

Wildlife Protection Plan

BLUE CHIP OIL AND GAS LOCATION **Weld County, Colorado**

March 16, 2022

Prepared for:

Kerr-McGee Oil & Gas Onshore, LP

1099 18th Street
Denver, CO 80202



Prepared By:

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Apex Job No.: 066.1608.01.PRE0032

1. Introduction

Apex Companies, LLC (Apex) completed a biological assessment of the proposed pad construction and drilling operations at the Blue Chip Oil and Gas Location (Location) for Kerr-McGee Oil and Gas Onshore, LP (KMOG). This effort included a desktop review and site survey, performed on June 16, 2021, to identify sensitive resources that could be affected by the construction of the Location and subsequent operations. This effort and report provide KMOG with an assessment of potential adverse impacts to sensitive natural resources, including vegetative communities, surface waters, and wildlife. The desktop review sources included the Federal Emergency Management Agency (FEMA) National Flood Hazard Layer, the U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) Mapper, the USFWS Information for Planning and Consultation (IPaC) system, the U.S. Geological Survey (USGS) National Hydrography Dataset (NHD), Colorado Parks and Wildlife (CPW) Species Activity Mapping (SAM) data, CPW High Priority Habitat (HPH) data layers, recent and historical aerial imagery, and Apex's proprietary database of over 1,500 mapped raptor nests throughout the Denver-Julesburg (DJ) Basin.

2. Oil and Gas Location Description

The Location is within Section 22, Township 5 North, Range 67 West in the City of Greeley in Weld County, Colorado (Figure 1). The Location consists of a 12.62-acre disturbance area, including a 5.44-acre well pad surface and a 2.62-acre facility pad. Twelve (12) wells are proposed for the Location. The existing Blue Chip Oil Inc Jean Ann-65N67W #22CNW facility (Location ID #305408) is approximately 200 feet west of the Location. Weld County Road (WCR) 56 is approximately 0.25 mile north, and State Highway 257 is approximately 0.5 mile east. Access to the Location is off the south side of WCR 56 via a 0.23 mile existing access road currently serving the Jean Ann-65N67W #22CNW facility (Figure 2).

The Location lies within dryland wheat crop and appears to have been in agricultural production since at least the late 1990's.

3. COGCC: High Priority Habitats and Other Protected Resources

Findings

The Location does not occur within any High Priority Habitats (HPH) designated by CPW pursuant to the COGCC's Series 1200 rules. The closest HPH is an Aquatic Native Species Conservation Water along Sheep Draw, an NHD-designated intermittent stream approximately one (1) mile to the east. No other HPHs are located within one (1) mile of the Location. The next closest HPH is Mule Deer Severe Winter Range located approximately 1.82 miles southwest of the Location along the Big Thompson River (Figure 3). The nearest known ordinary high water mark (OHWM) is approximately 2,480 feet to the south on Loveland Greeley Canal, which is not an HPH (Figure 4)

Resource Management Recommendations

The Location is greater than 500 feet from the nearest potential ordinary high-water mark within Sheep Draw therefore it is not subject to restrictions described in COGCC 1200 Series Rule 1202.c(1)R regarding

proximity to Aquatic Native Species Conservation Waters.¹ As well, the Location is more than 1,000 feet from and hydraulically upgradient to the mapped streambed, therefore mitigation measures described in COGCC 1200 Series Rule 1202.a(10)R do not apply. No part of the Location lies within the Mule Deer Severe Winter Range HPH along the Big Thompson River; therefore, restrictions per 1200 Series Rule 1202.d(3) do not apply. There are no other HPHs or similar protected resources within proximity to the Location; no further action is recommended.

4. Raptors

Findings

There are no trees or other habitats suitable for nesting bald eagles (*Haliaeetus leucocephalus*) or golden eagles (*Aquila chrysaetos*) within ½ mile of the Location. The nearest mapped bald eagle nest is greater than 2.5 miles to the south. The Location is approximately two (2) miles north of the nearest CPW-mapped bald eagle winter night roost area.

There are minimal trees suitable for nesting non-eagle raptors within 0.5 mile of the Location, and additional habitats suitable for non-eagle raptor nesting within 0.5 mile. These habitats suitable for nesting include but are not limited to utility poles, oil and gas equipment, and other miscellaneous structures. No non-eagle raptor nests have been recorded within 0.5 mile of the Location (Figure 3).

Resource Management Recommendations

If project activities start between February 1 and August 15, CPW recommends surveys for nesting non-eagle raptors.

5. Agriculture

Findings

The Location is within the City of Greeley within Weld County on property zoned as Holding Agricultural (H-A) (City of Greeley 2021). Aerial imagery suggests that this property has been farmed, likely as dryland wheat cropland, since at least the late-1990s (Google Earth 2021).

Resource Management Recommendations

None.

6. Summary of Findings

Following a review of sensitive resources with potential to be affected by proposed pad construction and drilling operations at the Blue Chip pad by KMOG, potential adverse impacts to the ecosystem are anticipated to be minimal and include disturbances to existing agricultural operations within and

¹ Sheep Draw is identified as a seasonally flooded intermittent streambed in the NWI dataset; however, it was not examined in the field due to its position off the Project Site, so its status as an intermittent stream remains unconfirmed. Google Earth aerial imagery suggests that the portion of Sheep Draw within one mile of the Location does not support an OHWM (Google Earth, 2021).

surrounding the Location and ground or structure nesting birds. Construction at the Location would not impact surface waters, federally-threatened or endangered species, or CPW High Priority Habitats.

7. Implementation of Rule 1202.a. and 1202.b. Operating Requirements

Yes	No	NA	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<p><u>Rule 1202.a.(1):</u> Operators will install and utilize bear-proof dumpsters in black bear habitat Comment: <i>Location is not within black bear range.</i></p>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<p><u>Rule 1202.a.(2).A. and B.:</u> Operators will disinfect water suction hoses and water tanks withdrawing from or discharging into natural surface waters using a CPW-approved disinfectant or with water greater than 140° F for at least 10 minutes. Comment: <i>No Location operations will withdraw from or discharge into natural surface waters.</i></p>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p><u>Rule 1202.a.(3):</u> Operators will not situate new staging, refueling, or chemical storage areas at new and existing locations; within 500 feet of any river, perennial or intermittent stream, lake, pond, or wetland Comment: <i>No staging, storage or refueling will be conducted within 500 feet of a persistent surface water or wetland.</i></p>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<p><u>Rule 1202.a.(4).A., B., and C.:</u> Operators will fence and net or install other CPW-approved exclusion devices on new or existing (if COGCC determines it's necessary to protect Wildlife Resources) drilling pits, production pits, and other pits associated with Oil and Gas Operations that are intended to contain Fluids. Comment: <i>KMOG does not utilize pits in the DJ Basin.</i></p>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p><u>Rule 1202.a.(5):</u> Operators will install wildlife escape ramps for trenches that are left open for more than 5 consecutive days. Comment: <i>KMOG will comply with this directive.</i></p>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p><u>Rule 1202.a.(6):</u> Operators will use CPW-recommended seed mixes for Reclamation and use CPW-recommended fence designs when consistent with the Surface Owner's approval and any local soil conservation district requirements. Comment: <i>KMOG will comply with this directive.</i></p>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p><u>Rule 1202.a.(7):</u> Operators will use CPW-recommended fence designs when consistent with the Surface Owner's approval and any Relevant Local Government requirements. Comment: <i>PRM will comply with this directive.</i></p>

Yes	No	NA	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p><u>Rule 1202.a.(7):</u> Operators will use CPW-recommended fence designs when consistent with the Surface Owner’s approval and any Relevant Local Government requirements. Comment: <i>KMOG will comply with this directive.</i></p>
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<p><u>Rule 1202.a.(8):</u> Operators will conduct all vegetation removal necessary for operations outside of the nesting season for migratory birds (April 1 to August 31) or will need to conduct pre-construction nesting migratory bird surveys within the approved disturbance area prior to any vegetation removal during the nesting if hazing or exclusion devices were not installed prior to April 1. Comment: <i>KMOG will comply with this directive. Pre-construction nesting bird surveys will be performed no more than 7 days prior to the start of site disturbing activities.</i></p>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<p><u>Rule 1202.a.(9):</u> Operators will treat drilling pits, production pits, and any other pits containing water that provides a medium for breeding mosquitoes to control mosquito larvae that may spread West Nile virus to Wildlife Resources season. Comment: <i>KMOG does not utilize pits in the DJ Basin.</i></p>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<p><u>Rule 1202.a.(10).A. thru E.:</u> Operators will employ the following minimum BMPs on new locations with a Working Pad Surface located between 500 feet and 1000 feet hydraulically upgradient from a High Priority Habitat identified in Rule 1202.c.(1).Q–S:</p> <ul style="list-style-type: none">○ A. contain flowback and stimulation fluids in tanks with downgradient perimeter berming;○ B. construct lined berms or other lined containment devices pursuant to Rule 603.o around any new crude oil, condensate, and produced water storage tanks that are installed after January 15, 2021;○ C. inspect locations on a daily basis, unless the approved Form 2A provides for different inspection frequency or alternative method of compliance;○ D. maintain adequate spill response equipment at the location during drilling and completion operations; and○ E. not construct or utilize any pits, except existing previously approved pits that were operated and maintained in compliance prior to January 15, 2021. <p>Comment: <i>The Location is greater than 1,000 feet of an HPH identified in Rule 1202.c.(1).Q–S. The nearest HPH is approximately one mile to the east from the eastern edge of the Location (Figure 3).</i></p>
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<p><u>Rule 1202.b.:</u> Operators will bore, rather than trench, pipeline/utility crossings of perennial streams identified as aquatic High Priority Habitat, unless the Operator obtains a signed waiver from CPW and an approved Form 4 Sundry Notice from COGCC. Comment: <i>The Location does not intersect an HPH or perennial streams.</i></p>

8. Additional General Operating BMPs

The following site-specific wildlife BMPs will be implemented at the Location:

1. Inform and educate employees and contractors on wildlife conservation practices, including no hunting, harassment or feeding of wildlife.
2. Consolidate and centralize fluid collection and distribution facilities to minimize impact to wildlife.
3. Adequately size infrastructure and facilities to accommodate both current and future gas production.
4. Protect culvert inlets from erosion and sedimentation and install energy dissipation structures at outfalls.
5. Implement fugitive dust control measures.
6. Install screening or other devices on the stacks and on other openings of heater treaters or fired vessels to prevent entry by migratory birds.
7. Minimize rig mobilization and demobilization by completing or re-completing all wells from a given well pad before moving rigs to a new location.
8. To the extent practicable, share and consolidate new corridors for pipeline rights-of-way and roads to minimize surface disturbance.
9. Engineer new pipelines to reduce field fitting and reduce excessive right-of-way widths and reclamation.
10. Mow or brush hog vegetation where appropriate, leaving root structure intact, instead of scraping the surface, where allowed by the surface owner.
11. Limit access to oil and gas access roads where approved by surface owners, surface managing agencies, or local government.
12. Post speed limits and caution signs to the extent allowed by surface owners, Federal and state regulations, local government, and land use policies.
13. Use wildlife-appropriate fencing where acceptable to the surface owner.
14. Use topographic features and vegetative screening to create seclusion areas, where acceptable to the surface owner.
15. Use remote monitoring of well production to the extent practicable.
16. Reduce traffic associated with transporting drilling water and produced liquids through the use of pipelines, large tanks, or other measures.
17. Install automated emergency response systems (e.g., high tank alarms, emergency shutdown systems).

9. References

- City of Greeley. 2021. City of Greeley Official 2021 Zoning Map. Available online at: http://greeleygov.com/docs/default-source/gis/pdfs/zoningofficial.pdf?sfvrsn=f84c2dc_12. Accessed September 2021.
- Google Earth V 7.3. (July 9, 2021. City of Greeley in Weld County, Colorado. 40.388128° north, -104.88102° west, eye altitude at 6,000 feet. Accessed September 2021.

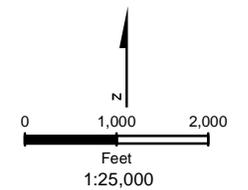
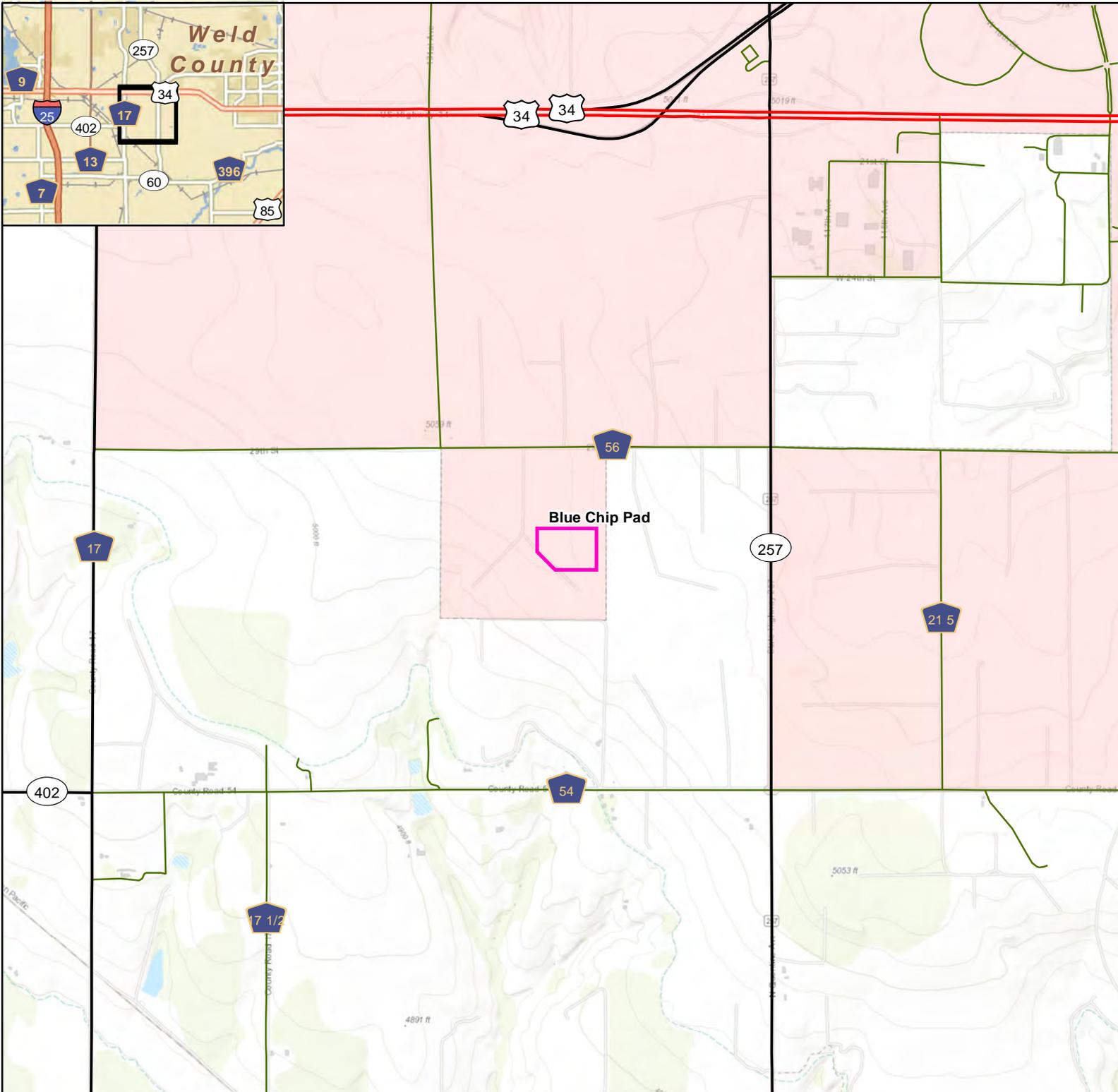


Blue Chip Pad

Figure 1 - Vicinity Map

Legend

-  Oil and Gas Location
-  City of Greeley Limits



Site Characteristics

Legal Location: Sec 22, T5N R67W
County: Weld

Feature symbols not to scale

REVISED	BY	COMMENT
10/15/2021	AD	WPP Vicinity Map

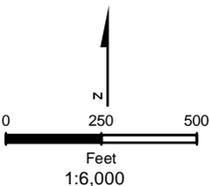


Blue Chip Pad

Figure 2 - Site Map

Legend

-  Working Pad Surface
-  Oil and Gas Location



Site Characteristics

Legal Location: Sec 22, T5N R67W
County: Weld

Feature symbols not to scale

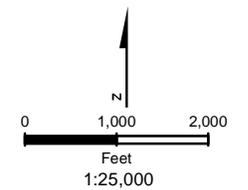
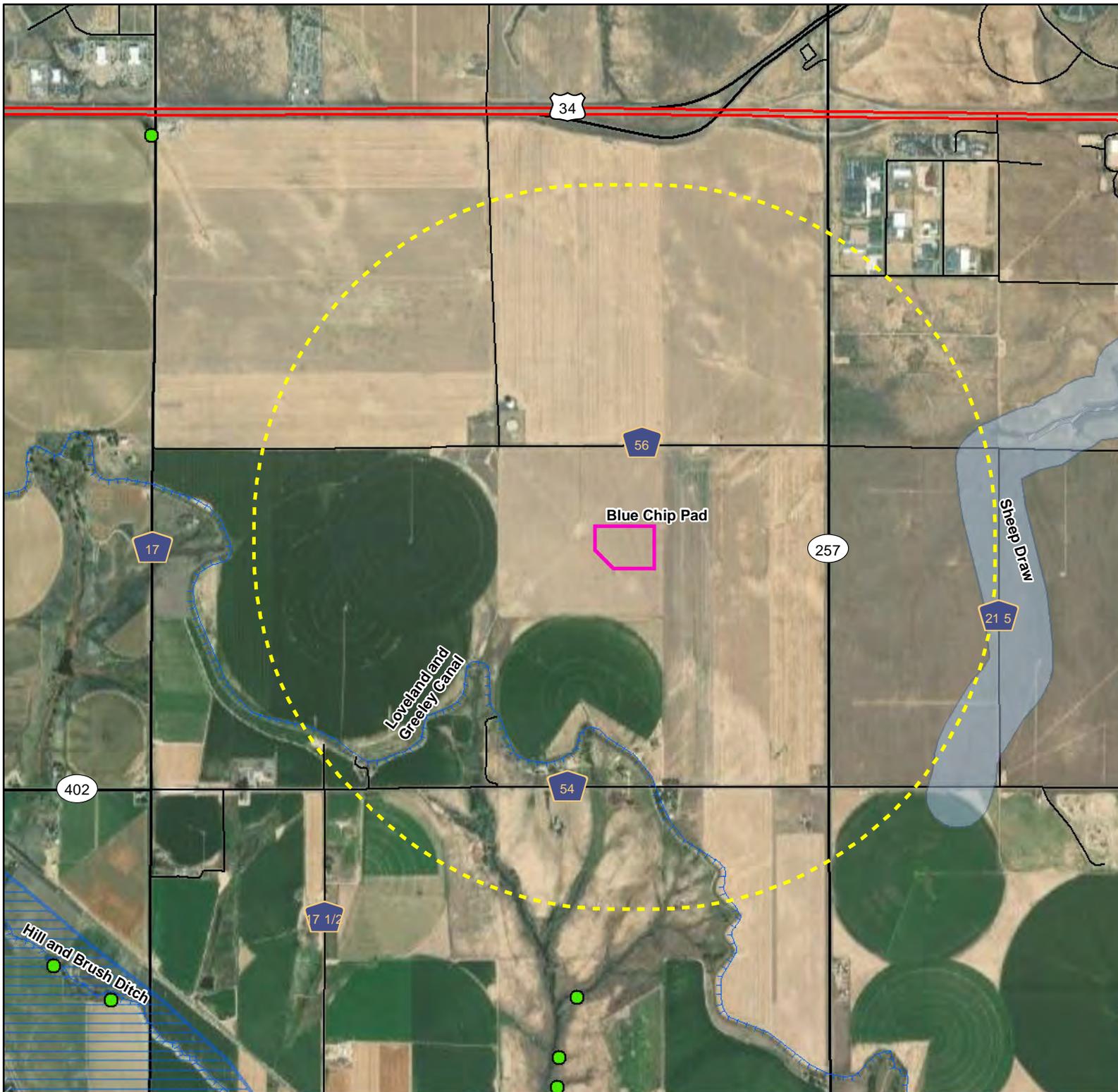
REVISED	BY	COMMENT
2/11/2022	MJW	WPP Site Map

Blue Chip Pad

Figure 3 - High Priority Habitats

Legend

- One-mile Buffer
- Oil and Gas Location
- Raptor Nest - Inactive or Unknown Status
- NHD-Mapped Canal/Ditch
- FEMA-Mapped 100-Year Floodplain
- Aquatic Native Species Conservation Water
- Mule Deer Severe Winter Range HPHD



Site Characteristics

Legal Location: Sec 22, T5N R67W
 County: Weld

Feature symbols not to scale

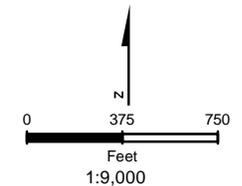
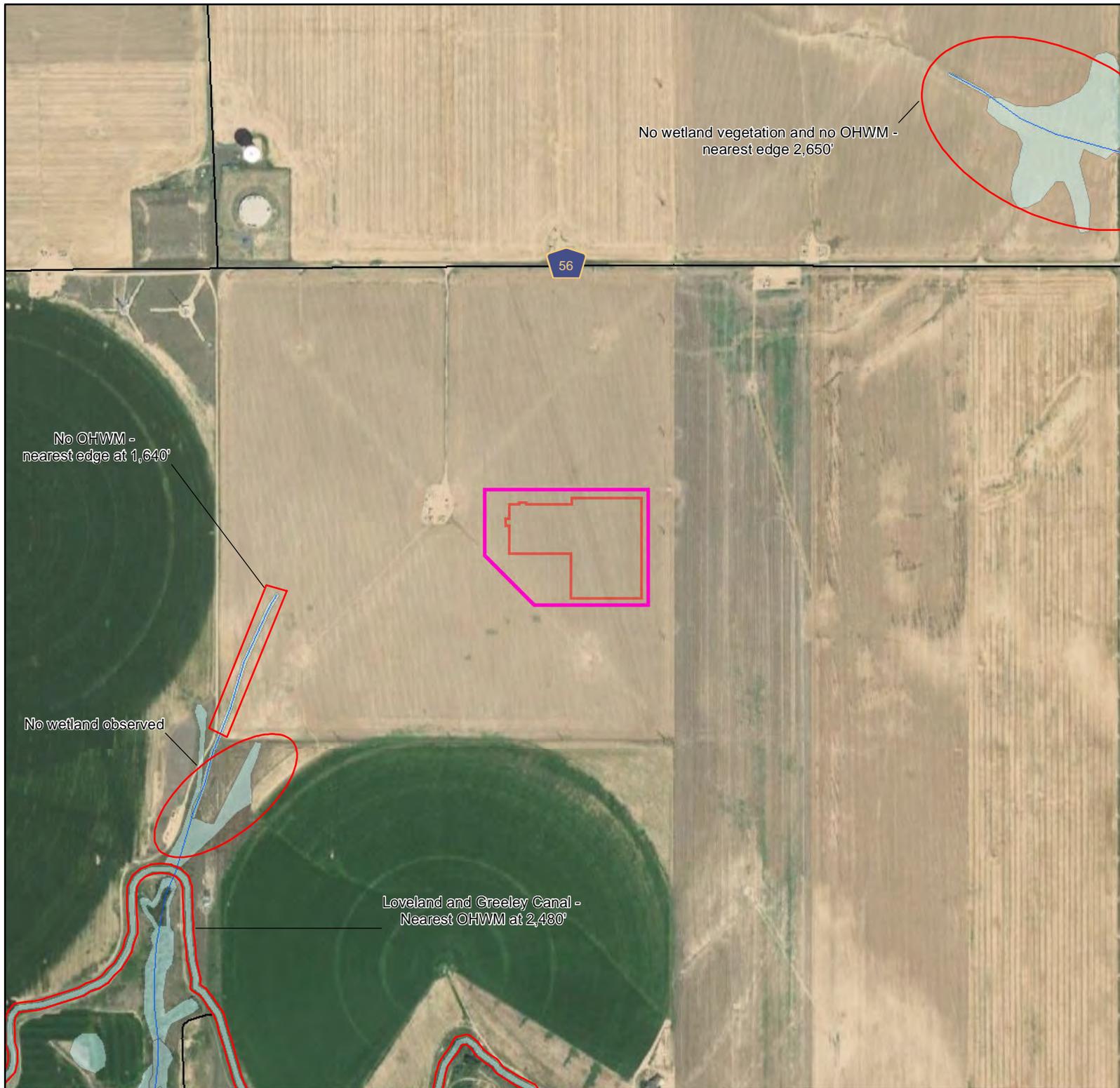
REVISED	BY	COMMENT
10/21/2021	MJW	WPP HPH

Blue Chip 6-22HZ Pad

**Figure 4 -
NHD/NWI-Mapped
Features Nearest to Location**

Legend

- Working Pad Surface
- Location
- NHD-mapped stream
- NWI-mapped wetland



Inspector: KD, AD
Inspection Date: 9/8/2021, 10/4/2021

Site Characteristics

Legal Location: NENW, SENW Sec 22, T5N R67W
County: Weld
Land Use: Agriculture, Oil and Gas
Pre-Construction Vegetation Cover: Cropland
Topography: 1-3 percent slopes
Run-Off Risk: Low
Total Disturbed Area: 12.62 acres
Soil Type: Weld loam, 1 to 3 percent slopes
Receiving Waters: Loveland and Greeley Canal

Feature symbols not to scale

REVISED	BY	COMMENT
3/2/2022	MJW	Natural Resources Map