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

PERMITTEE:	U.S. Department of the Interior Bureau of Land Management
FACILITY NAME AND ADDRESS:	Park Center Well BLM Front Range District Office 3028 East Main Street Canon City, Colorado 81212
PERMIT NUMBER:	CO-0035017
RESPONSIBLE OFFICIAL:	Cathy Cook, District Manager 719-269-8554 ccook@blm.gov
FACILITY CONTACT:	Cathy Cook, District Manager
PERMIT TYPE:	Minor, Permit Renewal Industrial
FACILITY LOCATION:	SW ¼ Section 34, Township 17, Range 70, Fremont County, Colorado Latitude 38.521286, Longitude -105.214619

1 INTRODUCTION

This statement of basis (SoB) is for the issuance of a National Pollutant Discharge Elimination System (NPDES) permit (the Permit) to the Bureau of Land Management (BLM), Front Range District known as the Park Center Well facility (Facility). The Permit establishes discharge limitations for any discharge of wastewater from the Facility through Outfall 001 to Fourmile Creek. The SoB explains the nature of the discharges, EPA's decisions for limiting the pollutants in the wastewater, and the regulatory and technical basis for these decisions.

The Facility is a federal facility in Colorado. EPA Region 8 is the NPDES permitting authority for federal facilities located in Colorado.

2 MAJOR CHANGES FROM PREVIOUS PERMIT

Major changes from the previous permit include the following:

- Renamed Outfall 002 to Outfall 001.
- Added clarification for the effluent discharge to meet the 40:1 flow dilution for the State of Colorado's temperature criterion, based on USGS gage station 07096250 with flow rate at least 5.76 mgd (or 8.93 ft^3/s) when the facility valve discharges at 100 gal/min.
- The monthly daily maximum and quarterly daily maximum flow limitations have been removed from this Permit due to technical errors.

3 BACKGROUND INFORMATION

The Park Center Well was originally drilled around 1924-1927 as a test well by the Mutual Oil and Development Company. When exploration struck the Fountain Aquifer (approximately 3,000-foot depth) and not oil, the well was acquired by the General Land Office[1] under the authority of the Mineral Leasing Act. In 1968, a water lease was signed with the Park Center Water District to supply water for the Park Center area. Approximately 20 years later in 1988, a Colorado Supreme Court Decision awarded the water right to the Bureau of Land Management (BLM). The BLM has managed the site since this time.

In 2008, the BLM signed a new 25-year lease with the Park Center Water District. Noting leaks around the well casing, the BLM initiated plans for well repairs. In 2010, construction began to update the failing existing wells and the new well was drilled. The BLM unknowingly utilized a non-pressurized drilling rig and due to the high pressure of the Fountain Aquifer (believed to be 250 pounds per square inch at the surface), the new well failed during drilling.

[1] The General Land Office (GLO) was an independent agency of the United States government responsible for public domain lands in the United States. The GLO was merged with the United States Grazing Service (established in 1934) to become the Bureau of Land Management on July 16, 1946.

The failure caused groundwater to flow into Fourmile Creek at approximately 8,000-10,000 gallons per minute, with sediments and elevated temperatures (~98°F) causing downstream scouring and a fish kill. The leak at the newly drilled well was stopped in October of 2012. After reporting of the incident, the BLM and EPA voluntarily entered into a Federal Compliance Agreement (FCA) to ensure the necessary Clean Water Act objectives "to restore and maintain the chemical, physical and biological integrity of the Nations Waters" were met. See section 101(a) of the CWA. 33 U.S.C. Final repairs of the new well took place in 2015.

The Park Center Well is located approximately six miles north of Cañon City, Colorado. The BLM – Front Range District owns and manages the Park Center Well. The well is a high pressure artesian well that flows from the Fountain aquifer; water produced from the well is leased to the Park Center Water District (Public Water System ID: CO0122600) for municipal water supply to approximately 4,000 residents in the water district.

Under Colorado Water Law, the BLM has a water exchange provision with the Town of Cripple Creek and a requirement to provide water to residents of the Park Center Water District. Under this water exchange provision, the BLM is required to return a minimum of 25-acre feet per year (approximately 8.15 million gallons) of water to Fourmile Creek, and supply 275-acre feet per year (approximately 89.6 million gallons) to the Park Center Water District.

3.1 Facility Process Description

The discharge from the Park Center Well, Outfall 001, is designed to flow through a concrete weir box prior to entering Fourmile Creek (See Figure 1 below for Park Center Well site). Fourmile Creek headwaters begin in the Town of Cripple Creek and travel down through Cañon City joining with the Arkansas River.

During the previous permit issuance, EPA determined the Facility is not a natural hot spring. Therefore, the natural hot spring requirements do not apply for this Permit as outlined in the Colorado regulation 31.9(3)(b). This regulation states that "No temperature effluent limit will be applied to a discharge of water from a natural hot spring, so long as that water enters the receiving water in the vicinity of its natural outflow."

The water discharged from the aquifer via the well includes naturally occurring pollutants; mainly high temperature and arsenic. The limitations in this NPDES Permit are being specified in compliance with Colorado Water Quality Standards for Fourmile Creek.

Figure 1. Aerial image of Park Center Well site

3.2 Treatment Process

The Park Center Well has been utilized as a drinking water source for the Park Center Water District, which treats and supplies approximately 4,000 homes with drinking water. The BLM also has a water exchange provision/agreement in place with the Towns of Cripple Creek and Victor which stipulates the annual return of 25-acre feet to Fourmile Creek. The BLM utilizes the aquifer discharge to Fourmile Creek to assist the Towns of Cripple Creek and Victor with water demands and Fourmile Creek recharge.

The BLM has no treatment for the water discharged to Fourmile Creek and has requested permitting based on flow metering to control the known contaminants of temperature and arsenic discharged into Fourmile Creek. EPA is using this permitting approach to control pollutant discharges to Fourmile Creek based on limiting discharge volume.

With completion of the new well, flow controls were constructed to enable the BLM to regulate flow to Fourmile Creek via Outfall 001 at the weir box. The well site also has a locked

valve for filling fire control and dust mitigation vehicles. Discharges from this locked valve and discharges to the Park Center Water District are not covered by this NPDES Permit.

3.3 Chemicals Used

No chemicals are added to the aquifer or the discharged water. The water contains naturally occurring high temperature and arsenic.

4 PERMIT HISTORY

According to EPA records maintained for the Facility, this renewal is at least the 2nd issuance of this NPDES permit. The previous permit for the Facility became effective on December 1, 2018, and was set to expire on November 30, 2023. The Facility submitted a permit renewal application prior to the permit's expiration, which EPA received on April 19, 2023, and thus the previous permit was administratively continued.

4.1 Discharge Monitoring Report (DMR) Data

Table 1 below summarizes the DMR self-monitoring results for Outfall 002 from December 2018 – January 2024. It shows there were no effluent limitation exceedances for flow and pH. Note, that Outfall 002 will be changed to Outfall 001 in this Permit.

Table 1. Summary of the DMR Data (December 2018 – January 2024) for Outfall 002 from EPA Integrated Compliance Information System (ICIS) database (date accessed February 12, 2024)

Parameter	Permit Limit(s)	Reported Average	Reported Range	Number of Data Points	Number of Exceedances
Outfall 002 Discharge Volume, million gallons per day (mgd)	40:1 dilution	0.27	0.174-0.517	7	0
USGS station 07096250 Discharge Volume, million gallons per day (mgd)	40:1 dilution	19.6	9.6-40.9	7	0
Temperature, ^{o}C	N/A	31.5	30.9-32	7	N/A
pH, units	6.5-9.0	6.91-7.29	6.54-7.79	7	N/A
Arsenic, μg/L	N/A	3.5	1.1-11.2	5	N/A

5 DESCRIPTION OF RECEIVING WATER

The receiving water is within the state of Colorado. The CDPHE Regulation 32 - Classifications and Numeric Standards for Arkansas River Basin (Adopted 10/10/2023, effective 12/31/2023) lists Fourmile Creek (Segment 20b. Mainstem of Fourmile Creek, including all tributaries and wetlands, from the confluence with Long Gulch to the confluence with the Arkansas River) as

having the following uses: Agriculture, Aquatic Life Cold 1, Recreation E, and Water Supply. Classifications and numeric standards for Segment 20b - COARUA20B can be found in the following website link: Colorado Regulation 32, Page 204.

CDPHE currently has adopted a temporary modification for "arsenic (chronic) equals to hybrid" for segment 20b (expiring 12/31/2024). In addition, the following is the link to the Draft Final Action for the CDPHE, Water Quality Control Commission's June 2024 Rulemaking for Colorado regulations, where CDPHE proposed to extend the temporary modification for arsenic. The Commission has adopted these changes and took final action on this in August 2024. The changes will be effective on 12/31/2024. As indicated in this Draft Final Action, the revised Colorado Regulation 32 on page 43 of the document (table for COARUA20B, Mainstem of Fourmile Creek), the temporary modification for arsenic will be extended to expire on 12/31/2029. Information on the extension is provided for context. This extension is not effective for Clean Water Act purposes unless and until the EPA approves it.

While the temporary modification is in effect, the arsenic requirement is "maintain current condition" for discharges existing on or before 6/1/2013. The Park Center Well was required under the FCA to monitor Fourmile Creek to assess ambient/current conditions for arsenic upstream of the Facility. Instream arsenic data collected during the 4th quarter of 2013 from the upstream point (UP1) was reported at 1.0 µg/L. The temporary modification is: As(chronic)=current condition, expiring on 12/31/2024.

Fourmile Creek Low Flow Analysis:

Colorado Regulations specify the use of low flow conditions when establishing water quality based effluent limitations, specifically the acute and chronic low flows. While the arsenic temporary modification is in place, the temperature criterion will be the most stringent permit condition.

Upon discussions with the BLM staff, EPA was informed by the BLM engineer that the wellhead at the Park Center Well is designed to handle high pressure flows; to safely maintain the valve and security of personnel, the valve is best managed by utilizing flows at a minimum of 100 gallons per minute on a short-term basis. Hence, instream volumes must be sufficient to receive a discharge of 100 gallons per minute while attaining the applicable water quality standards.

Permit Conditions Under the Arsenic Temporary Modification Water Quality Standard: While the temporary modification standard for arsenic is in place, a 40:1 dilution ratio of instream to discharge volume must be achieved to meet the temperature criterion. To meet this requirement, EPA has provided the BLM with a flow control limit in the permit which will require real-time daily monitoring of stream volume during periods of discharge to ensure compliance with the established permit limitations. BLM will need to discharge batch volumes into Fourmile Creek when stream flows provide at least a 40:1 dilution ratio (stream volume to well discharge volume) for a 100 gallon per minute discharge. Based on the 40:1 dilution ratio and the well discharge rate of 100 gallon per minute, the minimum stream flow at USGS station

07096250 (Fourmile Creek Below Cripple Creek Near Victor, CO) must be at least 5.76 mgd (or 8.93 ft^3/s) before any discharges are allowed from the well (see calculations below).

$$100\ \frac{gal}{min} * 60\frac{min}{hr} * 24\frac{hrs}{day} * 40 * \frac{mgd}{1{,}000{,}000\ gal} = 5.76\ mgd$$

The previous permit (expired on November 30, 2023) outlined the "Permit Conditions Under the Underlying Arsenic Water Quality Standard: If/when the arsenic temporary modification ends, effluent limits for the Facility will be based upon the calculated low flows for Fourmile Creek from USGS station 07096250 (Fourmile Creek Below Cripple Creek Near Victor, CO), Data period of 12/1/2014 to 11/31/2017 with historical high flow values." In the previous permit, these values were used to determine the flow rate and limiting factors for the Facility discharge limitations as a monthly daily maximum and quarterly daily maximum.

The Park Center Well does not have any arsenic treatment options available. The background arsenic concentrations from both the receiving water (Fourmile Creek at 1.0 µg/L) and the Well (at 1.17 to 3.5 µg/L) are both above the Water Quality Standard (WQS) of 0.02 µg/L.

For this Permit, EPA is removing the flow monthly daily maximum and quarterly daily maximum limitations to meet the previous permit's 100:1 dilution ratio requirement. There is no dilution to meet the arsenic WQS of 0.02 µg/L since both the receiving stream (Fourmile Creek) and well discharge arsenic concentration are well above the WQS.

6 PERMIT LIMITATIONS

6.1 Water Quality Based Effluent Limitations (WQBELs)

The Facility discharges to the main stem of Fourmile Creek. The receiving water is within the state of Colorado and thus the state of Colorado's WQS apply. EPA has reviewed the applicable Colorado water quality standards for consideration of the development of WQBELs. The BLM does not treat the water discharged from the Park Center Well. The water reaching the surface comes from the Fountain Aquifer which contains naturally occurring arsenic and high thermal temperatures. A review of all physical and biological standards and permitting assumptions are provided below.

6.1.1 Temperature

Due to the CDPHE temporary modification for arsenic, temperature is the limiting factor for the Park Center Well. Flows for the facility will be limited to 40:1 dilution, on the basis described below. This flow limitation will allow the BLM to utilize real-time Fourmile Creek stream flows from USGS stream gauge to determine the highest levels of stream flow in order to meet the Extreme Dilution Streamlined Assessment Criteria as outlined in WQP-23, Procedures for Conducting Assessments for Implementation of Temperature Standards in Discharge Permits policy, section III.1.b., for Industrial Sources, which requires a flow rate of 40:1 dilution or greater to be exempt from a numeric temperature limitation. Monitoring and reporting for temperature will be

required daily during any discharge to verify consistent dilution ratios throughout any discharge event.

6.1.2 Dissolved Oxygen

Due to previous consultation with CDPHE staff, no dissolved oxygen (DO) limitations are implemented in this Permit on the basis that the nature of the untreated groundwater discharge and lack of additional constituents or wastes in the discharge means there is no reasonable potential to exceed or impair the dissolved oxygen content of this naturally occurring aquifer ground water. In addition, based on data submitted in the application from the previous permit, there does not appear to be reasonable potential to cause or contribute to an exceedance of the DO water quality standards. Therefore, for this Permit, there will be no DO limit nor monitoring required since there are no operational changes from the previous permit.

6.1.3 pH

While EPA does not anticipate the Facility will exceed water quality standards on data provided, pH monitoring and limitations will be required in this Permit to assure protection of aquatic life and to assess any changes that may occur in the Fountain Aquifer. pH limitations will be set at 6.5 – 9.0.

6.1.4 Chlorophyll, *Escherichia coli*

While there are CDPHE WQS for *E. coli*, based on the nature of the discharge and lack of additional constituents or wastes in the discharge, there is no reasonable potential or expectation that recreational WQS limits will be exceeded. For this Permit, there will be no Chlorophyll or Escherichia coli limits nor monitoring required since there are no changes from the previous permit.

6.2 Inorganic Standards

6.2.1 Ammonia, Boron, Chloride, Chlorine, Cyanide, Nitrate, Nitrite, Phosphorus, Sulfate and Sulfide

For the listed inorganic constituents, data analysis was conducted during 2013-2015 under the FCA, the review of the data provided no indication of reasonable potential for the listed inorganic contaminants. For this Permit, there will be no limits nor monitoring required for these parameters since there are no changes from the previous permit.

6.3 Metals Standards

6.3.1 Arsenic

The Park Center Well was required under the FCA to monitor Fourmile Creek to assess ambient conditions for arsenic upstream of the Facility. Instream arsenic data collected during the 4th quarter of 2013 from the upstream point (UP1) was reported at 1.0 µg/L. The CDPHE WQSs for Segment 20b for arsenic is an acute limit of 340 µg/L and a chronic limit of 0.02 µg/L. Due to the naturally existing arsenic in the receiving stream, the

CDPHE currently has a temporary modification in place for arsenic for segment 20b (expiring 12/31/2024 and plans to submit an extension until 12/31/2029 for EPA action). While the temporary modification is in effect the arsenic requirement is "maintain current condition" for discharges existing on or before 6/1/2013.

EPA reviewed three different sets of data. 1) The previous permit record documented there were nine data points from the Facility discharge reported for Park Center Well and collected by the Facility during the period of the FCA, which ranged from 1.3 µg/L to 2.1 µg/L with an average of 1.6 µg/L. 2) The DMR data in Table 1 shows the average arsenic concentration is 3.5 µg/L. 3) The permit application has an arsenic concentration of 1.17 µg/L. Based on this information, the arsenic present in the water from the Facility does have reasonable potential to exceed the existing standard of 0.02 µg/L.

6.3.2 Cadmium, Chromium III, Chromium VI, Copper, Iron, Lead, Manganese, Mercury, Molybdenum, Nickel, Selenium, Silver, and Zinc

EPA reviewed data submitted as required by the FCA during 2013-2015, as well as application data submitted for the Park Center Well facility from the previous permit. A quantitative review of the data indicated no reasonable potential for the Facility to exceed the criteria for the above listed contaminants. For this Permit, there will be no limits or monitoring required for these parameters since there are no operational changes from the previous permit.

6.4 Final Effluent Limitations

Flow limitations established to limit the flow based on the temperature requirement are provided below in Table 3 and are specific to any discharge from the concrete weir, listed as Outfall 001. No other discharges are permitted by this Permit.

Table 3 – Final Effluent Limitations for Outfall 001

Effluent Characteristic	**Daily Maximum a/**	**Limit Basis b/**
Flow	Flow shall be limited to 40:1 dilution or less, as calculated from USGS gage station 07096250 (Fourmile Creek Below Cripple Creek Near Victor, CO) with a minimum stream flow of 5.76 mgd. c/	WQBEL, PP
The pH of the effluent shall not be less than 6.5 or greater than 9.0 at any time.		WQBEL

a/ See section 1 of the Permit for definition of terms.

b/ WQBEL = Limitation based on water quality-based effluent limit; PP = Limitation based on previous permit

c/ The volume of groundwater discharged to Fourmile Creek shall be limited to control flows based on the 40:1 dilution temperature criterion. The flow, as a unit of measurement, shall

be reported in million gallons per day and shall not exceed the daily 40:1 dilution ratio maximum at any time based on real-time USGS stream gage data.

6.5 Antidegradation

Discharges from the Facility are existing, and no changes to effluent quality are proposed. The Permit prohibits exceedances of numeric or narrative standards. For this Permit, EPA has determined the antidegradation analysis provided in the previous permit remains applicable as follows:

"CDPHE regulations require an anti-degradation review for new or increased water quality impacts. The Park Center Well is considered a new permit and requires a significance determination as stated in Regulation No. 31 at section 31.8(3)(a). The EPA reviewed the Colorado Antidegradation Significance Determination Guidance and has determined that this facility has extensive site-specific data and a situation that does not match the guidance and is therefore provided a special situation assessment with documentation to support that decision, as provided by the guidance Question and Answers #Q20[2] and #Q22[3]. This determination is explained further in the Section 5 above. In summary while a temporary modification of the arsenic standard is in place for this segment, antidegradation-based limits for arsenic for this segment are not applicable."

6.6 Anti-Backsliding

Federal regulations at 40 CFR § 122.44(l)(1) require that when a permit is renewed or reissued, interim effluent limitations, standards or conditions must be at least as stringent as the final effluent limitations, standards, or conditions in the previous permit unless the circumstances on which the previous permit were based have materially and substantially changed since the time the Permit was issued and would constitute cause for permit modification or revocation and reissuance under 40 CFR § 122.62.

This permit renewal complies with anti-backsliding regulatory requirements. EPA is removing the flow monthly daily maximum and quarterly daily maximum limitations from the previous permit. The background arsenic concentrations from both the receiving water (Fourmile Creek at 1.0 µg/L) and the Facility (at 1.17 to 3.5 µg/L) are above the arsenic WQS of 0.02 µg/L. Therefore, the 100:1 dilution ratio that was implemented as a limit after the temporary modification expiration date does not provide any dilution to meet the arsenic WQS of 0.02

[2] Q20: What if my facility has extensive site-specific data or a situation that doesn't match this guidance?
A20: This guidance document is just that, "guidance", for implementing the antidegradation regulations. It is designed as a framework to provide a documented methodology and to ensure consistency among permits and those conducting the antidegradation reviews. Special situations will be assessed on a case-by-case basis; and will be adequately documented as an attachment to this guidance.

[3] Q22: What happens if the calculated BWQ exceeds the water quality standard?
A22: If the calculated BWQ exceeds the water quality standard, there is no baseline available increment to be protected. In this case, the ADBAC cannot be calculated. Antidegradation-based limits would not apply since the water quality is already degraded. The Division will then further evaluate the waterbody for 303(d) Listing.

µg/L since both the receiving stream (Fourmile Creek) and well discharge arsenic concentrations are above the WQS. EPA believes this was a technical error to include these limitations in the previous permit.

7 MONITORING REQUIREMENTS

7.1 Self-Monitoring Requirements - Outfalls 001

Monitoring must be conducted according to test procedures approved under 40 CFR Part 136, as required in 40 CFR § 122.41(j), unless another method is required under 40 CFR subchapters N or O.

7.1.1 Flow, Temperature, pH, and Arsenic are being monitored for this Permit.

The monitoring frequencies are kept the same from the previous permit. The daily sample frequency for flow, temperature and pH should be sufficient to characterize the effluent quality and quantity and to detect events of noncompliance. The quarterly sample frequency for arsenic is sufficient to gather data on this pollutant of concern since it is not expected to be highly variable.

Grab samples are appropriate to monitor effluent that does not discharge on a continuous basis and the water qualtiy is expected to be consistent.,

Table 4 Monitoring requirements for Outfall 001

Effluent Characteristic	**Monitoring Frequency**	**Sample Type a/**	**Data Value Reported on DMR b/**
Flow, gallons per day, c/	Daily	Grab	Daily average flow rate Daily maximum flow rate
Temperature, degrees °C	Daily	Grab	Daily Max.
pH, units	Daily	Grab	Minimum Maximum
Arsenic, µg/L d/	Quarterly	Grab	Daily Max.

a/ See section 1 of the Permit for definition of terms.
b/ Refer to the Permit for requirements regarding how to report data on the DMR.
c/ Flow measurements of effluent volume shall be made in such a manner that the Permittee can affirmatively demonstrate that representative values are being obtained. The average flow rate and the maximum flow rate in million gallons per day (mgd) during the reporting period, shall be reported.

d/ Arsenic values will be required once per quarter when discharges occur.

When there is a discharge from the Facility, the average flow rate and the maximum flow rate shall be taken from the U.S. Geological Service (USGS) gage station 07096250 (Fourmile Creek Below Cripple Creek Near Victor, CO) as follows:

Table 5 Monitoring Requirements for USGS Gage Station 07096250 Data

Effluent Characteristic	Monitoring Frequency	Sample Type a/	Data Value Reported on DMR b/
Flow, million gallons per day, c/	Daily	Grab	Daily average flow rate Daily maximum flow rate

a/ See section 1 of the Permit for definition of terms.
b/ Refer to the Permit for requirements regarding how to report data on the DMR.
c/ Flow measurements shall be taken daily from U.S. Geological Service (USGS) gage station 07096250 (Fourmile Creek Below Cripple Creek Near Victor, CO). The average flow rate and the maximum flow rate (in mgd) during the reporting period, shall be reported.

8 REPORTING REQUIREMENTS

Reporting requirements are based on requirements in 40 CFR §§ 122.44, 122.48, and Parts 3 and 127. A discharge monitoring report (DMR) frequency of quarterly was chosen, because the Facility typically discharges less than quarterly, and this frequency is the same as the previous permit.

9 COMPLIANCE RESPONSIBILITIES AND GENERAL REQUIREMENTS

9.1 Inspection Requirements

On a weekly basis, unless otherwise modified in writing by EPA, the Permittee shall inspect its treatment facility to ensure it is functioning properly. The Permittee shall document the inspection, as required by the Permit. Inspection requirements are the same as the previous permit.

9.2 Operation and Maintenance

40 CFR § 122.41(e) requires Permittees to properly operate and maintain at all times, all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of this Permit. In addition to an operation and maintenance plan, regular facility inspections, an asset management plan (AMP), and consideration of staff and funding resources are important

aspects of proper operation and maintenance. Asset management planning provides a framework for setting and operating quality assurance procedures and helps to ensure the Permittee has sufficient financial and technical resources to continually maintain a targeted level of service. Consideration of staff and funding provide the Permittee with the necessary resources to operate and maintain a well-functioning facility.

Operation and maintenance requirements have been established in sections 5.3 of the Permit to help ensure compliance with the provisions of 40 CFR § 122.41(e).

10 ENDANGERED SPECIES CONSIDERATIONS

The Endangered Species Act 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 (formal or informal) (50 CFR § 402.14(a)).

The U.S. Fish and Wildlife Information for Planning and Conservation (IPaC) website (https://ecos.fws.gov/ipac/) was accessed on August 28, 2024, to determine federally-listed Endangered, Threatened, Proposed and Candidate Species for the area near the Facility. The IPaC Trust Resource Report findings are provided below. The designated area utilized was identified in the IPaC search and covers the entire Park Center Well site along the Fourmile Creek of about 10 square miles in Fremont County, Colorado, and the immediate facility site area of the receiving water.

Table 2. IPaC Federally listed Threatened and Endangered Species

Species	Scientific Name	Species Status	Designated Critical Habitat	Determination
Eastern Black Rail	*Laterallus jamaicensis ssp. jamaicensis*	Threatened	No critical habitat has been designated	No effect
Mexican Spotted Owl	*Strix occidentalis lucida*	Threatened	There is final critical habitat for this species (published in the Federal Register on August 31, 2004). Facility location does not overlap the critical habitat.	No effect (Not aquatic dependent species)

Species	Scientific Name	Species Status	Designated Critical Habitat	Determination
Monarch Butterfly	*Danaus plexippus*	Candidate	No critical habitat has been designated	No effect (Candidate species does not need consultation. No critical habitat)

10.1 Biological Evaluation

The justification to support the determination for the species is as follows.

Eastern Black Rail: Based on the IPaC information generated, no critical habitat has been designated for Eastern Black Rail in this area. Presently, Eastern Black Rails are reliably located within the lower Arkansas River Valley of Colorado, much further downstream than this site. Further, we would not expect this species to be using this area due to the woody vegetation leading to thick canopy cover, lack of marshland around the drainage, and amount of disturbance in the area. EPA's determination for this species is "No effect".

Mexican Spotted Owl: EPA determines "No effect" for the Mexican Spotted Owl because it is not an aquatic dependent species and the IPAC search identified there are no critical habitats at this location.

Monarch Butterfly: Monarch Butterfly is a candidate species. It is not an aquatic dependent 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.

This is a renewal permit. There will be no expected changes in water quality in the receiving water and no new construction for this facility. It is a natural untreated groundwater discharge. Therefore, there are no expected changes or impacts to downstream habitats.

In addition, EPA had informal consultation phone calls and emails with the Colorado FWS field office representative in regarding this Permit. Based on the IPaC information and informal consultation with FWS, EPA determines this Permit is "No effect" to the species as described in the table above. Since a "No effect" determination was made, no formal consultation with FWS is required.

11 NATIONAL HISTORIC PRESERVATION ACT REQUIREMENTS

Section 106 of the National Historic Preservation Act (NHPA), 16 U.S.C. § 470(f) requires that federal agencies consider the effects of federal undertakings on historic properties. The first step in this analysis is to consider whether the undertaking has the potential to affect historic properties, if any are present. See 36 CFR § 800.3(a)(1). Permit renewals where there is no new construction are generally not the type of action with the potential to cause effects on historic properties.

12 401 CERTIFICATION CONDITIONS

Colorado is the Clean Water Act (CWA) Section 401 certifying authority for the Permit, and a CWA Section 401 certification will be requested prior to Permit finalization.

13 MISCELLANEOUS

The effective date of the Permit and the Permit expiration date will be determined upon issuance of the Permit. The intention is to issue the Permit for a period not to exceed 5 years.

Permit drafted by Qian Zhang P.E., U.S. EPA, 303-312-6267, September 2024