

**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, 10 <sup>th</sup> 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° N, 104.8583° W
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 system (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.

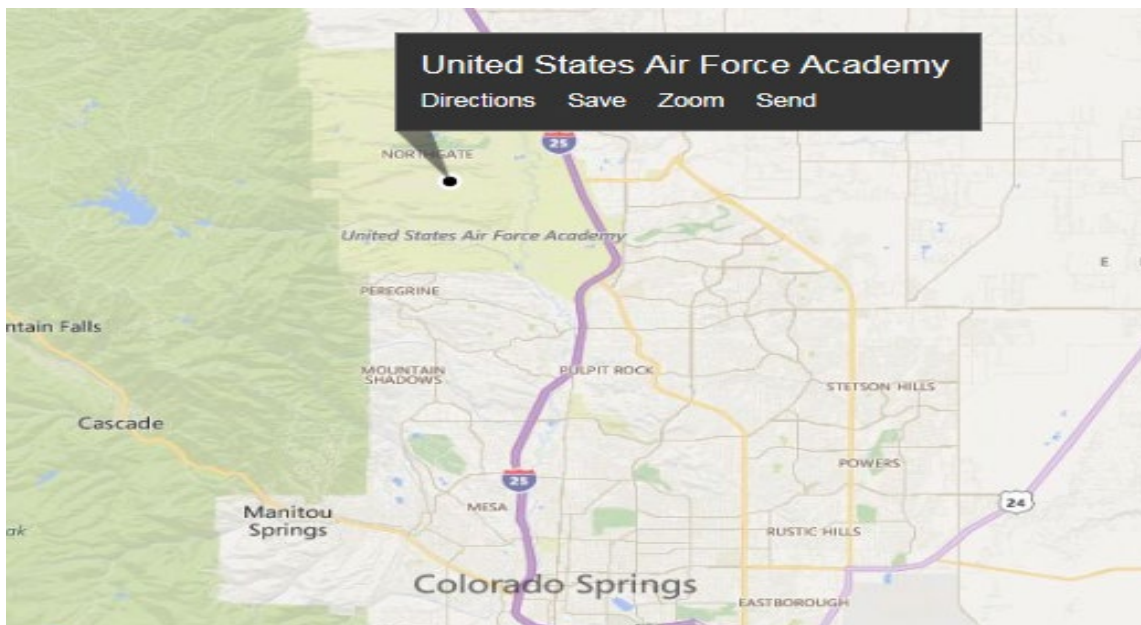
## 2. FACILITY BACKGROUND INFORMATION

### 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 10<sup>th</sup> 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 tens of thousands of people including base residents, cadets, retirees, 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**



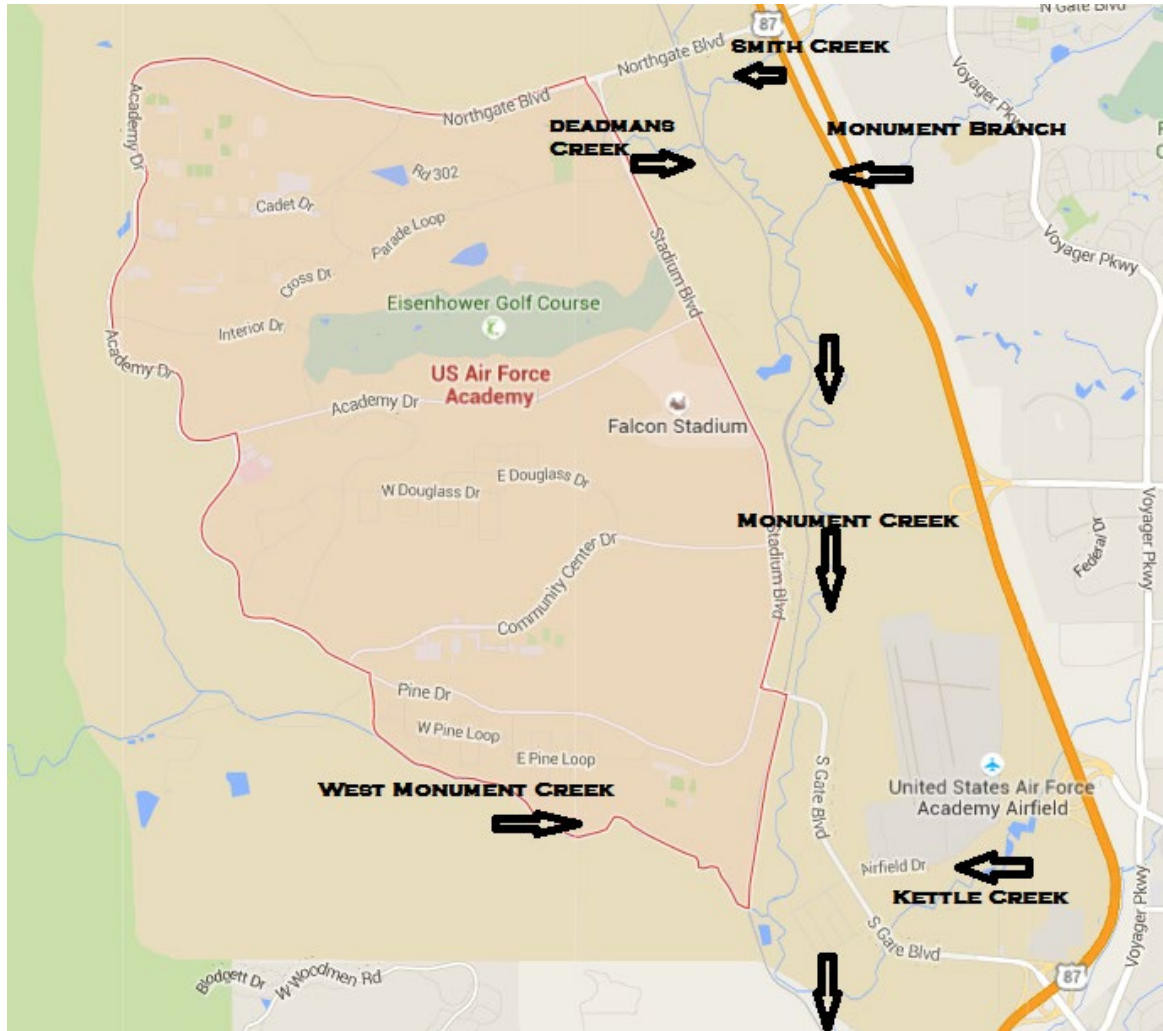
The USAFA is located approximately 10 miles north of the city of Colorado Springs and occupies an area immediately adjacent to Interstate 25.

### 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**



#### 3.1. Receiving Waters Water Quality Standards

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 – USAFA 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). See Table 1 below.

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 Total Maximum Daily Load (TMDL) to address these water quality impairments has not been developed. If there is a 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.

**Table 1 – Impaired Waters that receive runoff from the USAFA MS4**

1. Listed portion: COARFO03a\_B  
West Monument Creek and tributaries

<i>Affected Use</i>	<i>Analyte</i>	<i>Category/List</i>	<i>Priority</i>
Aquatic Life Use	Macroinvertebrates	5. - 303(d) list	L

2. 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 creek from the source to the confluence with Monument Creek.

<i>Affected Use</i>	<i>Analyte</i>	<i>Category/List</i>	<i>Priority</i>
Reactional Use	E.coli	5. - 303(d) list	H

3. Listed portion: COARFO06\_B  
Mainstem of Monument Creek, from the boundary of National Forest lands to the confluence with Jackson Creek.

<i>Affected Use</i>	<i>Analyte</i>	<i>Category/List</i>	<i>Priority</i>
Aquatic Life Use	Macroinvertebrates (Provisional)	5. - 303(d) list	M
Water Supply Use	Magnesium (Dissolved)	5. - 303(d) list	L
Reactional Use	E.coli (May-Oct)	5. - 303(d) list	H
Aquatic Life Use	Temperature	5. - 303(d) list	M

4. Listed portion: COARFO06\_C  
Mainstem of Monument Creek, from the confluence with Jackson Creek to the confluence with Fountain Creek.

<i>Affected Use</i>	<i>Analyte</i>	<i>Category/List</i>	<i>Priority</i>
Aquatic Life Use	Macroinvertebrates (Provisional)	5. - 303(d) list	M
Water Supply Use	Magnesium (Dissolved)	5. - 303(d) list	L
Reactional Use	E.coli	5. - 303(d) list	H
Aquatic Life Use	Temperature	5. - 303(d) list	M

#### 4. PERMIT HISTORY

USAFA is considered a non-traditional Phase II small MS4. The Facility was originally covered under EPA’s Small MS4 General Permit under the certification number COR04207F. This general permit was issued on June 23, 2003 and expired on June 22, 2008. This general permit was not reissued after expiration. Instead, 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) at Outfalls 001, 002, and 003 using CWA wastewater draft analytical method 1633 until method 1633 is finalized. 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.”
- In addition, a PFAS Discharge Reduction best management practice (BMP) has been added. The Permittee must make an effort to prevent the discharge of any PFAS-containing compounds (including Aqueous Film-Forming Foam, or AFFF) to receiving waters. 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 within 14 days following the event.

## 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 draft analytical method 1633 until method 1633 is finalized (see 40 CFR 122.21(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. PFAS MONITORING AND DISCHARGE REDUCTION BMP

### 8.1 Per- and Polyfluoroalkyl Substances (PFAS)

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

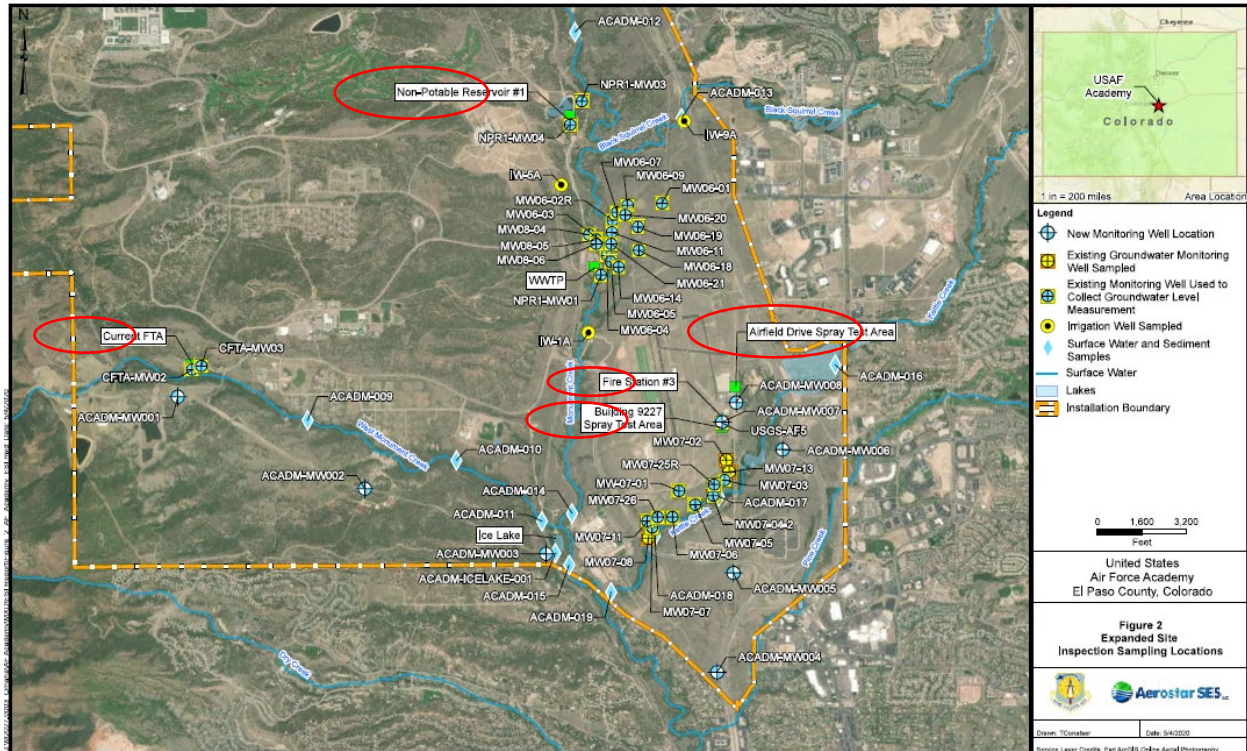
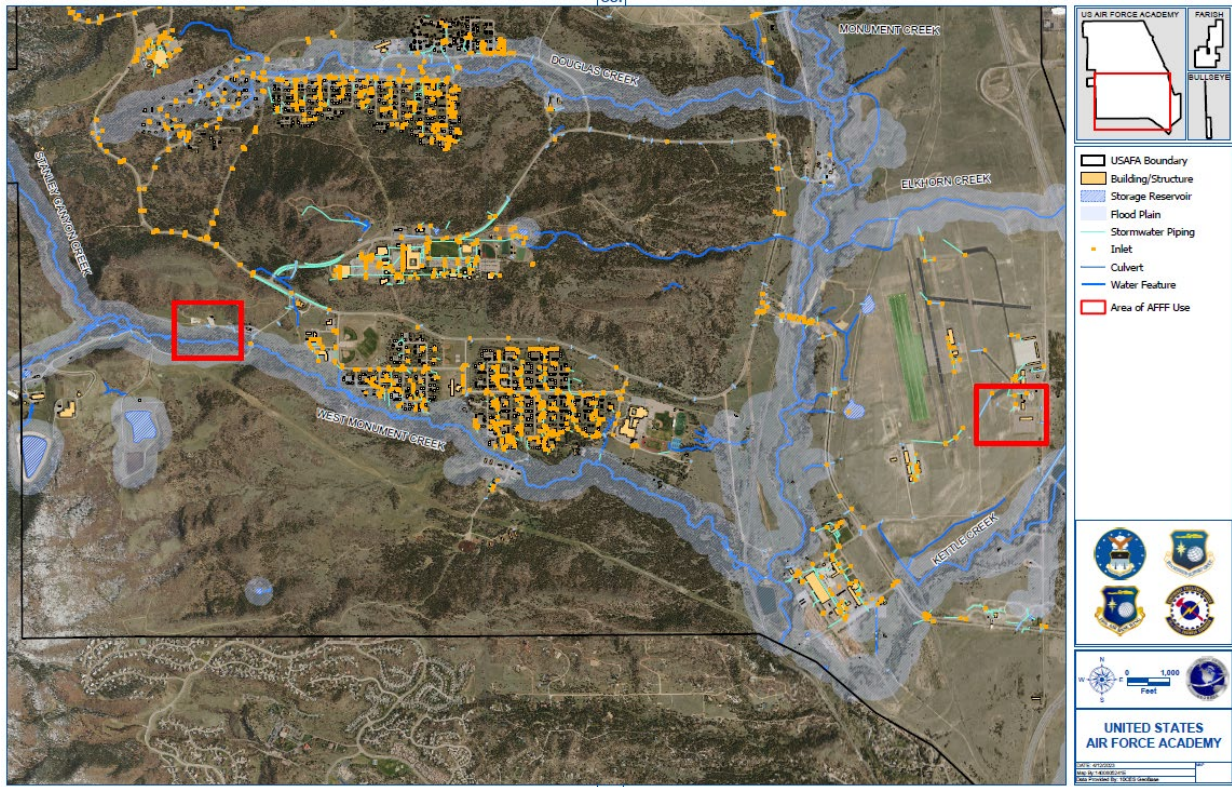
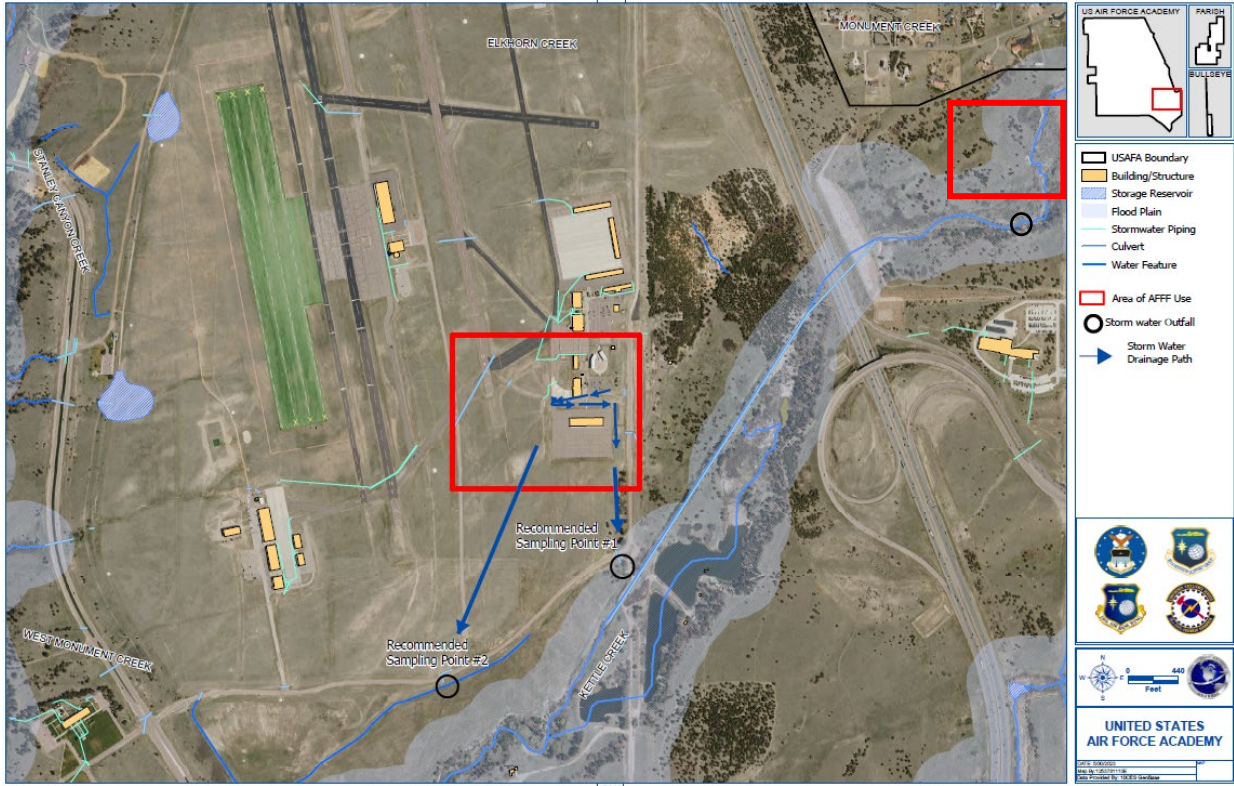


Figure 4 – Overview of Stormwater System and Outfalls with AFFF Facilities



**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 µg/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 its storage area, 56 gallons in a rapid intervention vehicle, and 210 gallons in a Stryker. AFFF was manually added to rapid intervention vehicle and a 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 µg/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 typically discharges to Outfall 001A (south of the WWTP) 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 µg/L (ppt), which is above current (2022) health advisory levels for PFOA and PFOS.

**Table 2 - PFAS Monitoring Requirements For: Outfalls 001, 002, 003<sup>c/</sup>**

Stormwater Discharge Characteristic	Frequency	Sample Type <sup>a/</sup>
Per- and polyfluoroalkyl substances (PFAS) $\mu\text{g/L}$ <sup>b/</sup>	Quarterly <sup>b/</sup>	Grab <sup>a/</sup>

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

b/ In the absence of a final 40 CFR Part 136 method, the Permittee must monitor PFAS using CWA wastewater draft analytical method 1633 (see 40 CFR122.21(e)(3)(ii) and 40 CFR 122.44(i)(1)(iv)(B)). Therefore, 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 to allow USAFA to procure contract mechanisms.

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 3 – NPDES PFAS Monitoring Locations**

Outfall	Longitude	Latitude	Outfall Description	AOPI <sup>a/</sup> /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	Fire Burn Pit, Current Fire Fighting Training Area (FTA)

			south edge of Road 601, just beyond the drainage rip rap.	
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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. The Permittee should consider the use and storage of alternatives to PFAS-containing compounds for firefighting activities. For any activity and specific event in which 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 March 22, 2024 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 4). EPA did an informal consultation with the Colorado FWS field office representative on March 15, 2024, and provided preliminary information and obtained assistance for the below species. Based upon this informal consultation, EPA determined that this permitting action has “no affect” for three listed species and "may affect, but is not likely to adversely affect" for five listed species.

**Table 4 – Potentially Affected Species at this Location**

Species	Scientific Name	Species Status	Designated Critical Habitat	Justification
Tri-Colored Bat	<i>Perimyotis subflavus</i>	Proposed Endangered	None	<p>May affect, but is not likely to adversely affect.</p> <p>This is primarily a terrestrial species, but is known to occur in El Paso country. During the winter, tricolored bats are often found in caves and abandoned mines, although in the southern United States, where caves are sparse, tricolored bats are often found roosting in road-associated culverts where they exhibit shorter torpor bouts and forage during warm nights. During the spring, summer, and fall, tricolored bats are found in forested habitats where they roost in trees, primarily among leaves of live or recently dead deciduous hardwood trees, but may also be found in Spanish moss, pine trees, and occasionally human structures.</p>
Preble’s Jumping Mouse	<i>Zapus hudsonius preblei</i>	Threatened	Yes	<p>May affect, but is not likely to adversely affect.</p> <p>This is a terrestrial species. This discharge permitting activity does not directly permit habitat disturbing activities and no changes in physical habitat/habitat modifications from permitted stormwater runoff discharges will occur. However, critical habitat does occur on AFA.</p>
Eastern Black Rail	<i>Laterallus jamaicensis ssp. jamaicensis</i>	Threatened	None	<p>No affect.</p> <p>Presently, eastern black rails are reliably located within the Arkansas River Valley of Colorado which AFA is not located within.</p>
Mexican Spotted Owl	<i>Strix occidentalis lucidacidentalis</i>	Threatened	Yes	<p>May affect, but is not likely to adversely affect.</p> <p>Owls are usually found in areas with some type of water source (i.e., perennial stream, creeks, and springs, ephemeral water, small pools from runoff, reservoir emissions). Owl foraging habitat includes a wide variety of forest conditions, canyon bottoms, cliff faces, tops of canyon rims, and riparian areas. Critical habitat does occur on AFA.</p>



Piping Plover	<i>Charadrius melodus</i>	Threatened	None	<p>No affect.</p> <p>Based on the information provided in IPAC this species only needs to be considered in this area if the project includes water-related activities and/or use (e.g., water development project or water depletion activity) in the N. Platte, S. Platte, and Laramie River Basins which may affect listed species in Nebraska. This permitted activity does not discharge into either of these specified waterbodies and is not a water development project or water depletion activity.</p>
Greenback Cutthroat Trout	<i>Oncorhynchus clarkii stomias</i>	Threatened	None	<p>May affect, but is not likely to adversely affect.</p> <p>According to USFWS field office, species known to occur in Zimmerman Lake (Poudre River watershed), Bear Creek near Colorado Springs (south of US Air Force Academy), and Herman Gulch.</p>
Pallid Sturgeon	<i>Scaphirhynchus albus</i>	Endangered	None	<p>No affect.</p> <p>Based on the information provided in IPAC this species only needs to be considered in this area if the project includes water-related activities and/or use (e.g., water development project or water depletion activity) in the N. Platte, S. Platte, and Laramie River Basins which may affect listed species in Nebraska. This permitted activity does not discharge into either of these specified waterbodies and is not a water development project or water depletion activity.</p>
Monarch Butterfly	<i>Danaus plexippus</i>	Candidate	None	<p>The monarch butterfly is a candidate species. No consultation is required for this species but was identified in the area by the IPAC search and has been considered in this review).</p>
Ute Ladies'-tresses	<i>Spiranthes diluvialis</i>	Threatened	None	<p>May affect, but is not likely to adversely affect.</p> <p>Based on the IPAC information, this species is primarily found in wetlands, moist meadows associated with perennial stream terraces, floodplains, oxbows, alluvial banks, point bars, seasonally flooded river terraces, sub-irrigated or spring-fed abandoned stream channels and valleys, and lakeshores.</p>

### 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.

As Table 4 shows, there is no critical habitat listed for the Tri-colored Bat, Eastern Black Rail, Piping Plover, Greenback Cutthroat Trout, Pallid Sturgeon, Monarch Butterfly, or Ute Ladies'-tresses within the action area. Furthermore, all of these species are terrestrial species except the Pallid Sturgeon (which prefer deeper rivers with moderate to swift currents) and the Greenback Cutthroat Trout.

The Mexican Spotted Owl and Preble's Jumping Mouse has critical habitat in the action area. The Mexican spotted owl is found in mixed-conifer forests, Madrean pine-oak forests, and rocky canyons. Nesting habitat is typically in areas with complex forest structure or rocky canyons and contains mature or old growth stands which are uneven-aged, multistoried, and have high canopy closure. In the northern portion of the range (southern Utah and Colorado), most nests are in caves or on cliff ledges in steep-walled canyons. Elsewhere, the majority of nests are in Douglas-fir trees. Since there are multiple MS4 discharge outfalls located throughout USAFA in this type of terrain/critical habitat, EPA's determination for this species is "may affect, but is not likely to adversely affect."

For the Preble's Jumping Mouse, during summer months, the most important wetland types are riparian areas and adjacent wet meadows. During the summer months, the Preble's Jumping Mouse prefer dense shrub, grass and forb ground cover along creeks, rivers, and associated waterbodies. From early fall through the spring, they hibernate underground in burrows that are typically at the base of vegetation and have a northerly aspect.<sup>1</sup> Since there are multiple MS4 discharge outfalls located throughout USAFA in this type of terrain/critical habitat, EPA's determination for this species is "may affect, but is not likely to adversely affect."

EPA's determination for five affected species is "may affect, but is not likely to adversely affect" and "no affect" for other three species (Table 4).

During public notice, a copy of the draft Permit and this Statement of Basis will be 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 above and "no affect" the species listed above.

## 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

<sup>1</sup> According to the Colorado Parks and Wildlife website accessed January 29, 2024  
[https://cpw.state.co.us/Documents/LandWater/WetlandsProgram/PrioritySpecies/Factsheet-and-Habitat-Scorecard\\_PreblesMeadowJumpingMouse.pdf](https://cpw.state.co.us/Documents/LandWater/WetlandsProgram/PrioritySpecies/Factsheet-and-Habitat-Scorecard_PreblesMeadowJumpingMouse.pdf)

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) will be 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 the following conditions in their Section 401 certification to EPA on **DATE**.

## **13. MISCELLANEOUS**

The effective date of the Permit is **TBD** and the Permit expiration date is **TBD**. 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 **[Month Day, Year]**, the FWS **[concurred/disagreed]** with EPA’s preliminary conclusion that the Permit reissuance may affect but is not likely to adversely affect listed species.

#### **PUBLIC NOTICE AND RESPONSE TO COMMENTS:**