facilities owned or operated by small municipalities which were temporarily exempted from the Phase I requirements in accordance with the provisions of the Intermodal Surface Transportation Efficiency Act (ISTEA) of 1991.

The 1987 CWA amendments clarified the fact that industrial storm water discharges are subject to the best available technology (BAT)/best conventional technology (BCT) requirements of the CWA, and applicable water quality standards. For MS4s, the CWA specifies a new technology-related level of control for pollutants in the discharges - control to the maximum extent practicable (MEP). However, the CWA is silent on the issue of compliance with water quality standards for MS4 discharges. In September 1999, the Ninth Circuit Court addressed this issue and ruled that water quality standards compliance by MS4s is discretionary on the part of the permitting authority (Defenders of Wildlife v. Browner, No. 98-71080).

The technology-based limits for this Permit are largely based on the implementation of a Stormwater Management Plan (SWMP) which addresses six minimum measures. The SWMP and additional measures included in this Permit are the means through which DoAF complies with the CWA's requirement to control pollutants in the discharges to the MEP and how EPA discretion addresses

compliance with the water quality related provisions of the CWA. The EPA considers MEP to be an iterative process in which an initial SWMP is proposed and then periodically upgraded as new best management practices (BMPs) are developed or new information becomes available concerning the effectiveness of existing BMPs (64 FR 68754). The Phase II regulations at 40 CFR §122.34 require the following six minimum pollution control measures to be included in the SWMP:

6.1.9. Public Education and Outreach on Storm Water Impacts;

6.1.10. Public Involvement/Participation;

6.1.11. Illicit Discharge Detection and Elimination;

6.1.12. Construction Site Storm Water Runoff Control;

6.1.13. Post-Construction Storm Water Management in New Development and Redevelopment; and

6.1.14. Pollution Prevention/Good Housekeeping for Municipal Operations.

The regulations specify required elements for each minimum measure and include guidance which provides additional information recommended for an adequate program. The Permit includes a number of additional requirements for each minimum measure which were derived from the recommendations of the regulations, recommendations from the State of Colorado, and from inspection/audit findings by EPA inspectors which could affect the implementation of an effective stormwater program.

The technology-based limits and a rationale for these limits are in Part 2 of the Permit.

Limitations on Permit Coverage

In Part 1.4 of the Permit, there are limitations on the types of discharges that are covered under this Permit. Parts 1.4.3 and 1.4.4 are provided to note that stormwater discharges from regulated construction activities and stormwater discharges from regulated industrial activities are not authorized under this Permit. These types of activities need to be authorized under a separate permit.

Part 1.4 of the Permit also defines several types of non-stormwater discharges which are authorized under this Permit unless the Permittee determines they are significant contributors of pollutants. If the Permittee identifies any of the categories as a significant contributor of pollutants, the Permittee must include the category as an illicit discharge.

7. MONITORING REQUIREMENTS

7.1. Monitoring

The Phase II stormwater regulations at 40 CFR §122.34(d)(1) require that small MS4s evaluate program compliance, the appropriateness of the BMPs in their SWMPs and progress towards

meeting their measurable goals. Monitoring and assessment activities are included as part of each of the minimum measures of the Permit.

7.2. Per- and Polyfluoroalkyl Substances (PFAS)

USAFA shall be required to sample per- and polyfluoroalkyl substances (PFAS) using CWA wastewater analytical method 1633 (see 40 CFR122.21(e)(3)(ii) and 40 CFR 122.44(i)(1)(iv)(B)). This is because PFAS substances have historically been used at USAFA (see Section 8.1 of the SoB), and such monitoring is consistent with EPA's December 5, 2022 memo, "Addressing PFAS Discharges in NPDES Permits and Through the Pretreatment Program and Monitoring Programs." This data will allow EPA to evaluate any needed controls in future permits to meet the state of Colorado's narrative standard prohibiting toxics, as describes in the state of Colorado's PFAS Policy 20-1. Therefore, USAFA will be required to monitor quarterly for PFAS pollutant identification. See Section 8.1 for more details.

8. MONITORING REQUIREMENTS

8.1 Per- and Polyfluoroalkyl Substances (PFAS)

Figure 3 – Location of Aqueous Film-Forming Foam (AFFF) Historic Use/Investigation Sites

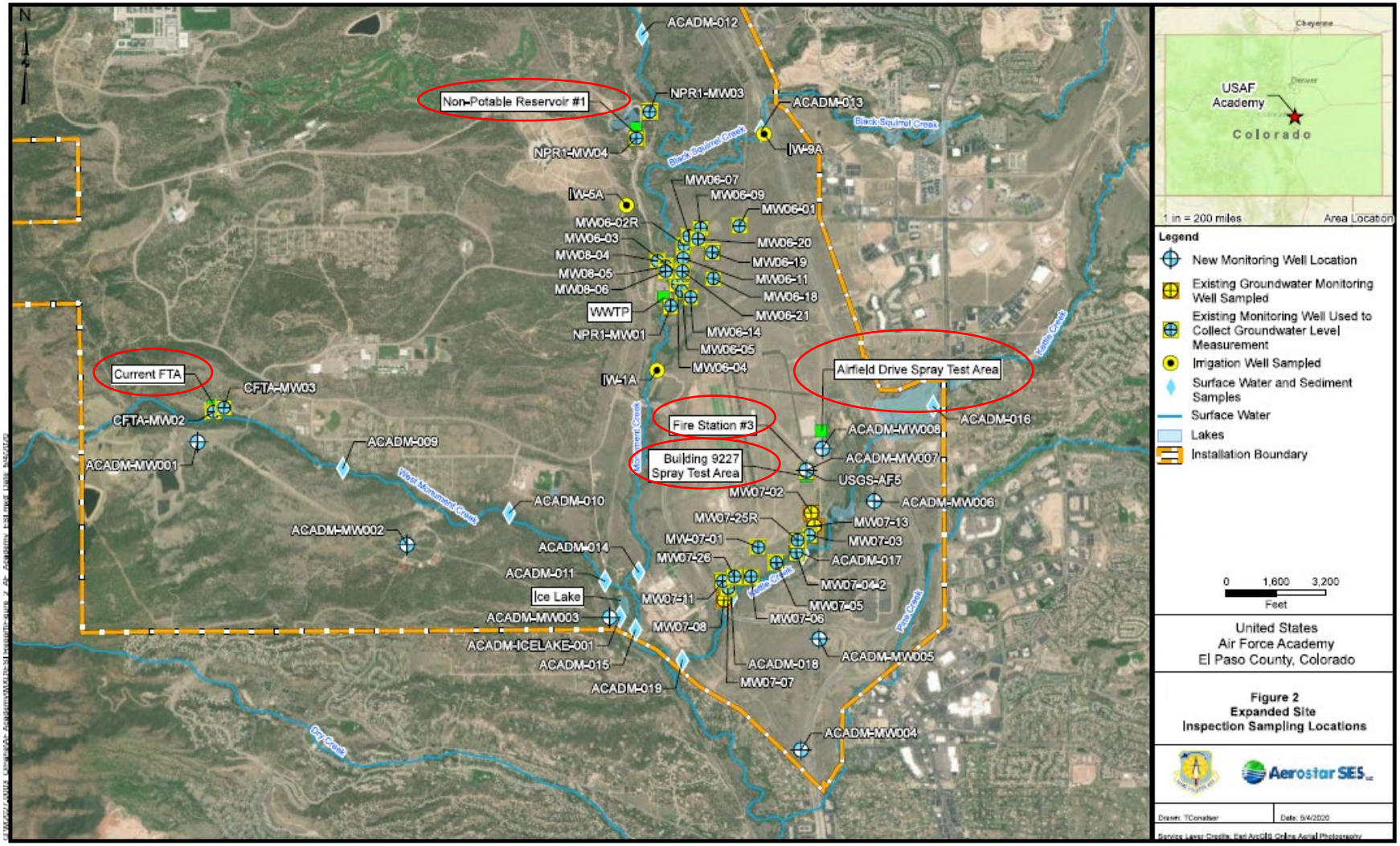


Figure 4 – **Overview of Stormwater System and Outfalls with AFFF Facilities**

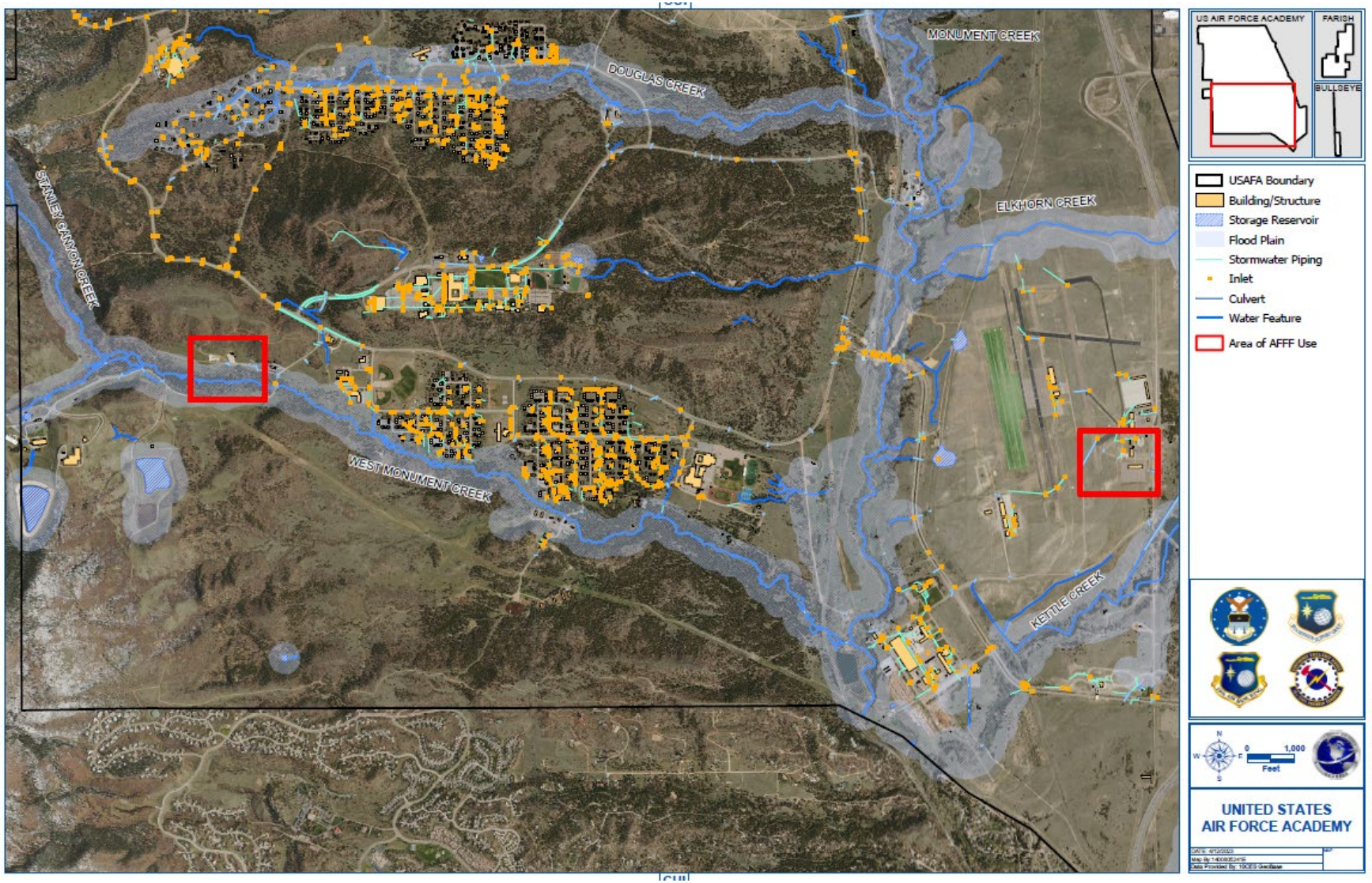


Figure 5 –AFFF Area: Fire Station #3, Building 9227 & Airfield Drive Spray Test Area

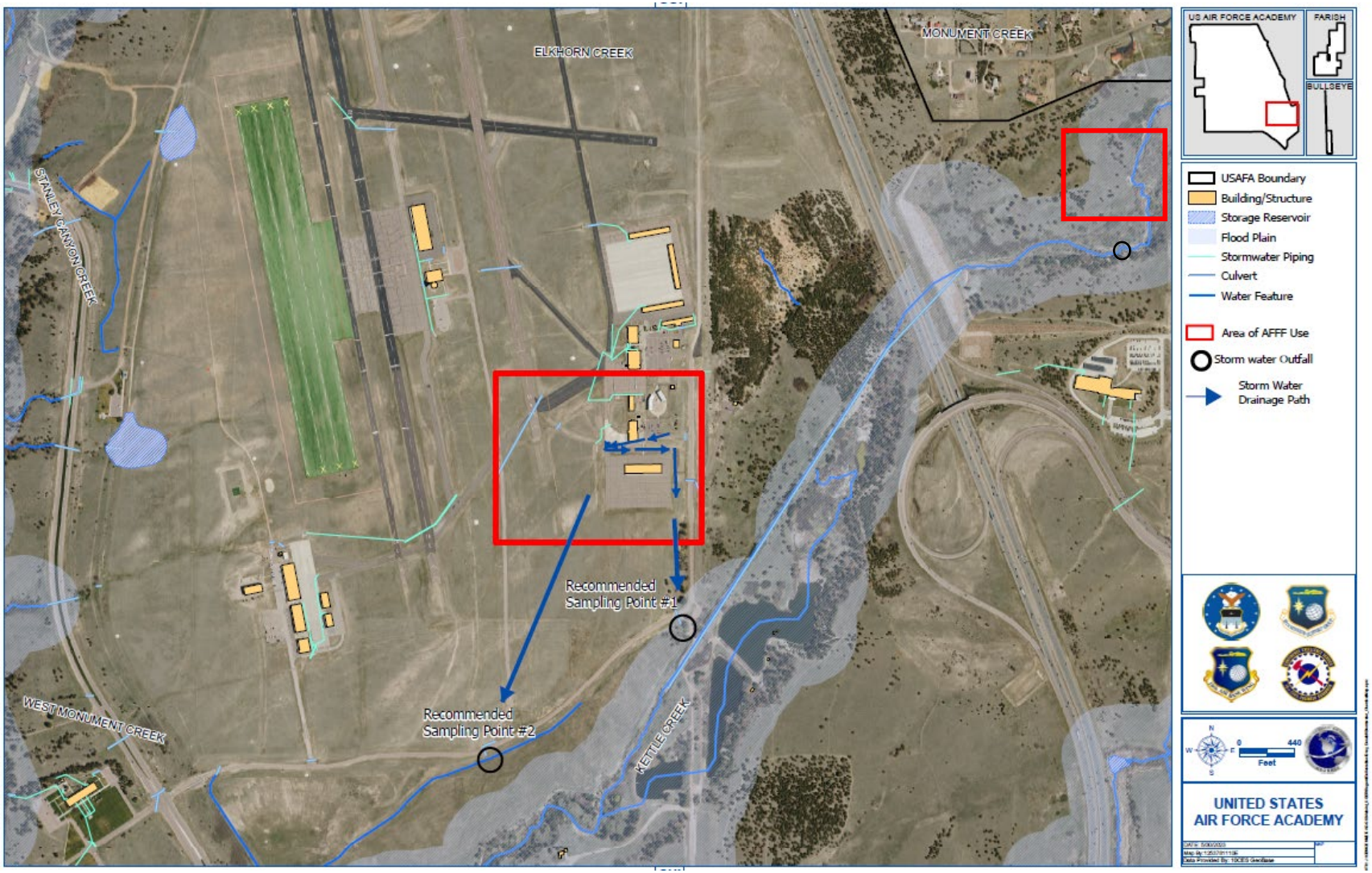
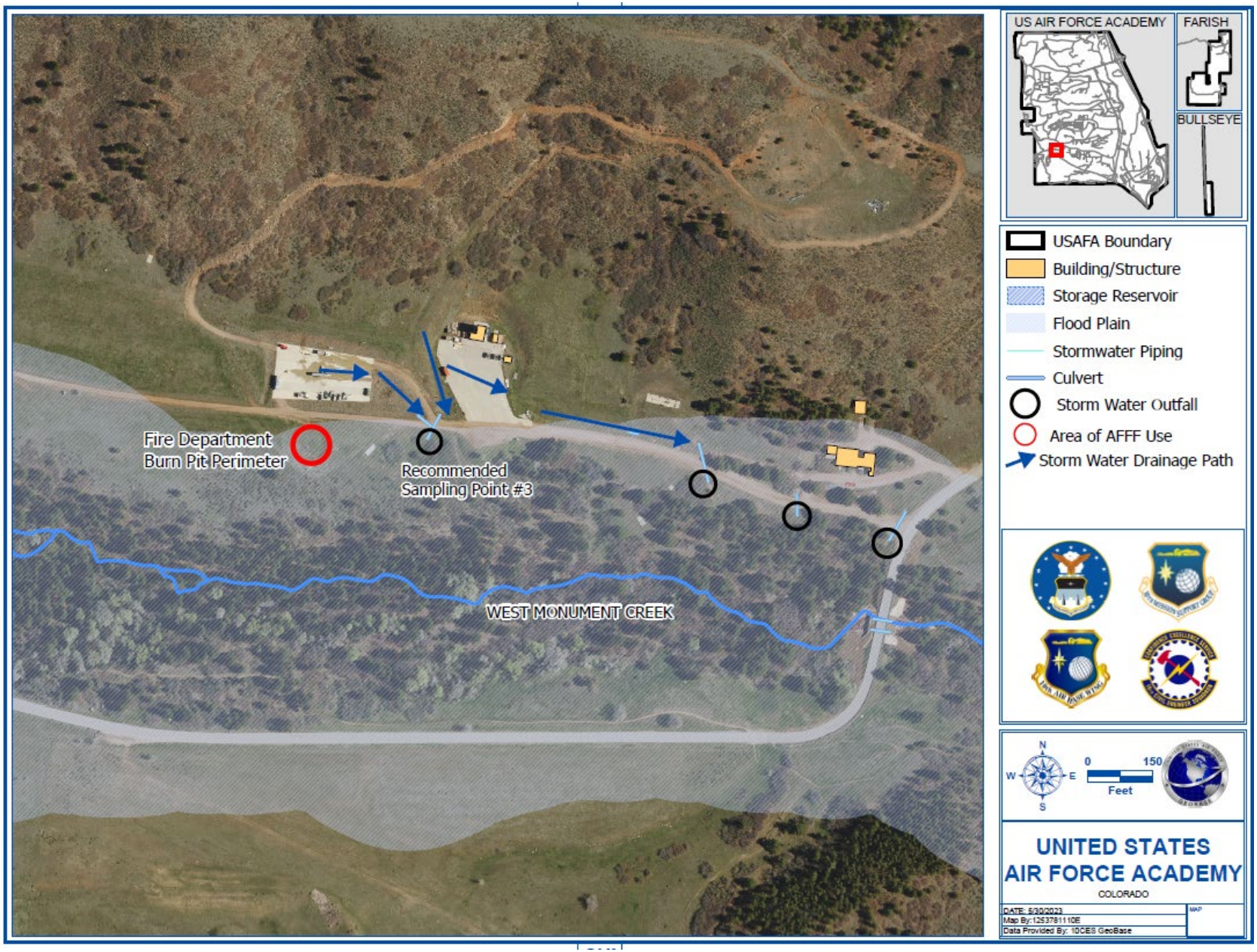


Figure 6 –AFFF Area: Current Fire Training Area (FTA)



AFFF Descriptions from the Scientific Investigation (SI):

Current Fire Training Area - AFFF was possibly used at the fire pit and at the former Cessna training area for 5 years between late 1980s and early 1990s. Up to 1,000 gallons of water could have been applied to the fire pit and the former Cessna training area as "target practice." Combined PFOS and Perfluorooctanoic acid (PFOA) concentrations were detected in groundwater at 72 ug/L (ppt), which is above current (2022) health advisory levels for PFOA and PFOS.

Fire Station #3 and Building 9227 – This site has active storage of 275 gallons of AFFF in storage area, 56 gallons in rapid intervention vehicle, and 210 gallons in Stryker. AFFF was manually added to rapid intervention vehicle and Stryker using pails via overhead filling and pumps from 55-gallon drums. Water spray testing from fire engines is conducted in the tarmac area south of Building 9227. The date on which water spray testing began in this area is unknown. Discharge from spray test activities at the Building 9227 tarmac area would likely be carried south to the Kettle Creek Lakes via overland flow or a grass-lined swale (drainage ditch) parallel to Airfield Drive. The Kettle Creek Lakes eventually discharge to Kettle Creek, which has a confluence with Monument Creek approximately 0.5 mile south of the Hazardous Waste Storage Facility. Combined PFOS and PFOA concentrations in the SI report were detected in groundwater at 13 ug/L (ppt), which is above current (2022) health advisory levels for PFOA and PFOS.

Airfield Drive Spray Test Area - A historical fire engine spray test area was identified along Airfield Drive approximately 0.25 mile north of Fire Station #3. The exact location of the engine hose discharge could not be identified, but fluid was reportedly sprayed on brush and foliage east of Airfield Drive. The Airfield Drive Spray Test Area was reportedly used during the 1980s, but no current USAFA Fire Department personnel were employed during that time. AFFF was not known to be maintained at USAFA until the late 1980s. Use of AFFF at the Airfield Drive Spray Test Area could not be confirmed but is a possible to likely scenario. This area was not sampled in the SI, as groundwater was not encountered above bedrock.

Wastewater Treatment Plant (WWTP) and Non-Potable Reservoir #1 - Fluid captured by the Fire Station #3 trench drain is gravity fed to an oil/water separator and flows to the WWTP via the sanitary sewage system. Treatment processes do not include activated carbon (PFAS removal/treatment is not part of the current system). USAFA holds another individual National Pollutant Discharge Elimination System permit for discharges to Monument Creek (Outfall 001A) and NPR #1 (Outfall 001B). The WWTP discharges to Outfall 001A (south of the WWTP) no more than once per year. Treated wastewater is typically pumped to NPR #1 but is also occasionally diverted to one of three other non-potable reservoirs (NPR #2, #3, and #4). Treated wastewater in non-potable reservoirs is used for USAFA landscaping and irrigation.

The WWTP maintains a concrete overflow pond to hold wastewater when maintenance is being performed on the treatment system. There are structural integrity concerns (cracks) associated with the overflow pond, so it is used as infrequently as possible.

Combined PFOS and PFOA concentrations were detected in groundwater at 0.111 ug/L (ppt), which is above current (2022) health advisory levels for PFOA and PFOS.

Table 1 - PFAS Monitoring Requirements For: Outfalls 001, 002, 003[c/]

Stormwater Discharge Characteristic	Frequency	Sample Type [a/]
Per- and polyfluoroalkyl substances (PFAS) µg/L [b/]	Quarterly [b/]	Grab [a/]

a/ See Definitions, Part 1, for definition of terms.

b/ The Permittee must monitor PFAS quarterly using Method 1633 and must report a PFAS monitoring result with its Annual Report for each year of permit coverage. Sampling will be required to begin one year after the effective date of this Permit.

c/ If the Permittee completes a Remedial Investigation (RI) under Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) in which PFAS sampling occurred, the Permittee may submit such sampling data in the Permittee's Annual Report. Such sampling data could be used to request a reduction in the number of PFAS sampling locations required under this Permit. The information contained in any RI will not be used for any other purpose in this Permit other than requesting a reduction in the number of PFAS sampling locations. A reduction in sampling locations may be approved by EPA and would not require additional public notice.

Table 2 – NPDES PFAS Monitoring Locations

Outfall	**Longitude**	**Latitude**	**Outfall Description**	**AOPI [a/]/PFAS Site Identifier**
001	-104.8126	38.96485	South of Airfield Drive, NW of Kettle Lake #2. Approximately 111 feet south of west entrance of Kettle Lake parking area.	Fire Station #3, Building 9227 & Airfield Drive Spray Test Area
002	-104.8182	38.9620	Southside of Airfield Drive, approximately 85 feet south of the intersection of Airfield Drive and Airfield Access Road Gate #4. Culvert is 40 feet south from the edge of Airfield Drive.	Fire Station #3, Building 9227 & Airfield Drive Spray Test Area

003	-104.8807	38.9744	Fire Fighting Training Area. Approximately 1,085 feet west of the intersection of West Monument Creek Road and Road 601. Sampling location is 65 feet from SW edge of Fire Fighting concrete pad with the tower. Approximately 40 feet from south edge of Road 601, just beyond the drainage rip rap.	Fire Burn Pit, Current Fire Fighting Training Area (FTA)

a/ AOPI is AFFF Areas of Potential Interest from the facility's Final Expanded Site Inspection Report of Aqueous Film Forming Foam Areas at United States Air Force Academy El Paso County, Colorado (2020).

8.2 Per- and Polyfluoroalkyl Substances (PFAS) Discharge Reduction BMP

The Permittee must make an effort to prevent the discharge of any PFAS-containing compounds (including AFFF) to receiving waters. As a first step, the Permittee should consider the use and storage of alternatives to PFAS-containing compounds for firefighting activities. For any activity where AFFF is used, including emergency firefighting and training activities, the Permittee must immediately clean up the AFFF as best as possible, including diversions and other measures that prevent discharges to receiving waters. The Permittee must also report the use of AFFF, and any discharges of AFFF, to EPA at the address in section 6.1 of the permit within 14 days following the event.

9. REPORTING REQUIREMENTS

8.1 Annual Report

40 CFR 122.34(d)(3) requires small MS4s to submit reports to the EPA. Annual reports are required to allow for regular evaluation of the MS4 program. See Part 4.2 of the Permit for specifics on annual reporting requirements.

10. ENDANGERED SPECIES CONSIDERATIONS

The Endangered Species Act (ESA) of 1973 requires all Federal Agencies to ensure, in consultation with the U.S. Fish and Wildlife Service (FWS), that any Federal action carried out by the Agency is not likely to jeopardize the continued existence of any endangered species or threatened species (together, "listed" species), or result in the adverse modification or destruction of habitat of such species that is designated by the FWS as critical ("critical habitat"). See 16 U.S.C. § 1536(a)(2), 50 CFR Part 402. When a Federal agency's action "may affect" a protected species, that agency is required to consult with the FWS, depending upon the endangered species, threatened species, or designated critical habitat that may be affected by the action (50 CFR Part 402.14(a)).

The U. S. Fish and Wildlife Information for Planning and Conservation (IPaC) website program was accessed on September 1, 2023 to determine federally-listed Endangered, Threatened, Proposed and Candidate Species that may be present in the portion of El Paso County, Colorado near the USAFA (Table 3).

Table 3 – Potentially Affected Species at this Location

Species	Scientific Name	Species Status	Designated Critical Habitat
Gray Wolf	*Canis lupus*	Endangered	None
Preble's Jumping Mouse	*Zapus hudsonius preblei*	Threated	
Eastern Black Rail	*Laterallus jamaicensis ssp. jamaicensis*	Threatened	None
Mexican Spotted Owl	*Strix occidentalis lucidacidentalis*	Threatened	Yes
Piping Plover	*Charadrius melodus*	Threatened	None
Greenback Cutthroat Trout	*Oncorhynchus clarkii stomias*	Threatened	None
Pallid Sturgeon	*Scaphirhynchus albus*	Endangered	None
Monarch Butterfly	*Danaus plexippus*	Candidate	None
Ute Ladies'- tresses	*Spiranthes diluvialis*	Threatened	None

10.1. Biological Evaluations and Conclusions

Biological evaluations of the potential effects of the final action on the seven listed species and their critical habitat are provided below. These biological evaluations are based on information obtained from the IPaC site and knowledge regarding the final action.

The final action is reissuance of this NPDES Permit. This is a continuation of existing operating conditions; no significant changes to habitat or discharge volumes or quality are planned or expected due to the reissuance of this Permit. Since this is a MS4 permit, there is no consumptive use, and no water depletions will result from this Permit. Permit limitations are protective of the immediate receiving water quality.

USAFA is outside of the critical habitat for all species of concern identified by IPaC, listed in Table 3 above except for Mexican Spotted Owl. There is no critical habitat listed for the Gray Wolf, Preble's Meadow Jumping Mouse, Eastern Black Rail, Piping Plover, Greenback Cutthroat Trout, Pallid Sturgeon, Monarch Butterfly, or Ute Ladies'- tresses. Except for the Pallid Sturgeon (which prefer deeper rivers with moderate to swift currents) and the Greenback Cutthroat Trout, the species listed are terrestrial species. Due to the USAFA being within the critical habitat for the Mexican Spotted Owl, EPA's determination for these species is "may affect, but is not likely to adversely affect."

Before going to public notice, a copy of the draft Permit and this Statement of Basis was sent to the FWS requesting concurrence with EPA's finding that reissuance of this NPDES Permit "may affect, but is not likely to adversely affect" the species listed as threatened or endangered in the action area by the FWS under the Endangered Species Act nor their critical habitat.

11. NATIONAL HISTORIC PRESERVATION ACT REQUIREMENTS

Section 106 of the National Historic Preservation Act, 16 U.S.C. § 470(f) requires that federal agencies consider the effects of federal undertakings on historic properties. In its initial application for MS4 permit coverage in 2003, the USAFA, working with State Historic Preservation Officers (SHPOs), certified that stormwater discharges and discharge-related activities from the USAFA MS4 would not affect a property that is listed or is eligible for listing on the National Register of Historic Places as maintained by the Secretary of the Interior. The USAFA is required to evaluate the potential effects of every new construction project through a formal impact analysis. These analyses require that all new projects are designed and maintained such that properties listed or eligible for listing on the National Register of Historic Places are not affected.

During public notice of the Permit, Colorado's State Historic Preservation Office (SHPO) was notified as an interested party to ensure that historic properties are not negatively affected by the conditions of the Permit.

12. 401 CERTIFICATION CONDITIONS

Colorado is the Clean Water Act (CWA) Section 401 certifying authority for the Permit, and Colorado provided no conditions in their Section 401 certification to EPA on September 30, 2024.

13. MISCELLANEOUS

The effective date of the Permit is January 1, 2025 and the Permit expiration date is December 31, 2029. This NPDES Permit shall be effective for a fixed term not to exceed 5 years.

Permit written by: Amy Maybach, 8WD-CWW, 303-312-7014, September 2023

ADDENDUM:

AGENCY CONSULTATIONS

On May 13, 2024, the FWS concurred with EPA's conclusion that the Permit reissuance "may affect but is not likely to adversely affect" listed species.

NEIGHBORING JURISDICTIONS

EPA conducted a neighboring jurisdiction analysis of water resources located downstream from the Facility and outside the boundaries of the State of Colorado, in accordance with 40 CFR § 121.13. On November 7, 2024, the EPA permit signatory made a negative "may affect" determination for the authorized discharges from the Facility in the neighboring jurisdiction of Kansas. The EPA documented the factors considered in this determination in the administrative record for this Permit.

PUBLIC NOTICE AND RESPONSE TO COMMENTS

EPA received joint comments from the Department of Defense on April 26, 2024, for three DOD MS4 permits (Fort Carson, Peterson Space Force Base, and Air Force Academy). Below are the comments and response to comments:

Comment 1. Overall - Update permit references to Peterson Air Force Base, Peterson AFB, PAFB, to Peterson reflect the current name of Peterson Space Force Base, Peterson SFB, PSFB.

EPA Response: EPA made this name change to the Peterson Space Force Base Permit and Statement of Basis. This comment is not appliable to the AFA Permit. EPA has made no changes in response to this comment to AFA's Permit.

Comment 2. Paragraph 2.2.6.1 and 2.2.6.5: Maintaining a detailed list of all public outreach and education dates and 2.2.6.5 activities across the installation (2.2.6.1) is an onerous new administrative burden on its own, made more so by the new requirement for "up-to-date tracking" (2.2.6.5). Request removal of these provisions, to align with the Buckley SFB permit and to avoid this administrative drain on resources that exceeds its commensurate environmental benefit.

EPA Response: EPA has removed Part 2.2.6.4 (A description of the rationale for how public outreach is provided to the target audience(s) and Part 2.2.6.5 (Up-to-date tracking of the public education and outreach provided to the target audience(s)), and changed the language in Part 2.2.6.1 from "…list of dates and activities meeting….." to "…schedule for meeting the requirements…." to be consistent with the Buckley Space Force Base (SFB) permit.

Comment 3. Paragraph 2.3.5: Request changing the requirement from investigating illicit discharges within two business days of detection to five business days. This allows more flexibility for staff, while still being more stringent than the existing permit requirement. Investigating illicit discharges quickly is a priority for the installations, but having more time accommodates personnel absences due to leave as well as to fulfil other job responsibilities away from the permitted facility. This is of particular concern at Peterson SFB, where the Water PM is also the Water PM for Cheyenne Mountain Space Force Station (CMSFS) and divides their time each week between the two installations.

EPA Response: EPA considered this request and declined to change the response time in Part 2.3.5 from two business days to five business days due to resource constraints. The proposed language is consistent with other MS4 permits such as the Buckley SFB. The requirement in Part 2.3.5 is two business days so investigations would not be required during non-business days such as weekends. EPA has made no changes in response to this comment.

Comment 4. Paragraph 2.4.5 and subparts: This section is redundant to the Construction General Permit (CGP), which is up for reissuance during these MS4 permit terms. Recommend removing the subparts and changing 2.4.5 to read "Appropriate control measures must be selected, designed, installed, implemented, and maintained to minimize all potential pollutants, such as but not limited to sediment, construction site waste, trash, discarded building materials, concrete truck washout, chemicals, sanitary waste, and contaminated soils in discharges to the MS4. Specific control measures must be implemented as required by, and in compliance with, the EPA General Permit for Discharges from Construction Activities. Control measures are also required for non-stormwater discharges not covered under the EPA General Permit for Discharges from Construction Activities that may contribute pollutants to the MS4, including construction dewatering and wash water." This will ensure that should the CGP be updated, there are no issues of conflicting or inconsistent requirements that may needlessly increase the burdens of MS4 oversight and construction compliance.

EPA Response: EPA considered this request and declined to make the changes requested. The language is consistent with other MS4 permits such as the Buckley SFB. EPA has made no changes in response to this comment. The Permittee of the MS4 is required to have an oversight role related to construction project sites within the MS4. AFA may or may not be considered an "federal operator" under EPA's General Permit for Discharges from Construction Activities (CGP) and therefore, may or may not be required to obtain their own CGP coverage for a particular construction project. This MS4 permit and the CGP are separate permits and are not required to be aligned as the roles and responsibilities are significantly different (i.e., oversight role vs. construction operator, respectively).

Comment 5. Paragraph 2.4.6.1: DoD has concerns about the administrative burden of documenting official approval of construction Stormwater Pollution Prevention Plans (SWPPPs). Request the language be revised to read as follows to reflect that the MS4 does ensure SWPPP CGP compliance without requiring formal SWPPP approval and documentation from MS4 staff: "Initial SWPPP Review: The Permittee must review site plans and SWPPPs for **all** applicable construction activities prior to the start of construction activities. If they do not meet the requirements in EPA General Permit for Discharges from Construction Activities, the Permittee shall notify appropriate personnel that land disturbing activities may not be commenced at the site."

EPA Response: EPA considered this request and declined to make the changes requested. The language is consistent with other MS4 permits such as the Buckley SFB. Documenting SWPPP approval/disapproval is a necessary function to show the outcome of SWPPP review and can be accomplished in one or more ways in conjunction with SWPPP review, as determined most expedient by the Permittee. EPA has made no changes in response to this comment.

Comment 6. Paragraph 2.4.6.1.1 through 2.4.6.1.8 and subparts: These sections and sub-bullets are related to Comment #5 above and are through redundant to the Construction General Permit (CGP), which is up for reissuance during these MS4 permit terms. Recommend deleting the sub-sections to 2.4.6.1 and relying on the proposed revisions to the language in 2.4.6.1 (Comment #5) regarding CGP compliance to ensure that should the CGP be updated, there are no issues of conflicting or inconsistent requirements that may needlessly increase the burdens of MS4 oversight and construction compliance.

EPA Response: EPA considered this request and declined to make the changes requested. The language is consistent with other MS4 permits such as the Buckley SFB. EPA has made no changes in response to this comment. The Permittee of the MS4 is required to have an oversight role related to construction project sites within the MS4. AFA may or may not be considered an "federal operator" under EPA's General Permit for Discharges from Construction Activities (CGP) and therefore, may or may not be required to obtain their own CGP coverage for a particular construction project. This MS4 permit and the CGP are separate permits and are not required to be aligned as the roles and responsibilities are significantly different (i.e., oversight role vs. construction operator, respectively).

Comment 7. Paragraph 2.4.6.3.1: Request revision from inspection every 45 days to quarterly inspections which is a more feasible timeline, particularly when many construction projects are occurring simultaneously. Presumably the 45-day timeframe is based on the Colorado Non-standard MS4 permit, but that permit allows for many exceptions to the 45-day timeframe, including for non-active construction sites in winter and to accommodate staff vacancies/absences. If a full change from 45 days to quarterly is not acceptable, request the addition of the reasonable exceptions language from the Colorado permit to allow for the same exceptions to the 45-day requirement.

EPA Response: As requested, EPA has added a new part (Part 2.4.6.3.1.1) from the Colorado Non-standard MS4 permit which states:

"Routine inspections do not apply to sites:
Individual Homes in a Residential Subdivision-Finished Home: Inspections are not required for a residential lot that has been conveyed to a homeowner ("a finished home") when all of the following criteria have been met: 1) The lot has been sold to the homeowner(s) for private residential use, 2) The lot has less than one acre of disturbed area, 3) All construction activity associated with grading the lot and building the home is completed, 4) A certificate of occupancy (or equivalent) has been issued to the homeowner, 5) The Permittee has documented that the lot is subject to this exclusion and 6) The residential development site must have a Permittee-approved site plan and still be inspected by the Permittee if there are observations or reports of discharges of sediment from disturbed areas.

Individual Homes in a Residential Subdivision-Unfinished Home: Inspections are not required for a residential lot with an unfinished home when all of the following criteria have been met: 1) The lot has less than one acre of disturbed area, 2) The Permittee has documented that the lot is subject to this exclusion, and 3) The residential development site must have a Permittee-approved site plan and still be inspected by the Permittee if there are observations or reports of discharges of sediment from disturbed areas.

Winter Conditions: Inspections are not required at sites where construction activities are temporarily halted, snow cover exists over the entire site for an extended period and melting conditions posing a risk of surface erosion do not exist. This exclusion is applicable only during the period where melting conditions do not exist. Other required minimum inspection frequencies remain applicable but do not include the days during which this exclusion applies. The following information must be documented for this exclusion: dates when snow cover occurred, date when construction activities ceased, and date melting conditions began."

Comment 8. Paragraph 2.5: Request the addition of a sub-provision to this section identical to the one in the Buckley SFB permit language, to more clearly reflect that these requirements are only for contracts initiated after the permit effective date (as is also helpfully clarified in 2.5.11.1): "Compliance Schedule: Construction projects already planned prior to the permit effective date are not subject to the Post-Construction Stormwater Control Measure Design Standards in the Part 2.5.9. These projects must still comply with the requirements of the previous permit issued in 2015. Projects planned after the effective date of the permit have a grace period of two years to comply with Part 2.5.9 to accommodate personnel training."

EPA Response: EPA agrees with this request and added the following language to be consistent with the Buckley SFB permit:

To Section 2.5.1., EPA added "See 2.5.9.3 Compliance Schedules for existing projects."

EPA added Part 2.5.9.3 "Compliance Schedule: Construction projects already planned prior to the Permit effective date are not subject to the Post-Construction Stormwater Control Measure Design Standards in Part 2.5.9. These projects must still comply with the requirements of the previous permit issued in 2016. Projects planned after the effective date of the Permit have a grace period of two years to comply with Part 2.5.9 to accommodate personnel training."

Comment 9. Paragraph 2.5.8: Request modification of the language to make it clear that only newly installed control measures need to comply with the new permit, as the language currently reads it could be misinterpreted to mean that previously installed control measures also need to meet the new permit requirements. Suggested revising the first sentence to read: "Inspect at a minimum, annually, all Control Measures planned and installed during the permit term for the purpose of meeting the Control Measure Design Standards defined in Part 2.5.9 and New Development Planning Procedures for Specific Industrial Activities defined in Part 2.5.10 to ensure that they are being maintained in a manner which meets their intended design."

EPA Response: EPA agrees to revising for clarification that only newly installed control measures need to comply with the new permit requirements. EPA has changed Part 2.5.8 to "Inspect at a minimum, annually, all Control Measures planned and installed during the Permit term for the purpose of meeting the Control Measure Design Standards defined…."

Comment 10. Paragraph 2.6.11: Request removal of this provision as redundant to outreach and education requirements in 2.2.

EPA Response: EPA agrees with this request and has removed Part 2.6.11 regarding outreach to laboratory employees.

Comment 11. Paragraph 2.6.13: Request removal of this inspection protocol provision as redundant to inspection requirements throughout the permit and to avoid confusion. Inclusion of this language in 2.6 can be misinterpreted as requiring establishment of a new inspection protocol in addition to those already required elsewhere in the permit, which does not appear to be the intent.

EPA Response: EPA considered this request and declined to remove Part 2.6.13, as this is consistent with other permits such as the Buckley SFB. Rather, EPA suggests that the Permittee use existing inspection protocols established elsewhere in the Permit to avoid confusion. EPA has made no changes in response to this comment. Due to other changes, Part 2.6.13 of the draft Permit has become Part 2.6.12 of the final Permit.