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

PERMITTEE:	United States Department of the Army (DoA)
FACILITY NAME AND ADDRESS:	Fort Carson Municipal Separate Storm Sewer System (MS4) 1626 Evans Street Fort Carson, CO 80913
PERMIT NUMBER:	COR-042001
RESPONSIBLE OFFICIAL:	Garrison Commander 1626 Evans Street, Building 1219 Fort Caron, CO 80913
FACILITY CONTACT:	Hal Alguire, Director Public Works 1626 Evans Street Fort Carson, CO 80913 719-526-8955 Hal.k.alguire.civ@mail.mil
PERMIT TYPE:	Federal Facility, Municipal Separate Storm Sewer Systems, Permit Renewal
FACILITY LOCATION:	1626 Evans Street Fort Carson, CO 80913 Latitude, Longitude: 38.7434° N, 104.7879° W
DISCHARGE LOCATION(S):	Multiple outfalls to: B-Ditch, Clover Ditch, Infantry Creek, and Rock Creek - tributaries of Fountain Creek, Wildhorse Creek, Arkansas River
RECEIVING WATERS:	B-Ditch, Clover Ditch, Infantry Creek, and Rock Creek - tributaries of Fountain Creek, Wildhorse Creek, Arkansas River

1. INTRODUCTION

This statement of basis (SoB) is for the issuance of a NPDES permit (the Permit) to the United States Department of Army (DoA), for Fort Carson's municipal separate storm sewer system (MS4). The Permit establishes discharge limitations for any discharge of municipal stormwater from Fort Carson (FC or the Facility). 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.

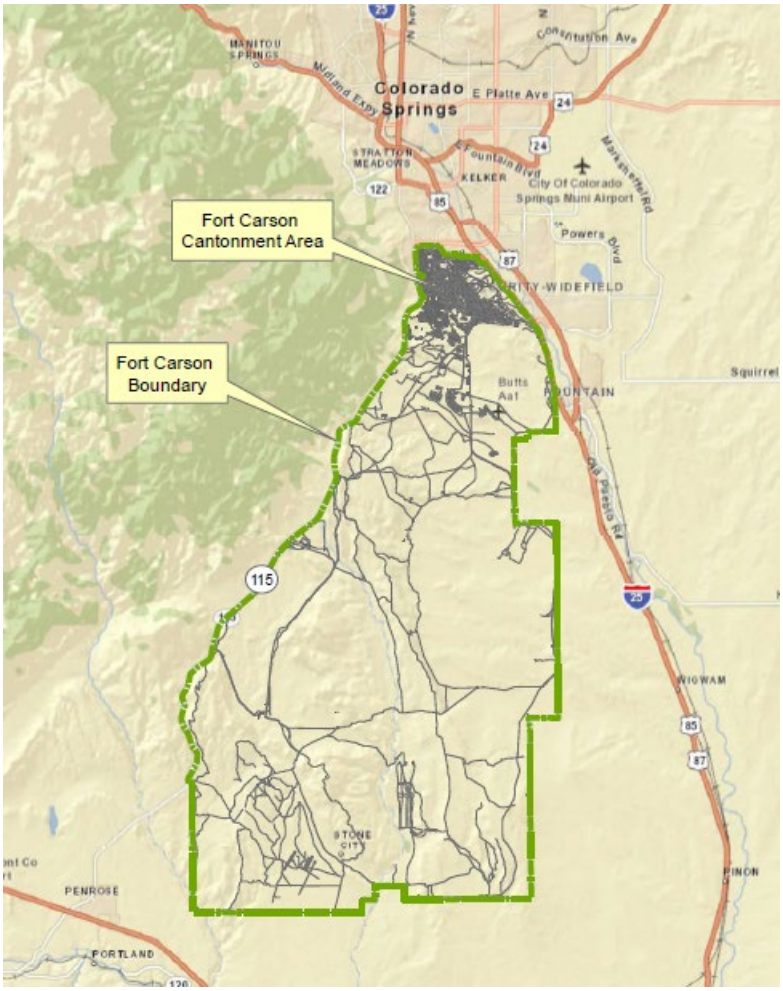
2. FACILITY BACKGROUND INFORMATION

2.1. Facility Overview

The FC military installation is located in central Colorado. The northern edge is located approximately eight miles south of Colorado Springs in El Paso County. The northern portion of the west boundary is adjacent to Colorado State Highway 115. The southern boundary is approximately 10 miles north of and parallel to U.S. Highway 50 in Pueblo County. A small area in the southwestern portion of the post is located in Fremont County. FC as a whole is divided into three areas. The majority of the developed area at FC is referred to as "the cantonment area." This area is approximately 220 square miles and includes the majority of the developed footprint (i.e., housing, industrial facilities, offices). The downrange portion of FC is utilized primarily for military maneuvers and is immediately adjacent to the cantonment area. A third area, the Pinon Canyon maneuver site, is not contiguous with the cantonment and downrange areas, and is located in Las Animas County approximately 100 miles southeast of FC. The Pinon Canyon site is utilized primarily for large scale military maneuvers. This Permit authorizes stormwater discharges from the contiguous area of FC which includes both the cantonment area and the downrange portions of the Facility. The Pinon Canyon site is not included in this Permit as it does not contain a significant developed footprint and is not contiguous with the other areas operated by FC.

The primary purpose of FC is to train troops and provide maintenance and support for vehicles and aircraft. Approximately 18,000 soldiers are stationed at FC. In addition, there is a substantial civilian workforce and many soldier families.

Figure 1 – Facility Location Map



The northern edge of FC is located approximately eight miles south of Colorado Springs in El Paso County.

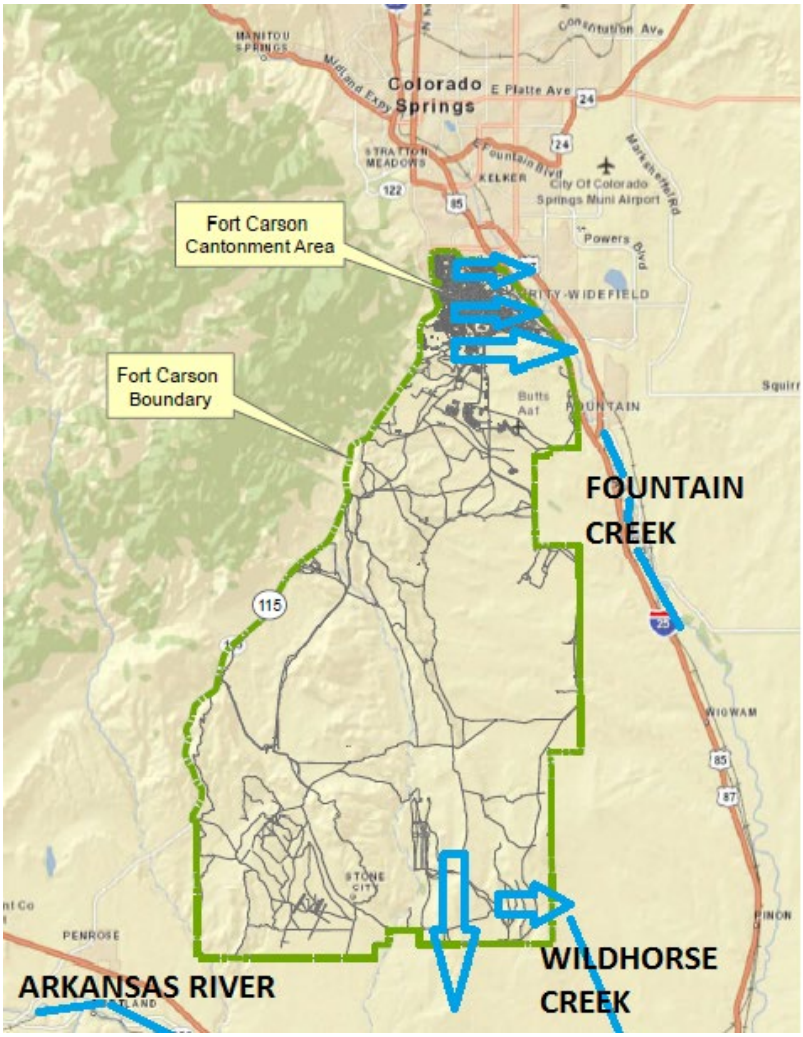
3. WATER QUALITY CONSIDERATIONS

3.1. Description of Receiving Waters

FC is located in the Fountain Creek drainage basin, within the Arkansas River drainage basin. Stormwater runoff in the northern portion of the installation flows into one of four main drainages: B-Ditch, Clover Ditch, Infantry Creek, and Rock Creek, which are all tributaries to Fountain Creek. The southern and western portions of the installation drain directly in the Arkansas River to the south. Maps of hydrology and the developed footprint of FC, as well as a detailed description of the geology impacts to these waterbodies, are available in the Facility's Stormwater Management Plan (SWMP).

The majority of the stormwater runoff from FC, including all portions of the developed cantonment area, ultimately flows to Fountain Creek. Several intermittent drainages discharge stormwater runoff from the far southern end of the undeveloped downrange area. Intermittent drainages in the southwest portion of the downrange area ultimately flow to the Arkansas River and intermittent drainages in the southeast portion of the downrange area ultimately flow to Wildhorse Creek, which is also a tributary to the Arkansas River.

Figure 2 – Receiving Waters Map



Most of the runoff from FC ultimately discharges to Fountain Creek, but a small portion of the undeveloped downrange area discharges to the Arkansas River through intermittent drainages or via Wildhorse Creek.

3.2. Receiving Waters Water Quality Standards

Water quality standards approved by the Colorado Department of Public Health and Environment for the receiving waters from FC are attributed to three (3) different segments. These water body segments are defined as follows:

1. COARFO04d - All tributaries with confluences with Fountain Creek from South Academy Blvd (CO83) to and including the unnamed tributary immediately south of Old Pueblo Road

   Designated uses: Aquatic Warm Cold 2, Recreation E, Agriculture

2. COARMA04a – Mainstem of Wildhorse Creek from the source to the confluence with the Arkansas River.

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

3. COARUA14d – All tributaries, including wetlands, to the Arkansas River and Pueblo Reservoir from the inlet to Pueblo Reservoir to the Colorado Canal headgate

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

Two of the three waterbody segments which receive stormwater runoff from the FC MS4 are listed as impaired in the Colorado Section 303(d) List of Impaired Waters and Monitoring and Evaluation List (Colorado Control Regulation #93); see Table 1 below.

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 to its expiration date to include wasteload allocations or specific control measures prescribed in a TMDL.

Table 1 - Impaired Waters that receive runoff from the FC MS4

1. Listed portion: COAR004d_A

All tributaries with confluences with Fountain Creek from South Academy Blvd (CO83) including the unnamed tributary immediately south of Old Pueblo Road (38.585843, -104.669591), including tributaries and wetlands, expect for Little Fountain Creek and its tributaries and wetlands, and specific listings in segments 3a, 5a, and 5b. All tributaries with confluences with Fountain Creek from a point immediately above University Blvd (CO47) (38.312846, -104.590524) to the confluence with Arkansas River.

Affected Use	*Analyte*	*Category/List*	*Priority*
Reactional Use	E.coli	5. 303(d) list	H

2. Listed portion: COAR004a_A
Mainstream of Wildhorse Creek from the source to the confluence with the Arkansas River.

Affected Use	*Analyte*	*Category/List*	*Priority*
Reactional Use	E.coli	4a. TMDL	NA

Prior to development of a TMDL, it is important to evaluate relative contributions of pollutants from all MS4s which could cause or contribute to a violation of the water quality impairment.

In order to address the impacts to receiving waters from the FC MS4, FC conducted a multi-year monitoring effort. Reports from these monitoring efforts are available in the permit administrative record and include a Benthic Macroinvertebrate Study and an associated Streambank Stabilization Report. These reports provide information about stressors and the influences of different types of disturbances within the base. These data, coupled with sampling data from FC wastewater treatment plant process water flows and data from stormwater runoff collected from industrial facilities, may possibly provide data in the development of a TMDL. Should the development of a TMDL establish wasteload allocations for the FC MS4, this Permit contains provisions in Part 5.15 which allow the Permit to be reopened and modified to include appropriate effluent limits or other appropriate requirements.

4. PERMIT HISTORY

FC 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 COR04201F. On April 30, 2009, FC was issued an individual permit (COR042001) which replaced the certification under the general permit. FC was issued a second iteration of this individual permit on December 2, 2015 which was effective January 1, 2016 and expired on December 31, 2020. FC submitted a timely and complete permit application on October 15, 2020 so the permit was administratively continued. This proposed Permit will be the third iteration of the FC's individual permit.

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 (DoA) 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 added nutrient provisions to all re-issued Phase II MS4 permits.

- The Permittee shall sample quarterly for per- and polyfluoroalkyl substances (PFAS) using CWA wastewater draft analytical method 1633 until method 1633 is finalized (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 the Facility (see Section 8.2 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, the Permittee will be required to monitor quarterly for PFAS pollutant identification. See Section 7.2 of the SoB for more details.

- 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 (FC 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. 9871080).

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 DoA 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)

Aqueous Film-Forming Foam (AFFF) Descriptions from the DoA's FC Scientific Investigation (SI):

AFFF was historically used and stored at several locations on FC for firefighter training activities. Areas of Potential Interest (AOPIs) were determined based on these activities and sampled in 2019 by DoA or their contractors in order to identify the potential threat to off post human receptors downgradient of the Base.

Historical fire training activities were conducted at the Butts Army Airfield (BAAF) Former Fire Training Area (FFTA) The FFTA was located approximately 80 feet east of the BAAF Sewage Treatment Lagoons and 400 feet southeast of the Former Used Waste Oil Tank at Building 9620. The FFTA was used by fire fighters at the Facility for training activities (potentially every two weeks) from the 1960s (exact date unknown) through December 1993. Training activities consisted of filling a basin with flammable liquids, igniting the liquids, and using water and AFFF to extinguish the fire.

The FFTA consisted of a concrete basin, a flammable storage area, and an oil/water separator. Fire training activities were conducted in the concrete basin, which was approximately 50 by 50 feet in area and 1.5 feet deep. The concrete basin was constructed in 1972 and was demolished in July 1996. Prior to construction of the concrete basin in 1972, the fire training exercises were conducted in an unlined earthen pit located at the site. The former oil/water separator was located adjacent to and west of the concrete basin at the FFTA. It received the water, AFFF, and residual fuel mixture after the fire was extinguished during firefighter training exercises.

In addition to AFFF use at the FFTA, AFFF was historically stored and/or released at several locations at the Facility, as follows:

- **Former Nozzle Test Area** - Nozzle testing was conducted once per week from approximately the 1970s to 1991 with AFFF equipment near the Former Fire Station (Building 9600) located adjacent to the airfield.

- **Building 9608** is a former temporary storage facility at BAAF where an unknown quantity of an unknown type of AFFF contained in blue 55-gallon barrels was stored. In 2018, the barrels were turned in to the Facility's DPW for disposal. Building 9608 has been demolished, and currently Hangar 9680 exists at this location, which does not contain AFFF in its fire suppression system. There are no known releases of AFFF from former Building 9608 while it was in storage.

- **Hangar 9633** at BAAF contained 2,000 gallons of AFFF in the fire suppression system, which was removed in July/August 2018 under contract W9128F-15-D-0034. There are no known releases of AFFF from Hangar 9633 prior to removal.

- **Hangar 9660** at BAAF is the unmanned aerial vehicle hangar at BAAF that contained an unknown quantity of high-expansion foam (ANSUL Jet-X 2% High Expansion Foam

Concentrate) in the fire suppression system. In 2017 the foam contained in the fire suppression system was released into the hangar and filled the hangar up to approximately 5 feet in height. The foam dissipated quickly and drained into a lined holding pond located at BAAF, which is connected to all the fire suppression systems on BAAF.

- **Building 8110** - Foam Storage location historically housed fire trucks with AFFF storage until 2018.

- **ARNG Building 1982** - Foam Storage location historically housed fire trucks with AFFF storage until 2018.

- **Other AFFF Releases** –
  - Mass casualty training was completed periodically with a C130 aircraft at BAAF. The exact location of this training is unknown.
  - AFFF was reportedly used at the refueling site in the northwestern corner of BAAF in response to a helicopter fire in December 1991. The type and quantity of AFFF used is unknown.

Perfluorooctane sulfonate (PFOS), perfluorooctanoic acid (PFOA), and/or perfluorobutanesulfonic acid (PFBS) were detected in groundwater above the Office of the Secretary of Defense (OSD) risk screening level of 40 ng/L at all of the AOPI sites listed above. Additionally, the FC Golf Course is nearby AOPIs/PFAS source areas, therefore it was also sampled for the SI. The SI Report found soil levels above levels of detection (LOD) but below soil risk thresholds. However, groundwater was not encountered between 25 to 30 feet at the golf course and therefore, a sample was not collected.

Figure 3 – Location of AFFF Historic Use/Investigation Sites and Areas of Potential Interest (AOPIs)

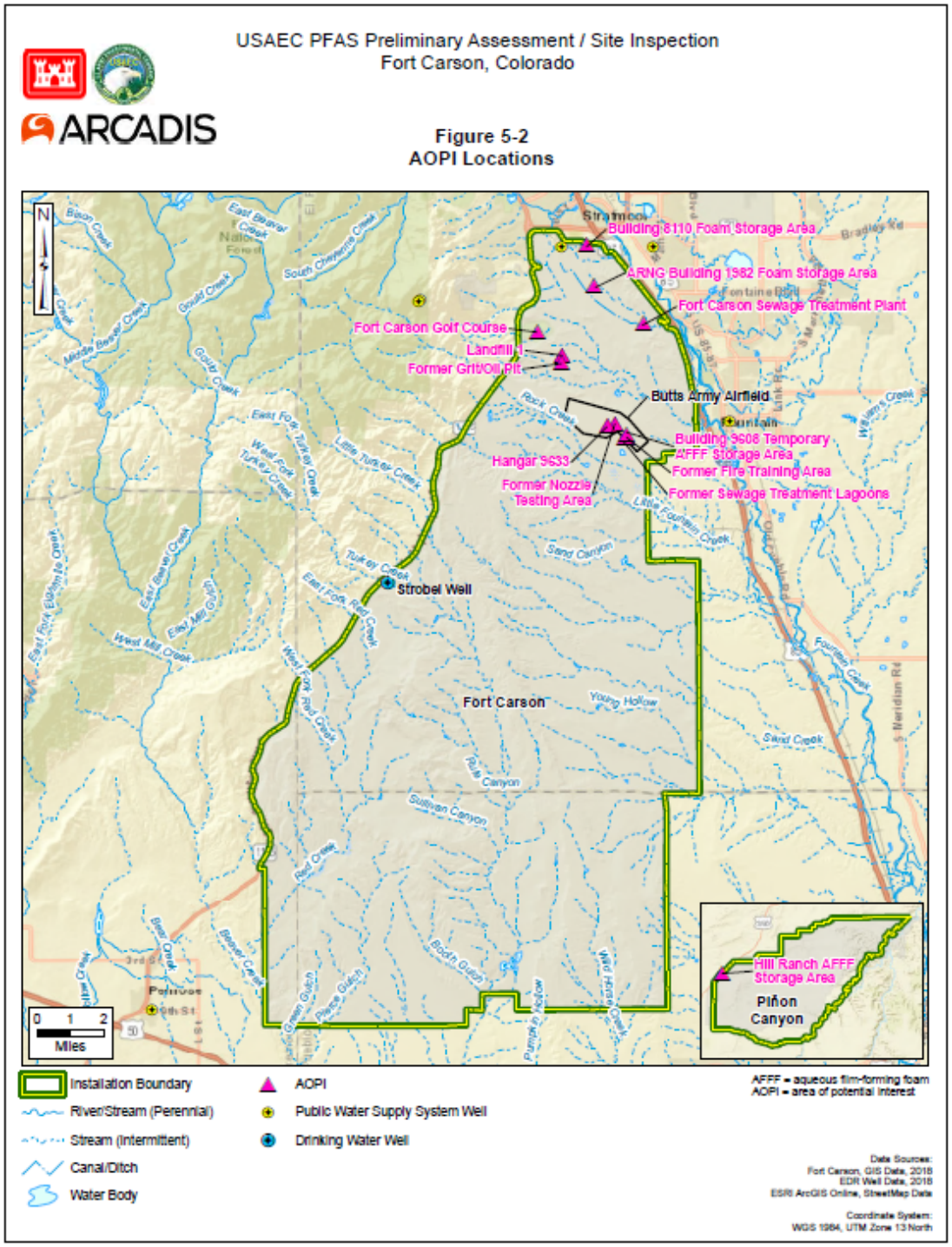


Figure 4 – AOPIs/Locations for Quarterly Sampling

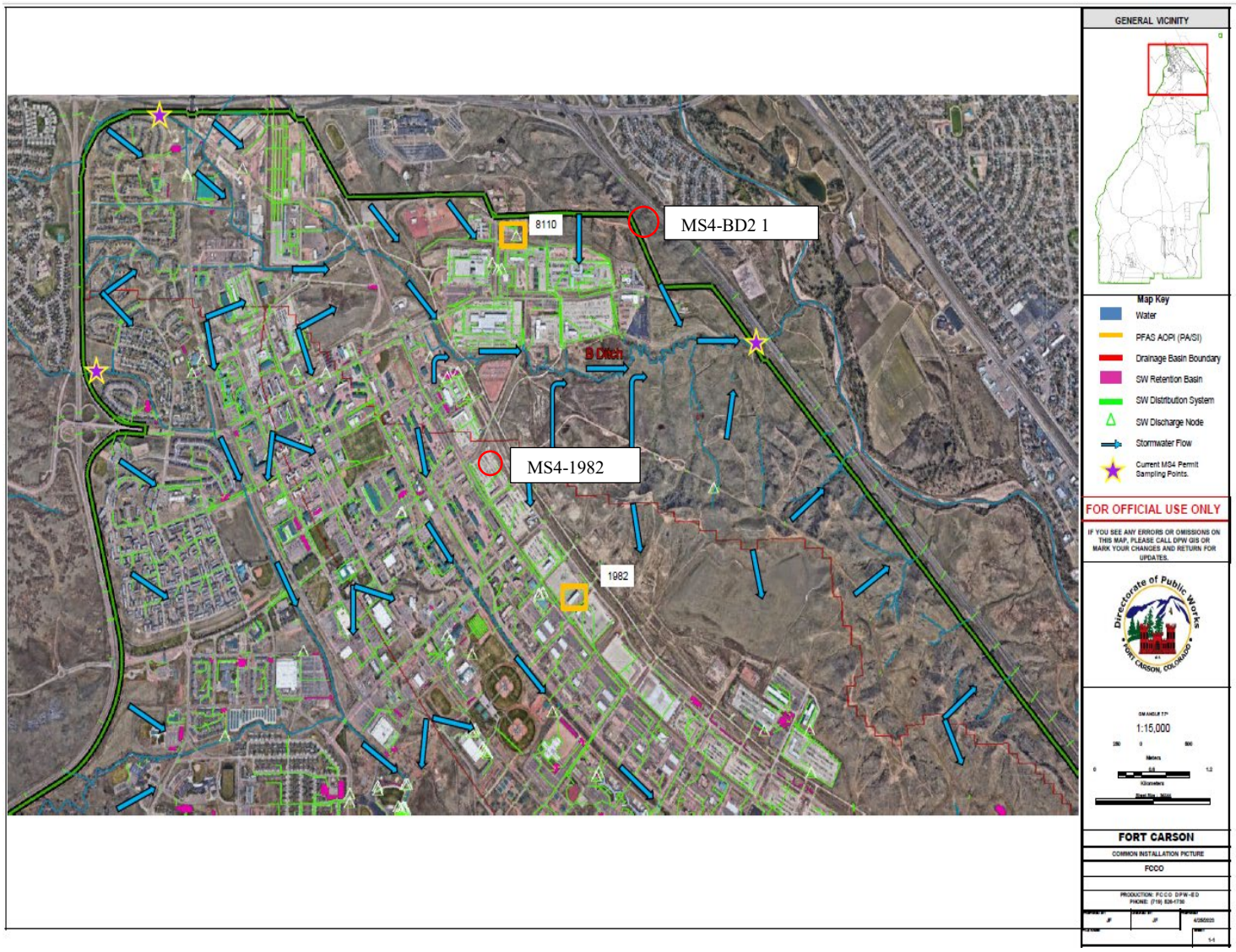


Figure 5 – AOPIs/Locations for Quarterly Sampling

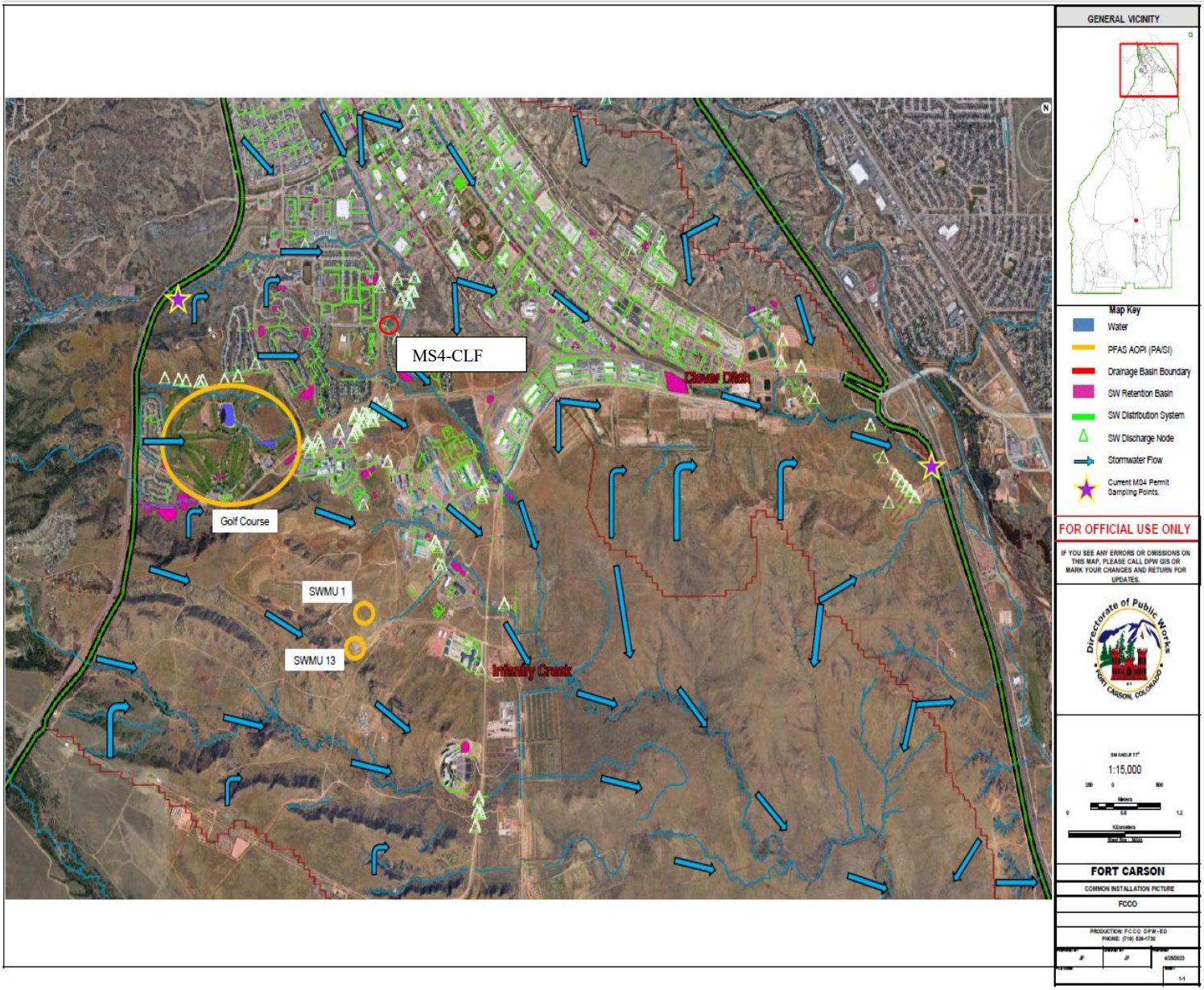


Figure 6 – AOPIs/Locations for Quarterly Sampling

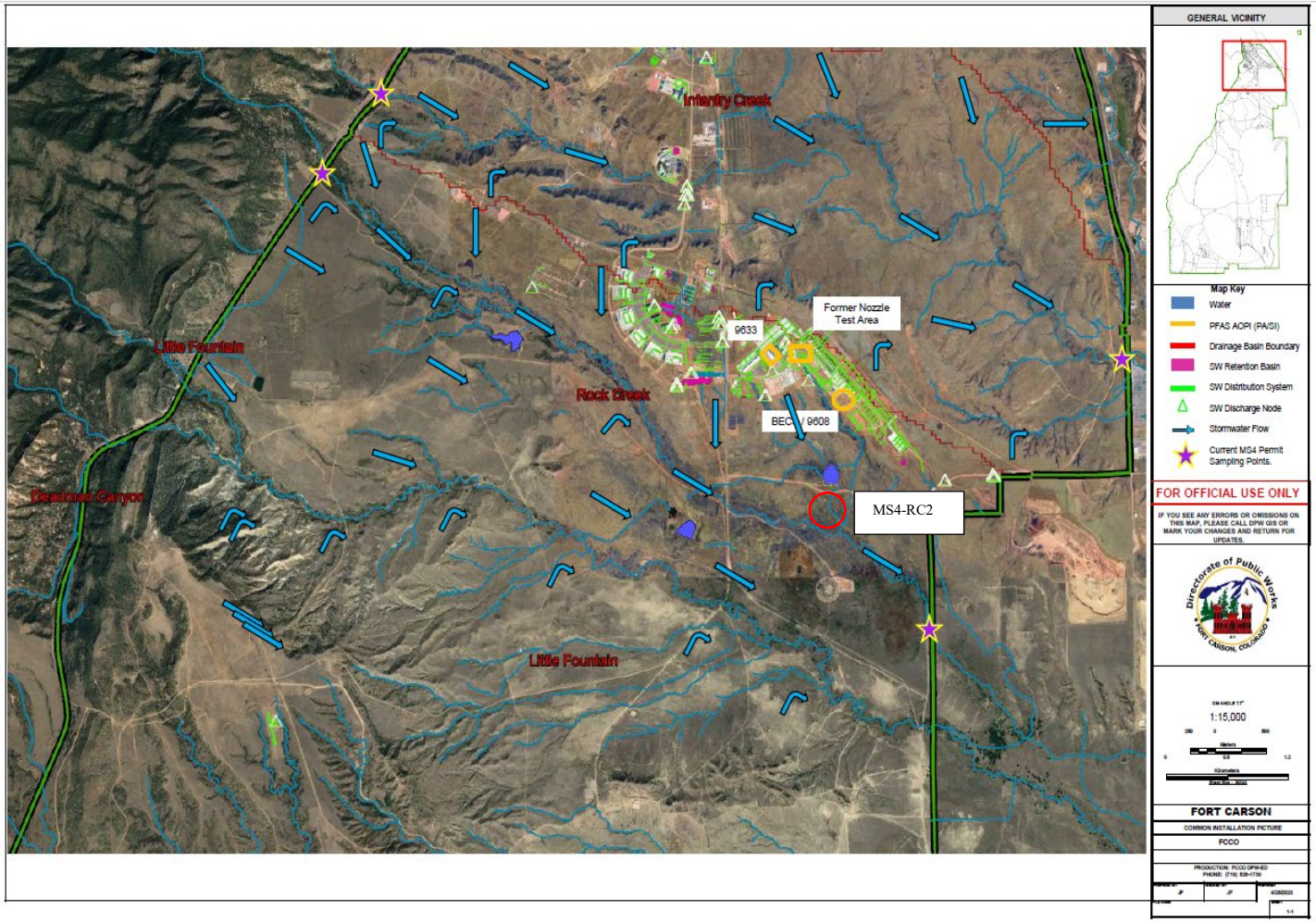


Figure 7 – Overview of Direction of Stream Flow and MS4 Inlets/Outfalls

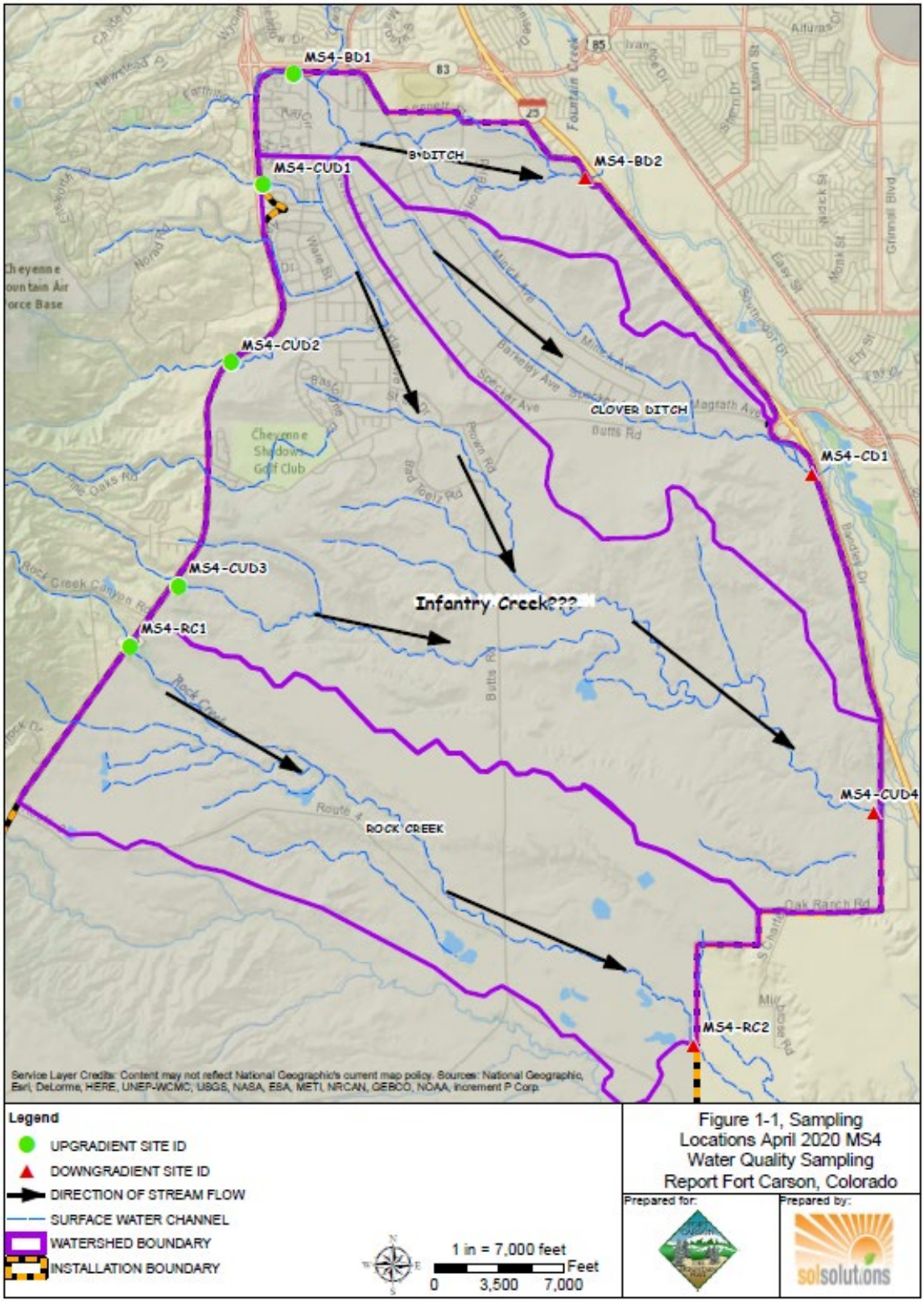


Table 2 - PFAS Monitoring Requirements For Outfalls MS4-BD2, MS4-1982, MS4-CLF, and MS4-RC2[c/]

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/ 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 FC 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	**Outfall Description**	**AOPI/PFAS Site Identifiers**
MS4-BD2	Outfall will capture runoff from Areas of Potential Interest (AOPI) Building 8110	Building 8110
MS4-1982	Outfall just downstream of AOPI Building 1982 in Clover Ditch	Building 1982
MS4-CLF	Outfall upstream/Northwest of Infantry Creek. Will capture AOPIs in the golf course, Landfill 1 and Grit/Oil Pit (sampling sites SWMU 1 & 13.	Golf Course, Landfill 1, Grit/Oil Pit

S4-RC2	Outfall will capture these AOPIs: 9633, Former Nozzle Test Area and BEC/9608 and will also capture Former Fire Training and Storage Area and Sewage Treatment Lagoons	Building 9633, Former Nozzle Test Area, BEC/9608, Sewage Treatment Lagoons, Former Fire Training and Storage Area

Based upon the Permittee's historic use of AFFF (described in Section 8 below) containing PFAS, EPA will require PFAS monitoring as follows:

Table 4 - PFAS Monitoring Requirements For

Outfalls MS4-BD2, MS4-1982, MS4-CLF, and MS4-RC2[c/]

Effluent 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/ 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.

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.

7.3 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.

8. 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 6.2 of the Permit for specifics on annual reporting requirements.

9. 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 FC (5). 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 five listed species and "may affect, but is not likely to adversely affect" for four listed species.

Table 5 – Potentially Affected Species at this Location

Species	Scientific Name	Species Status	Designated Critical Habitat	Justification
Gray Wolf	*Canis lupus*	Endangered and Experimental Population, Non-essential	None	No affect. Based on the information provided in IPAC, this species only needs to be considered in this area if the activity includes a predator management program. The permitted discharge activity for the facility does not include a predator management program. The gray wolf is a terrestrial species, and is not aquatic dependent.

Species	Scientific Name	Species Status	Designated Critical Habitat	Justification
Tri-Colored Bat	*Perimyotis subflavus*	Proposed Endangered	None	May affect, but is not likely to adversely affect. 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.
Preble's Meadow Jumping Mouse	*Zapus hudsonius preblei*	Threatened	None	No affect. 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. Critical habitat does not occur on Fort Carson.
Eastern Black Rail	*Laterallus jamaicensis ssp. jamaicensis*	Threatened	None	No affect. Presently, eastern black rails are reliably located within the Arkansas River Valley of Colorado which Fort Carson is not located within.
Mexican Spotted Owl	*Strix occidentalis lucida*	Threatened	Yes	May affect, but is not likely to adversely affect. 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 Fort Carson.

Species	Scientific Name	Species Status	Designated Critical Habitat	Justification
Piping Plover	*Charadrius melodus*	Threatened	None	No affect. 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.
Greenback Cutthroat Trout	*Oncorhynchus clarkii stomias*	Threatened	None	May affect, but is not likely to adversely affect. 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.
Pallid Sturgeon	*Scaphirhynchus albus*	Endangered	None	No affect. 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.
Monarch Butterfly	*Danaus plexippus*	Candidate	None	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).
Ute Ladies'-tresses	*Spiranthes diluvialis*	Threatened	None	May affect, but is not likely to adversely affect. 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.

9.1. Biological Evaluations and Conclusions

Biological evaluations of the potential effects of the final action on the eight 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 5 shows, there is no critical habitat listed for the Gray Wolf, Tri-colored Bat Preble's Meadow Jumping Mouse, 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 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 FC 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 four affected species is "may affect, but is not likely to adversely affect" and "no affect" for other five species (Table 5).

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.

10. 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, FC, working with State Historic Preservation Officers (SHPOs), certified that stormwater discharges and discharge-related activities from the FC 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. FC 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) will be notified as an interested party to ensure that historic properties are not negatively affected by the conditions of the Permit.

11. 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.

12. 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: