

**Chevron Rockies Business Unit**

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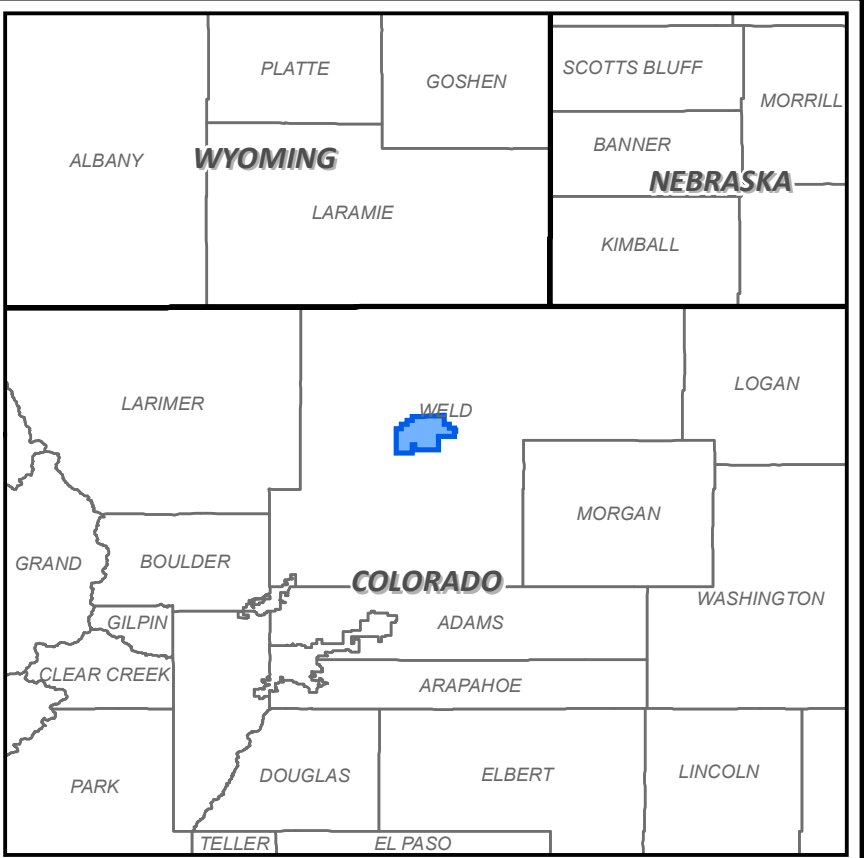
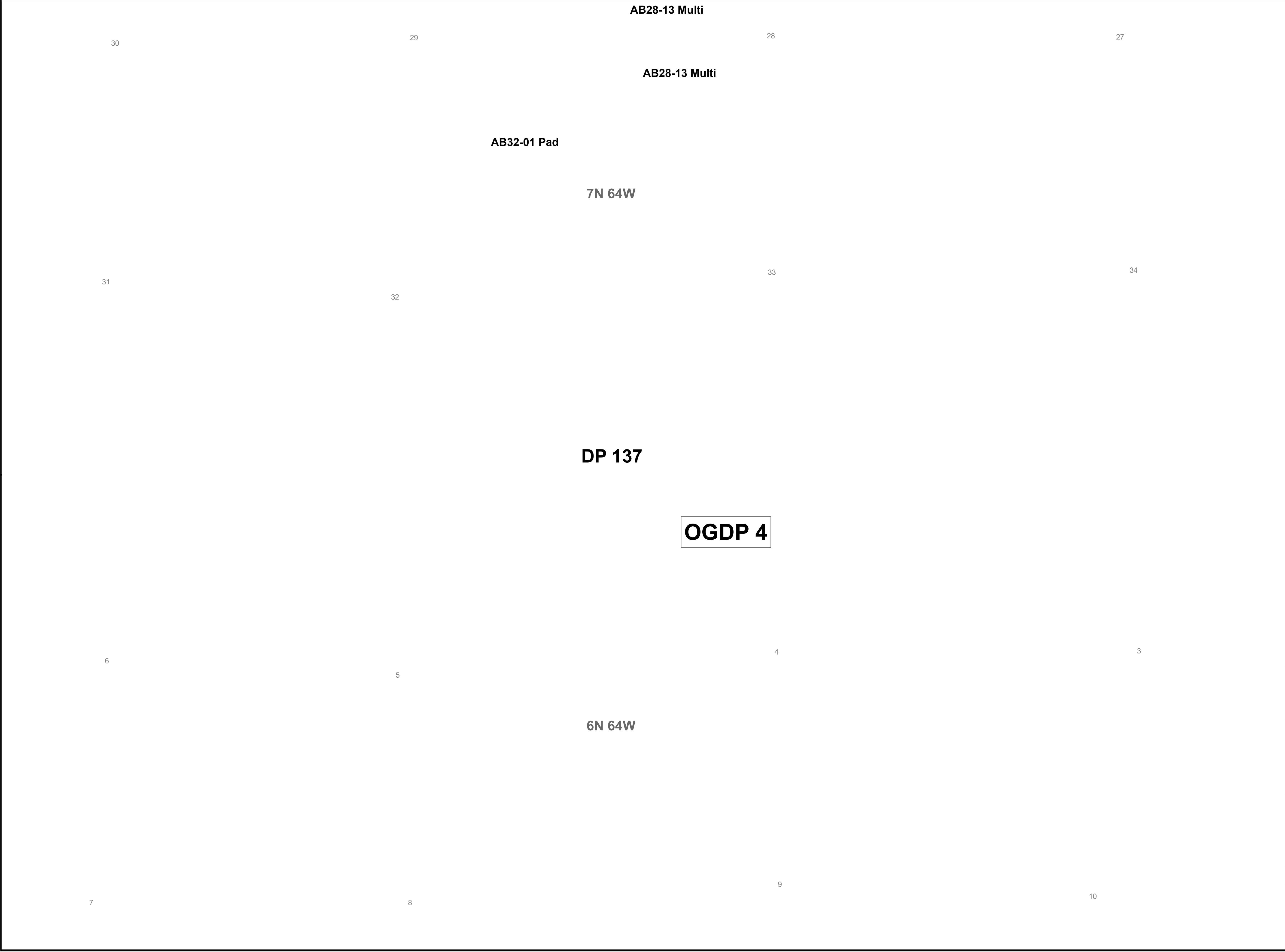
**COGCC Wildlife Protection Plan- Wells Ranch Comprehensive Drilling Plan  
WR OGD 4- AB32-01 Drill Pad**

Per Colorado Oil and Gas Conservation Commission (COGCC) 300 Series and 1200 Series Rules for the protection of wildlife and habitat, Chevron/Noble (Noble) is presenting this Wildlife Protection Plan (WPP) for the proposed Wells Ranch Comprehensive Drilling Plan (CDP) Oil and Gas Development Plan 4 (WR OGD 4) and specifically the AB32-01 Drill Pad, presented as Figure 1. WR OGD 4 includes one drill pad and a second multi-pad with a co-located second drill pad and production facility and lies within T7N, R64W, Section 28 (SW/SW) and Section 32 (NE/NE). The evaluations herein are submitted in support of the COGCC 2A permitting process and specifically the AB32-01 Drill Pad, pursuant to Rule 304.c.(17) Wildlife Protection Plan, and Rule 1201.a for an Oil and Gas Location outside of High Priority Habitat (HPH). It should be noted that figures supporting this WPP are schematic representations used for approximate presentation of environmentally sensitive habitat in the project area, and that full design drawings should be referenced for detailed location placement and analysis.

**Environmental Summary**

Noble's WR OGD 4 will include a single drill pad and a second multi-pad with co-located drill pad and production facility. The development does not encroach upon any 1202.c. HPH. Mason Reservoir and the Eaton Canal irrigation structures are immediately East of the AB28-13 Multi-pad, with the Willow Creek drainage and its associated floodplain West of the AB32-01 drill pad, as demonstrated on Figure 2. Potential environmental constraints for the project include these noted water-way structures and their associated wetland areas.

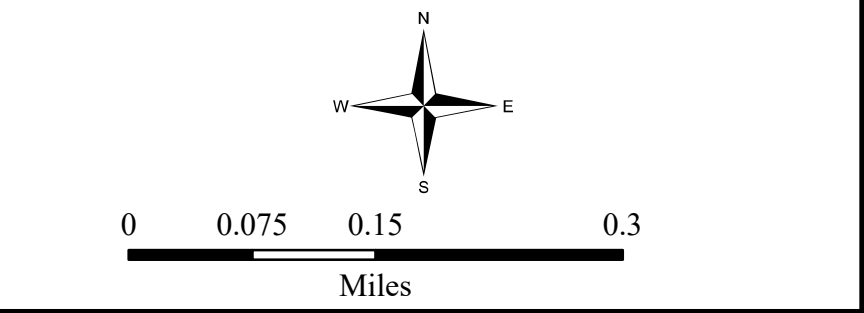
Hydrologic field review by SWCA Environmental Services Professional Wetland Scientist (PWS) was performed the week of December 12<sup>th</sup>, 2021. Survey activities were performed based on existing hydrologic features identified in the field including National Wetland Inventory (NWI)-mapped wetlands and National Hydrography Dataset (NHD) delineations, and the features presented on the AB32-01 Drill Pad Hydrology Map submitted with the 2A packet. As depicted on Figure 3, SWCA confirmed that the roadside ditch north and south of CR76, each with its defined Ordinary High-Water Mark (OHWM) are located  $\pm 200$  feet and  $\pm 250$  feet north of the proposed pad surface, and a freshwater emergent wetland was identified  $\pm 450'$  northeast. The NWI-mapped season streambed wetland within the northeast corner of pad disturbance footprint was inspected and determined not to contain wetlands, or any other aquatic resources. No other associated wetlands, water features or hydrophytic plant or soil indicators were identified within 500' of the pad area or within the proposed pad disturbance footprint.



Legend

- Oil & Gas Development Plan
- Wells Ranch CDP
- Well Pad
- Planned Wells
- Township/Range
- Sections

FIGURE 1

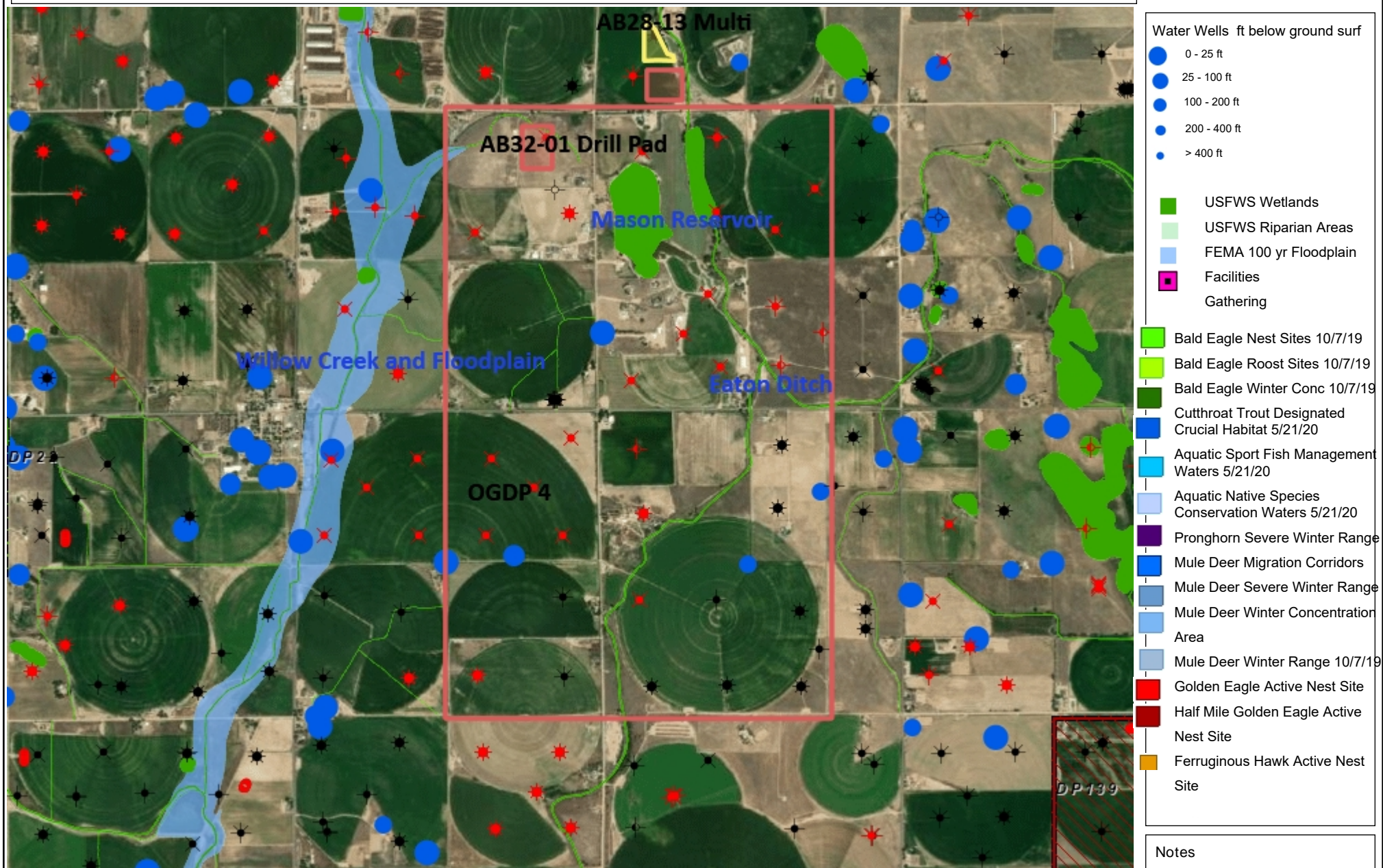


Wells Ranch CDP  
OGDP 4  
Weld County, Colorado

CSR:		NAD 1983 UTM Zone 13N	
Revised by:	jacobfrost	Date:	2/26/2021

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FIGURE 2 Chevron RBU Wells Ranch CDP- OGD 4



0 0.57 1.1 Miles  
1: 36,112



Source: iNAV  
Map Date: 5/6/2021

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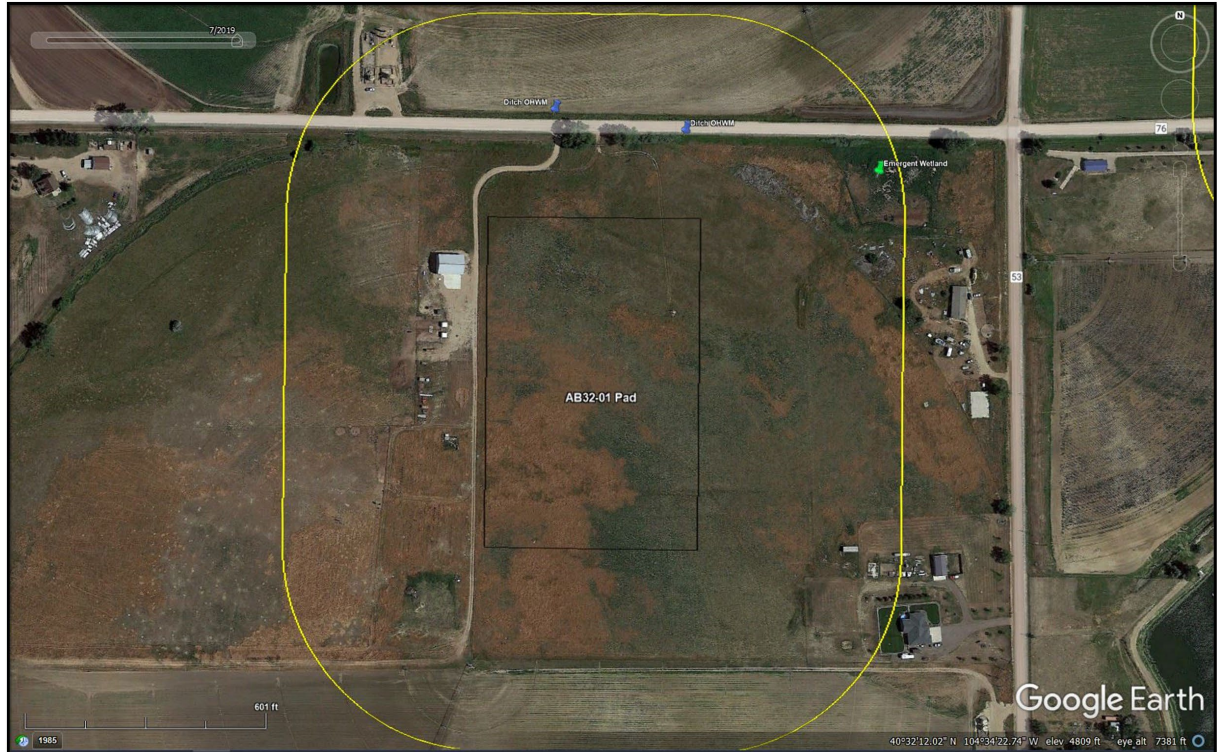
FIGURE 2

The recent hydrology field investigation suggests that per Rule 1202.a.(3) pad placement, construction, drilling/completions and operations could potentially impact the two irrigation ditches north and south of CR76 and the emergent wetland, all within 500' of the pad surface (Figure 3). Based on the short-term presence of chemical injection skids, acid and chlorine dioxide tanks, and fuel tanks on the AB32-01 Drill Pad, Noble requested and obtained CPW Waiver Rule 1202.a.(3) approval (received 01/07/22 and attached to this document) for pad construction and to institute the following BMPs to be protective of the irrigation ditches.

- A temporary raised earthen berm will be placed along the entire eastern pad edge of the drill pad, protecting the emergent wetland to the northeast and aquatic resources to the east including Mason Reservoir;
- A detention pond structure will be placed at the southwest corner of the drill pad. Stormwater will be collected by perimeter drainage channels and directed from the north and east pad edges to the detention structure, further protecting the irrigation ditches to the north and Willow Creek floodplain to the west, from any off-pad flow;
- Noble will construct the AB32-01 drill pad with 4-6" of clay and 3-5" of road-based cuttings. In addition to the road-based cuttings, Noble will use a 30-mill geosynthetic liner to underly the drill rig, cuttings and mud storage areas;
- All surficial activities performed by Noble during well drilling and completion (D&C) activities on the drill pad will be protective of the environment. Bulk liquids used during D&C activities, including chemical injection skids, acid and chlorine tanks, and fuel tanks will be containerized in appropriate sealed vessels and underlain by an impervious liner and/or secondary containment system capable of containing any spill or leak from that vessel;
- Valves and temporary flow lines associated with D&C activities will be inspected daily for damage or leaks while in service;

Flowline installation between the AB32-01 drill pad and AB28-13 multi-pad production facility will avoid any direct impacts to these sensitive water ways and wetlands which are not classified as 1202.c.(1) Q,R or S HPH. As previously stated, the use of the chemical injection skids, acid and chlorine dioxide tanks, and fuel tanks proposed for drilling and completion activities will only be onsite during transitory drilling/completion operations and will not be present during long-term production operations.



**FIGURE 3- AB32-01 Drill Pad**

## Operating Requirements

Pursuant to Rule 1202.a operating requirements, and the additional operating and mitigation requirements in Rules 1201.b.(1)-(4), 1202 and 1203. Noble commits to the following Operational Requirements in protection of the WR OGD 4 environment.

### 1202.a. Operating Requirements

- Black Bear Habitat 1202.a.(1)- The proposed AB32-01 drill pad is not within black bear habitat.
- Water Transportation 1202.a.(2)- Noble will follow appropriate protocols for disinfecting water collection and transportation equipment and thereby protecting any surface water sources utilized by Noble operations.
- Refueling/Chemical Storage Areas 1202.a.(3)- roadside irrigation ditches, Mason Reservoir and the Willow Creek FEMA Floodplain are located in proximity to AB32-01 drill pad (Figure 2). As described above under Environmental Summary, a Professional Wetland Scientist (PWS) provided full hydrologic review of surface water-way, wetlands, irrigation ditch, and riparian areas potentially impacted by pad construction and operations (full reporting is attached to this plan). Based on this detailed review, Noble may be situating new staging, refueling, or chemical storage areas within 500 feet of the Ordinary High-Water Mark (OHWM) of the irrigation ditch structures north and south of CR76.

- Wildlife Exclusions 1202.a.(4)- Noble will implement appropriate wildlife exclusion devices for drilling, completion and production operations. Noble will not construct or utilize drilling pits or production pits on location. The following wildlife exclusion devices will be installed:
  - Fencing may be installed and maintained around the pad perimeter following drilling and completion activities and in coordination with surface landowner preferences
  - Netting will be installed and maintained on all small-volume secondary containment structures that may hold precipitation and liquids
  - Drip pans will have functional lids and be kept closed
  - Bird exclusion devices will be installed on the vent stacks for all separation and combustion devices to discourage perching, roosting and nesting activities
  - All produced water and water collection vessels will be close-topped, and all access ports will be sealed or netted
  - Administrative Controls- daily inspections and good housekeeping practices will be followed for early prevention/detection of any wildlife-related issues
- Trenching 1202.a.(5)- Any flowline/pipeline trenches left open for more than five consecutive days will have wildlife escape ramps at a minimum of one ramp per ¼ mile of trench.
- Reclamation and Seed Mix 1202.a.(6)- While conducting interim and final reclamation activities (pursuant to 1000 Series Rules), Noble will use CPW-recommended seed mixes when consistent with the Surface Owner's approval and any Soil Conservation District requirements.
- Fencing 1202.a.(7)- Noble will use CPW-recommended fence designs when consistent with the Surface Owner's approval and any relevant Local Government requirements.
- Migratory Birds 1202.a.(8)- Noble will conduct all vegetation removal necessary for Oil and Gas Operations outside of the established nesting season for migratory birds (April 1-July 31). For any vegetation removal activities performed between April 1 and July 31, Noble will conduct pre-construction nesting surveys within the proposed disturbance area prior to vegetation removal. Should active nests be located, Noble will establish appropriate work zone buffers.
- West Nile Virus (WNV) and Mosquito Larvae Control 1202.a.(9)- Noble will not utilize drilling or production pits. However, fresh water may be stored on location in Minion Tanks during well drilling/completion activities. These tanks are completely netted to protect wildlife and are treated for WNV and larvae control.
- 1202.a.(10) Best Management Practices for activities in Proximity to Aquatic HPH 1202.c.(1).Q-S- Noble have not proposed any activities within 500-1000 feet from 1202.c. Aquatic HPH areas or within any 1202.c.(1) A-T HPH, for the WR OGD 4 development.

#### **Additional Committed BMPs**

- Best Management Practices- The following additional BMPs are committed under this Wildlife Protection Plan and are standard Noble processes for new development.

- Noble will pre-clear all proposed disturbances according to CPW guidance meeting Migratory Bird Treaty Act (MBTA), Bald and Golden Eagle Protection Act (BGEPA) and Endangered Species Act (ESA) laws in protection of active nesting activities, observe CPW/USFWS requested protected buffers for active nesting species, and consult with CPW/USFWS as warranted.
- Noble will install and maintain bird-deterrent devices on all open-vent exhaust stacks on production equipment to discourage perching, roosting and nesting activities.
- Will employ Noble's Stormwater Management Program to protect soil resources, minimize erosion, identify pollutants, apply pollutant control measures, and conduct regular inspections.
- All interim and final reclamation areas will be contoured and re-vegetated to a stable condition to restore natural habitats for wildlife species.
- Noble will meet weed management targets during construction, drilling, production and reclamation lifecycles.
- Noble commits to employ Noise, Light, Dust and Odor mitigation efforts meeting COGCC Series 400 Rules in the protection of Wildlife Resources. A general summary of wildlife BMP commitments under the Series 400 aesthetic rules and incorporated by this WPP include:
  - Prior to the commencement of Production Operations, Noble will take all necessary and reasonable precautions to ensure that lighting, dust, noise and odor from the Oil and Gas Location does not unnecessarily impact the health, safety, and welfare of Wildlife occupying any High Priority Habitat within 2,000 feet of the Oil and Gas Location. For permanent facilities this includes:
    - Identify permanent and temporary housing of resident wildlife and ensure locations are recorded in wildlife reports kept in-house by HSE
    - Conduct a daily walkthrough of the location to ensure no wildlife have built nest(s) in/around lighting or noise sources. If nest(s) are found, HSE reporting will be issued to appropriate personnel to either remove the nest and/or temporarily abandon the lighting source until nest is abandoned.
  - Inform and educate all field employees and contractors on wildlife conservation practices, including no harassment or feeding of wildlife.
  - Utilization of telemetry equipment for remote monitoring to limit in-person visitation by production operations personnel.
- Institute the Noble safety program meeting Operational Excellence Management System initiatives and "Stop Work" authority.
- Construct pipeline infrastructure to provide takeaway of oil, natural gas, and fresh and produced water from the CDP development, eliminating truck traffic and emissions associated with hauling product from the oil and gas development and limiting vehicle/wildlife interactions.
- Any encroachment of wetlands or active water ways potentially considered Waters of the United States (WOTUS) will be reviewed and/or protected under USACE Nationwide or General Permit processes.

Michael Keller  
Lead Environmental Specialist (970-415-2631)

Cc: Brian Taylor, HSE Manager

## **Wildlife Protection Plan References and Sources**

### **State of Colorado Rulemaking in support of Sensitive and Protected Species/Habitat:**

Document references to COGCC Rules in support of this Wildlife Protection Plan include:

- 300 Series Rules:
  - Rule 304: Form 2A: Oil and Gas Location Assessment Application
  - Rule 309: CPW Consultation
- 400 Series Rules:
  - Dust, Light, Noise and Odor Mitigation
- 500 Series Rules:
  - 529: Rulemaking Proceedings
- 1200 Series Rules: Protection of Wildlife Resources

Source: [COGCC Regulation \(state.co.us\)](https://state.co.us/cogcc/regulation)

### **Colorado Parks and Wildlife:**

Colorado Parks and Wildlife High Priority Habitat maps in support of COGCC Rule Making and supporting this Wildlife Protection Plan:

Source: [COGCC Maps \(state.co.us\)](https://state.co.us/cogcc/maps)

Colorado Parks and Wildlife, Department of Natural Resources- Recommended Buffer Zones and Seasonal Restrictions for Colorado Raptors (2020):

Colorado Parks and Wildlife, Department of Natural Resources- Recommended Survey Protocol and Actions to Protect Nesting Burrowing Owls (revised 4/6/21):

Source: [Colorado Parks and Wildlife \(state.co.us\)](https://state.co.us/cpw)

### **U.S. Endangered Species Act (ESA):**

“Take” (as defined by ESA) of a federally-protected threatened and endangered species is illegal without permit. The project analysis must take into consideration threatened and endangered species as well as candidate and/or petitioned species. Species information may be obtained by contacting a local U.S. Fish and Wildlife field office with project information and/or accessed via the source below:

Source: <https://ecos.fws.gov/ipac/>



**Critical Habitat under ESA**

Critical habitat are specific areas deemed essential to the conservation of (ESA) endangered and threatened species and may need special management or protections. Projects must be evaluated for the presence of critical habitat.

Source: <https://www.fws.gov/southeast/endangered-species-act/critical-habitat/>

**Migratory Bird Treaty Act (MBTA):**

The MBTA prohibits intentional take of federally-protected birds without permit. Projects shall be evaluated for risk of take of MBTA-listed species, focusing on those species listed Birds of Conservation Concern (BCC) and Birds of Management Concern (BMC). This information may be obtained by contacting a local U.S. Fish and Wildlife field office with project information and/or may be accessed at the source below:

Source: <https://ecos.fws.gov/ipac/>

**Bald and Gold Eagle Protection Act (BGEPA):**

“Take” (as defined by BGEPA) of federally protected eagles is illegal without permit. Projects shall be evaluated for risk of take of bald and golden eagles. Species information may be obtained by contacting a local U.S. Fish and Wildlife office with project information and/or may be accessed at the source below:

Source: <https://ecos.fws.gov/ipac/>

**Clean Water Act (CWA):**

The CWA regulates the discharge of pollutants into the Waters of the United States and quality standards for surface waters. CWA makes it unlawful to intentionally or negligently discharge any pollutant from a point source into navigable waters, unless a permit is obtained.

**Waters of the United States (WOTUS):**

The Department of the Army, acting through the U.S. Army Corps of Engineers, has authority to permit the discharge of dredged or fill material in waters of the U.S. under Section 404 of the CWA, and permit work and the placement of structures in navigable waters of the U.S. under Sections 9 and 10 of the Rivers and Harbors Act of 1899. Projects resulting in impacts to WOTUS are subject to federal permitting requirements. Projects shall be evaluated for risk of impacts to jurisdictional Waters of the United States.

In addition to the use of topographic maps, the following information is useful for WOTUS determinations:

**National Hydrography Dataset (NHD)/Watershed Boundary Dataset:**

Source: [https://nhd.usgs.gov/NHD\\_High\\_Resolution.html](https://nhd.usgs.gov/NHD_High_Resolution.html)

**USFWS National Wetland Inventory (NWI) Mapper:**

Source: <https://www.fws.gov/wetlands/>

**NOTE:** National Resource Conservation Service (NRCS) Soil and Topography Data (see section below) must be utilized to ascertain presence of hydric soils and flood risk.

**National Historic Preservation Act (NHPA)/Colorado Historical, Prehistorical and Archaeological Resources Act of 1973):**

Projects shall be evaluated for presence of cultural resources and historical artifacts.

**NOTE:** Archaeological investigations must be performed or supervised by an archaeologist who meets the U.S. Secretary of the Interior's Professional Qualification Standards for Archaeology (48FR 22716 or 36 CFR Part 61); or meets the requirements for Principal Investigator defined in 8 CCR 1405-7.

**Federal Emergency Management Administration (FEMA) Floodplain;**

Projects constructed in floodplains may require additional permitting. Projects shall be evaluated for potential impacts to floodplains and flood risk.

Source: <https://msc.fema.gov/portal>

**NOTE:** If floodplain maps are not available (i.e. "unmapped"), NRCS Soil and Topography Data must be used for planning purposes (See NRCS data below).

The logo for SWCA (Soil & Water Conservation Agency) 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.

# Aquatic Resources Inventory Report for Proposed Development of the AB32-01 Pad, Weld County, Colorado

JANUARY 2022

PREPARED FOR

**Chevron Rockies Business Unit**

PREPARED BY

**SWCA Environmental Consultants**



# **AQUATIC RESOURCES INVENTORY REPORT FOR PROPOSED DEVELOPMENT OF THE AB32-01 PAD, WELD COUNTY, COLORADO**

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January 2022





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# **1 INTRODUCTION**

On behalf of Chevron Rockies Business Unit (Chevron), SWCA Environmental Consultants (SWCA) completed an aquatic resources inventory, commonly referred to as a wetland delineation, for the proposed development of the AB32-01 pad located in Weld County, Colorado (Figure A1 in Appendix A). SWCA evaluated and visually assessed wetlands and other aquatic resources that are located within 500 feet of the proposed pad area that includes a roadside ditch adjacent to Weld County Road 76 (collectively, these areas are hereafter referred to as the survey area). The project survey area also consisted of a 0.5-mile buffer for potential raptor nests that was briefly assessed during the survey period. The approximate center point of the project is located at the center of the proposed pad, latitude 40.534858°, longitude -104.568603° (see Figure A1). The goal of conducting an aquatic resources inventory is to identify aquatic resources containing an ordinary high-water mark (OHWM) or wetland within 500 feet of the proposed project in order to comply with the Colorado Oil and Gas Conservation Commission's (COGCC's) Rule 1202(3).

The inventory of aquatic resources included the identification and recording of features that may be determined to be waters of the U.S. by the U.S. Army Corps of Engineers (USACE). Waters of the U.S. include waterbodies such as rivers, creeks, streams, arroyos, lakes, and associated wetlands, which have connectivity to downstream navigable waters or tidal seas. Under the Clean Water Act, wetlands are aquatic resources that are inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions (USACE 1987). Non-wetland waters are generally identified and delineated by the presence of an OHWM, which is a defined boundary on the shore or bank of an aquatic resource established by water fluctuations and movement.

## **2 METHODS**

The aquatic resources inventory included a desktop review of existing data and field surveys. The following sections provide a summary of the methods used to generate the collected data and aquatic resource mapping.

### **2.1 Existing Data Review**

SWCA conducted a desktop review of existing spatial data prior to the field surveys to identify areas with the greatest potential for aquatic resources. Sources used during the existing data review included U.S. Geological Survey (USGS) 7.5-minute quadrangles, U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) maps (USFWS 2021), the National Hydrography Dataset (NHD) (USGS 2021), the USGS StreamStats tool (Version 4.6.1) (USGS 2020), Natural Resources Conservation Service (NRCS) soil survey maps (NRCS 2021), and historic and current aerial photographs of the survey area (Google Earth 2021; NETROnline 2021).

### **2.2 Field Surveys**

The aquatic resources inventory included a desktop review of existing data and field surveys. The following sections provide a summary of the methods used to generate the collected data and aquatic resource mapping. SWCA conducted the aquatic resources field surveys on December 14, 2021. SWCA biologists performed formal wetland and waterbody delineations within 500 feet of the proposed oil and gas location on accessible parcels crossed by the project; visual wetland assessments were conducted on

those parcels within the 500-foot survey area for which Chevron did not have permission for pedestrian access during the December 2021 surveys.

### **2.2.1 Mapping**

A handheld global positioning system (GPS) receiver with submeter accuracy was used to record delineated wetland and waterbody boundaries and geographically reference data points during the field surveys. Geographic information system (GIS) software was used to analyze recorded features, calculate areas, and generate the survey area maps. When potential wetland or non-wetland waters within the survey area were located on adjacent land for which Chevron did not have access permission or extended outside of accessible parcels, SWCA visually confirmed these resources from available access points and digitized boundaries from best available aerial imagery.

### **2.2.2 Wetlands**

The presence/absence of wetlands was determined in the field using delineation methods provided in the *Corps of Engineers Wetlands Delineation Manual* (Manual) (USACE 1987) and the *Regional Supplement to the Corps of Engineers Wetlands Delineation Manual: Great Plains Region* (Version 2.0) (Regional Supplement) (USACE 2010). Data at each potential wetland were recorded on the Regional Supplement wetland determination data forms (datasheet). Determination of wetland habitat (type) is based on the classification system developed by Cowardin et al. (1979). Per the Manual and Regional Supplement, wetlands are present in areas where three wetland parameters (i.e., wetland hydrology, hydric soils, and hydrophytic vegetation community) are present under normal circumstances. The presence of these wetland parameters is determined using the indicators provided in the Regional Supplement. One data point is recorded within each potential wetland (or wetland type for proximate, similar wetlands) along with a corresponding upland data point. These data provided the basis for mapped wetland–upland boundaries.

### **2.2.3 Non-Wetland Waters**

The presence and extent of non-wetland waters (e.g., constructed ditches and reservoirs, active channels, and ponds) was determined in the field using the guidance and methods provided in USACE Regulatory Guidance Letter 05-05 (USACE 2005) and the USACE technical guidance *A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States* (USACE 2008). An OHWM is the line on a shore established by fluctuations of water and is typically identified by physical characteristics such as a clear, natural line impressed on the bank; shelving; changes in the character of soil; destruction of terrestrial vegetation; the presence of litter and debris; or other appropriate means that consider the characteristics of the surrounding areas. The spatial extent of non-wetland waters is delineated using the identified OHWM for each feature.

Non-wetland waters were characterized hydrologically as ephemeral, intermittent, or perennial waters. Ephemeral features flow only in direct response to precipitation or snowfall and flow for a brief period of time. Intermittent waters have prolonged flow that is sustained (at least in part) by melting snowpack or a groundwater source. Perennial waters flow continuously but may have periods of less flow. According to the USACE Manual and policy (USACE 1987, 2008), erosional features that lack an OHWM, or lack a continuous OHWM, are not waters of the U.S.



### 3 RESULTS

The results of the existing data review and field surveys for the AB32-01 pad are presented in the following sections. Project maps are provided in Appendix A; representative photographs of the project area and visually assessed waterbody features are provided in Appendix B; and the NRCS soil report for the survey area is provided in Appendix C.

#### 3.1 General Observations and Desktop Review Results

The AB32-01 pad survey area is in the South Platte basin, roughly 4,810 feet above sea level (see Appendix A). The survey area terrain is generally flat, and primarily consists of cultivated cropland (Figures B1 and B2). Based on data provided by the USGS StreamStats tool, the project survey area is in an approximately 3.89-square-mile drainage basin that receives approximately 13.78 inches of mean annual precipitation.

The survey area is not located within a 100-year floodplain. The closest 100-year floodplain is associated with Willow Creek, located approximately 0.24 mile west of the survey area (COGCC 2021; Federal Emergency Management Agency 2021). Geologic mapping for this area indicates that the study area is in upper cretaceous shale, claystone, siltstone, and sandstone containing coal beds known as the Laramie Formation or Lance Formation (Tweto 1979). According to the NRCS soil surveys for Weld County, Colorado, one of the five soil map units within the survey area has a strong potential to satisfy the hydric soil criteria: Aquolls and Aquepts, flooded, described as poorly drained with recorded depths to groundwater ranging from 6 to 36 inches (NRCS 2021) (see Appendix C). The other dominant soil map units present within the study area are Nelson fine sandy loam, 0 to 3 percent slopes; Otero sandy loam, 1 to 3 percent slopes; Renohill clay loam, 0 to 3 percent slopes; and Shingle loam, 1 to 3 percent slopes, all of which are described as well drained and have recorded depths to groundwater greater than 80 inches (NRCS 2021) (see Appendix C).

The latest NHD and NWI maps indicate that there is an NHD flowline that crosses through the northern portion of the AB32-01 disturbance boundary. Based on field observation, the area where the NHD flowline is mapped was determined upland and are no potentially jurisdictional wetlands or waterbodies within 500 feet of the proposed AB32-01 pad (USFWS 2021).

Based on SWCA's review of available data and observations made at the time of the surveys, hydrologic conditions in the vicinity of the survey area are generally representative of typical conditions for this time of year. The recorded rainfall amounts for October through December 2021 are compared with normal rainfall amounts for these months in Table 1. According to data obtained from Weather Underground (2021), in the 3-month period preceding SWCA's site visit, the project area received less-than-normal rainfall, with less-than-normal precipitation in all 3 months assessed.

**Table 1. Monthly Recorded Precipitation at the Greeley, Colorado, Weather Station**

Month	Recorded Rainfall (inches)	Normal Rainfall (inches)	Difference (inches)
October 2021	0.11	1.01	0.90
November 2021	0.06	0.74	0.68
December 2021	0.00	0.56	0.56
<b>Total</b>	<b>0.17</b>	<b>2.31</b>	<b>2.14</b>

Sources: U.S. Climate Data (2021); Weather Underground (2021)

## 3.2 Field Survey Results

Qualified SWCA biologists conducted the on-site field surveys on December 14, 2021. A pedestrian survey covering the entire 500-foot survey area was performed. Access to the surrounding survey area was limited to the parcel containing the proposed AB32-01 pad.

### 3.2.1 Wetlands

SWCA recorded one fringe wetland feature (WL01) totaling approximately 0.31 acre within the AB32-01 survey area (Table 2). This fringe wetland feature associated with a roadside ditch adjacent to Weld County Road 76 (WCR76), is located entirely on a parcel SWCA did not have permission to access and therefore was visually assessed from the adjacent county roadway north of the wetland feature. Similar to WL01, another fringe wetland associated with the drainage ditch on the north side of WCR76 appeared to contain several wetland indicators (Figure B4); however, because SWCA biologists did not have permission to survey that area, no formal wetland delineation or visual assessment were conducted.

**Table 2. Wetlands Identified within the AB32-01 Survey Area**

Waterbody ID	Size within the 500-foot Survey Area (acres)	Distance to Pad (feet)	Direction to Pad
WL01	0.31	187.57	Southwest

The following subsection provides additional information regarding this feature.

#### 3.2.1.1 WETLAND ASSOCIATED WITH ROADSIDE DITCH (WL01)

SWCA identified approximately 0.31 acre of a roadside ditch feature (WL01) that contains an OHWM and is associated with the roadside ditch (WB01). This wetland feature is located on the south side of WCR76, entirely on a parcel SWCA did not have permission to access and therefore was visually assessed from the county roadway and was digitized following the fieldwork. The wetland feature is located on both banks of the roadside ditch (WB01) and is upgradient from the proposed AB31-01 pad location. Although the ditch does contain hydrophytic plant species, such as broadleaf cattail (*Typha latifolia*) and narrowleaf willow (*Salix exigua*), the vegetation communities were composed of predominately weed and grass species, including reed canarygrass (*Phalaris arundinacea*), smooth brome (*Bromus inermis*), sunflower (*Helianthus annuus*), and kochia (*Bassia scoparia*). Based on the observations recorded during the field survey, the hydrophytic vegetation appeared to be the dominant plant community (see Figures A2 and Figure B3).

### 3.2.2 Non-Wetland Waters

SWCA recorded one non-wetland water feature totaling approximately 0.06 acre within the AB32-01 survey area (Table 3). This waterbody feature, a roadside ditch adjacent to WCR76, is located entirely on a parcel SWCA did not have permission to access and therefore was visually assessed from the county roadway and adjacent access road south of the waterbody feature.

**Table 3. Waterbodies Identified within the AB32-01 Survey Area**

Waterbody ID	Size within the 500-foot Survey Area (acres)	Distance to Pad (feet)	Direction to Pad
WB01	0.06	177.73	Southwest

The following subsection provides additional information regarding this feature.

### 3.2.2.1 ROADSIDE DITCH (WB01)

SWCA biologists visually assessed and verified the extent of a roadside ditch feature (WB01) that contains an OHWM and is located within 500 feet of the proposed AB32-01 pad. Following the field survey and visual confirmation of the boundaries of the ditch, approximately 0.06 acre was digitized from the best available aerial imagery. The segment of the ditch feature within the survey is composed of a not well-defined streambed and undercut banks, showing signs of significant erosion. The drainage ditch is located upgradient of the proposed pad location, approximately 197 feet north of the AB32-01 disturbance boundary (see Figure A2). Based on the observations made from county roadway location north of the ditch, a visible fringe wetland (WL01) and hydrophytic vegetation associated with banks of the holding pond were evident (see Figure B3).

## 4 SUMMARY AND RECOMMENDATIONS

One fringe wetland (WL01) and associated waterbody feature (WB01), totaling 0.37 acre, were recorded within the AB32-01 project survey area. None of the potentially jurisdictional aquatic resources were recorded within the proposed pad boundary, and construction is not expected to require permitting under Section 404 of the Clean Water Act (U.S. Environmental Policy Agency 2008).

COGCC Rule 1202(3) states that operators will not situate new staging, refueling, or chemical storage areas within 500 feet of the OHWM of any river, perennial or intermittent stream, lake, pond, or wetland. Based on our understanding of the proposed project, the delineated fringe wetland (WL01) is located 187 feet north from the disturbance boundary and 595 feet north of the center of the proposed A32-01 pad. One waterbody (WB01) containing an OHWM was recorded within the survey area, located 178 feet north from the AB32-01 disturbance boundary, and was estimated to be 605 feet north of the center of the AB32-01 pad.

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## **APPENDIX A**

### **Aquatic Resources Inventory Maps**



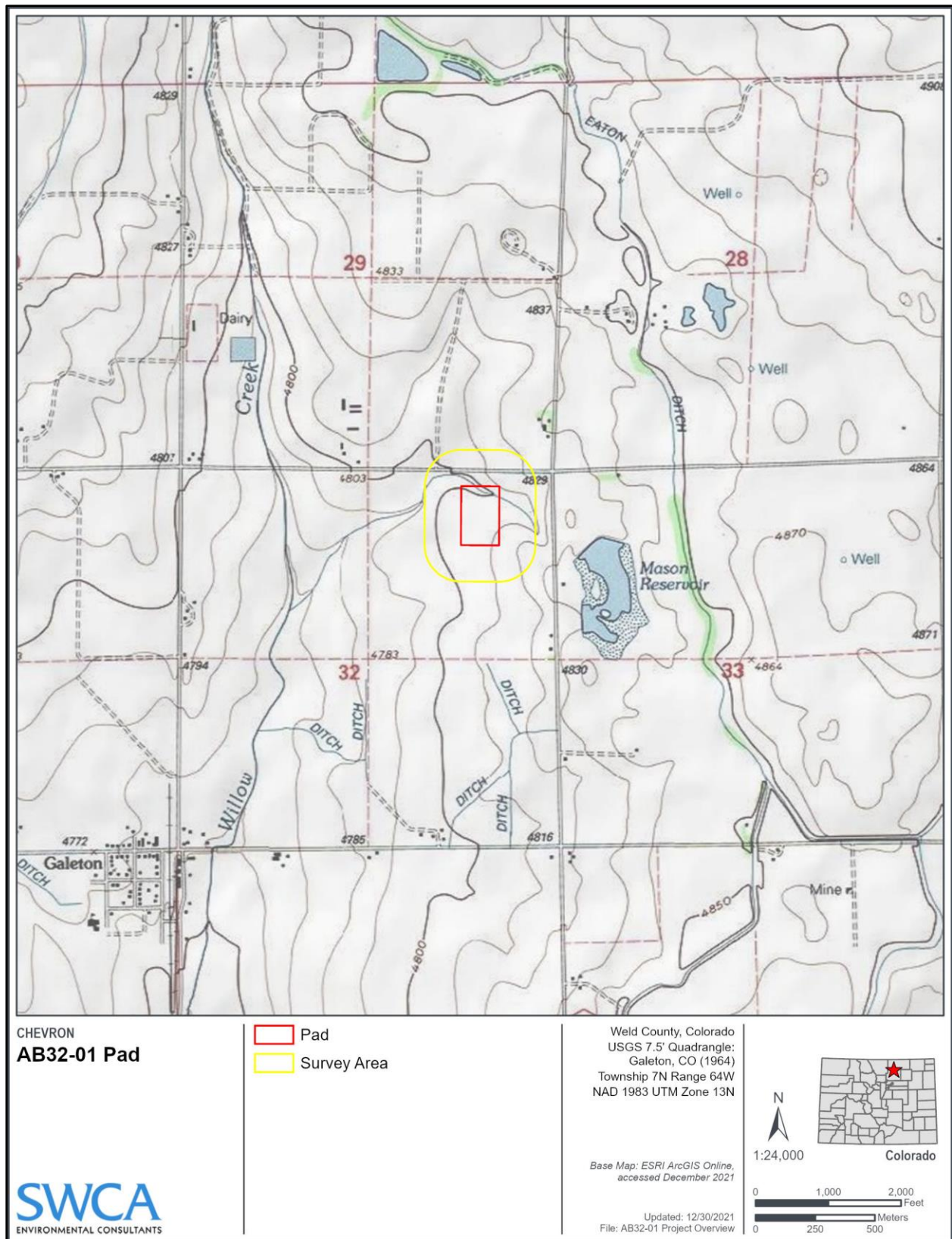


Figure A. Overview of the AB32-01 survey area.

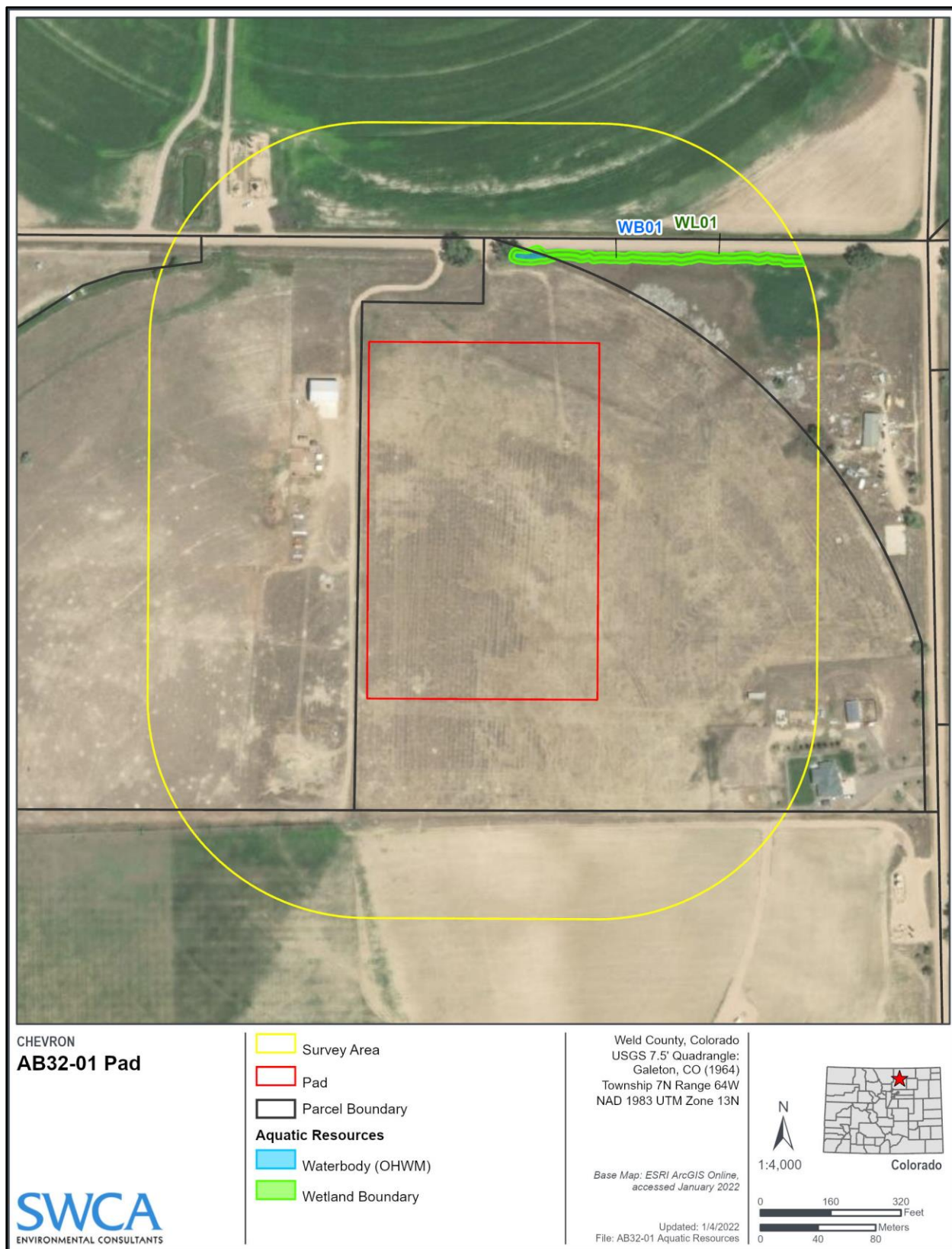


Figure A2. Delineated aquatic resources in the AB32-01 survey area.



## **APPENDIX B**

### **Wetland and Waterbody Photographs**





**Figure B1. Overview of the proposed AB32-01 pad location, facing north-northeast.**



**Figure B2. Overview of the proposed AB32-01 pad location, facing south-southeast.**





**Figure B3. Overview of roadside ditch (WB01) and associated wetland (WL01), facing east from WCR76.**



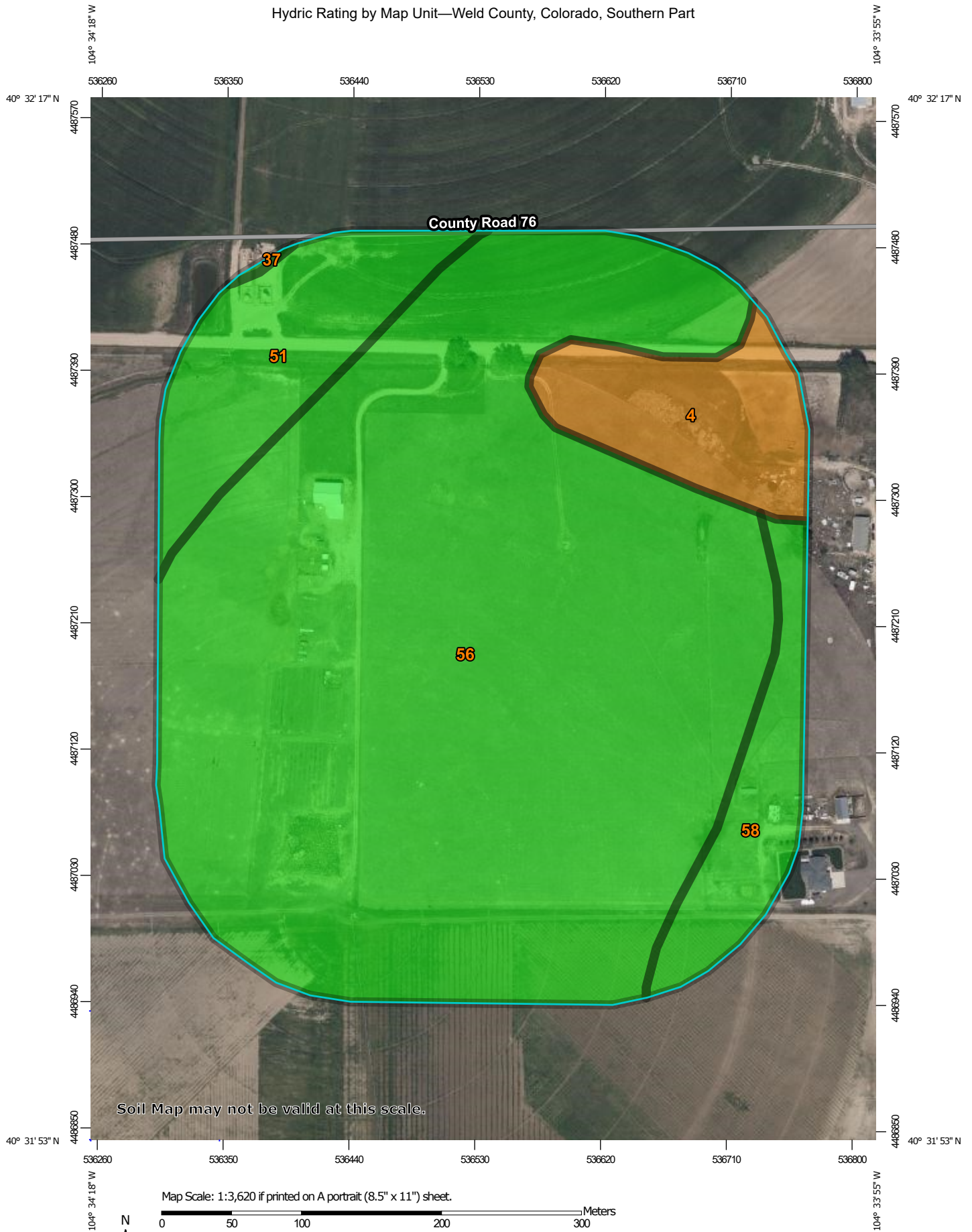
**Figure B4. Overview of roadside ditch on the north side of WCR76 and potential wetland, facing east from WCR76.**

## **APPENDIX C**

### **NRCS Soil Report for Survey Area**



# Hydric Rating by Map Unit—Weld County, Colorado, Southern Part









## MAP LEGEND

### Area of Interest (AOI)







 Area of Interest (AOI)

### Soils







#### Soil Rating Polygons

-  Hydric (100%)
-  Hydric (66 to 99%)
-  Hydric (33 to 65%)
-  Hydric (1 to 32%)
-  Not Hydric (0%)
-  Not rated or not available


#### Soil Rating Lines

-  Hydric (100%)
-  Hydric (66 to 99%)
-  Hydric (33 to 65%)
-  Hydric (1 to 32%)
-  Not Hydric (0%)
-  Not rated or not available






#### Soil Rating Points

-  Hydric (100%)
-  Hydric (66 to 99%)
-  Hydric (33 to 65%)
-  Hydric (1 to 32%)
-  Not Hydric (0%)
-  Not rated or not available


### Water Features

 Streams and Canals

### Transportation

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

### Background

 Aerial Photography

## MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service  
Web Soil Survey URL:  
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Weld County, Colorado, Southern Part  
Survey Area Data: Version 20, Aug 31, 2021

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jul 19, 2018—Aug 10, 2018

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

## Hydric Rating by Map Unit

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
4	Aquolls and Aquepts, flooded	80	4.4	7.5%
37	Nelson fine sandy loam, 0 to 3 percent slopes	0	0.0	0.1%
51	Otero sandy loam, 1 to 3 percent slopes	0	5.4	9.2%
56	Renohill clay loam, 0 to 3 percent slopes	0	45.1	77.1%
58	Shingle loam, 1 to 3 percent slopes	0	3.6	6.1%
<b>Totals for Area of Interest</b>			<b>58.5</b>	<b>100.0%</b>



## **CPW Waiver Approval**

**From:** [Marette - DNR, Brandon](#)  
**To:** [Dennison, Doug](#)  
**Cc:** [Keller, Michael](#)  
**Subject:** **[\*\*EXTERNAL\*\*]** Re: Waiver Requests - Wells Ranch OGDP 4  
**Date:** Friday, January 7, 2022 10:50:28 AM

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Good morning Doug,

This e-mail serves as a wildlife/aquatic/wetland waiver for Rule 1202.a.(3). Thank you for the map with adjacent drainages & wetlands, plus the BMPs to protect them.

Could you please let me know the Township, Range & Sections of these two locations? And also include it in the text for future requests?

Regards,

**Brandon B. Marette, CWB®**  
Northeast Region Energy Liaison and Land Use Coordinator



Direct [\(303\) 291-7327](tel:3032917327)  
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[CPW's Energy Webpage](#)  
[CPW's Wildlife Movements Webpage](#)



THINK SAFETY FIRST!



On Thu, Jan 6, 2022 at 11:09 AM Dennison, Doug <[dougdenison@chevron.com](mailto:dougdenison@chevron.com)> wrote:

Good Morning Brandon,

Enclosed are the subject waiver requests.

If you have any questions or require additional information, please contact Mike Keller or me.

Thanks.