



Wildlife Protection Plan

Submitted with Form 2A Application for

Cosslett East 22H-H168

Plan Date July 6, 2021

Submitted July 13, 2021

Resubmitted: September 10, 2021

**Crestone Peak Resources' Wildlife Protection Plan was developed in
accordance with COGCC Rule 1201.**

Wildlife Plan

COSSLETT EAST 22H-H168 PAD **Weld County, Colorado**

July 6, 2021

Prepared for:

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Apex Job No.: 125.1803.05-0049



1. Introduction

Apex Companies, LLC (Apex) completed a biological assessment for the proposed pad and drilling operations at the Cosslett East 22H-H168 pad (Project), for Crestone Peak Resources, LLC (CPR). This effort included a desktop review and site survey, performed on March 01, 2021, to identify sensitive resources with potential to be affected by the Project. This effort and report provide CPR with an assessment of potential adverse impacts to sensitive natural resources, including vegetative communities, surface waters, and wildlife. The desktop review sources included recent and historical aerial imagery, the Federal Emergency Management Agency (FEMA) National Flood Hazard Layer, the U.S. Geological Survey (USGS) National Hydrography Dataset (NHD), the U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) Mapper, the USFWS Information for Planning and Consultation (IPaC) system, Colorado Parks and Wildlife (CPW) Species Activity Mapping (SAM) data, CPW High Priority Habitat (HPH) data layers, and Apex's proprietary database of over 1,500 mapped raptor nests throughout the Denver-Julesburg (DJ) Basin.

2. Project Site/Oil and Gas Locations

The Project is located in Section 22, Township 1 North, Range 68 West, in Weld County, Colorado, Colorado (Figure 1). The Project site consists of a 6.80-acre pad located on West Interstate 25 frontage road, approximately 0.55-mile south of the intersection of Interstate 25 and Erie Parkway (Figure 2). Fourteen (14) wells are proposed for the Project site. The majority of the Project site (6.20 acres) currently supports an active row crop field (variety unidentified), with the southern edge of the site (0.60 acre) supporting rangeland, primarily ruderal species. An approximately 0.70-acre segment within the northern portion of the Project has been reclaimed for agricultural use following disturbance from adjacent north oil/gas operations (Figures 2 and 3).

The Project is located immediately south of the former Cosslett B Unit pad (Location ID 323151). This former Oil and Gas Location was operated by CPR and supported eight (8) wells: Cosslett B Unit 1X, 8-2-22, 42-22, 6-0-22, 41-22, 4-0-22, 32-22, and 6-4-22). That pad also formerly supported a second Oil and Gas Location (ID 08069) consisting of a single well (Cosslett B Unit 1) operated by Vessels Oil & Gas Company (Vessels). The wells at this location were either Plugged and Abandoned or Temporarily Abandoned between December 2018 and October 2020. The single Vessels well was Dry and Abandoned in 1985.

3. COGCC: High Priority Habitats and Other Protected Resources

Findings

The Project site does not occur within any High Priority Habitats (HPH) designated by CPW for application in the Colorado Oil and Gas Conservation Commission's (COGCC) Series 1200 rules.

The closest HPH is Little Dry Creek, an Aquatic Native Species Conservation Water located approximately 0.62-mile to the south (Figure 3). No other HPHs are located within one mile of the Project site. The next closest HPHs are an active bald eagle (*Haliaeetus leucocephalus*) nest located approximately 4.45-miles southeast and an Aquatic Native Species Conservation Water (Coal Creek) approximately 6-miles east of the Project site (Figure 3).

Resource Management Recommendations

The Project site is greater than 500 feet from the nearest potential ordinary high water mark identified as within Little Dry Creek or its associated channelized conveyance. Therefore, the Project is not subject to restrictions described in COGCC 1200 Series Rule 1202.c(1)R regarding proximity to Native Aquatic Species Conservation Waters. Additionally, the Project site lies further than 0.25-mile of the active bald eagle nest HPH and is in adherence with 1200 Series Rule 1202.c.

4. Agriculture

Findings

The Project site is located within unincorporated land in Weld County on property zoned as Agricultural (A) (Weld County Property Portal 2021). Aerial imagery suggests that this property has been actively managed since approximately 1993, however, the intermittent presence of prairie dog burrows sporadically located throughout of the parcel also suggests periods of inactivity of land disturbance (Google Earth 2021).

Resource Management Recommendations

None. Agriculture is a predominant land use in the immediate vicinity and regionally. Loss due to the conversion of use will be negligible.

5. Summary of Findings

Following a review of sensitive resources with potential to be affected by the Project and drilling operations at the Cosslett East 22H-H168 Pad by CPR, potential adverse impacts to the ecosystem are anticipated to be minimal and include disturbances to the agricultural field over which the Project will be built. Agriculture is a predominant land use in the immediate vicinity and regionally.

The project will not impact CPW High Priority Habitats.

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

- Rule 1202.a.(1): Operators will install and utilize bear-proof dumpsters in black bear habitat: The Project is not located within black bear habitat.
- Rule 1202.a.(2).A. and B.: 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: No Project operations will withdraw from or discharge into natural surface waters.
- Rule 1202.a.(3): 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: The Project is greater than 500 feet from the nearest persistent surface water, Little Dry Creek, at its closest point.
- Rule 1202.a.(4).A., B., and C.: 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: CPR will fence and net or install other CPW-approved exclusion devices on new or existing drilling pits, production pits and other pits as determined necessary by COGCC.
- Rule 1202.a.(5): Operators will install wildlife escape ramps for trenches that are left open for more than 5 consecutive days: CPR will comply with this directive.
- Rule 1202.a.(6): 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: CPR will comply with this directive.
- Rule 1202.a.(7): Operators will use CPW-recommended fence designs when consistent with the Surface Owner's approval and any Relevant Local Government requirements: CPR will comply with this directive.
- Rule 1202.a.(8): Operators will conduct all vegetation removal necessary for operations outside of the nesting season for migratory birds (April 1 to August 31) or may need to conduct pre-construction nesting migratory bird surveys within the approved disturbance area prior to any vegetation removal during the nesting: CPR will comply with this directive. Pre-construction nesting bird surveys will be performed no more than seven days prior to the start of site disturbing activities if Project activities start between April 1 and August 31.

- Rule 1202.a.(9): 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: CPR will comply with this directive.
- Rule 1202.a.(10).A. thru E.: 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:
 - 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.

The Project is approximately 0.62-mile upgradient from Little Dry Creek, an Aquatic Native Species Conservation Water (identified at 1202.c.(1).R), so implementation of Rule 1202.a.(10).A. thru E is not necessary. Figure 3 depicts the proximity of Little Dry Creek to the Project.

- Rule 1202.b.: 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: No flowline or other underground utility associated with the Project will cross either a perennial stream or an aquatic HPH.

7. Site-Specific BMPs

The following site-specific wildlife BMPs will be implemented at the Project site. These BMPs are applicable for entry in Form 2A under General Wildlife:

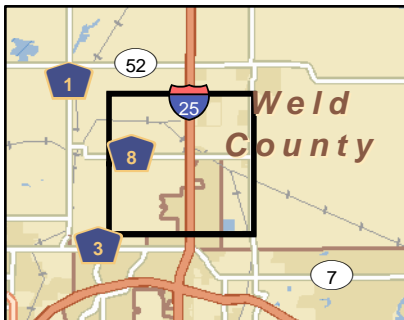
1. Inform and educate employees and contractors on wildlife conservation practices, including no harassment or feeding of wildlife;

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; and
17. Install automated emergency response systems (e.g., high tank alarms, emergency shutdown systems).

13. References

- Colorado Department of Agriculture. 2021. Noxious Weed Species ID. Available online at <https://ag.colorado.gov/conservation/noxious-weeds/species-id>. Accessed April 2021.
- (CPW) Colorado Parks and Wildlife. 2020. Recommended Buffer Zones and Seasonal Restrictions for Colorado Raptors. Available online at <https://cpw.state.co.us/Documents/WildlifeSpecies/LivingWithWildlife/Raptor-Buffer-Guidelines.pdf>. Accessed April 2021.
- Google Earth V 7.3. Erie, Colorado. 40.039238° north, -104.983578° west. Accessed May 2021.
- (NRCS) Natural Resources Conservation Service, United States Department of Agriculture. Official Soil Series Descriptions. Available online at <https://casoilresource.lawr.ucdavis.edu/gmap/>. Accessed April 2021.
- (USFWS) U.S. Fish and Wildlife Service. 2005. Final List of Bird Species to Which the Migratory Bird Treaty Act Does Not Apply. Federal Register 70 (49): 12710-12716.
- (USFWS) U.S. Fish and Wildlife Service. 2020a. Revised List of Migratory Birds. Federal Register 85(74):21282 – 21305.
- (USFWS) U.S. Fish and Wildlife Service. 2021. IPaC – Information Planning and Conservation System. Available online at: <http://ecos.fws.gov/ipac/>. Accessed March 3, 2021.
- Weld County Property Portal. Available at: <https://www.co.weld.co.us/maps/propertyportal/>. Accessed on May 20, 2021.

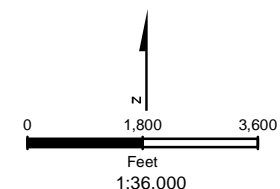
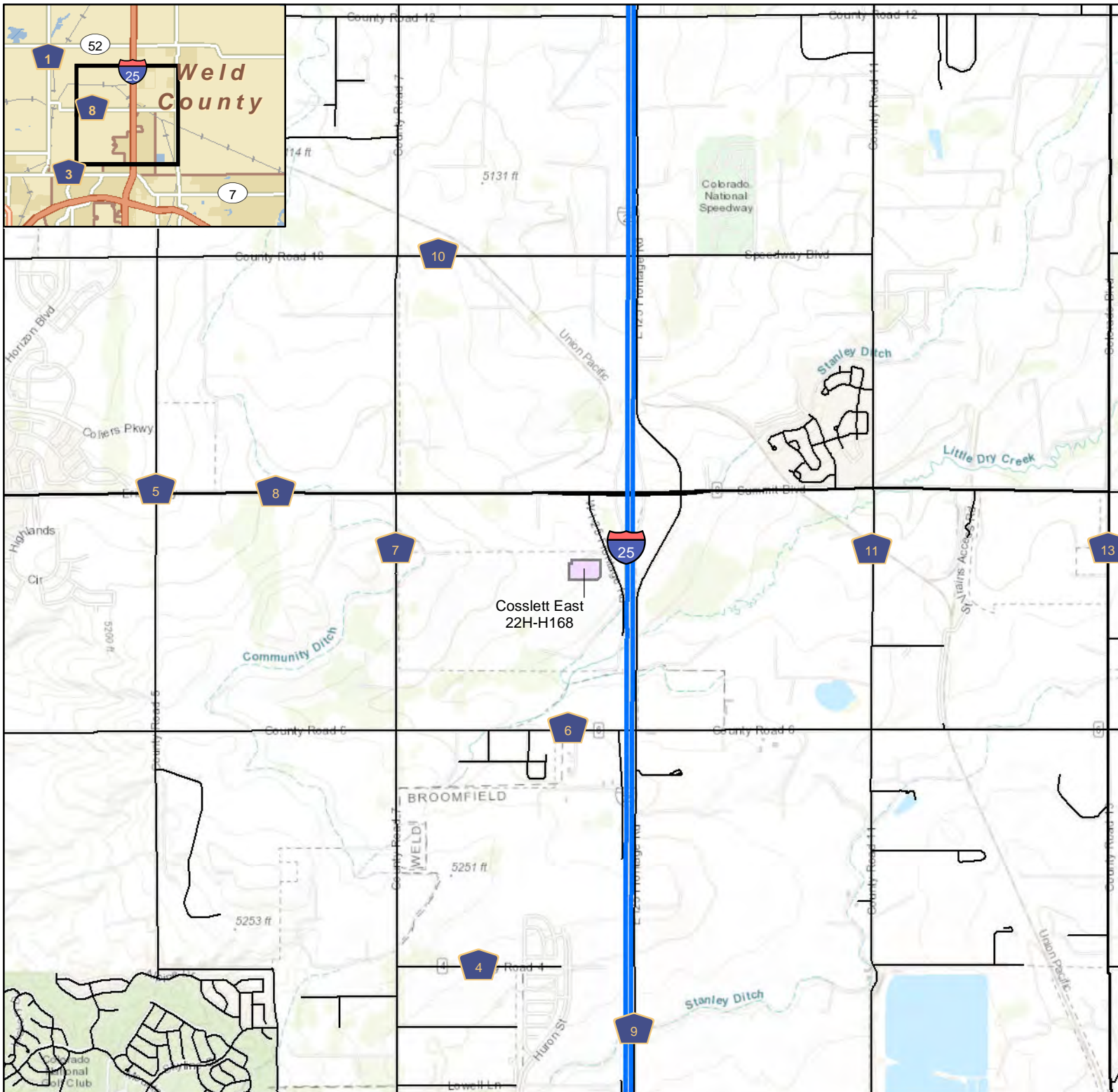
Figures



Cosslett East 22H-H168 Pad Figure 1

Legend

 Pad Footprint



Inspector: **KD**
Inspection Date: **03/01/2021**

Site Characteristics

Legal Location: Sec 22, T1N R68W
County: Weld
Land Use: Agriculture and Oil and Gas
Pre-Construction Vegetation Cover: Cropland
Topography: Slope to SE
Run-Off Risk: Low
Total Disturbed Area: 6.8 acres
Soil Type: Nunn clay loam, 1 to 3 percent slopes; Ulm clay loam, 3 to 5 percent slopes; Weld loam, 1 to 3 percent slopes
Receiving Waters: Stanley Ditch




REVISED	BY	COMMENT
5/25/2021	BJB	Natural Resources Map

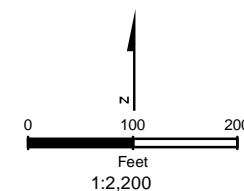


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Cosslett East 22H-H168 Pad Figure 2

Legend

-  Pad Footprint
-  Raptor Nest - Active
-  Potential BUOW Habitat



Inspector: **KD**
 Inspection Date: **03/01/2021**

Site Characteristics

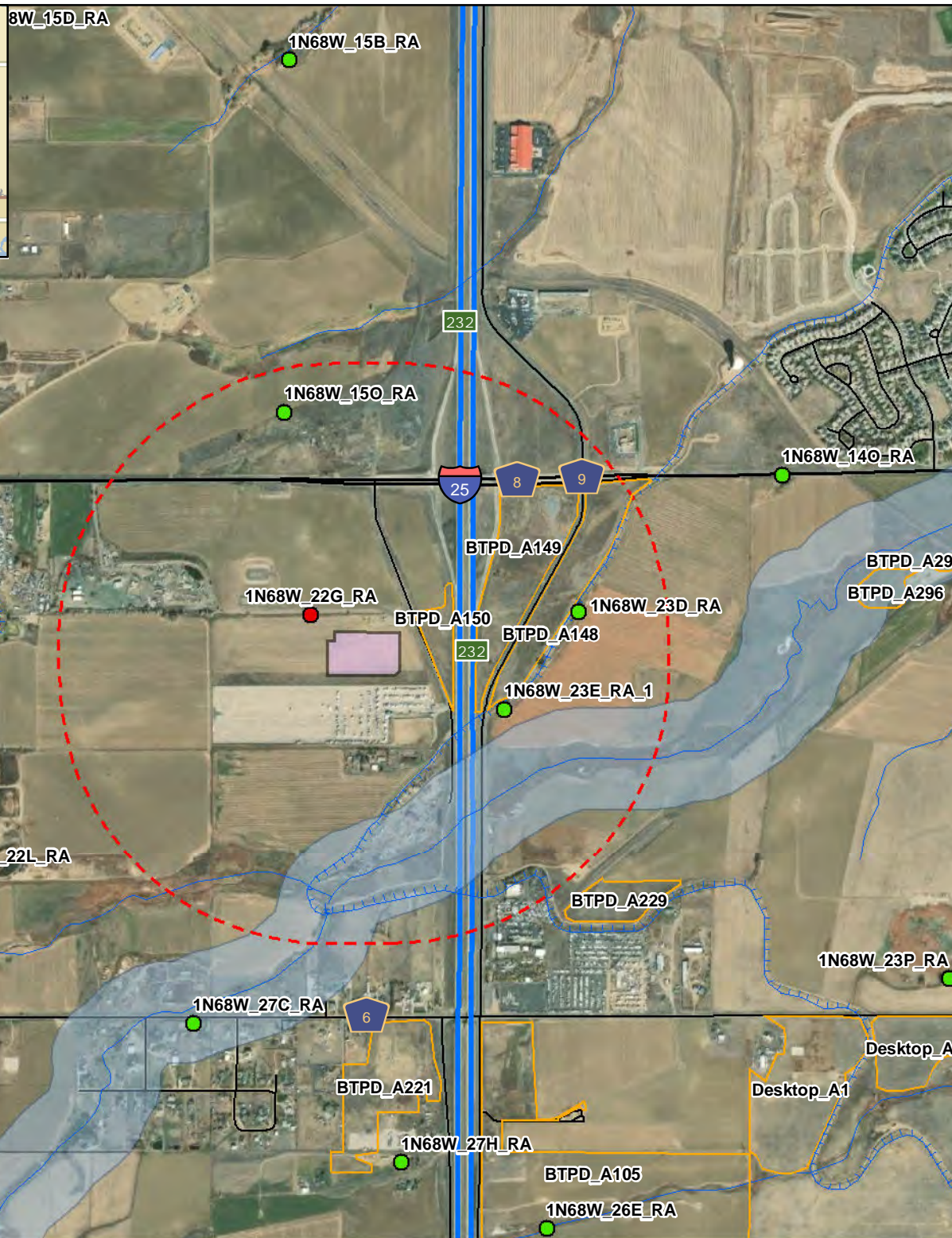
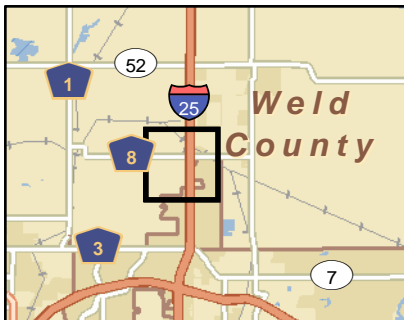
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5/25/2021	BJB	Natural Resources Map



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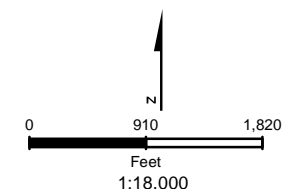




Cosslett East 22H-H168 Pad Figure 3

Legend

- Pad Footprint
- Half-Mile Survey Area around Pad
- Raptor Nest - Active
- Raptor Nest - Inactive or Unknown Status
- Stream/River
- Canal/Ditch
- Potential BUOW Habitat
- Aquatic Native Species Conservation Water



Inspector: **KD**
Inspection Date: **03/01/2021**

Site Characteristics

Legal Location: Sec 22, T1N R68W
County: **Weld**
Land Use: Agriculture and Oil and Gas
Pre-Construction Vegetation Cover: **Cropland**
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REVISED	BY	COMMENT
5/25/2021	BJB	Natural Resources Map



Feature symbols not to scale