


# **Appendix B10**

## **Environmental Analysis – SWCA**

### **3-UASI25-001-Phase 1 Environmental**

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**Canyon Peak Power Arapahoe County 1041/USR Application**  
**UASI25-001**

The logo for the Southwestern Council of Agencies (SWCA) is positioned vertically on the left side of the page. It consists of the letters 'S', 'W', 'C', and 'A' in a large, stylized, light blue font, stacked one above the other.

# Canyon Peak Power Station Environmental Impact Analysis for Arapahoe County 1041 USR Permit – Lateral Pipeline

DECEMBER 2024; REVISED MARCH 2025 AND APRIL 2025

PREPARED FOR

**Canyon Peak Power LLC**

PREPARED BY

**SWCA Environmental Consultants**

# **ENVIRONMENTAL IMPACT ANALYSIS FOR THE CANYON PEAK POWER STATION LATERAL PIPELINE**

Prepared for

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## **Abbreviations**

µg/m <sup>3</sup>	micrograms per cubic meter
APEN	Air Pollution Emission Notice
AQCR	air quality control region
AQRV	air quality-related value
CAA	Clean Air Act
CDPHE	Colorado Department of Public Health and Environment
CFR	Code of Federal Regulations
CNHP	Colorado Natural Heritage Program
CO	carbon monoxide
CPP	Canyon Peak Power
CPW	Colorado Parks and Wildlife
DMNFR	Denver Metropolitan/North Front Range
EPA	U.S. Environmental Protection Agency
FE	federally endangered
FEMA	Federal Emergency Management Agency
FT	federally threatened
GESC	grading, erosion, and sediment control
HAP	hazardous air pollutant
HDD	horizontal directional drill
IPaC	Information for Planning and Consultation
MRLC	multi-resolution land characteristics
N/A	not applicable
NAAQS	National Ambient Air Quality Standards
NHD	National Hydrography Dataset
NLCD	National Land Cover Database
NO <sub>2</sub>	nitrogen dioxide
NO <sub>x</sub>	nitrogen oxide
NRCS	Natural Resources Conservation Service
NWI	National Wetlands Inventory

OAHP	Office of Archaeology and Historic Preservation
OHWM	ordinary high water mark
Pipeline	Lateral Pipeline
PM <sub>10</sub>	particulate matter 10 micrometers in diameter or smaller
PM <sub>2.5</sub>	particulate matter 2.5 microns in diameter or smaller
ppm	parts per million
SE	state endangered
SIP	state implementation plan
SO <sub>2</sub>	sulfur dioxide
SPCC	spill prevention, control, and countermeasures
ST	state threatened
SWCA	SWCA Environmental Consultants
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey
VOC	volatile organic compound
WOTUS	waters of the United States
WQCD	Water Quality Control Division

# 1 PROJECT INTRODUCTION

Canyon Peak Power LLC (CPP or the Applicant) is proposing to construct the Lateral Pipeline (Pipeline) as part of the Canyon Peak Power Station in Arapahoe County, Colorado. The Pipeline consists of the connection of an approximately 4-mile-long 10-inch diameter natural gas pipeline with existing infrastructure near Bennett, Colorado, in Arapahoe County (Figures 1 and 2). The pipeline will be constructed belowground, within an existing utility corridor. At the north end of the pipeline and on private property, a pig launcher/receiver will be constructed above ground. Likewise, on the south end of the pipeline on private property, a pig launcher/receiver will be constructed above ground. The Pipeline does not intersect federal lands. While not part of CPP's Pipeline, construction of an aboveground pipeline metering station, including a fence, gate access, aboveground piping, a filter/separator with drain tank, metering skid, flow control skid, and an electronic gas measurement enclosure, is proposed immediately east of the northern terminus of the pipeline. The metering station is not part of CPP's Pipeline for the purposes of this 1041 Permit application but is mentioned to inform Arapahoe County (and other agencies) that the metering station is proposed for permitting and construction at a later date. The information and descriptions in this environmental impact analysis cover the proposed pipeline, pigging facilities, and a 150-foot buffer (Impact Area). However, the field survey covered only portions of the Impact Area that fall within the public road right-of-way east of County Road 129 and up to the fence line and the gas meter yard easement area located on the parcel owned by Ronald Otto and Mary Anne Otto (Survey Area).

On behalf of CPP, SWCA Environmental Consultants (SWCA) conducted an environmental impact analysis for the Pipeline to address the requirements in Section III.C.12 of the "Regulations Governing Areas and Activities of State Interest In Arapahoe County (1041 Regulations)" (readopted and amended December 12, 2006). This environmental impact analysis provides a description of the existing natural environment and an analysis of the impacts of the Pipeline portion of the Canyon Peak Power Station to the natural environment based on a desktop analysis of the Impact Area and site visit to the Survey Area on March 14, 2025, conducted by SWCA. The analysis also includes a description of how CPP will comply with the applicable Approval Criteria in Section V of the 1041 Regulations.

As further detailed in Section 11, this environmental impact analysis consisted of reviewing U.S. Geological Survey (USGS) 7.5-minute quadrangles (Esri 2024), the USGS National Land Cover Database (NLCD) (USGS 2021), historical and current aerial photographs (Google Earth 2021), U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) maps (USFWS 2023), the National Hydrography Dataset (NHD) (USGS 2023a), USFWS lists of threatened and endangered species (USFWS 2024a), Colorado's Conservation Data Explorer (Colorado Natural Heritage Program [CNHP] 2024), Colorado Parks and Wildlife (CPW) lists of state-listed species (CPW 2024a), CPW species profiles (CPW 2024b), and CPW high priority habitats (CPW 2023).



Figure 1. Overview of the northern half of the Impact Area.



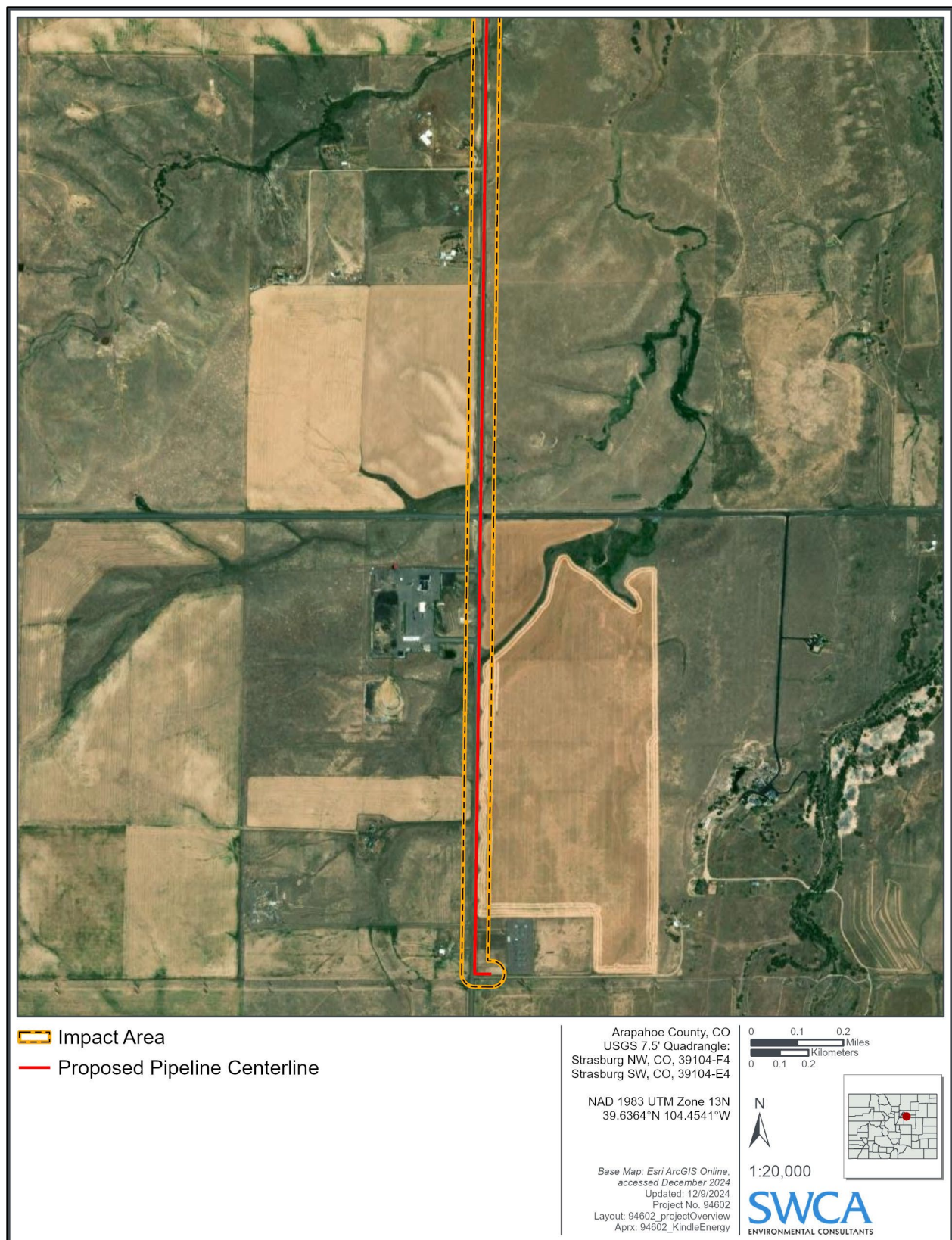


Figure 2. Overview of the southern half of the Impact Area.

## 2 AIR QUALITY

### 2.1 Section III.C.12.a.i

An air quality control region (AQCR), as defined in Section 107 of the Clean Air Act (CAA), is a federally designated area in which National Ambient Air Quality Standards (NAAQS) must be met. An implementation plan is developed for each AQCR describing how ambient air quality standards will be achieved and maintained, ensuring that states and local governments collaborate effectively to meet federal air quality standards set by the CAA. These regions are designed to facilitate the monitoring, management, and control of air pollutants (U.S. Environmental Protection Agency [EPA] 2024a).

The Pipeline is located within the Metropolitan Denver Area airshed (AQCR 3), which includes Adams County, Arapahoe County, Boulder County, Clear Creek County, Denver County, Douglas County, Gilpin County and Jefferson County (State of Colorado 2011). AQCR 3 has faced air quality concerns, particularly with ozone pollution and 2015 8-hour ozone standards, and it is in maintenance status for the 1971 carbon monoxide (CO) and the 1987 PM<sub>10</sub> (particulate matter 10 micrometers or less in diameter) standards (EPA 2024b). The closest Class I Area (a CAA-designated air quality protection area), Rocky Mountain National Park, is located 63.73 miles northwest of the Impact Area (ArcGIS 2024), and is an important consideration in regional air quality planning.

### 2.2 Section III.C.12.a.ii.

The CAA was implemented to ensure safe and non-hazardous air quality for the residents of the United States. As a result, the EPA introduced the NAAQS for pollutants deemed harmful to public health and the environment. These pollutants are known as criteria pollutants. Unlike the other criteria pollutants, ground-level ozone is usually not directly emitted from a source into the atmosphere. Instead, it is created when nitrogen oxides (NO<sub>x</sub>) and volatile organic compounds (VOCs) mix in sunlight. Table 1 shows the current primary and secondary NAAQS and averaging time for each pollutant. Primary standards are set to protect public health with an added margin of safety, while secondary standards are intended to safeguard environmental concerns, such as air quality-related values (AQRVs) and resources that may be negatively impacted by changes in air quality, including visibility, vegetation, water quality, soils, and fish and wildlife.

**Table 1. National Ambient Air Quality Standards**

Criteria Pollutant	Averaging Period	Primary NAAQS	Secondary NAAQS
Nitrogen Dioxide (NO <sub>2</sub> )	1 hour	0.100 ppm*	N/A
	Annual	0.053 ppm <sup>†</sup>	0.053 ppm <sup>†</sup>
Sulfur Dioxide (SO <sub>2</sub> )	1 hour	0.075 ppm <sup>‡</sup>	N/A
	3 hours	N/A	0.50 ppm <sup>§</sup>
	24 hours	N/A	N/A
	Annual	N/A	N/A
Particulates with a diameter of 10 microns or less (PM <sub>10</sub> )	24 hours	150 µg/m <sup>3</sup> #	150 µg/m <sup>3</sup> #
Particulates with a diameter of 2.5 microns or less (PM <sub>2.5</sub> )	24 hours	35 µg/m <sup>3</sup> **	35 µg/m <sup>3</sup> **
	Annual	9 µg/m <sup>3</sup> †, ††	15 µg/m <sup>3</sup> †, ††

Criteria Pollutant	Averaging Period	Primary NAAQS	Secondary NAAQS
Carbon Monoxide (CO)	1 hour	35 ppm <sup>§</sup>	N/A
	8 hours	9 ppm <sup>§††</sup>	N/A
Lead (Pb)	3 months	0.15 µg/m <sup>3</sup> <sup>¶</sup>	0.15 µg/m <sup>3</sup> <sup>¶</sup>
Ozone (O <sub>3</sub> )	8 hours	0.070 ppm <sup>§§</sup>	0.070 ppm <sup>§§</sup>
Hydrogen Sulfide (H <sub>2</sub> S)	1 hour	N/A	N/A

Source: EPA (2024c).

Note: N/A = not applicable; ppm = parts per million; µg/m<sup>3</sup> = micrograms per cubic meter.

<sup>\*</sup> The standard is based on the 3-year average of the 98th percentile of the daily maximum 1-hour average.

<sup>†</sup> Annual mean value.

<sup>‡</sup> The standard is based on the 3-year average of the 99th percentile of the daily maximum 1-hour average.

<sup>§</sup> Not to be exceeded more than once per calendar year.

<sup>¶</sup> Not to be exceeded.

<sup>#</sup> Not to be exceeded more than once per calendar year on average over 3 years.

<sup>\*\*</sup> The standard is based on the 3-year average of the 98th percentile of the 24-hour average.

<sup>††</sup> The standard is based on the 3-year average of the weighted annual mean.

<sup>‡‡</sup> The standard is 9 ppm for areas with an elevation less than 5,000 feet above mean sea level.

<sup>§§</sup> The standard is based on the annual fourth-highest daily maximum 8-hour concentration averaged over 3 years.

States must develop and submit a state implementation plan (SIP) outlining how the NAAQS are going to be achieved, maintained, and enforced within their jurisdiction. The SIP must include strategies, regulations, and measures to meet the air quality standards, and must be approved by the EPA. In Colorado, the SIP is managed by the Colorado Department of Public Health and Environment (CDPHE). SIPs are often composed of air quality rules and regulations that apply to stationary sources that may emit criteria pollutants and, in some cases, hazardous air pollutants (HAPs). Under the provisions of the CAA, any state may impose requirements that are stricter than those of the national program and not covered at the national level.

The EPA designates an area's attainment status on a pollutant-specific basis based on whether an area meets the NAAQS. Areas that meet these standards are referred to as "attainment areas." In contrast, areas that do not meet the NAAQS are called "nonattainment areas." If there is insufficient data to determine an area's attainment status, it is labeled as an "unclassified area." Additionally, areas that were previously designated as nonattainment but have since achieved compliance with the standards are known as "maintenance areas."

The attainment status designations are outlined in the 40 Code of Federal Regulations (CFR) 81. A region's attainment status, combined with projected emission rates or anticipated emissions increases, dictates the regulatory review process for a project. The Denver Metropolitan/North Front Range (DMNFR), which includes Arapahoe County, is currently a nonattainment area for the 2008 and 2015 8-hour ozone standards, the county is also in maintenance for the 1971 CO and 1987 particulates with a diameter of 10 microns or less (PM<sub>10</sub>) standards (EPA 2024b). CPP's Pipeline is located within the nonattainment and maintenance areas in Arapahoe County (EPA 2024d).

Although the proposed Pipeline is not expected to be a direct emitter of criteria pollutants, its construction could contribute to temporary air quality impacts. During operation, the underground pipeline itself will not generate significant emissions, but occasional maintenance activities may cause minor air quality impacts. As the Pipeline is within an existing utility corridor, its overall effect on state and local air quality is expected to be minimal. Compliance with air quality regulations will ensure emissions remain within acceptable limits.



## **2.3 Section III.C.12.a.iii.**

The CAA requires the General Conformity Rule to ensure that actions taken by federal agencies in nonattainment areas and maintenance areas do not hinder a state's efforts to meet the NAAQS (EPA 2024e). The General Conformity provisions apply to all criteria pollutants in nonattainment and maintenance areas. The applicability analysis process (40 CFR 93.153) mandates that federal agencies assess whether proposed actions within these areas will result in emissions of criteria pollutants that exceed established threshold levels.

The General Conformity Rule applies to federal actions in both nonattainment and maintenance areas for NAAQS, including ozone, if emissions of NO<sub>x</sub>, sulfur dioxide (SO<sub>2</sub>), nitrogen dioxide (NO<sub>2</sub>), or VOCs exceed 100 tons per year. This rule ensures that federal actions align with the air quality goals established in SIPs. Additionally, the General Conformity Rule is relevant for new sources in CO and PM<sub>10</sub> maintenance areas if emissions of each pollutant surpass 100 tons per year. Arapahoe County is currently designated as nonattainment for the 2008 and 2015 8-hour ozone standards. The county also maintains compliance with the 1971 CO and 1987 PM<sub>10</sub> standards. As a result, the General Conformity Rule would be applicable.

Impacts to air quality associated with construction of the Pipeline would result from short-term, temporary construction activities, idling of construction vehicles, increased construction traffic in the area, and gasoline and diesel emissions from construction equipment. Construction will generate potential air pollutant emissions of PM<sub>10</sub>, NO<sub>x</sub>, CO, SO<sub>2</sub>, VOCs, greenhouse gases, and HAP emissions. These emissions would be localized, temporary, and of limited duration, and would not be anticipated to significantly increase ambient air pollutant concentrations.

Pipeline construction activities and equipment would require submission of an Air Pollution Emission Notice (APEN) through CDPHE if the Pipeline is greater than or equal to 25 contiguous acres, and/or construction is expected to take 6 months or longer, or if emissions exceed regulatory thresholds for criteria pollutants, HAPs, or greenhouse gases. This permit will monitor emissions from construction activities, including dust, vehicle exhaust, and any potential VOCs (CDPHE 2025). Arapahoe County requires a Grading, Erosion, and Sediment Control (GESC) Permit for all land-disturbing activities within unincorporated areas, which will ensure that erosion, dust, and sediment control measures are implemented to mitigate impacts to air and water quality (Arapahoe County 2024).

Additionally, the Pipeline must comply with state and federal ambient air quality standards applicable to the affected airsheds. CPP must implement mitigation strategies such as effective dust control during construction and measures to limit emissions during operations to ensure compliance with established thresholds.

Unavoidable adverse impacts would include temporary increases in particulate matter and vehicle emissions during construction. These impacts are expected to be minor and short-lived, ceasing upon the completion of construction activities. To minimize adverse impacts, best management practices, mitigation measures, and adherence to dust control permits would be employed. Mitigation measures, including regularly watering exposed soil surfaces, enforcing vehicle speed limits on unpaved roads, use of low-emission equipment, compliance with all relevant air quality regulations, and applying environmentally safe dust suppressants would further reduce potential impacts to air quality. Additionally, construction vehicles and equipment would be maintained regularly to reduce emissions, and idling times would be limited to minimize fuel combustion impacts. To minimize adverse impacts, best management practices, mitigation measures, and adherence to dust control permits would be employed.

### **3 VISUAL QUALITY**

#### **3.1 Section III.C.12.b.i.**

The Pipeline is in a relatively flat agricultural area with few surrounding residences. USGS (2021) NLCD data indicate that the dominant land cover types in the Impact Area consist of developed/open space (65.61 acres), herbaceous (43.58 acres), cultivated crops (31.51 acres), and barren land (1.33 acres). The Impact Area intersects three NHD-mapped flowline features (i.e., intermittent stream/rivers) and three NWI-mapped riverine wetland features (USFWS 2023; USGS 2023a). Two water bodies were field delineated within the Survey Area (ordinary high water mark [OHWM]01 [an intermittent water body] and OHWM02 [an ephemeral water body]) and overlapped with two NHD-mapped flowline features and two NWI-mapped wetland features that were identified during the desktop analysis. One of the NWI and overlapping NHD-mapped features within the Survey Area was determined to be upland during the March 14, 2025, field survey. Detailed description of vegetation in the Impact Area is provided in Section 8, Terrestrial and Aquatic Plant Life. Aquatic features are discussed in Section 4, Surface Water Quality.

#### **3.2 Section III.C.12.b.ii.**

The area surrounding the Pipeline is sparsely developed with relatively flat terrain. The Impact Area does not intersect designated scenic areas, such as National Wild and Scenic Rivers, scenic roads, or highways (Bureau of Land Management 2024; National Park Service 2024a; USFWS 2024b; U.S. Forest Service 2024). The Impact Area intersects three NHD-mapped flowline features and three NWI-mapped wetland features (USFWS 2023; USGS 2023a). Two water bodies were mapped within the Survey Area (OHWM01 [an intermittent water body] and OHWM02 [an ephemeral water body]) and overlapped with two NHD-mapped flowline features and two NWI-mapped wetland features that were identified during the desktop analysis. No Federal Emergency Management Agency (FEMA) mapped floodplains are located within the Impact Area (FEMA 2021). See Section 4.1 for more information on surface water impacts.

#### **3.3 Section III.C.12.b.iii.**

The Pipeline includes the construction of a belowground pipeline and does not include the construction of new aboveground buildings or facilities. The aboveground pig launchers and receivers would be approximately 3 feet above grade and are to be constructed at the north and south ends of the pipeline on private property.

#### **3.4 Section III.C.12.b.iv.**

Visual impacts during the construction phase will include the presence of construction equipment and materials. Upon completion, the Impact Area will be restored to preexisting conditions, with the exception of the fenced areas housing the pig launcher and receivers (to be constructed at the north and south ends of the pipeline on private property), and would have minimal impacts on visual quality of the Impact Area.

## **4 SURFACE WATER QUALITY**

### **4.1 Section III.C.12.c.i.**

Two water bodies were observed and mapped during the field survey conducted within the Survey Area on March 14, 2025. These two features (OHWM01 [an intermittent water body] and OHWM02 [an ephemeral water body]) overlapped with NHD-mapped flowline features and NWI-mapped wetland features that were identified during the desktop analysis. Further details, including a map of these features, are included in Section 6, Wetland and Riparian Areas. The Pipeline is not anticipated to impact state water quality standards. The Pipeline will follow guidance from Arapahoe County's Grading, Erosion and Sediment Control Manual and obtain necessary stormwater permits through the CDPHE.

### **4.2 Section III.C.12.c.ii and iii.**

The Pipeline is not anticipated to significantly impact the quantity or quality of surface water or impact the meandering characteristics and limits of streambeds, as impacts to surface water features mapped within the Survey Area during the field survey will be avoided using either boring or horizontal directional drilling (HDD). Additionally, appropriate control measures will be implemented to ensure minimal impacts to surface water quality. A construction stormwater management plan will be developed for the Pipeline in accordance with CDHPE's Colorado Discharge Permitting System Permit (COR400000) and Arapahoe County's Grading, Erosion and Sediment Control Manual.

## **5 GROUNDWATER QUALITY AND QUANTITY**

### **5.1 Section III.C.12.d.i.**

The Pipeline is located within the Denver Basin aquifer system, which includes four aquifers: the Dawson aquifer, Denver aquifer, Arapahoe aquifer, and Laramie-Fox Hills aquifer. The Impact Area is entirely within the Denver aquifer and Laramie-Fox Hills aquifer (Figures 3 and 4).



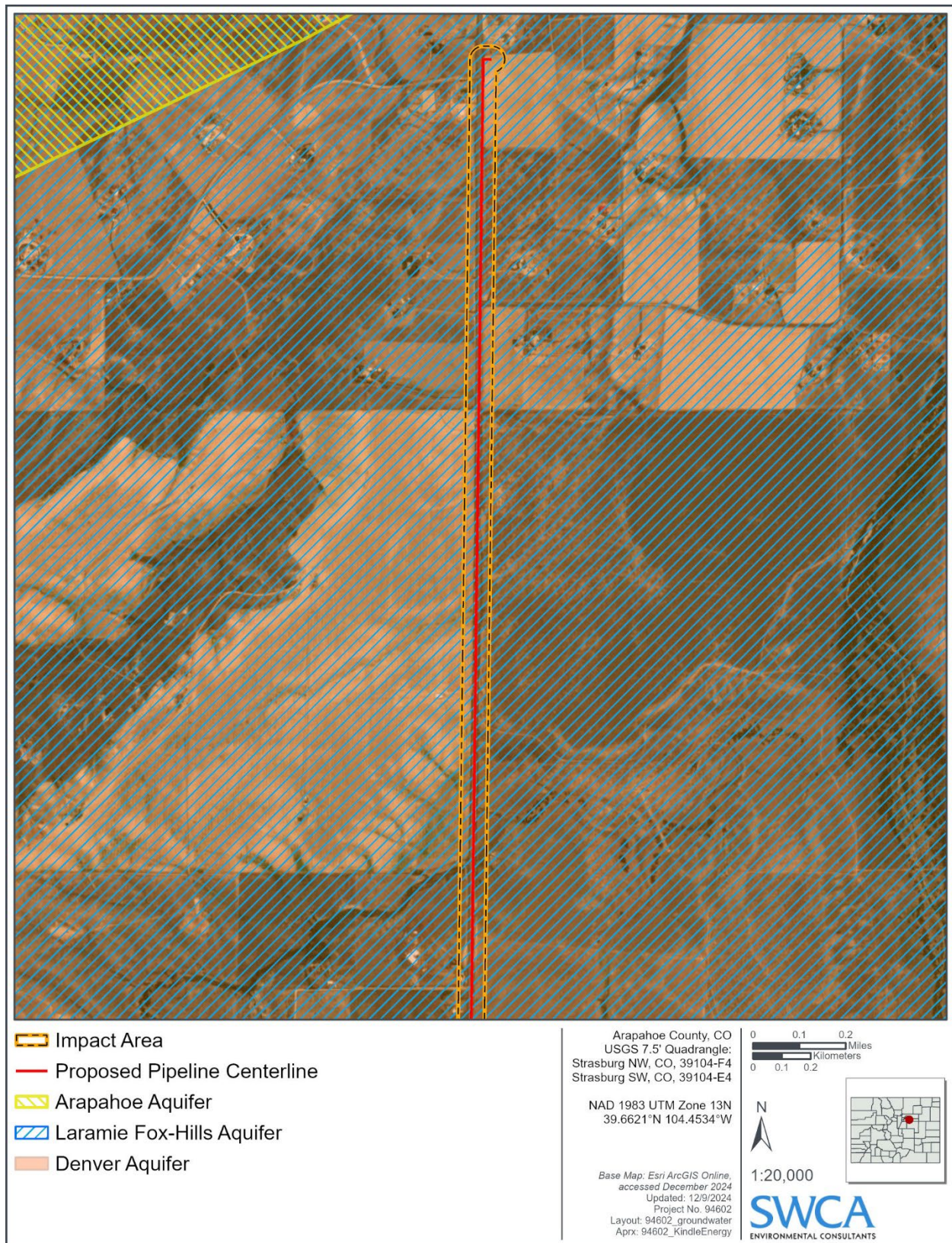


Figure 3. Aquifers within the northern half of the Impact Area.



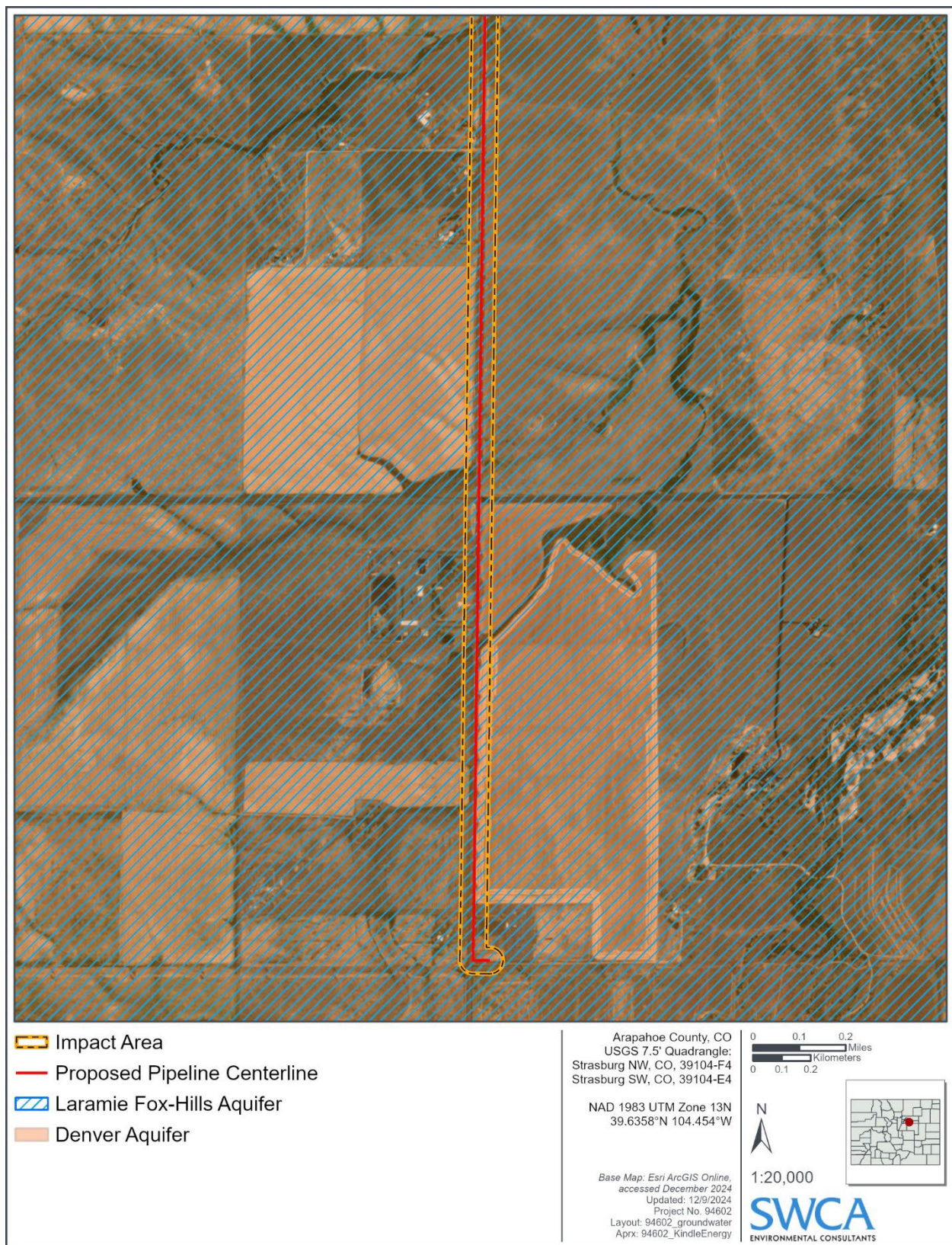


Figure 4. Aquifers within the southern half of the Impact Area.

The Denver Basin aquifer system is located entirely within the great plains physiographic region and extends from Denver to Colorado Springs (Barkmann et al. 2020)

**a) Seasonal water levels in each subdivision of the aquifer affected by the Pipeline.**

No impacts to seasonal water levels are anticipated to result from the Pipeline.

**b) Artesian pressure in aquifers.**

No impacts to artesian pressure in aquifers are anticipated to result from the Pipeline.

**c) Groundwater flow directions and levels.**

No impacts to groundwater flow directions and levels are anticipated to result from the Pipeline.

**d) Existing aquifer recharge rates and areas and the methodology used to calculate recharge to the aquifer from any recharge sources.**

No impacts to aquifer recharge rates or sources are anticipated to result from the Pipeline.

**e) For aquifers to be used as part of a water storage system, methodology and results of tests used to determine the ability of aquifer to impound groundwater and aquifer storage capacity.**

The Pipeline will not use aquifers as part of a water storage system.

**f) Seepage losses expected at any subsurface dam and at stream-aquifer interfaces and methodology used to calculate seepage losses in the affected streams, including description and location of measuring devices.**

No seepage losses are anticipated to result from the Pipeline.

**g) Existing groundwater quality and classification.**

Groundwater within the Denver Basin aquifer system is fairly good quality and meets both federal and Colorado state drinking water standards with the exception of secondary drinking water components that influence the color, taste, and smell of the water (Barkmann et al. 2020).

**h) Location of all water wells and their uses.**

Figures 5 and 6 show water wells within the Impact Area. Uses of wells within the Impact Area include monitoring, sampling, and domestic water. The Applicant will avoid impacts to wells to the extent practicable through coordination with private landowners and by using the Colorado Division of Water Resources' publicly available well database (Colorado Division of Water Resources 2025) to identify well locations.



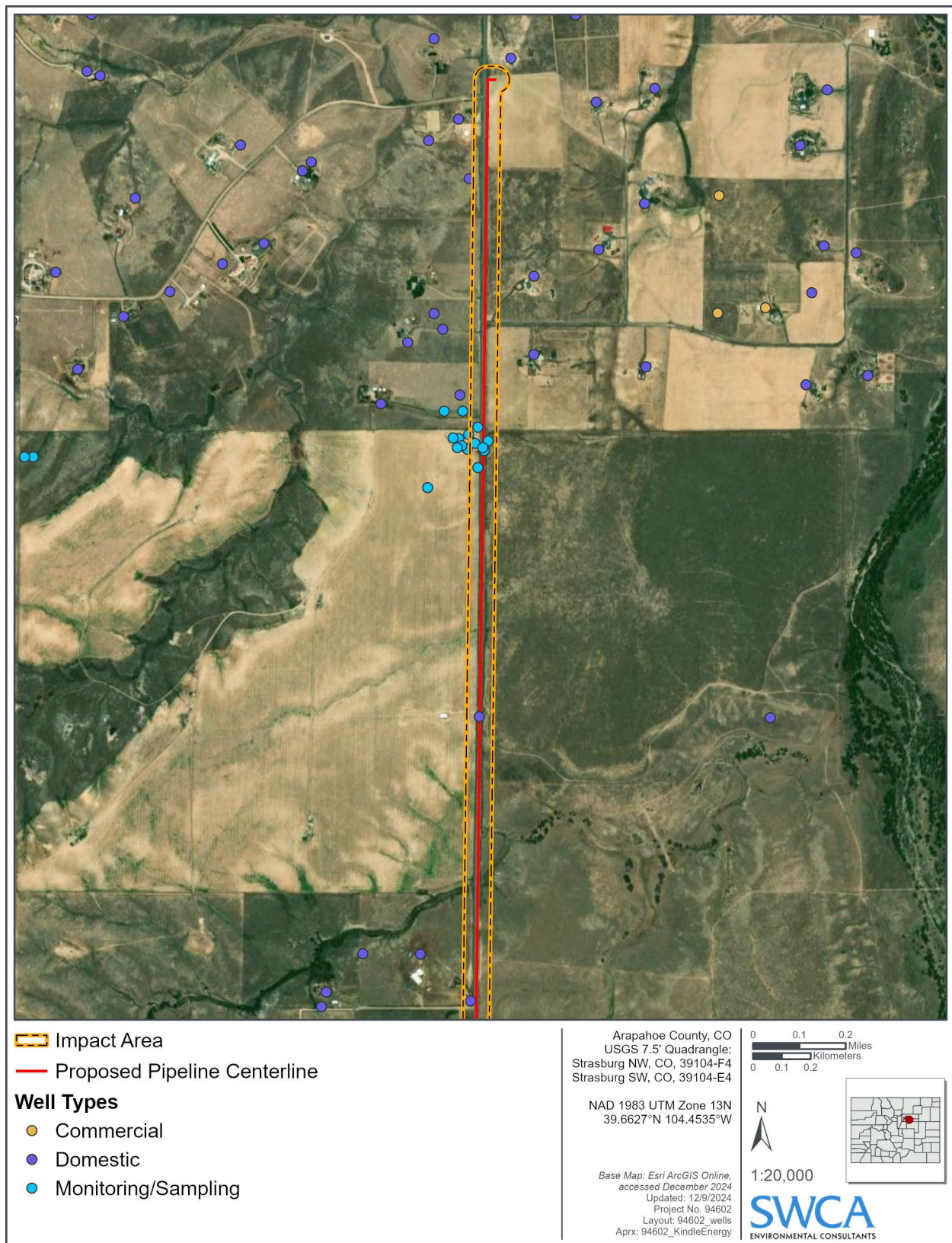


Figure 5. Location and uses of wells within the northern half of the Impact Area.



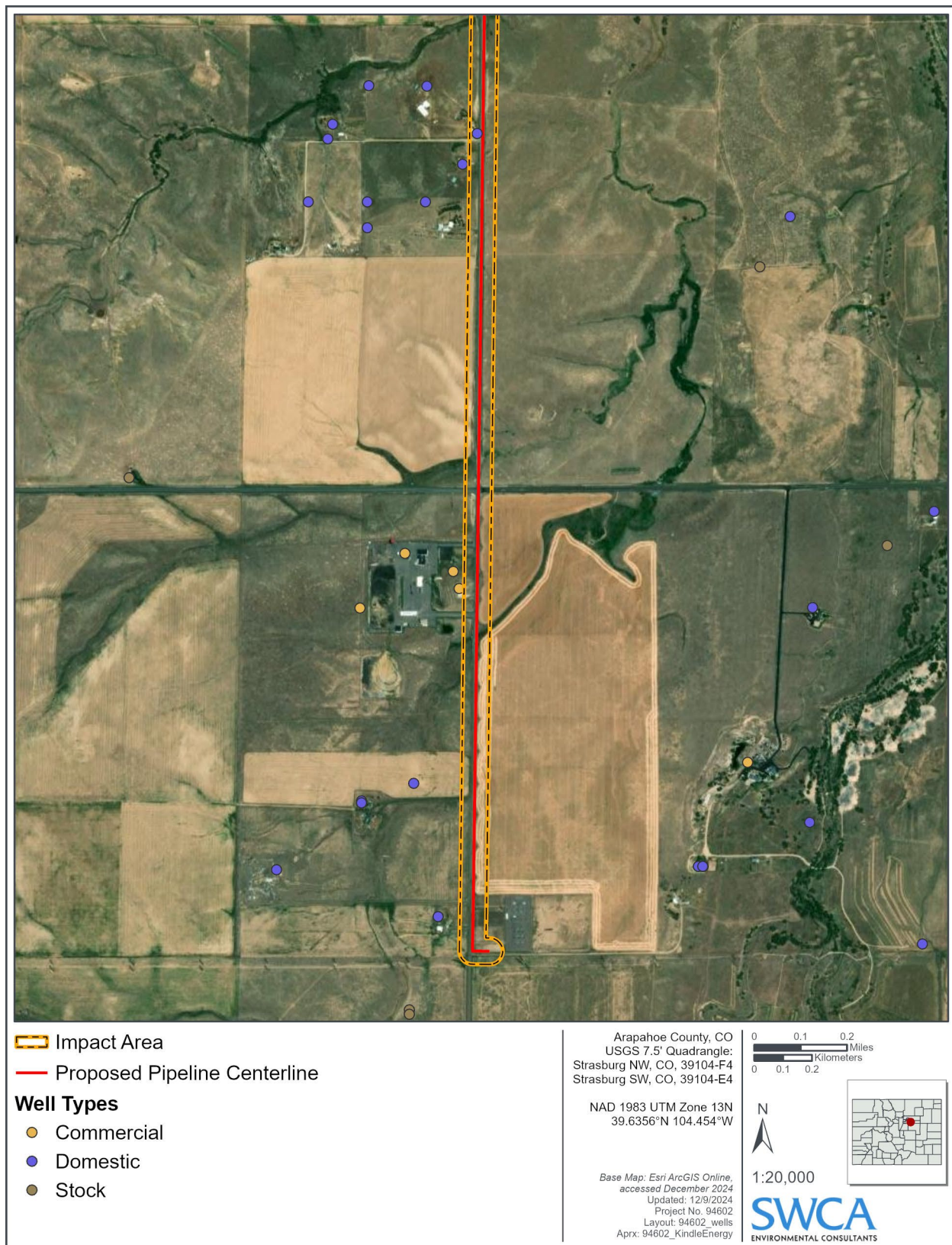


Figure 6. Location and uses of wells within the southern half of the Impact Area.



5.2 Section III.C.12.d.ii.

The Pipeline will include construction of a 10-inch subsurface natural gas pipeline that will be installed using standard pipeline construction practices. The pipeline will be buried at a minimum depth of cover of 48 inches to the top of the pipe or equivalent means to protect the pipeline from outside force damage. For the several road, driveway, and creek crossings, the depth of pipe likely will be deeper than 48 inches. The minimum buried depth between the top of the pipeline and road or creek beds will be determined in the bore or horizontal directional drill (HDD) design. Roads and waters of the United States (WOTUS) will be avoided using either boring or HDD installations. There is a potential that the pipeline trench may intersect the groundwater table during construction, which may require the need for dewatering. If dewatering is necessary, the water would be discharged to a vegetated upland area in compliance with applicable regulations and erosion potential would be mitigated using control measures. Any impacts to groundwater resulting from Pipeline construction are anticipated to be minimal and short term.

6 WETLANDS AND RIPARIAN AREAS

6.1 Section III.C.12.e.i.

The Impact Area is located within the Middle Kiowa Creek watershed (Hydrologic Unit Code 1019001003). The Impact Area intersects three NHD-mapped flowline features, which are mapped as intermittent streams/ivers, within the Impact Area and three NWI-mapped wetland features, which are mapped as riverine features (Table 2) (USFWS 2023; USGS 2023a) (Figures 7 and 8). No FEMA-mapped floodplains are located within the Impact Area (FEMA 2021). All mapped aquatic features will be avoided using either boring or HDD to install the pipeline underneath the features.

Table 2. NWI and NHD mapped features within the Impact Area

Feature Type	Feature Count	Length within the Impact Area (Linear Feet)	Acreage within the Impact Area
NHD Flowlines			
Intermittent Stream/River	3	1,442.00	–
NWI Wetlands			
Riverine	3	–	0.63

Source: USFWS (2023a) and USGS (2023).

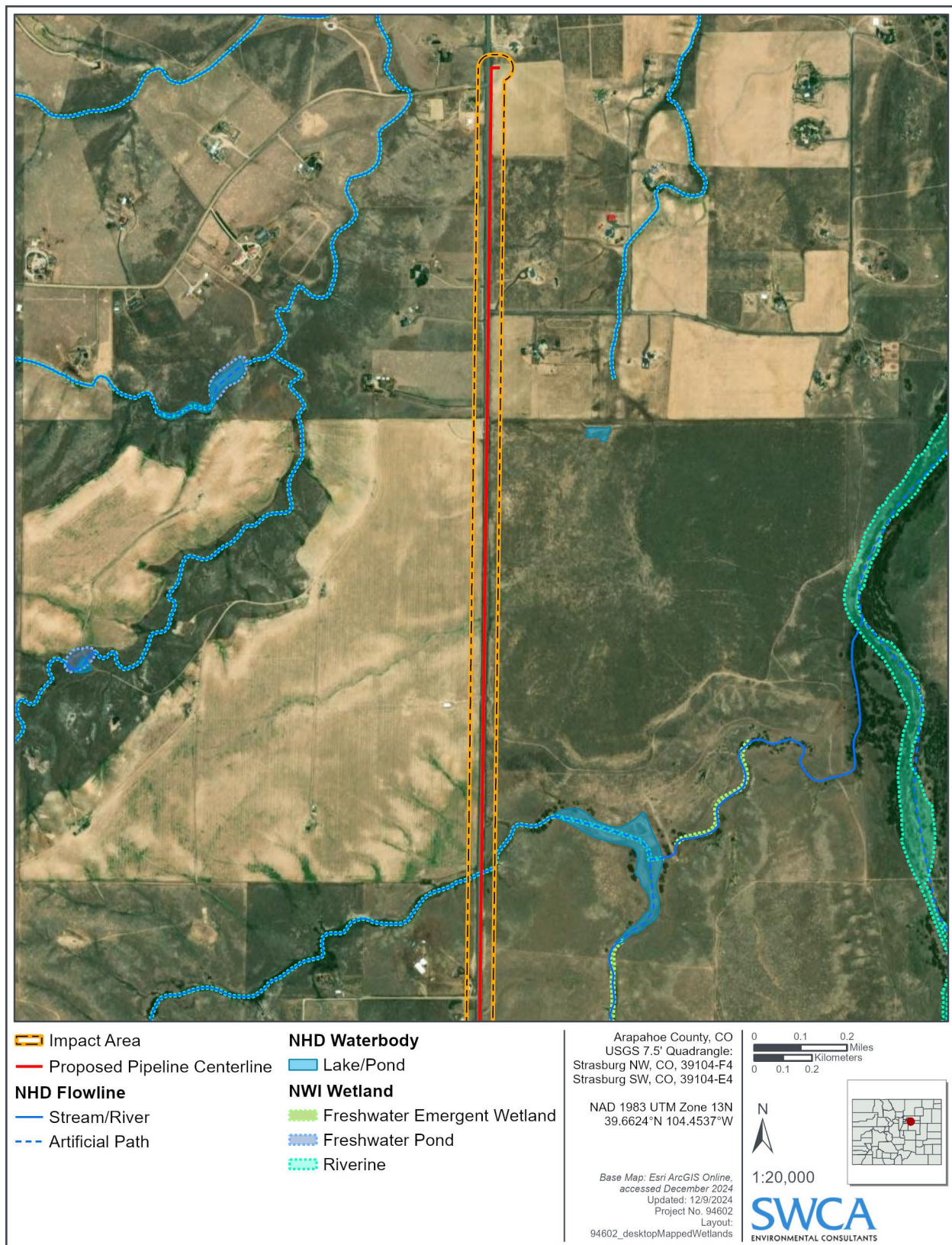


Figure 7. NWI- and NHD-mapped wetlands and water bodies in the northern half of the Impact Area.



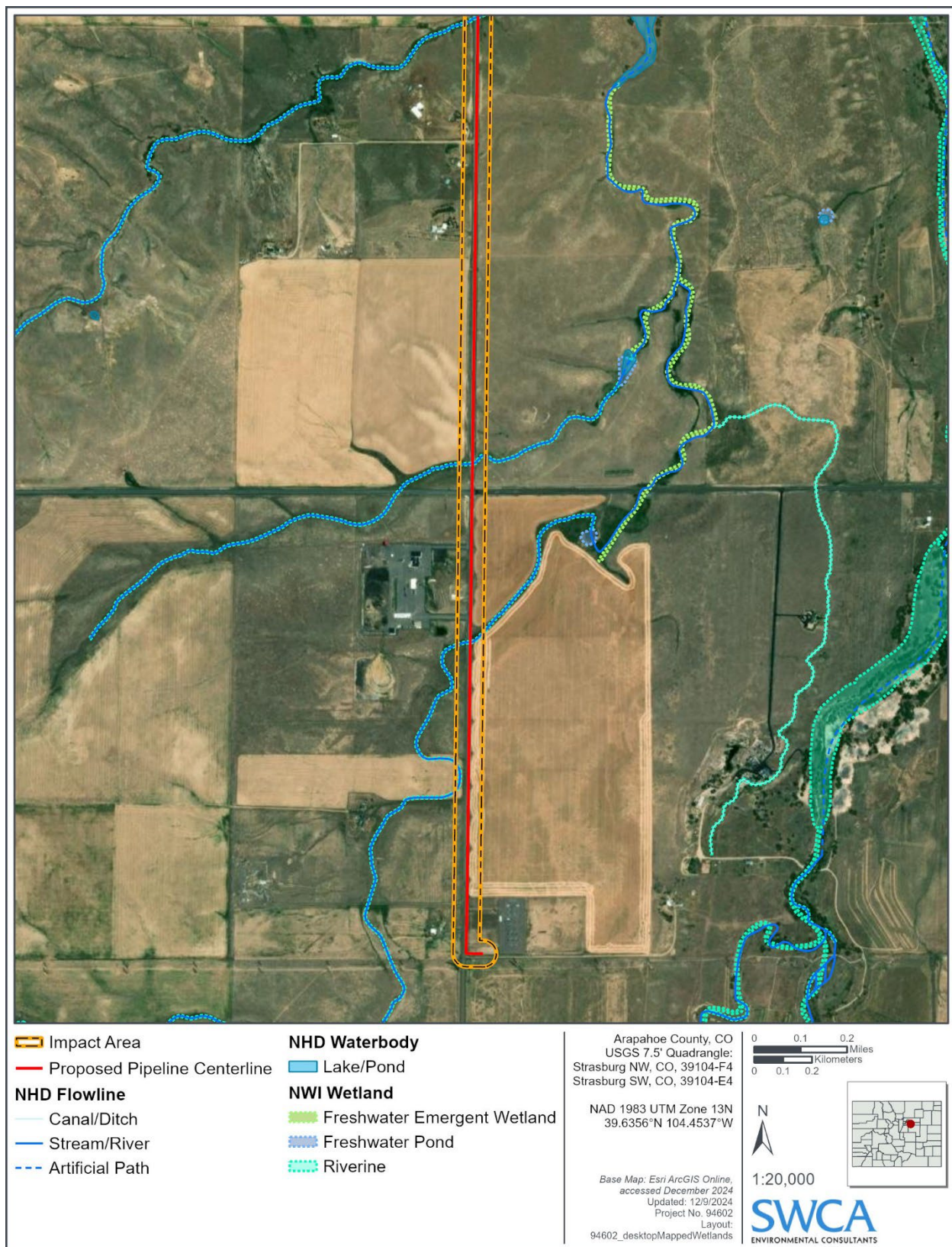


Figure 8. NWI- and NHD-mapped wetlands and water bodies in the southern half of the Impact Area.

## **6.2 Section III.C.12.e.ii.**

An aquatic resources inventory, also known as a wetland delineation, was conducted within the Survey Area on March 14, 2025, to verify the presence and extent of any aquatic features and determine the source of water interacting with the surface systems to create each wetland (if present). No wetlands were mapped within the Survey Area. Two water bodies were mapped within the Survey area (Figures 9 and 10; Table 3). These two features (OHWM01 and OHWM02) overlapped with NHD-mapped flowline features and NWI-mapped wetland features that were identified during the desktop analysis.

Based on field observations and analysis of aerial imagery and topographic maps, OHWM01 is an apparent relatively permanent water body with potential connectivity to Kiowa Creek, and OHWM02 is an apparent non-relatively permanent tributary of Kiowa Creek. It is SWCA's professional opinion that OHWM02 is likely a State water and regulated by the CDPHE, Water Quality Control Division (WQCD) and OHWM01 is likely a WOTUS regulated by the U.S. Army Corps of Engineers. Changes in the definition of WOTUS could impact the project planning process. The U.S. Army Corps of Engineers has the ultimate authority in determining the presence and extent of WOTUS. Impacts to all aquatic features will be avoided using either boring or HDD to install the pipeline under the features; therefore, USACE or CDPHE WQCD authorization is not required as it does not result in a discharge of dredged or fill material into WOTUS or Colorado State Waters.

SWCA evaluated locations within the Survey Area where NHD and NWI features were mapped or signatures on aerial imagery appeared to be potentially indicative of saturation or inundation. Aquatic resources were not observed at six locations (NDP01–NDP06). These locations, called negative determination points for the purposes of this report, were field verified as upland features.

**Table 3. Field-delineated Aquatic Features within the Survey Area.**

Feature Name	Relative Permanence	Length (linear feet)	Average OHWM width (feet)	Area (acres)
OHWM01	Intermittent	7.24	38.96	0.005
OHWM02	Ephemeral	51.96	47.55	0.046



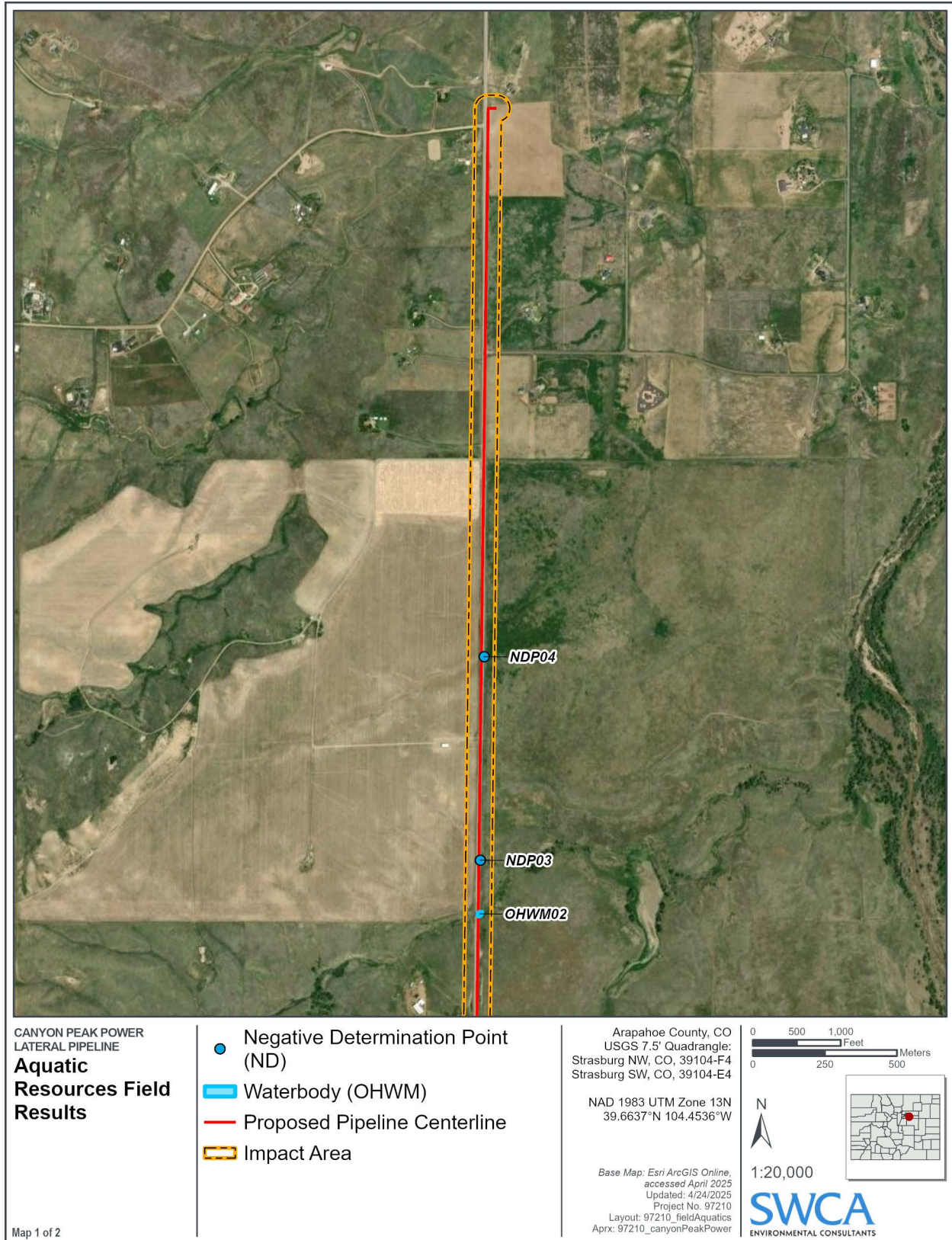


Figure 9. Field-delineated aquatic resources within the northern half of the Survey Area.



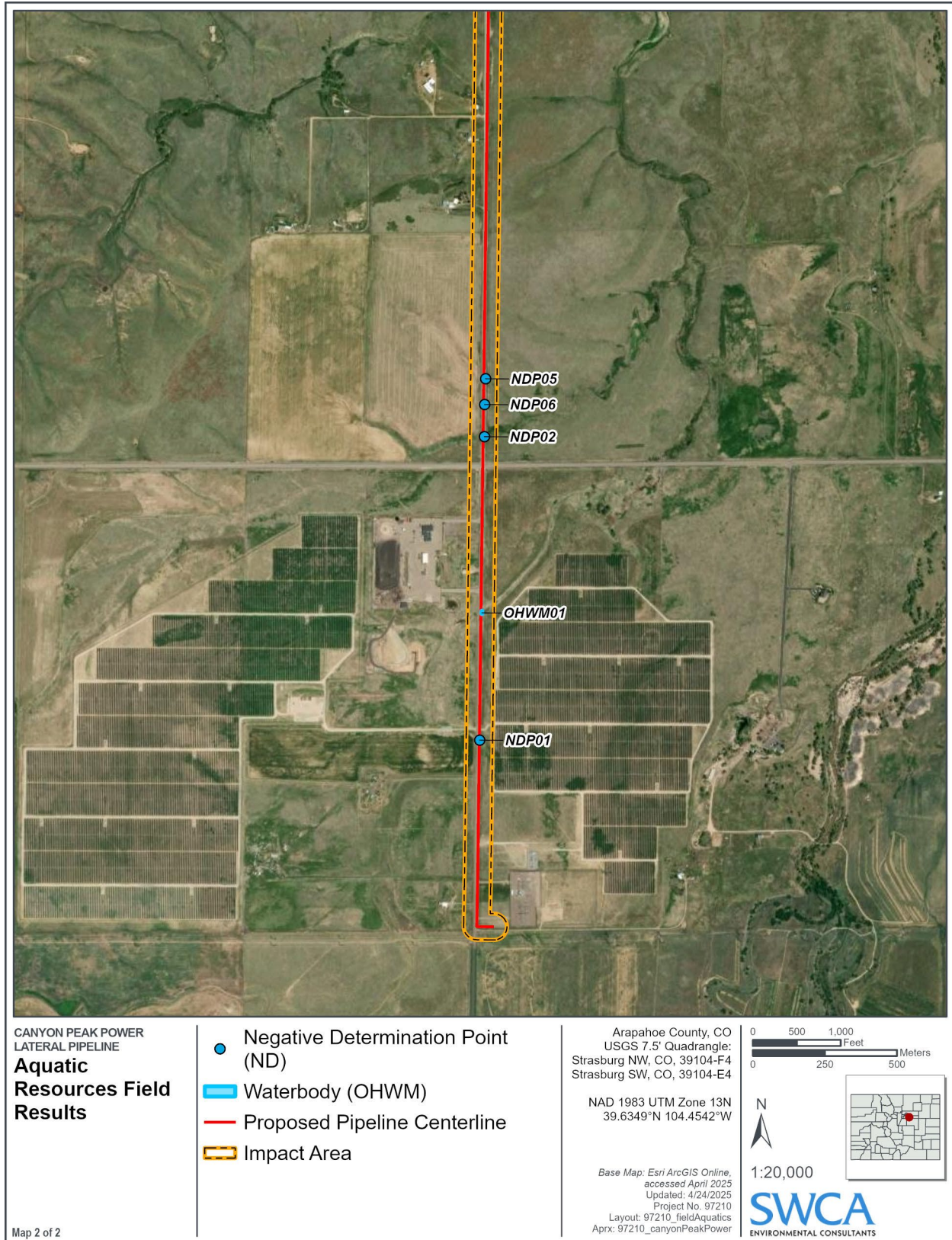


Figure 10. Field-delineated aquatic resources within the southern half of the Survey Area.

### 6.3 Section III.C.12.e.iii.

No significant impacts to floodplains, wetlands, and riparian areas are anticipated to result from the Pipeline, as WOTUS and waters of the State of Colorado will be avoided using boring or HDD. No FEMA mapped floodplains are located within the Impact Area (FEMA 2021).

## 7 TERRESTRIAL AND AQUATIC ANIMALS AND HABITAT

### 7.1 Section III.C.12.f.i.

#### 7.1.1 Special Status Species

SWCA reviewed and analyzed federally listed threatened and endangered species (USFWS 2024a) (Appendix A) and state-listed threatened and endangered species (CPW 2024a, 2024b) (Table 4) with potential to occur in the Impact Area through desktop analysis supplemented by a habitat field survey on March 14, 2025. No federally listed threatened and endangered species and state-listed threatened and endangered species were observed during the March 14, 2025 field survey. Additionally, federally listed threatened and endangered species and state-listed threatened and endangered species are unlikely to occur in the Impact Area, with the exception of burrowing owl (*Athene cunicularia*), which has potential to occur in the Impact Area (Table 4). This species typically nests in prairie dog, ground squirrel, or badger burrows in open areas with short grasses and no trees (CPW 2024a). The Impact Area is located within the CPW breeding range for this species, and one active prairie dog colony was observed (PD01) (Figure 12) just outside of the Survey Area during the March 14, 2025 field survey. If construction begins in prairie dog towns between March 15 and August 31, CPP would conduct CPW-recommended protocol surveys for burrowing owl. If owls are present, CPP would follow CPW recommendations to avoid and minimize impacts to the active burrow(s). The Pipeline will be buried and co-located in an existing utility easement. Areas disturbed during construction will be temporary in nature, reseeded with an approved seed mix (Table 5), and allowed to revert to previous conditions, with the exception of pigging facilities/meter yards, which will be fenced and graveled. Therefore, the Pipeline is expected to have minimal impacts to terrestrial and aquatic animal life. See Sections 4 through 6 for additional information regarding aquatic resources.

**Table 4. Special Status Animal Species**

Common name ( <i>scientific name</i> )	Status*	Potential to Occur
<b>Mammals</b>		
Preble's jumping mouse ( <i>Zapus hudsonius preblei</i> )	FT, ST	<b>Unlikely to occur.</b> The Impact Area is in this species' overall range; however, no suitable habitat (e.g., dense shrub, grass and forb ground cover along creeks, rivers, and associated water bodies) was observed along the mapped water bodies.
<b>Birds</b>		
Piping plover ( <i>Charadrius melodus</i> )	FT, ST	<b>None.</b> The Impact Area is outside the species' known range and lacks suitable habitat. The species is a rare migrant in northern Colorado.
Whooping crane ( <i>Grus americana</i> )	FE, SE	<b>None.</b> The Impact Area lacks suitable habitat and is outside the species' expected range.



Common name ( <i>scientific name</i> )	Status*	Potential to Occur
Burrowing owl ( <i>Athene cunicularia</i> )	ST	<b>Potential to occur.</b> This species typically nests in prairie dog, ground squirrel, or badger burrows in open areas with short grasses and no trees (CPW 2024a). The Impact Area is located within the CPW breeding range for this species, and one active prairie dog colony was observed (PD01) (Figure 12) just outside of the Survey Area during the March 14, 2025 field survey.
<b>Fishes</b>		
Pallid sturgeon ( <i>Scaphirhynchus albus</i> )	FE	<b>None.</b> The Impact Area lacks suitable habitat and is outside the species' expected range. Additionally, no water depletions to the North Platte, South Platte, and Laramie River Basins are proposed as part of the Pipeline.

Source: CNHP (2024); CPW (2024a and 2024b); eBird (2021); USFWS (2024).

\* FE = federally endangered; FT = federally threatened; SE = state-endangered; ST = state-threatened.

## 7.1.2 Raptors and Migratory Birds

No raptor nests previously mapped by CPW are within the Impact Area or a 0.5-mile buffer; however, during the March 14, 2025, field survey, two small inactive raptor nests were observed with binoculars (RN01 and RN02) (Figure 11) within the 0.5-mile buffer. No activity or individuals were observed at either nest during the March 14, 2025, survey. Raptor nesting habitat was observed within the 0.5-mile buffer; however, it was limited to areas of scattered trees along drainages associated with Kiowa Creek. The Impact Area is within the CPW-designated breeding range of the golden eagle (*Aquila chrysaetos*).

Under the Migratory Bird Treaty Act, it is illegal for anyone to take, possess, import, export, transport, sell, purchase, barter, or offer for sale any migratory bird or the parts, nests, or eggs of such a bird except under the terms of a valid permit issued by USFWS. The Information for Planning and Consultation (IPaC) report produced for the Impact Area (Appendix A) identified several passerine birds of concern listed on the USFWS Birds of Conservation Concern list or that may require additional attention within the Impact Area (see Appendix A). These species consisted of the following: broad-tailed hummingbird (*Selasphorus platycercus*), ferruginous hawk (*Buteo regalis*), grasshopper sparrow (*Ammodramus savannarum*), lesser yellowlegs (*Tringa flavipes*), and northern harrier (*Circus hudsonius*). No migratory birds or nests were observed within the Survey Area during the March 14, 2025 field survey. If construction cannot be avoided during the breeding and nesting season, which typically occurs from April 1 through August 31 for most songbirds and from February 1 through August 31 for most raptors except eagles, the Applicant will conduct preconstruction surveys and apply appropriate seasonal and spatial buffers, as applicable, to comply with Migratory Bird Treaty Act– and CPW-protected species regulations.

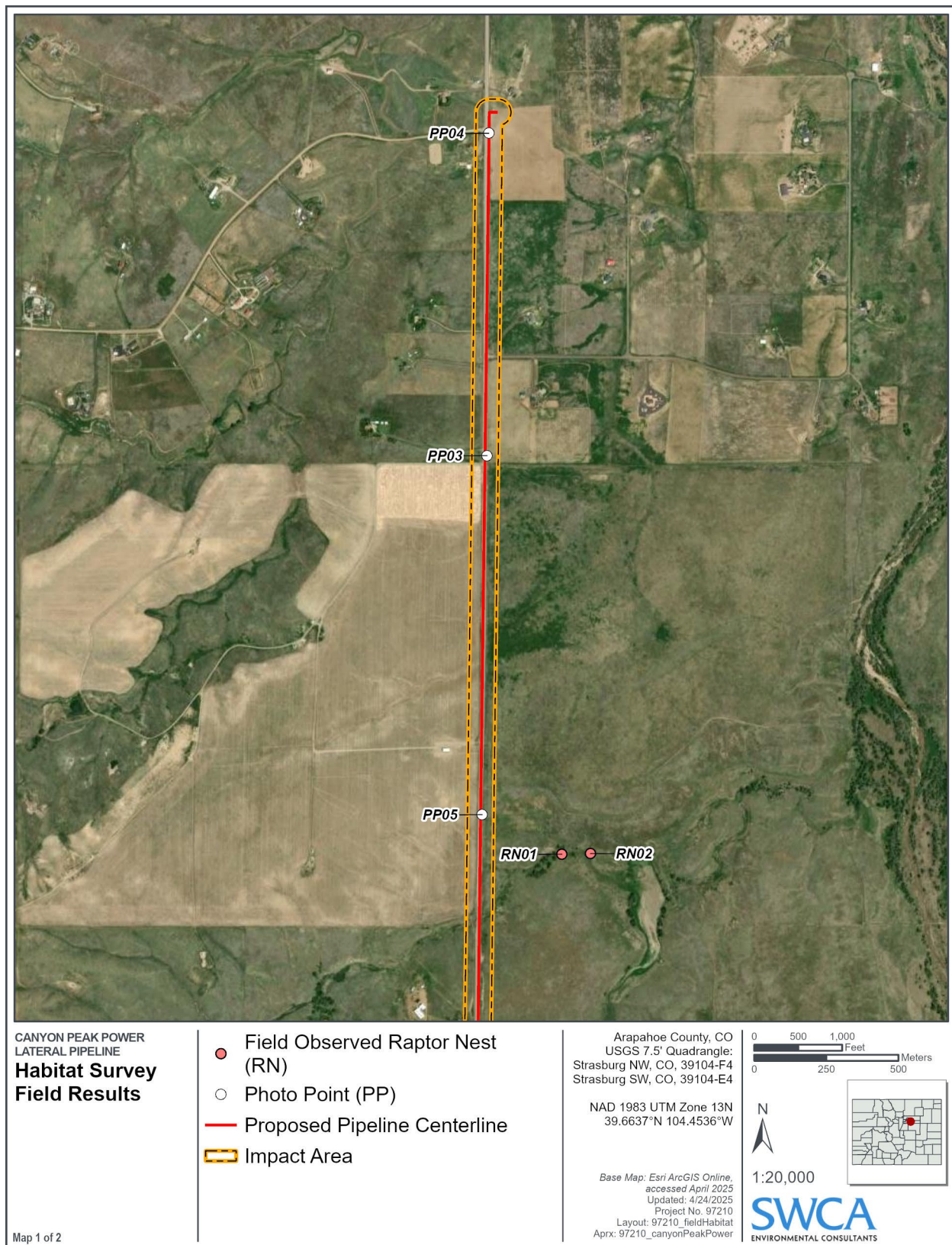


Figure 11. Habitat field survey results within the northern half of the Survey Area.



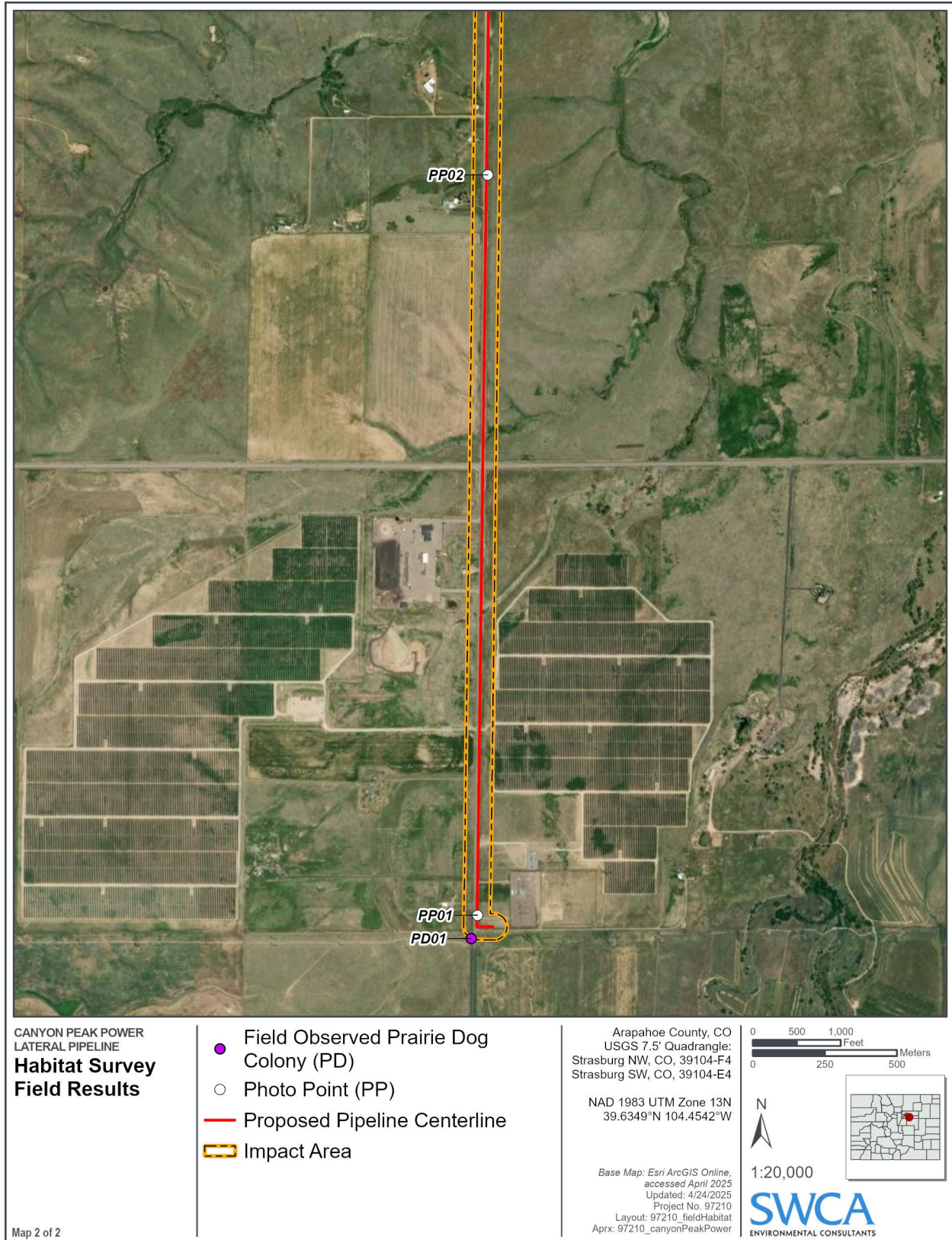


Figure 12. Habitat field survey results within the southern half of the Survey Area.

## 7.2 Section III.C.12.f.ii.

### 7.2.1 Big Game and CPW Mapped High Priority Habitat

The Impact Area does not intersect any CPW mapped big game ranges or high priority habitats (CPW 2023). The closest mapped habitat is approximately 0.5 mile from the Impact Area and includes Mule Deer Winter Concentration Area and Mule Deer Severe Winter Range. No Pipeline-related disturbances are proposed to occur outside of the Impact Area; therefore, no impacts are anticipated to big game species or CPW mapped high priority habitat.

## 7.3 Section III.C.12.f.iii.

The Pipeline will be buried and co-located in an existing easement. Areas disturbed during construction will be temporary in nature, reseeded with an approved seed mix, and allowed to revert to previous conditions, with the exception of pigging facilities/meter yards, which will be fenced and graveled. Therefore, the Pipeline is expected to have minimal impacts to terrestrial and aquatic animals' habitat and food chain based on the fact that the Pipeline will be buried (with the exception of pig launchers, receivers, and meter yards, which will be fenced and graveled), the temporary nature of the construction disturbance, and the fact that areas disturbed during construction will be reseeded with an approved seed mix and allowed to revert to previous conditions.

A perennial native seed mix that is specific to site conditions within the Impact Area is provided in Table 5. This perennial native seed mix contains both warm and cool season species and considers the local vegetation community, soil conditions, post-reclamation land use, and species availability.

**Table 5. Recommended Seed Mix**

Common Name	Scientific Name	Pounds Pure Live Seed per Acre	Pure Live Seed per Square Foot	Percent of Mix
Blue Grama	<i>Bouteloua gracilis</i>	0.48	9	15%
Western Wheatgrass	<i>Pascopyrum smithii</i>	3.6	9	15%
Green Needlegrass	<i>Nassella viridula</i>	1.4	6	10%
Sideoats Grama	<i>Bouteloua curtipendula</i>	2.1	9	15%
James' Galleta	<i>Pleuraphis jamesii</i>	1.6	6	10%
Alkali Sacaton	<i>Sporobolus airoides</i>	0.22	9	15%
Purple Threeawn	<i>Aristida purpurea</i>	0.87	6	10%
Squirreltail	<i>Elymus elymoides</i>	1.4	6	10%
<b>TOTAL</b>		<b>11.6</b>	<b>60</b>	<b>100%</b>

## 8 TERRESTRIAL AND AQUATIC PLANT LIFE

### 8.1 Section III.C.12.g.i.

USGS (2021) NLCD data indicate that the dominant land cover types in the Impact Area consist of the following NLCD classifications: developed/open space (65.61 acres), herbaceous (43.58 acres), cultivated crops (31.51 acres), and barren land (1.33 acres) (Figures 13 and 14). The NLCD definitions for the land cover types in the Impact Area are detailed in Table 6.

**Table 6. NLCD Classes within the Impact Area**

Class	Classification Description*
Developed, Open Space	Areas with a mixture of some constructed materials, but mostly vegetation in the form of lawn grasses. Impervious surfaces account for less than 20% of total cover. These areas most commonly include large-lot single-family housing units, parks, golf courses, and vegetation planted in developed settings for recreation, erosion control, or aesthetic purposes.
Herbaceous	Areas dominated by graminoid or herbaceous vegetation, generally greater than 80% of total vegetation. These areas are not subject to intensive management such as tilling but can be utilized for grazing.
Cultivated Crops	Areas used for the production of annual crops, such as corn, soybeans, vegetables, tobacco, and cotton, and also perennial woody crops such as orchards and vineyards. Crop vegetation accounts for greater than 20% of total vegetation. This class also includes all land being actively tilled.
Barren Land	Areas of bedrock, desert pavement, scarps, talus, slides, volcanic material, glacial debris, sand dunes, strip mines, gravel pits and other accumulations of earthen material. Generally, vegetation accounts for less than 15% of total cover.

\*Multi-Resolution Land Characteristics (MRLC) (2025)

The Gap Analysis Project (USGS 2023b) contains data on species distribution, land cover, and the Protected Areas Database of the United States. The basic thematic mapping unit for natural and semi-natural land cover classes is the ecological system or land cover type, which represents recurring groups of biological communities found in similar physical environments and influenced by similar ecological processes, such as fire or flooding. The Impact Area contains seven land cover types: Great Plains Cottonwood - Green Ash Floodplain Forest, Northern Great Plains Mixedgrass Prairie, Great Plains Shortgrass Prairie, Row & Close Grain Crop Cultural Formation, Introduced & Semi Natural Vegetation, Recently Disturbed or Modified, and Developed & Urban (USGS 2021).

Based on the results of the USFWS IPaC tool (see Appendix A), only two federally protected plant species are listed with potential to occur in the Impact Area: Ute-ladies' tresses (*Spiranthes diluvialis*) and western prairie fringed orchid (*Platanthera praeclara*) (Table 7). Based on observations during the March 14, 2025, field survey, the Impact Area lacks potentially suitable habitat for these species, and neither species is known to occur in Arapahoe County.



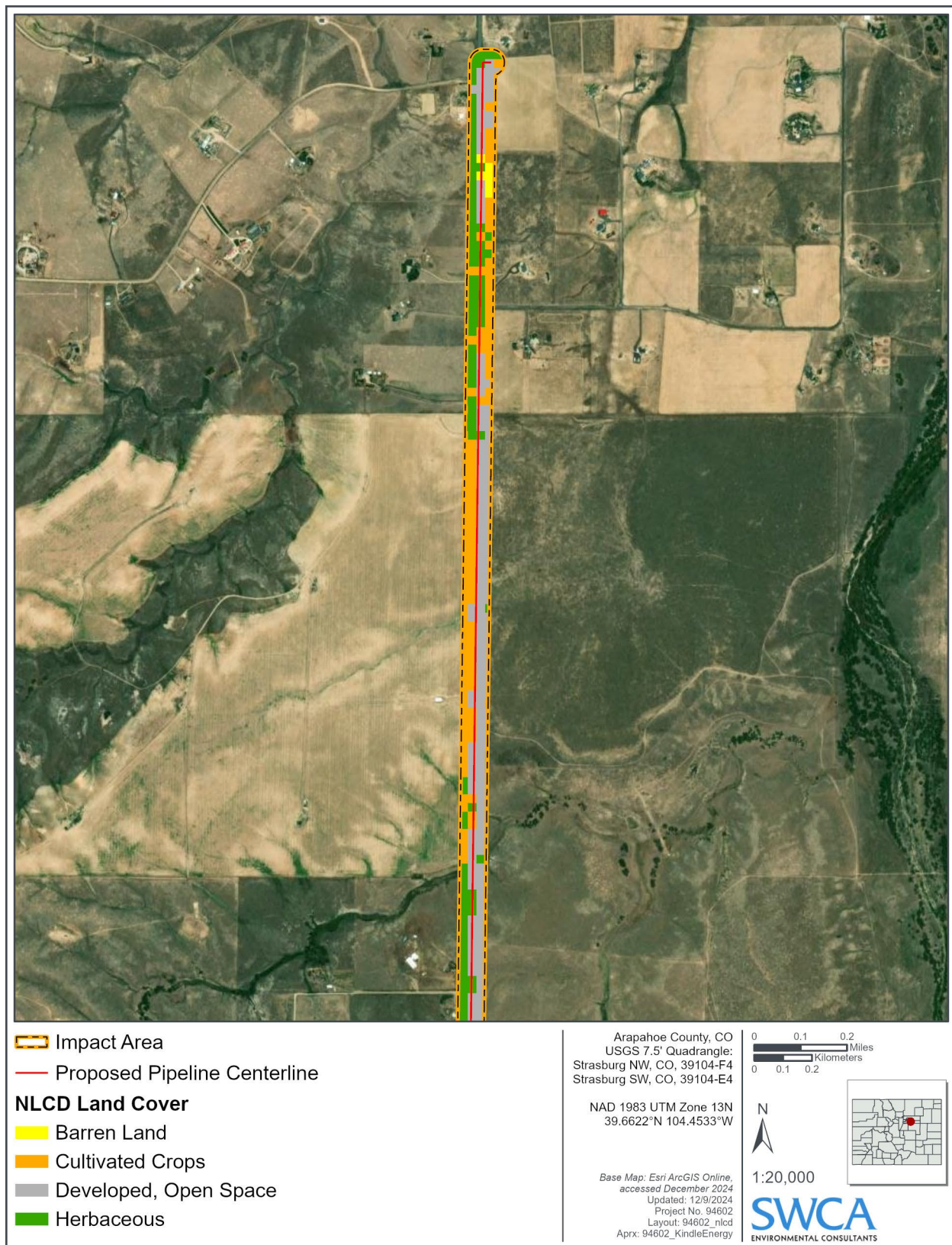


Figure 13. Land cover within the northern half of the Impact Area.



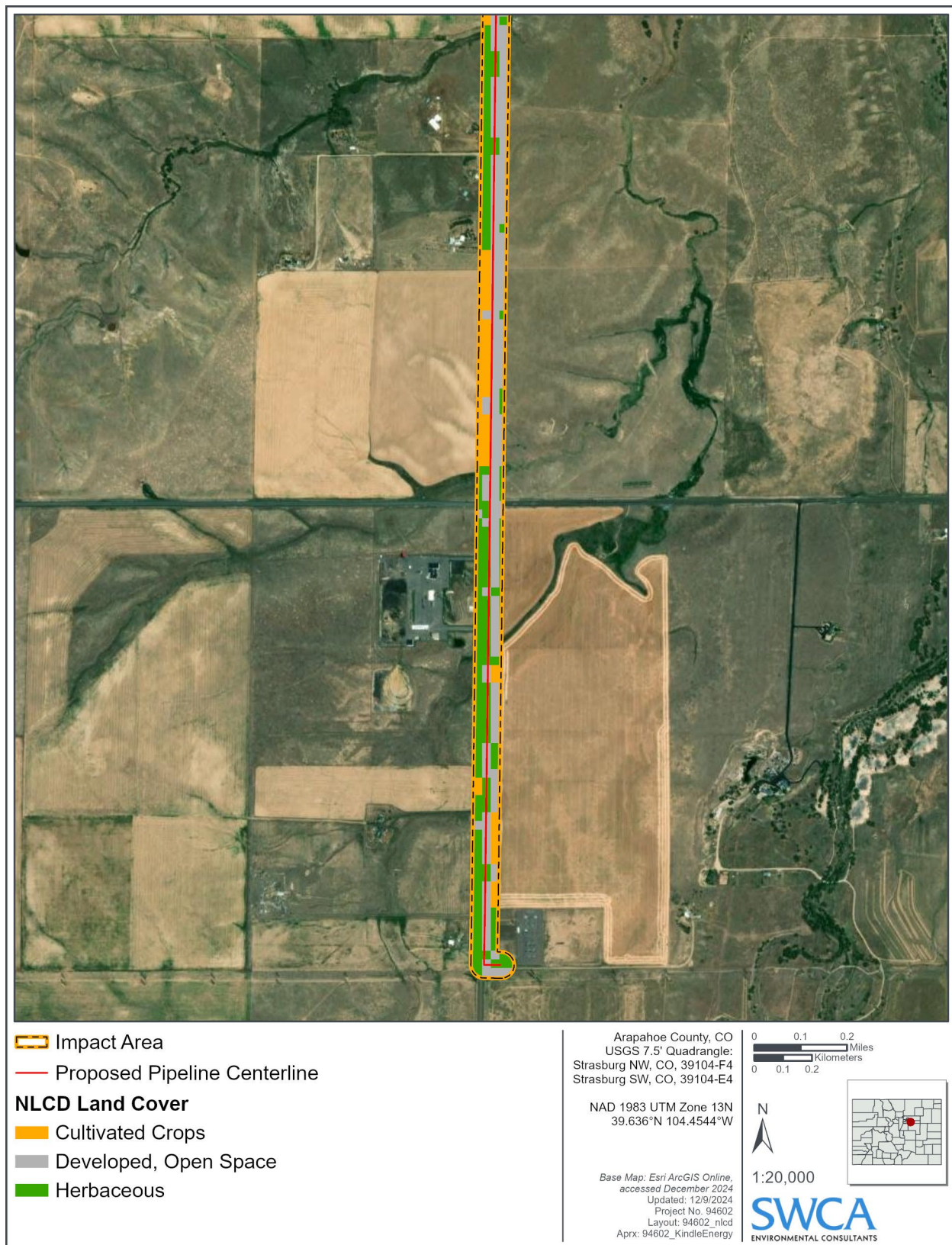


Figure 14. Land cover within the southern half of the Impact Area.

**Table 7. Special Status Plant Species**

Common name ( <i>scientific name</i> )	Status*	Potential to Occur
<b>Flowering Plants</b>		
Ute-ladies'-tresses ( <i>Spiranthes diluvialis</i> )	FT	<b>Unlikely to occur.</b> The Impact Area lacks suitable habitat (intermittently flooded river terraces, lakeshores, moist meadows along perennial streams, floodplains, abandoned stream channels, and oxbows) and the species is not known to occur in Arapahoe County, Colorado.
Western prairie fringed orchid ( <i>Platanthera praeclara</i> )	FT	<b>Unlikely to occur.</b> The Impact Area lacks suitable habitat and the species is not known to occur in Arapahoe County, Colorado. Additionally, no water depletions to the North Platte, South Platte, and Laramie River Basins are proposed as part of the Pipeline.

## 8.2 Section III.C.12.g.ii.

Special status plant species are unlikely to occur in the Impact Area. The Pipeline will be buried and co-located in an existing utility easement. Areas disturbed during construction will be temporary in nature, reseeded with an approved seed mix (see Table 5), and allowed to revert to previous conditions, with the exception of pigging facilities/meter yards, which will be fenced and graveled. Therefore, the Pipeline is expected to have minimal impacts to terrestrial and aquatic plant life.

Additionally, the pipeline will use either boring or HDD to bore under two aquatic features that were mapped during the March 2025 field survey. No impacts to aquatic plant life are anticipated as the aquatic features will be avoided through the use of HDD installation.

## 9 SOILS, GEOLOGIC CONDITIONS AND NATURAL HAZARDS

### 9.1 Section III.C.12.h.i.

The Pipeline is located within the Colorado Piedmont Section of the Great Plains Physiographic Province. The Colorado Piedmont Section lies primarily between the South Platte River and the Arkansas River and is characterized by the erosional effects of these rivers and their tributaries (USGS 2006). The bedrock of the Great Plains Physiographic Province includes horizontal beds of sandstones, shales, limestones, conglomerates, and lignite (National Park Service 2018).

The Impact Area is characterized by arkosic sandstone, shale, mudstone, conglomerate, and local coal beds (Tweto 1979). Seven Natural Resources Conservation Service (NRCS) soil map units are mapped within the Impact Area, three of which make up over 75% of the Impact Area (NRCS 2019) (Table 6). Fondis silt loam, 3 to 5 percent slopes, is well drained and derived from loamy and silty parent material soils. Weld-Deertrail silt loams, 0 to 3 percent slopes, are well drained and derived from loam silty and clayey eolian deposits. Renohill-Buick loams, 3 to 9 percent slopes, are well drained and derived from loam silty and clayey alluvium. The remaining soils consist of loams, clay loams, and silt loams generally found on drainageways, and terraces derived from loam clayey materials as well as alluvium and eolian deposits (NRCS 2019). The soil map units present within the Impact Area are presented in Table 8 and shown on the maps on Figures 15 and 16.



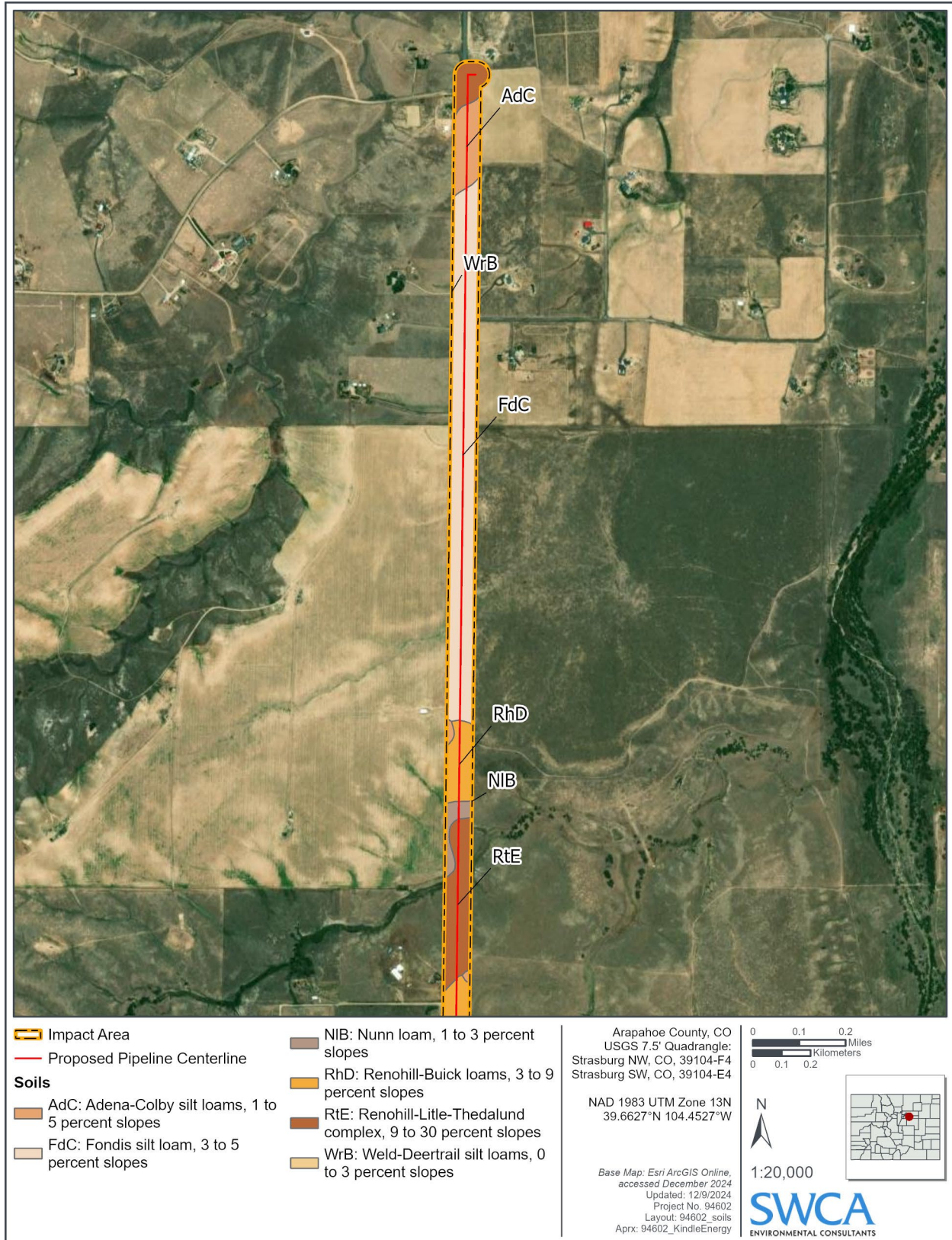


Figure 15. Soil map units within the northern half of the Impact Area.





Figure 16. Soil map units within the southern half of the Impact Area.

**Table 8. Soil Map Units within the Impact Area**

Soil Map Unit Name	Acres within Impact Area	Percentage of Impact Area	Corrosion of Steel Potential	Corrosion of Concrete	Source of Reclamation Material	Farmland Classification
Fondis silt loam, 3 to 5 percent slopes	41.81	29.90	Moderate	Low	Fair	Prime farmland if irrigated
Weld-Deertrail silt loams, 0 to 3 percent slopes	36.65	26.21	Moderate	Low	Fair	Not prime farmland
Renohill-Buick loams, 3 to 9 percent slopes	30.90	22.10	High	Low	Fair	Not prime farmland
Renohill-Little-Thedalund complex, 9 to 30 percent slopes	15.19	10.87	High	Low	Fair	Not prime farmland
Adena-Colby silt loams, 1 to 5 percent slopes	12.46	8.91	Low	Low	Fair	Farmland of statewide importance
Nunn loam, 1 to 3 percent slopes	2.51	1.80	Moderate	Low	Fair	Prime farmland if irrigated
Loamy alluvial land	0.31	0.22	High	Low	Fair	Not prime farmland

Soils within the Impact Area have a low corrosion of concrete potential and a moderate to high corrosion of steel potential. The rate of corrosion of uncoated steel is related to such factors as soil moisture, particle-size distribution (i.e., soil texture), acidity, and electrical conductivity of the soil (NRCS 2019). Special site examination and design are recommended if the combination of factors results in a severe hazard of corrosion. None of the soils in the Impact Area have a severe corrosion of steel potential.

Soils within the Impact Area are considered to be a fair source of reclamation material. A rating of fair means that vegetation can be established and maintained, and the soil can be stabilized through modification of one or more properties (NRCS 2025). Soils within the Impact Area are rated fair primarily because of low organic matter content, elevated clay content, shallow depth to bedrock (i.e., Renohill-Buick loams), or elevated water erosion potential. For satisfactory performance, it may be necessary to topdress with better suited material or add soil amendments. Topsoil resources should be salvaged separately from subsoil during pipeline installation and reapplied following backfilling and decompaction. Topsoil resources should be windrowed parallel to the pipeline trench on the non-travel side of the pipeline and separately from any windrowed subsoil material. Best management practices should be implemented to reduce erosion and loss of soil resources. Four soil map units in the Impact Area are mapped as “not prime farmland,” two soil map units within the Impact Area are mapped as “prime farmland if irrigated,” and one soil unit within the Impact Area is mapped as “farmland of statewide importance” (NRCS 2025) (Table 8). The USDA (2025) defines “prime farmland” as “land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops and is available for these uses.” The USDA (2025) defines “farmland of statewide importance” as “land that does not meet the criteria for prime or unique farmland.” The Pipeline would be built within an existing utility corridor; therefore, it would not impact farmland, as farming operations do not take place within the utility corridor.

## **9.2 Section III.C.12.h.ii.**

SWCA reviewed publicly available sources, including the Colorado Geological Survey and USGS, for data on karst formations, subsidence features faults, landslides, and flood zones to determine potential risks from natural hazards to the Impact Area. SWCA has determined that there are no significant risks to the Pipeline due to the soils within the Impact Area or from natural hazards consisting of karst formations, subsidence features faults, landslides, and flood zones (Colorado Geological Survey 2015; FEMA 2021; USGS 2024a, 2024b). Although all soil types within the Impact area, with exception of Adena-Colby silt loams, listed either a Moderate or High Corrosion Potential these ratings are only applicable to uncoated steel. The buried pipeline would be coated and cathodic protection would be implemented to ensure corrosion protection.

## **9.3 Section III.C.12.h.iii.**

The Pipeline is not anticipated to have significant impacts on soil and geologic conditions in the area, streambed meander limits, or aquifer recharge areas.

# **10 COMPLIANCE WITH APPROVAL CRITERIA**

## **10.1 General Approval Criteria**

### **10.1.1 Section V.A.1.**

Documentation that prior to site disturbance associated with the Proposed Project, the applicant can and will obtain all necessary property rights, permits and approvals. The Board may, at its discretion, defer making a final decision on the application until outstanding property rights, permits and approvals are obtained.

CPP Response: The Applicant will obtain the necessary permits and approvals to construct and operate the proposed Pipeline.

### **10.1.2 Section V.A.2.**

The Proposed Project considers the relevant provisions of the regional water quality plans.

CPP Response: The Pipeline is located within the Denver Basin aquifer system and is subject to the South Platte Basin Implementation Plan. The Pipeline will comply with the State of Colorado and Arapahoe County's Stormwater Management Manual (Revised July 5, 2011) (Arapahoe County Public Works and Development 2011).

### **10.1.3 Section V.A.3.**

The applicant has the necessary expertise and financial capability to develop and operate the Proposed Project consistent with all requirements and conditions.

CPP Response: The Applicant has the financial and technical capabilities to develop and operate the proposed Project. The Applicant may employ contractors for construction and operations-related tasks.

Only contractors with experience and expertise to construct this Pipeline will be pre-qualified to bid on this Project.

#### **10.1.4 Section V.A.4.**

The Proposed Project is technically and financially feasible.

CPP Response: The Applicant has evaluated the Pipeline for technical and financial feasibility and has determined that the Pipeline is necessary and feasible. As previously mentioned, the Applicant has the technical and financial capability to develop the proposed Pipeline. For more information on the financial feasibility of the Project, please reference Appendix B14 (Financial Feasibility) and B20 (Cost-Benefit Analysis) of the Applicant's submission.

#### **10.1.5 Section V.A.5.**

The Proposed Project is not subject to significant risk from natural hazards.

CPP Response: SWCA reviewed publicly available sources, including the Colorado Geological Survey and USGS, for data on karst formations, subsidence features faults, landslides, and flood zones to determine potential risks from natural hazards to the Impact Area. SWCA has determined that there are no significant risks to the Pipeline from natural hazards consisting of karst formations, subsidence features faults, landslides, and flood zones (Colorado Geological Survey 2015; FEMA 2021; USGS 2024a, 2024b). Additional information regarding the soils in the Impact Area is provided in Section 9.1.

#### **10.1.6 Section V.A.6.**

The Proposed Project is in general conformity with the applicable comprehensive plans.

CPP Response: The Applicant has reviewed the Arapahoe County Comprehensive Plan adopted August 15, 2019. The Pipeline is a permitted use as a Major Facility of Public Utility in accordance with Arapahoe County's 1041 Regulations (Arapahoe County 2006). The Applicant has also reviewed the 2018 Arapahoe County Comprehensive Plan (Comprehensive Plan), as amended through September 20, 2022. The Pipeline is in conformity with the vision and guiding principles outlined in the Comprehensive Plan, including Goal PFS 6 – *Ensure the Adequacy of Electric, Natural Gas, Telephone, Cable and Internet Utilities in Existing and New Development* and Goal PFS 11 – *Ensure the Provision of Adequate Public Facilities and Services*, as the Project will contribute to public services in Arapahoe County. The Project also is proposed for development in accordance with Policy PFS 12.3 - *Require Land Use Compatibility when Siting Local and Regional Utility Facilities*, as it is proposed for development within an existing utility corridor and will not have significant impacts on natural and cultural resources.

#### **10.1.7 Section V.A.7.**

The Proposed Project will not have a significant adverse effect on the capability of local government to provide services or exceed the capacity of service delivery systems.

CPP Response: The Pipeline will not create significant demand on local government services and primary Pipeline impacts will be limited to the construction phase of the Pipeline.

The Applicant will coordinate with the local fire, police, and the Arapahoe County Office of Emergency Management to discuss emergency response resources available. The Applicant has also developed and will implement an emergency response plan.

The maximum impacts due to traffic will be limited to the construction phase of the Pipeline. Traffic will utilize I-70, County Road 129, and Belleview Avenue. During construction there will be a higher number of vehicles utilizing the roadways, but the additional, temporary construction-related traffic is also not expected to negatively impact the roadways. All existing roadways used to access the site will be able to support the additional traffic and, as such, there are no new roads being proposed with this Project for either construction deliveries or other deliveries associated with facility operations. Once operation commences, traffic will be generally limited to plant operators (2 operators per shift) and deliveries. The Pipeline will therefore not impact the existing transportation network and infrastructure in Arapahoe County.

#### **10.1.8 Section V.A.8.**

The Proposed Project will not create an undue financial burden on existing or future residents of the County.

CPP Response: The Pipeline will not be funded using public funds and will be fully financed with funds provided by the Applicant or an affiliated entity. The Pipeline will contribute to increased tax revenue in Arapahoe County. The Pipeline will result in increased tax revenues for the state and county. Additionally, it is anticipated that workers would spend money on goods and services within the county during construction of the Pipeline. For a more detailed evaluation related to the distribution of the burden on existing or future residents of the county please see the benefit/cost analysis that was completed for the Pipeline and attached to the 1041 Permit application.

#### **10.1.9 Section V.A.9.**

The Proposed Project will not significantly degrade any substantial sector of the local economy.

CPP Response: The Pipeline will not degrade the local economy in Arapahoe County. The Applicant will employ local subcontractors and provide local job opportunities for qualified contractors to the extent practicable during the construction and operation of the Pipeline. Following construction, the Pipeline area will be restored to preexisting conditions and will not impact nearby businesses or agricultural activities.

#### **10.1.10 Section V.A.10.**

The Proposed Project will not unduly degrade the quality or quantity of recreational opportunities and experience.

CPP Response: The Pipeline is not located near designated scenic areas and the Impact Area does not contain trails or other facilities for recreational experiences. The closest business for recreational activities is the Kiowa Creek Sporting Club, which is approximately 0.65 mile east of the Impact Area. The Pipeline is not anticipated to affect the operations of this facility and potential nuisances associated with construction (noise, dust, odors) will be minimized to the extent practicable. Potential nuisances are expected to be limited to the construction phase of the Pipeline.

#### **10.1.11 Section V.A.11.**

The planning, design and operation of the Proposed Project will reflect principals of resource conservation, energy efficiency and recycling or reuse.

CPP Response: The Project will be designed to include construction of a natural gas pipeline and will reflect principals of resource conservation, energy efficiency, and recycling or reuse to the extent practicable. Natural gas is cleaner burning than many traditional fuel sources such as coal and more reliable than renewable energy sources (wind and solar resources). Upon completion, the pipeline would be used to transport natural gas, significantly reducing or eliminating the amount of truck traffic that would be required to haul the products. If the Pipeline was not constructed the need to use trucks for transport would result in a greater demand for gasoline and diesel, increased emissions, and may increase the risk for damage and additional maintenance to County Road 129.

#### **10.1.12 Section V.A.12.**

The Proposed Project will not significantly degrade the environment. Appendix “A” includes the considerations that will be used to determine whether there will be significant degradation of the environment. For purposes of this section, the term environment shall include:

- a. Air quality
- b. Visual quality
- c. Surface water quality
- d. Groundwater quality
- e. Wetlands, flood plains, streambed meander limits, recharge areas, and riparian areas
- f. Terrestrial and aquatic animal life
- g. Terrestrial and aquatic plant life
- h. Soils and geologic conditions

CPP Response: The Pipeline will not have significant environmental impacts, as the Impact Area will be restored to its pre-construction state to the extent practicable. The Applicant will use best management practices to limit environmental impacts, including erosion and sediment control measures, and will revegetate the disturbed area with an approved seed-mix following construction in accordance with federal, state, and County requirements. Additional discussion of environmental resources and impacts are provided in Sections 2 through 9.

#### **10.1.13 Section V.A.13.**

The Proposed Project will not cause a nuisance.

CPP Response: The Pipeline will contribute to limited and localized nuisances during construction, including dust, noise, and increased traffic. The extent of these nuisances is anticipated to be minimal, and the Applicant will employ relevant mitigation measures to minimize the impacts. These measures include regularly watering exposed soil surfaces, enforcing vehicle speed limits on unpaved roads, use of low-emission equipment, compliance with relevant air quality regulations, and applying environmentally safe dust suppressants.

#### **10.1.14 Section V.A.14.**

The Proposed Project will not significantly degrade areas of paleontological, historic, or archaeological importance.



CPP Response: The Pipeline currently does not have a federal nexus. The Applicant conducted an official file search through the Colorado Office of Archaeology and Historic Preservation (OAHP) in November 2024. The official OAHP file search results indicated that one cultural resource inventory has been previously completed within a small portion of the Impact Area. The file search also identified one previously recorded resource, the Brick Center School, present within the Impact Area. The school is visible on a historical aerial image and historical USGS quadrangles (NETROnline 2024; USGS 2024c). However, later modern maps and aerial images indicate the school is no longer extant and the area has been converted into agricultural land. There are no historic properties listed in the National Register of Historic Places or the State Register of Historic Places, and no National Historic Landmarks, National Historic Monuments, or National Historic Trails are recorded within 5 miles of the Pipeline area (History Colorado 2024; National Park Service 2024b, 2024c, 2024d).

Historical maps and aerial imagery indicate that the majority of the Impact Area has historically remained agricultural land since at least the 1950s. Small portions of the Impact Area have experienced other disturbances, such as the pipeline construction. Previous infrastructure developments paired with long-term agricultural use in the Impact Area and surrounding area limit the potential for intact archaeological resources to be present on the ground surface or shallowly buried.

### **10.1.15 Section V.A.15.**

The Proposed Project will not result in unreasonable risk of releases of hazardous materials. In making this determination as to such risk, the Board's consideration shall include:

- a. Plans for compliance with federal and State handling, storage, disposal and transportation requirements.
- b. Use of waste minimization techniques.
- c. Adequacy of spill prevention and response plans.

CPP Response: The Pipeline will be constructed in accordance with applicable federal and state safety regulations for pipelines to minimize the risk of spills of hazardous materials.

Waste generated during construction activities will be properly disposed of. Enclosed containment will be provided for trash disposal. Construction waste, including trash and litter, garbage, other solid waste, petroleum products, and other potentially hazardous materials, will be removed and taken to a disposal facility authorized to accept such materials.

The Applicant will develop a spill prevention, control, and countermeasures (SPCC) plan for the Pipeline, as required, to minimize the potential for release of hazardous materials. The SPCC plan will be developed in accordance with the Oil Pollution Act of 1990, as applicable. The Applicant also will develop a stormwater pollution prevention plan for construction. CPP will not have any buried oil storage tanks. In the event the project's aggregate aboveground oil storage capacity exceeds 1,320 gallons in containers with storage capacity equal to or greater than 55 gallons during commercial operations, CPP will develop and implement an SPCC plan in accordance with 40 CFR 112. CPP's GESC Report, including spill containment and control measures, was provided as Appendix B5 (1-Q24-063-GESC Report) to the 1041 Application. In compliance with the Colorado Discharge Permit System, the project must obtain a Construction Stormwater General Permit and will develop a Stormwater Management Plan, including a spill prevention and control plan prior to commencement of construction activities.

### **10.1.16 Section V.A.16.**

The benefits accruing to the County and its citizens from the proposed activity outweigh the losses of any resources within the County, or the losses of opportunities to develop such resources.

CPP Response: The Pipeline will be used for the safe and efficient transport of natural gas and will not contribute to losses of resources within the county. The Pipeline is anticipated to benefit the county through increased tax revenue, employment opportunities, and increased spending on goods and services within the county during construction of the Pipeline. Additional details can be found in the Benefit/Cost Analysis provided in the Pipeline's 1041 permit application.

### **10.1.17 Section V.A.17.**

The benefits accruing to the County and its citizens from the proposed activity outweigh the losses of any resources within the County, or the losses of opportunities to develop such resources.

CPP Response: The Applicant has reviewed and evaluated the Pipeline based on its technical and financial feasibility, and determined the Pipeline is the best alternative based on consideration of need, existing technology, cost, impact, and these regulations. Additional details can be found in the Applicant's alternatives analysis included under section III.C.2 of the Applicant's 1041 permit application.

### **10.1.18 Section V.A.18.**

The Proposed Project will not unduly degrade the quality or quantity of agricultural activities.

CPP Response: The Pipeline will be constructed within an existing utility corridor and is not anticipated to impact agricultural activities.

### **10.1.19 Section V.A.19.**

Cultural Resources. The Proposed Project will not significantly interfere with the preservation of cultural resources, including historical structures and sites, agricultural resources, the rural lifestyle and the opportunity for solitude in the natural environment.

CPP Response: The proposed Pipeline is not anticipated to impact cultural or historic resources, as discussed in Section 10.1.14. The proposed Pipeline will not interfere with agricultural activities in the area, as discussed in Section 10.1.18. The Impact Area does not overlap with any significant sites for recreation in the natural environment and will not impact the rural lifestyle of the area.

### **10.1.20 Section V.A.20.**

Land Use. The Proposed Project will not cause significant degradation of land use patterns in the area around the Proposed Project.

CPP Response: The Pipeline is proposed for development within an existing utility corridor and will not degrade the land use patterns in the area around the Impact Area.

### **10.1.21 Section V.A.21.**

Compliance with Regulations & Fees. The applicant has complied with all applicable provisions of these regulations and has paid all applicable fees.

CPP Response: The Applicant has complied with all applicable regulations and has paid all applicable fees.

## **10.2 Additional Criteria Applicable to Major Facilities of a Public Utility**

### **10.2.1 Section V.C.1.**

Areas around major facilities of a public utility shall be administered to minimize disruption of the service provided by the public utility.

CPP Response: The Pipeline will not cause disruptions to services provided by a public utility.

### **10.2.2 Section V.C.2.**

Areas around major facilities of a public utility shall be administered so as to preserve desirable existing community and rural patterns

CPP Response: The Pipeline is proposed for construction within an existing utility corridor and will not disrupt existing community and rural patterns.

### **10.2.3 Section V.C.3.**

Where feasible, major facilities of a public utility shall be located so as to avoid direct conflict with adopted local comprehensive, State and regional master plans.

CPP Response: To the Applicant's knowledge, the Pipeline is not in conflict with adopted local comprehensive, state, or regional master plans.

### **10.2.4 Section V.C.4.**

Where feasible, major facilities of a public utility shall be located so as to minimize dedication of new right-of-way and construction of additional infrastructure (e.g., gas pipelines, roads, and distribution lines.)

CPP Response: The Pipeline has been sited within an existing utility and will require minimal additional infrastructure for its operation.



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## **APPENDIX A**

### **Information for Planning and Consultation Results**

# IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

## Location

Arapahoe County, Colorado



## Local office

Colorado Ecological Services Field Office

☎ (303) 236-4773

📅 (303) 236-4005

MAILING ADDRESS



Denver Federal Center  
P.O. Box 25486  
Denver, CO 80225-0486

PHYSICAL ADDRESS

1 Denver Federal Center  
Bldg 25 Room W1911}  
Denver, CO 80225-0001

NOT FOR CONSULTATION

# Endangered species

**This resource list is for informational purposes only and does not constitute an analysis of project level impacts.**

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species<sup>1</sup> and their critical habitats are managed by the [Ecological Services Program](#) of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries<sup>2</sup>).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact [NOAA Fisheries](#) for [species under their jurisdiction](#).

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1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the [listing status page](#) for more information. IPaC only shows species that are regulated by USFWS (see FAQ).

2. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

## Mammals

NAME	STATUS
<b>Preble's Meadow Jumping Mouse</b> <i>Zapus hudsonius preblei</i> Wherever found There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. <a href="https://ecos.fws.gov/ecp/species/4090">https://ecos.fws.gov/ecp/species/4090</a>	<b>Threatened</b>

## Birds

NAME	STATUS
<b>Piping Plover</b> <i>Charadrius melodus</i> This species only needs to be considered if the following condition applies: <ul style="list-style-type: none"><li>• Project includes water-related activities and/or use in the N. Platte, S. Platte, and Laramie River Basins which may affect listed species in Nebraska.</li></ul> There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. <a href="https://ecos.fws.gov/ecp/species/6039">https://ecos.fws.gov/ecp/species/6039</a>	<b>Threatened</b>
<b>Whooping Crane</b> <i>Grus americana</i> There is <b>final</b> critical habitat for this species. Your location does not overlap the critical habitat. <a href="https://ecos.fws.gov/ecp/species/758">https://ecos.fws.gov/ecp/species/758</a>	<b>Endangered</b>

## Fishes

NAME	STATUS
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**Pallid Sturgeon** *Scaphirhynchus albus*

Endangered

Wherever found

This species only needs to be considered if the following condition applies:

- Project includes water-related activities and/or use in the N. Platte, S. Platte, and Laramie River Basins which may affect listed species in Nebraska.

No critical habitat has been designated for this species.

<https://ecos.fws.gov/ecp/species/7162>

## Insects

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NAME

STATUS

**Monarch Butterfly** *Danaus plexippus*

Candidate

Wherever found

No critical habitat has been designated for this species.

<https://ecos.fws.gov/ecp/species/9743>

## Flowering Plants

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NAME

STATUS

**Ute Ladies'-tresses** *Spiranthes diluvialis*

Threatened

Wherever found

No critical habitat has been designated for this species.

<https://ecos.fws.gov/ecp/species/2159>

**Western Prairie Fringed Orchid** *Platanthera praeclara*

Threatened

Wherever found

No critical habitat has been designated for this species.

<https://ecos.fws.gov/ecp/species/1669>

## Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

There are no critical habitats at this location.

You are still required to determine if your project(s) may have effects on all above listed species.

# Bald & Golden Eagles

There are no documented cases of eagles being present at this location. However, if you believe eagles may be using your site, please reach out to the local Fish and Wildlife Service office.

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Additional information can be found using the following links:

- Eagle Management <https://www.fws.gov/program/eagle-management>
- Measures for avoiding and minimizing impacts to birds  
<https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds>
- Nationwide conservation measures for birds  
<https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>
- Supplemental Information for Migratory Birds and Eagles in IPaC  
<https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action>

**What does IPaC use to generate the potential presence of bald and golden eagles in my specified location?**

The potential for eagle presence is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply). To see a list of all birds potentially present in your project area, please visit the [Rapid Avian Information Locator \(RAIL\) Tool](#).

**What does IPaC use to generate the probability of presence graphs of bald and golden eagles in my specified location?**

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [Rapid Avian Information Locator \(RAIL\) Tool](#).

## What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to obtain a permit to avoid violating the [Eagle Act](#) should such impacts occur. Please contact your local Fish and Wildlife Service Field Office if you have questions.

# Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act<sup>1</sup> and the Bald and Golden Eagle Protection Act<sup>2</sup>.

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats<sup>3</sup> should follow appropriate regulations and consider implementing appropriate conservation measures, as described in the links below. Specifically, please review the ["Supplemental Information on Migratory Birds and Eagles"](#).

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.

Additional information can be found using the following links:

- Eagle Management <https://www.fws.gov/program/eagle-management>
- Measures for avoiding and minimizing impacts to birds <https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds>
- Nationwide conservation measures for birds <https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf>
- Supplemental Information for Migratory Birds and Eagles in IPaC <https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action>

The birds listed below are birds of particular concern either because they occur on the [USFWS Birds of Conservation Concern](#) (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ [below](#). This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the [E-bird data mapping tool](#) (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found [below](#).

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the PROBABILITY OF PRESENCE SUMMARY below to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
<b>Broad-tailed Hummingbird</b> <i>Selasphorus platycercus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 25 to Aug 21
<b>Ferruginous Hawk</b> <i>Buteo regalis</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA <a href="https://ecos.fws.gov/ecp/species/6038">https://ecos.fws.gov/ecp/species/6038</a>	Breeds Mar 15 to Aug 15
<b>Grasshopper Sparrow</b> <i>Ammodramus savannarum</i> <i>perpallidus</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA <a href="https://ecos.fws.gov/ecp/species/8329">https://ecos.fws.gov/ecp/species/8329</a>	Breeds Jun 1 to Aug 20
<b>Lesser Yellowlegs</b> <i>Tringa flavipes</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. <a href="https://ecos.fws.gov/ecp/species/9679">https://ecos.fws.gov/ecp/species/9679</a>	Breeds elsewhere
<b>Northern Harrier</b> <i>Circus hudsonius</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA <a href="https://ecos.fws.gov/ecp/species/8350">https://ecos.fws.gov/ecp/species/8350</a>	Breeds Apr 1 to Sep 15

## Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read ["Supplemental Information on Migratory Birds and Eagles"](#), specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

**Probability of Presence (■)**



Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is  $0.25/0.25 = 1$ ; at week 20 it is  $0.05/0.25 = 0.2$ .
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

### Breeding Season (■)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

### Survey Effort (|)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

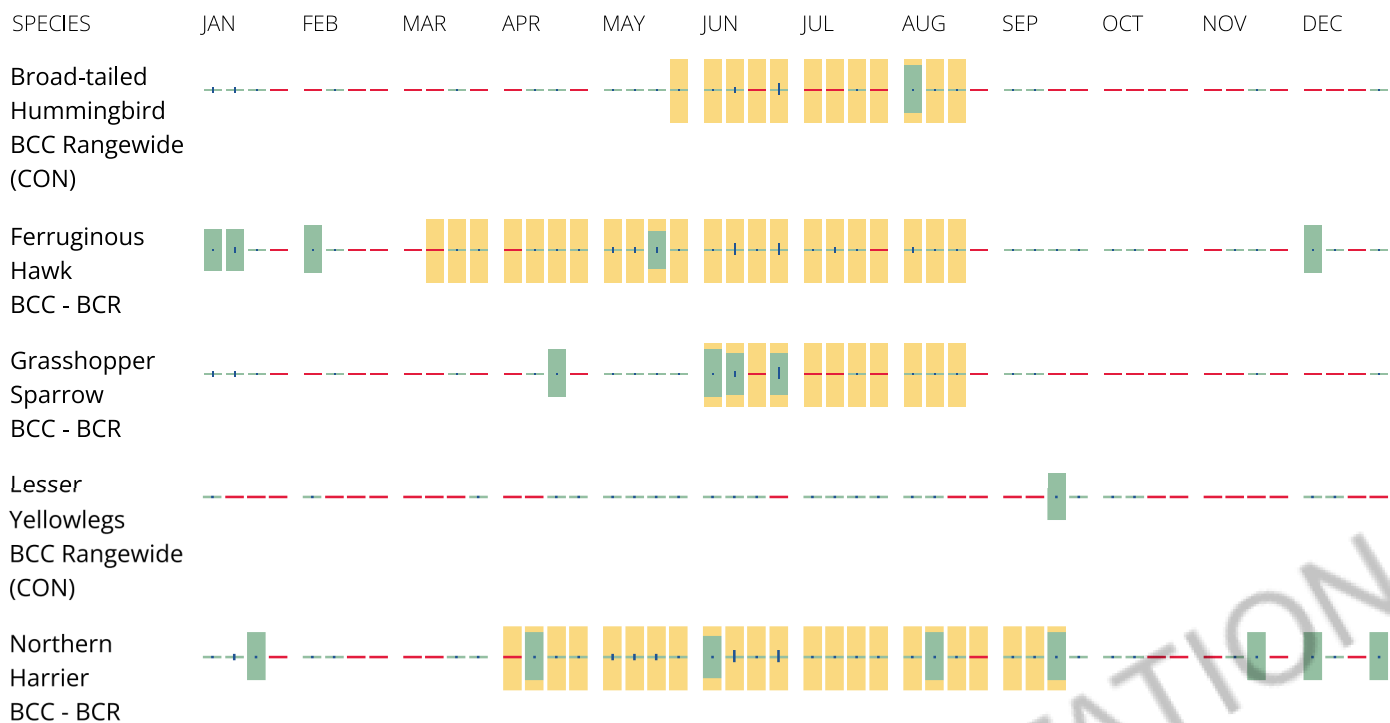
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

### No Data (—)

A week is marked as having no data if there were no survey events for that week.

### Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



**Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.**

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. [Additional measures](#) or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

**What does IPaC use to generate the list of migratory birds that potentially occur in my specified location?**

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [Rapid Avian Information Locator \(RAIL\) Tool](#).

**What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?**

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go to the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

### **How do I know if a bird is breeding, wintering or migrating in my area?**

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may query your location using the [RAIL Tool](#) and look at the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

### **What are the levels of concern for migratory birds?**

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Eagle Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

### **Details about birds that are potentially affected by offshore projects**

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

### **What if I have eagles on my list?**

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the Eagle Act should such impacts occur.

### **Proper Interpretation and Use of Your Migratory Bird Report**

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

## Facilities

### **National Wildlife Refuge lands**

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

There are no refuge lands at this location.

### **Fish hatcheries**

There are no fish hatcheries at this location.



# Wetlands in the National Wetlands Inventory (NWI)

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

This location overlaps the following wetlands:

RIVERINE

[R4SBC](#)

A full description for each wetland code can be found at the [National Wetlands Inventory website](#)

**NOTE:** This initial screening does **not** replace an on-site delineation to determine whether wetlands occur. Additional information on the NWI data is provided below.

## Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

## Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and

nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

#### **Data precautions**

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate Federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

NOT FOR CONSULTATION

## **APPENDIX B**

### **Site Photographs**



**Figure B-1. Negative Determination Point NDP01; view facing west.**



**Figure B-2. Negative Determination Point NDP02; view facing east.**





**Figure B-3. Negative Determination Point NDP03; view facing east.**



**Figure B-4. Negative Determination Point NDP04; view facing west.**





**Figure B-5. Negative Determination Point NDP05; view facing east.**



**Figure B-6. Negative Determination Point NDP06; view facing east.**





**Figure B-7. OHWM01; view facing east.**



**Figure B-8. OHWM02 view facing east.**





**Figure B-9. Photo point PP01; view facing north.**



**Figure B-10. Photo point PP01; view facing south.**





**Figure B-11. Photo point PP02; view facing north.**



**Figure B-12. Photo point PP02; view facing south.**





**Figure B-13. Photo point PP03; view facing north.**



**Figure B-14. Photo point PP03; view facing south.**





**Figure B-15. Photo point PP04; view facing north.**



**Figure B-16. Photo point PP04; view facing south.**





**Figure B-17. Photo point PP05; view facing north.**



**Figure B-18. Photo point PP05; view facing south.**





**Figure B-19. Raptor Nest RN01; view facing east.**



**Figure B-20. Raptor Nest RN02; view facing east.**



**Figure B-21. Overview of prairie dog colony PD01; view facing west.**