



Harambe 2920

304.C.(17) Wildlife Protection Plan

The proposed Harambe 2920 pad is located outside of High Priority Habitat. Pursuant to COGCC rule 1201.a, a Wildlife Protection Plan that includes a description of operating requirements shall be submitted with new ODGPs to ensure the design, implementation, management and maintenance of the proposed pad is in compliance with 1202.a operating requirements.

A field assessment was conducted on October 20, 2021, by Quandary Consultants, LLC. A one-mile review of the area determined the primary land use in and around the proposed location is non-irrigated cropland. There is approximately 20% vegetation coverage in the proposed disturbance area, the rest is bare ground. All of the vegetation in the disturbance area is invasive weeds, predominately large filed bindweed infestation with some Kochia. The 10-acre disturbance area is composed of two NRCS soil types. Approximately 6.28 acres of the soil is NRCS 15, Colby Loam, 1-3% slopes and the remaining 4.73 acres of disturbance is NRCS 16, Colby Loam, 3-5% slopes. A review of CPW High Priority Habitats revealed CPW Aquatic Sportfish Management Waters buffer is 160' South of the location and State Wildlife area, Banner Lakes is 580' South of the location. HPH Mule Deep Migration corridor is located 5250' SW of the Working Pad surface. A review of USFWS IPaC species revealed a low likelihood of presence of any threatened or endangered species due to in habitat not being suitable. Please see attached Wildlife habitat Map. This location was moved specifically, not just to be outside of the HPH NSO, but to maintain greater the 500' from the Ordinary High-Water mark of Banner lakes. OHWM was surveyed to maintain proper setbacks.

A review of operating requirements found in 1202.a. and 1202.b. will be complied throughout the life of the operations are listed below.

Non- Applicable Operating Requirements

- 1202.a (1): This location is not in Black bear habitat.
- 1202.a (2): This location will not be withdrawing or discharging into surface waters
- 1202.a (3): No new staging areas, refueling or chemical storage areas are situated within 500 feet of the ordinary high-water mark of a river, perennial or intermittent stream lake pond or wetland
- 1202.a (4): This location will not have any pits
- 1202.a (9): This location will not have any pits
- 1202.a (10): The working pad surface is not located within 500- 1000 feet upgradient from High Priority Habitat
- 1202.b. Operators will bore, rather than trench, flowline utility crossings of perennial streams identified as aquatic High Priority Habitat unless the Operator obtains a signed waiver from CPW and the Director or Commission approves a Form 4 or Form 2A documenting the relief. When



installing culverts or bridges, such structures will not impact or prevent the passage of fish unless otherwise directed by CPW.

Applicable Operating Requirements

- 1202.a. (5): If a trench is left open for more than 5 consecutive days during pipeline construction the operator will install wildlife escape ramps at a minimum of one map per ¼ mile of trench
- 1202.a.(6): Operator will use CPW-recommended seed mixes for interim and final reclamation when consistent with the Surface Owner's approval
- 1202.a. (7): Operator will use CPW-fence recommendations when consistent with Surface owner approval and Local Government requirements.
- 1202.a (8): Operators will conduct all vegetation removal necessary for Oil and Gas Operations outside of the nesting season for migratory birds (April 1 to August 31). For any vegetation removal that must be scheduled between April 1 to August 31, Operators may implement appropriate hazing or other exclusion measures prior to April 1 to avoid take of migratory birds. If hazing or other exclusion measures are not implemented, Operators will conduct pre-construction nesting migratory bird surveys within the approved disturbance area prior to any vegetation removal during the nesting season. If active nests are located, Operators will provide work zone buffers around active nests.

Additional BMPS

- Inform and educate employees and contractors on wildlife conservation practices, including no harassment or feeding of wildlife;
- Adequately size infrastructure and facilities to accommodate both current and future gas production;
- Protect culvert inlets from erosion and sedimentation and install energy dissipation structures at outfalls;
- Implement fugitive dust control measures;
- Install screening or other devices on the stacks and on other openings of heater treaters or fired vessels to prevent entry by migratory birds;
- Minimize rig mobilization and demobilization by completing or re-completing all wells from a given well pad before moving rigs to a new location;
- Post speed limits and caution signs to the extent allowed by surface owners, Federal and state regulations, local government, and land use policies;
- Use remote monitoring of well production to the extent practicable;
- Reduce traffic associated with transporting drilling water and produced liquids through the use of pipelines, large tanks, or other measures;
- Install automated emergency response systems (e.g., high tank alarms, emergency shutdown systems)



References:

Critical Habitat IPaC Report: <https://ecos.fws.gov/ipac/>

Migratory Birds: <https://www.fws.gov/birds/index.php>

State Protected Species: <https://cpw.state.co.us/learn/Pages/SpeciesProfiles.aspx>

Buffer Zones and Seasonal Restrictions for Colorado Raptors:

<https://cpw.state.co.us/Documents/WildlifeSpecies/LivingWithWildlife/Raptor-Buffer-Guidelines.pdf>

(CDWR) Colorado Division of Water Resources. 2021. HydroBase Point Data Well Applications. Available online at: <https://cdss.colorado.gov/gis-data/gis-data-by-category>.

(FEMA) Federal Emergency Management Agency. 2021. USA Flood Hazard Areas. Available online at:

<https://www.fema.gov/flood-maps/national-flood-hazard-layer>.

(NRCS) Natural Resources Conservation Service. 2021. Web Soil Survey. Available online at:

<http://websoilsurvey.nrcs.usda.gov/>.

(USFWS) U.S. Fish and Wildlife Service. 2021. National Wetlands Inventory. Available online at:

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

(USGS) U.S. Geological Survey. 2021. National Hydrography Dataset Plus High Resolution. Available

online at: <https://www.usgs.gov/core-science-systems/ngp/national-hydrography/nhdplus-highresolution>.

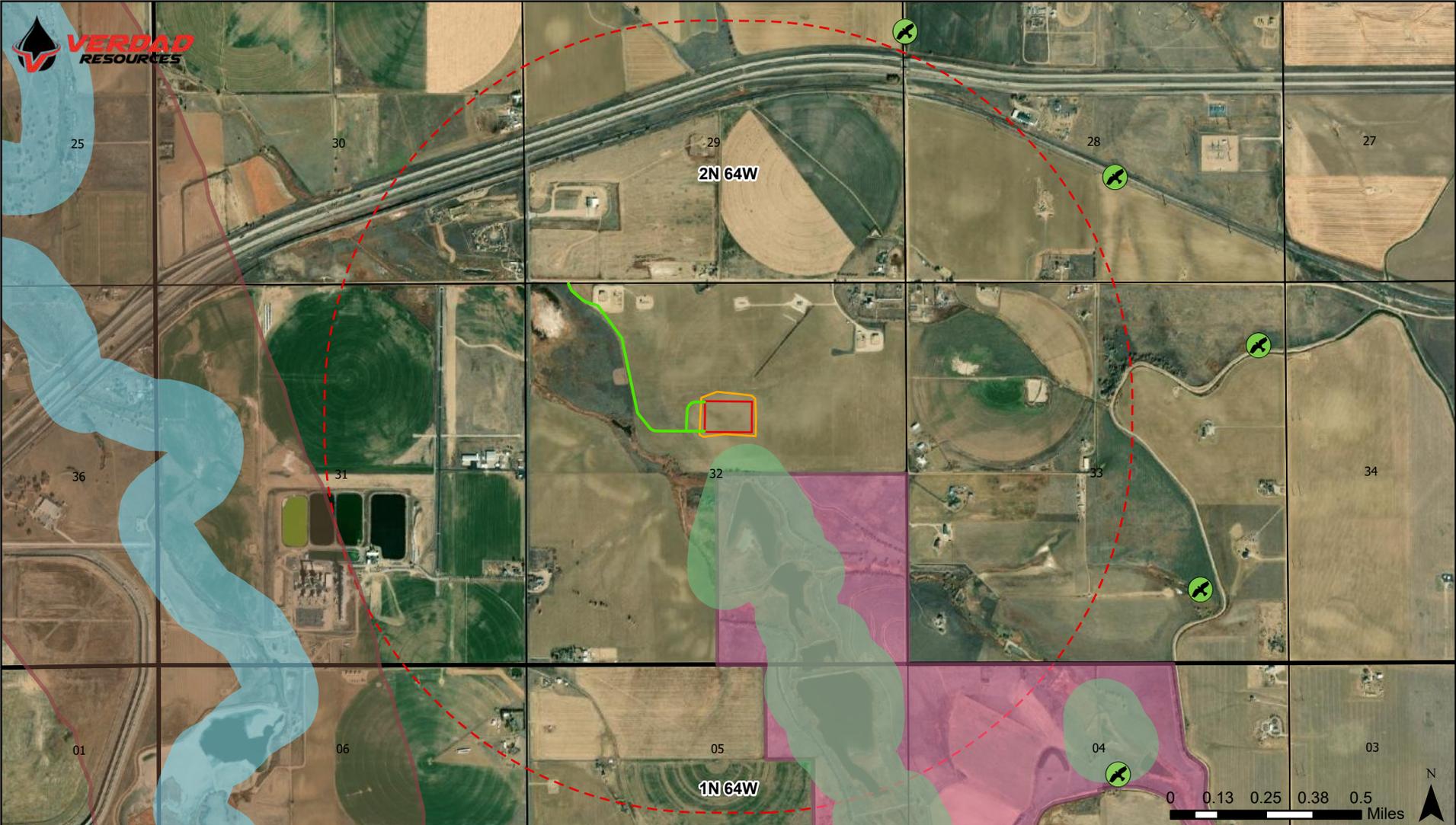


Figure 4. Harambe 2020 Wildlife Habitat Drawing

Client: Verdad Resources LLC

- Working Pad Surface
- Maximum Disturbance Area
- - - Working Pad Surface 1-Mile Buffer
- Access Road
- Raptor Nest
- CPW Aquatic Sportsfish Management Waters HPH
- CPW State Wildlife Area HPH
- CPW Mule Deer Migration Corridor HPH
- CPW Aquatic Native Species Conservation Waters HPH
- PLSS Township & Range
- PLSS Section

Author: Clara Jenck Date: 11/10/2021
 SENW & SWNE, Sect. 32, Township 2N, Range 64W



Notes: 1) The following source information was reviewed during preparation of the Wildlife Habitat Drawing:
 a. COGCC High Priority Habitat Layers
 b. IPaC: <https://ecos.fws.gov/ipac/>; No Federally Listed Critical Habitat Found
 c. Migratory Birds: <https://www.fws.gov/birds/index.php>; Operator will comply with Rule 1202.a.(8).

d. State Protected Species: <https://cpw.state.co.us/learn/Pages/SpeciesProfiles.aspx>
 e. Buffer Zones and Seasonal Restriction for Colorado Raptors: <https://cpw.state.co.us/Documents/WildlifeSpecies/LivingWithWildlife/Raptor-Buffer-Guidelines.pdf>