

# NueVida Resources, LLC's Wildlife Mitigation Plan

For the  
Ardourel 33081718 Pad

October 2022

**Prepared for:**



NueVida Resources, LLC  
5950 Cedar Spring Road, Suite 100  
Dallas, Texas 75235  
(214) 838-2768

**Developed by:**



479 Wolverine Drive  
Bayfield, Colorado 81122  
Phone: (970) 884-4080

## TABLE OF CONTENTS

---

1	Introduction.....	1
1.1	Project Location.....	1
2	Project Description.....	1
2.1	Estimated Total Area of Disturbance.....	2
2.1.1	Well Pad.....	2
2.1.2	Access Road for Well Pad .....	3
2.1.3	Ardourel tank pad TUA .....	3
2.1.4	Access Road for Ardourel tank pad TUA.....	3
2.1.5	Onsite and Off-location Pipelines .....	3
2.1.6	Temporary Pump Pad.....	4
3	Pre-application Consultation.....	6
3.1	Onsite Field Visit.....	6
3.2	Additional Meetings and Consultation .....	6
3.3	Alternative Location Analysis for Wildlife Impact .....	6
3.3.1	Alternatives Considered for the Well Pad.....	7
3.3.2	Alternatives Considered for the Ardourel tank pad TUA .....	8
4	Operation Compliance With Rule 1202.a .....	9
5	Operation Compliance With Rule 1202.b.....	11
6	Wildlife Best Management Practices .....	11
6.1	Employee and Contractor Education .....	11
6.2	Reclamation and Inter-seeding.....	11
6.3	Wildlife Best Management Practices/Standard Operating Practices (SOP's) .....	12
6.4	Additional Mitigation Planned to Benefit Wildlife Resources .....	13
7	Mitigation Commitments to Offset Unavoidable Adverse Impacts to Wildlife Resources .....	13
8	References.....	14
9	Wildlife Habitat Map.....	15

# 1 INTRODUCTION

---

NueVida Resources, LLC (NueVida) is providing this Wildlife Mitigation Plan to the Colorado Oil and Gas Conservation Commission (COGCC), to Colorado Parks and Wildlife (CPW), and to the La Plata County Planning Department, the La Plata County Planning Commission, and the La Plata County Board of County Commissioners (collectively LPC). This plan has been drafted in accordance with COGCC Rule 1201.b. and LPC's Land Use Code 90-123(IV). The purpose of this Plan is to avoid, reduce, and minimize impacts to the wildlife resource within the area from the Ardourel 33081718 Pad project (Proposed Project). The Proposed Project is within High Priority Habitats (HPH) including Mule Deer Severe Winter Range and Mule Deer Winter Concentration Area, as defined by COGCC Rule 1202.d.(3). NueVida has chosen to pay a Direct Impact Habitat Mitigation Fee to CPW, as provided by Rule 1203.c.

## 1.1 Project Location

The location for this Proposed Project has been selected to meet a variety of technical and logistical needs. Key among these is an acceptable location between the field from which the gas is coming and the plant to which it is being delivered. This Proposed Project is located near Ignacio, Colorado on Parcel Number 595318300056 owned by the Ardourel Trust and will be accessed from County Road 318, Ignacio, CO. The legal location for the project is the W/2 SW/4 of Section 18, Township 33 North, Range 8 West, N.M.P.M. This proposed location is currently occupied by sagebrush vegetation with sparse pinion pine and juniper trees scattered throughout. It is zoned for agricultural use by La Plata County. The location abuts other private properties on three sides and County Road 318 on the southern border.

# 2 PROJECT DESCRIPTION

---

NueVida plans to drill eight (8) wells on its leasehold, within La Plata County, to the Mancos Formation utilizing horizontal drilling technologies. NueVida plans to drill two (2) wells in the first year of the project for testing purposes. Based on results, the remaining six (6) wells may be drilled for a total of eight (8) wells. To accommodate these wells, NueVida is proposing a multi-well gas location (well pad), access roads, pipeline, Ardourel tank pad TUA, and temporary pump pad on private land owned by the Ardourel Trust. Access to the location will be from an existing two-track road which begins off County Road 318 and travels northward, parallel to the proposed well pad, Ardourel tank pad TUA and temporary pump pad. Two short access roads onto and off of the well pad and the Ardourel tank pad TUA will be constructed to accommodate pass-through traffic for both pads. NueVida will install an 8" HDPE (High Density Polyethylene) water pipeline and, for future use, a 10" steel gas pipeline from the northwestern corner of the well pad continuing north for 3,901.6 feet to an above ground header system where three different gathering companies in the area can tie to. (Note: In addition, Red Cedar Gathering Company (RCGC) plans to permit and construct on its own a 10" gas pipeline to the Ardourel location.)

Long-term operational equipment on the well pad will be two (2) 400-barrel steel water tanks, two (2) 2-phase vertical indirect heated vessels, one (1) dehydrator skid, one (1) small vertical fuel gas separator, and one (1) enclosed combustor. The temporary Ardourel tank pad TUA will have approximately fifteen (15) 40,000-barrel tanks and four (4) 20,000-barrel tanks.

NueVida plans to bring in electricity to the well pad for use in its production facilities/operations. La Plata Electric Association (LPEA) has high voltage electricity available at the El Paso Compressor Station, located in the SE/SE of Section 13, Township 33 North, Range 9 West, N.M.P.M. There is currently a

low voltage, 2-phase overhead line that runs west to east (approximately 380 feet) from the El Paso Station into the SW/SW of Section 18, Township 33 North, Range 8 West, N.M.P.M. This overhead line terminates and is located approximately 400 feet, north of County Road 318, along the lease access road to the well pad. LPEA will upgrade this 400-foot line to a higher voltage (TBD) 3-phase line. From this end point, LPEA will install approximately 1,670 feet of new high voltage, 3-phase overhead line to the NW end of the well pad. This new power line will run north paralleling the lease access road within existing ROW. LPEA will set an electric meter and supply 480 v, 3-phase service at the NW corner of the well pad. NueVida will set an electric panel from which it will run the electric supply to the various production units, motors/pumps and air supply.

Once drilling operations begin, drilling for the first two wells will take approximately forty (40) days. The drilling rig will then be removed, and a two-week period will begin for preparation to complete the wells. Once completion operations begin, it will take approximately thirty (30) days to complete. After completion, the tanks on the Ardourel tank pad TUA will be removed; however the Ardourel tank pad TUA will remain in place while testing of the wells takes place to determine additional wells that may be drilled.

## 2.1 Estimated Total Area of Disturbance

The Proposed Project will result in approximately 34.51 acres of total disturbance, of which 33.62 acres will result in removal of wildlife habitat. The location of new surface disturbance has been planned and guided in concert with COGCC, CPW, and LPC through consultation, as well as landowner requests, wildlife considerations, terrain characteristics, future planned NueVida infrastructure, and efforts to minimize ground/vegetative disturbance.

During interim reclamation, of the total 33.62 acres of surface disturbance, approximately 29.62 acres will be fully reclaimed once all wells are drilled, 2.90 acres will be left level and reseeded only, and 1.10 acres will be stabilized and used as a working surface throughout the life of the project. Upon decommissioning of all wells, NueVida's equipment and associated infrastructure will be removed, and the level working surfaces will be fully reclaimed to be similar to the original landscape.

### 2.1.1 Well Pad

The proposed well pad will be a 650-foot by 400-foot leveled area with a permitted construction zone on all sides of the pad for the establishment of cut and fill slopes (6.54 acres). There is an additional area around the well pad allotted for topsoil storage (1.55 acres). During the construction of the well pad, elevated areas within the pad area will be excavated and utilized as fill material on low areas of the pad to establish a level working surface. The well pad will require a maximum cut of 9.4 feet on the southwest corner and a maximum fill of 8.1 feet on the northeast corner of the pad. This entire area will be utilized during construction and setting of equipment. Once drilling and completion operations are finished, a small area encompassing the wells, facilities, and access road will be left level and stabilized for ongoing operations during the life of the wells. The new access road for the well pad (0.07 acres) and facility area (1.03 acres) will be graveled to stabilize soils and mitigate mud and dust. All other leveled areas surrounding the well heads will be reseeded only (2.90 acres). Beyond the level reseeded well pad and working areas, the remaining pad will be recontoured and reseeded to blend with the surrounding topography. All cut and fill slopes of the pad will be established at a 3:1 slope and will be reseeded with the CPW and landowner agreed upon seed mix.

### 2.1.2 Access Road for Well Pad

There will be two new proposed access roads that will be 156.4 feet and 75.2 feet long from the kick-off points at the edge of the proposed well pad to an existing oil and gas road and the two-track road on the west side of the proposed pad, respectively. The two roads totaling 231.6 feet will be constructed with 15-foot-wide running surface. The 665-foot existing two track on the west side of the pad will also be improved and utilized as access for the well pad. Construction of the two new access roads (0.07 acres) and utilization of the existing roads (0.30 acres) will result in 0.37 acres of total disturbance. For the long term, a 15-foot-wide graveled running surface, and the bottoms of the bar ditches along either side of the access road will remain for the life of the project.

### 2.1.3 Ardourel tank pad TUA

The Ardourel tank pad TUA will be an irregular shaped, level pad measuring 1,006.48-foot by 193.01-foot by 403.97-foot by 1,009-foot by 95.58-foot by 424.54-foot with an additional permitted construction zone on all sides of the pad for the establishment of cut and fill slopes (14.34 acres). There will also be an additional 1.18 acres for topsoil storage. During the construction of the Ardourel tank pad TUA, elevated areas within the pad area will be excavated and utilized as fill material on low areas of the pad to establish a level working surface. The well pad will require a maximum cut of 11.1 feet on the northeast corner and a maximum fill of 10.4 feet on the southwest corner of the pad. This entire area will be utilized during construction, setting of equipment, drilling, and completion operations. The cut and fill slopes of the pad will be established at a 3:1 slope and will be reseeded with the CPW and landowner agreed upon seed mix. After all wells planned to be drilled are drilled and completed, this area will be fully reclaimed. The estimate timeframe for all eight wells to be drilled is not expected to be any longer than five years. When wells are not actively being drilled, disturbed areas within the Ardourel tank pad TUA will be interim reclaimed and soils stabilized by reseeding with the CPW and landowner agreed upon seed mix and/or use of mats.

### 2.1.4 Access Road for Ardourel tank pad TUA

There will be two new proposed temporary access roads that will be 50 feet and 52.2 feet long from the kick-off points at the edge of the proposed Ardourel tank pad TUA to the existing oil and gas road on the west side of the proposed pad. The two roads totaling 102.2 feet in length will be constructed with 15-foot-wide graveled running surface. Construction of the two new access roads will result in 0.02 acres of total disturbance. After all wells planned to be drilled are drilled and completed, these two access roads will be fully reclaimed.

### 2.1.5 Onsite and Off-location Pipelines

#### **Onsite Flowlines**

From each wellhead on the Ardourel pad, approximately 300 feet of 4-inch, X-42 steel line pipe (coated and wrapped) will be buried at a minimum of 4 feet below ground level and will be run and connected to the production facilities located on the north end of the pad. Each 4-inch line will carry both natural gas and produced water to a 2-phase high-pressure separator. The water and gas will be separated with the water then being transferred through a 2-inch buried steel line (approximately 100 feet long) to two (2) 400-barrel water tanks. The produced water will be transported via truck and/or pipeline from these tanks to a water disposal system within the area (see “*Off-Location Flowlines*” for specifics to water disposal). The separated gas will flow into a dehydrator through a 6-inch above ground header system. The gas will be delivered from the dehydrator into an above ground 10-inch header system that will be connected to a custody meter run (onsite). The gathering company, Red Cedar Gathering Company (RCGC), will then

transfer gas off-site from the custody meter to its main line located in SE/SE Section 13 of Township 33 North, Range 9 West. RCGC will be responsible for permitting and installing the gathering line from NueVida's Ardourel pad to their mainline. There is no oil or condensate production from the Mancos formation in this area. The wells produce only dry gas.

### **Off-Location Flowlines**

NueVida will install 3,901.60 feet of 8-inch HDPE water line and 3, 901.60 feet of 10" steel gas pipeline from the north end of the well pad, located in the NW/SW Section 18 of Township 33 North, Range 8 West. These pipelines will run parallel along the north-south corridor of Section 18 of Township 33 North, Range 8 West, and Section 13 of Township 33 North, Range 9 West, within existing ROWs (refer to Ardourel Tank Pad TUA & Ardourel 33081718 Water Pipeline plats). The 10" gas line will be for future use. The 8-inch HDPE water line will be connected to an above ground header system, located in the SW/SW Section 7 of Township 33 North, Range 8 West. NueVida will connect its header system to the IKAV's 6-inch produced water system and to the Fassett SWD #1 site (both located in the SW/SW Section 7 of Township 33 North, Range 8 West). NueVida will install 966.90 feet of 8-inch HDPE water pipeline from the northwest corner of the Ardourel tank pad TUA, located in the SW/SW Section 18 of Township 33 North, Range 8 West, northward and parallel to the proposed well pad where it will tie to the first proposed water pipeline. Both water pipelines will be buried pipeline and will be installed within existing disturbance.

Prior to the well completion, produced water from IKAV's 6-inch produced water pipeline and Arkoma's Fassett SWD #1 (located in SWSW Section 7-T33N-R8W) will be transported south to the Ardourel tank pad TUA (refer to plats). The produced water will be stored in above ground tanks and used in the fracture stimulation of the wells. After completion, produced water from the wells will be pumped from the production tanks into the 8-inch HDPE line and transferred north to the connection site for the IKAV 6-inch produced water pipeline system and the Fassett SWD #1 water site.

#### **2.1.6 Temporary Pump Pad**

The proposed temporary pump pad will be a 127.32-foot by 132.76-foot by 130.34-foot by 160.44-foot leveled area and a permitted construction zone on all sides of the pad for the establishment of cut and fill slopes. The total resulting permitted area for this pad is 0.42-acre. During the construction of this pad, elevated areas within the pad area will be excavated and utilized as fill material on low areas of the pad to establish a level working surface. The pad will require a maximum cut of 1.8 feet on the southwest corner and a maximum fill of 2.4 feet on the northeast corner of the pad. This area will be utilized during the drilling and completion of the wells for a primary staging water tank and transfer pump. This working surface will be fully reclaimed once drilling and completions are over for all wells planned. When wells are not actively being drilled, disturbed areas across the pump pad will be interim reclaimed and soils stabilized by reseeding with the CPW and landowner agreed upon seed mix.

# Wildlife Mitigation Plan

**Table 2-1. Project Disturbance Estimates for the Proposed Ardourel 33081718 Pad**

Permitted Area Surface Disturbance (acres)					
Feature	Total Disturbance	New Disturbance	Fully Reclaimed	Reseeded Only	Long-term Disturbance
Well Pad	6.54	6.54	2.61	2.90	1.03
Ardourel tank pad TUA	14.34	14.34	14.34*	-	-
Pump Pad	0.42	0.42	0.42*	-	-
Pipeline Corridor	0.1	0.1	0.1	-	-
New Access Roads for Well Pad	0.07	0.07	-	-	0.07
New Access Roads for Ardourel tank pad TUA	0.02	0.02	0.02*	-	-
Existing Access Roads	0.3	-	-	-	0.3
TUA (Topsoil Storage for Well Pad)	1.55	1.55	1.55	-	-
TUA (Topsoil Storage for Ardourel tank pad TUA)	1.18	1.18	1.18*	-	-
Permitted Area for Stormwater BMPs	5.09	5.09	5.09	-	-
<b>Permitted Area Disturbance Total:</b>	<b>29.61</b>	<b>29.31</b>	<b>25.31</b>	<b>2.90</b>	<b>1.40</b>
Outside Permitted Area Surface Disturbance (acres)					
Pipeline Corridor	4.31	-	4.31	-	-
Existing Access Roads	0.59	-	-	-	0.59
<b>Outside Permitted Area Disturbance Total:</b>	<b>4.9</b>	<b>-</b>	<b>4.31</b>	<b>-</b>	<b>0.59</b>
<b>Overall Disturbance Total:</b>	<b>34.51</b>	<b>29.31</b>	<b>29.62</b>	<b>2.90</b>	<b>1.99</b>

\* Blue text indicates temporary disturbance that may remain for up to 5 years, all other temporary disturbance will be reclaimed no later than 2 years from the start of construction.

### 3 PRE-APPLICATION CONSULTATION

---

#### 3.1 Onsite Field Visit

NueVida and their contractors Energy Inspection Services (EIS) and Walsh Engineering met onsite at the proposed location with La Plata County, COGCC, and CPW staff on February 17, 2021, to discuss the Proposed Project, as well as any possible concerns, questions, alternatives, and mitigations. This Plan incorporates the agencies' comments, recommendations, and requests from that onsite consultation, as well as subsequent follow up and discussions.

During the onsite consultation, the location for the Ardourel tank pad TUA was closely looked at and discussed by all parties. Originally, the tank pad location was proposed directly east of the proposed well pad and within suitable sagebrush habitat for mule deer. CPW and La Plata County preferred to move the Ardourel tank pad TUA to a location directly south of the proposed well pad and closer to the existing access road, County Road 318, and an adjacent compressor station to the west to better consolidate the disturbance. Another location on a different property to the North was looked at in Section 7, Township 33 North, Range 8 West for the Ardourel tank pad TUA where NueVida has leased acreage. Upon inspection of this location, CPW and La Plata County clearly preferred the location on the Ardourel property. CPW expressed that the location in Section 7 was even better mule deer habitat and more isolated from existing disturbance.

#### 3.2 Additional Meetings and Consultation

On December 3, 2021, NueVida and CPW had a Google meeting to further discuss the Proposed Project and how to apply the COGCC 1200 series rules. Brian Magee, Brad Weinmeister, and Adrian Archuleta attended the meeting on behalf of CPW and J.B. Byrd, Dick Pate, Heather Riley, and Mindy Paulek attended on behalf of NueVida. CPW explained their process and reasoning in calculating the habitat mitigation fee, how that can be paid, and how they proposed handling the uncertainty around reclamation timing of the Ardourel tank pad TUA. There was further discussion around the mitigation that NueVida plans to do as part of the project that will benefit wildlife in the area, but Brian stated that it would be hard to place a value on those mitigation projects. Mindy and Brian discussed in further detail some of the revisions and additions that should be incorporated in the Wildlife Mitigation Plan. Discussion and guidance resulting from this meeting has been incorporated in this plan. A key item discussed at this meeting was that CPW and NueVida agreed to revisit the impacts and calculated fee associated with any areas remaining unreclaimed 5 years after initiation of the project construction.

#### 3.3 Alternative Location Analysis for Wildlife Impact

During the planning of the Proposed Project, NueVida utilized COGCC's Alternative Location Analysis process. NueVida's entire Mineral Development Area for their mineral leases is within the Mule Deer Severe Winter Range and Winter Concentration HPH. Therefore, any location considered within the mineral development area would still be within an HPH. The Proposed Location was chosen with respect to, and in consideration of, residential buildings, property lines, transmission lines, roads, CPW's HPH, disproportionately impacted communities (DIC), and the ability to access all the reserves in the mineral acreage. The Proposed Location will meet two criterion and be considered a Tier 4 according to the COGCC Tier System. The advantages of this location will be that the operator could develop all target minerals from one location and will utilize an existing access road. The reason this project would be in a Tier 4 is that the Ardourel tank pad TUA will be within 2,000 feet from a residential building. Once the temporary water pad is reclaimed, the well pad itself will be a Tier 3. The water tanks on the Ardourel



tank pad TUA will be temporary and only operated during the drilling and completion of the proposed wells. They will then be taken down and will not be used during the wildlife closure. One of the disadvantages of this proposed location is that it is within a HPH. During the onsite, CPW, COGCC, La Plata County, and NueVida discussed and looked at the locations considered for the well pad and the temporary Ardourel tank pad TUA.

### 3.3.1 Alternatives Considered for the Well Pad

#### 3.3.1.1 *Proposed Well Pad Location*

The advantages of the Proposed location are that the operator could develop all target minerals from this one location and that it would utilize an existing access road. A disadvantage of the Proposed Location is that it is visible from County Road 318. This location is not the most optimal location for the operator for extracting minerals because it would require a longer reach for the northern most lateral; however, all target minerals could be developed. In relation to wildlife resources, the location is within a HPH and would exceed the allowable density of one oil and gas location per square mile. Potential impacts from this location to wildlife would include disturbance to mule deer winter range in the form of direct loss of wintering habitat and loss of forage from the removal of sagebrush shrubland within the proposed disturbance area. Additionally, impacts to wildlife would result from increased noise and oil and gas activity during construction, drilling, completion, and on-going operations during the life of the well. The proposed location is currently occupied by dryland shrubs surrounded by sparse pinion pine and juniper stands. The area does show signs of moderate to high mule deer utilization based on tracks, scat, and signs of browsing.

#### 3.3.1.2 *Alternative Well Pad Location 1*

Alternative Well Pad Location 1 was considered because it would consolidate surface disturbance and slightly reduce the total amount of new surface disturbance from the Proposed Project. This location would be an extension to the north from an existing well pad. Expanding the existing well location and facilities to include the addition of the proposed new wells and facilities would result in moderately less visual and audible impacts. The disadvantages of this location are that the drillable laterals would not develop all the minerals which NueVida owns and that existing production of another operator would need to be shut in during NueVida's drilling and completion operations due to safety considerations. NueVida has no control or jurisdiction of shutting-in existing production of another operator. In addition, using this location would require development and drilling from a second location to develop the minerals that could not be reached from this location. This location is within the same HPH as the Proposed Location, so potential impacts to wildlife from developing this location would be very similar to impacts from the Proposed Location, though slightly less due to the reduction in total surface disturbance. However, the cumulative impacts to wildlife may turn out to be greater if this location is used due to the disturbance and fragmentation created by the construction of a second well pad.

#### 3.3.1.3 *Alternative Location 2*

Alternative Well Pad Location 2 was considered first by the operator because it would allow for the most optimal locations of laterals and most complete development of minerals including minerals in the west side of the development area. The disadvantages of this location are that it would be within 2,000 feet of a residential building unit (RBU) and also within in 150' feet of a property boundary. It would still be within the HPH but is further distanced from County Road 318 and existing disturbance. Otherwise, it would likely result in the same potential impacts to wildlife as the Proposed Well Pad Location. Due to being within 2,000 feet of an RBU, the potential impacts to the health and safety of the nearby residents

from development of this location might include increased noise, air emissions, odor, visual disturbance, oil field traffic, and the potential impacts from any unforeseen incident such as a fire, explosion, or spill.

#### *3.3.1.4 Alternative Well Pad Location 3*

Alternative Well Pad Location 3 was considered because it would be an optimal location to access the desired acreage from the east side of the mineral development area. The disadvantages of this location are that it is within 1,000 feet of a house, within the 2,000-foot boundary of a DIC, and still in the HPH. Potential impacts to wildlife from development of this location would result from removal of sagebrush habitat and would be similar to those from development at the Proposed Well Pad Location and the other alternative locations. Due to being within 2,000 feet of an RBU, the potential impacts to the health and safety of the nearby residents and the DIC could include increased noise, air emissions, odor, visual disturbance, oil field traffic, and the potential impacts from any unforeseen incident such as a fire, explosion, or spill.

### **3.3.2 Alternatives Considered for the Ardourel tank pad TUA**

Three viable alternative locations for the Ardourel tank pad TUA were considered by COGCC, CPW, La Plata County, and NueVida. These parties collaborated and agreed on the best placement for the tank pad TUA. The Proposed Tank Pad TUA Location allows for acceptable development of minerals in the lease acreage and reduces potential impacts to the resources of concern.

#### *3.3.2.1 Proposed Location*

The Proposed Tank Pad TUA Location consolidates new disturbance within closer proximity to existing disturbance in the area. It reduces fragmentation of the existing sagebrush habitat and severe winter habitat for mule deer by placing the tank pad adjacent to the proposed well pad, well access road, and two-track road on the Ardourel property. Additionally, the Proposed Tank Pad TUA Location will be adjacent to, and within closer proximity to existing disturbance (access road, County Road 318, and an existing compressor station to the west) than the other two alternatives listed below. This will allow the open sagebrush flat east of the Proposed Well Pad Location to remain as an undisturbed and more open area for mule deer to continue utilizing.

#### *3.3.2.2 Alternative Location 1*

Tank Pad TUA Alternative Location 1, proposed during the February 17, 2021 site visit, was placed to the east of the proposed well pad in order to adhere to the 2,000 foot setback from a residence. After discussion with COGCC, CPW, and La Plata County in the field, CPW and La Plata County agreed that it would be preferable to move the Ardourel tank pad TUA closer to County Road 318 and to the compressor station to the west.

#### *3.3.2.3 Alternative Location 2*

Tank Pad TUA Alternative Location 2 was proposed in Section 7, Township 33 North, Range 8 West, N.M.P. It is north of the Ardourel property and nearby to a potential well pad that NueVida may consider developing in the future to access additional lease acreage. Upon inspection of this location, CPW and La Plata County clearly preferred the Proposed Tank Pad Location on the Ardourel property. CPW expressed that the location in Section 7 was even better mule deer habitat and more isolated from existing disturbance. This location has more topography and elevational change than the Proposed Tank Pad Location and would require building a larger pad with greater cut and fill, thus requiring more surface

disturbance than that of the Proposed Tank Pad Location. This alternative is also more centrally located within the HPH and therefore could reduce the quality of the HPH for wildlife more than development at the Proposed Tank Pad Location, which is closer to the southern edge of the HPH boundary.

## 4 OPERATION COMPLIANCE WITH RULE 1202.A

---

The following outlines the operating requirements pursuant to Rule 1202.a and a description of how NueVida plans to implement measures to ensure compliance with said rule where applicable:

1. *In black bear habitat, Operators will install and utilize bear-proof dumpsters and trash receptacles for food-related trash at all facilities that generate trash.*

NueVida will install bear proof dumpsters for all trash related items on the Ardourel property.

2. *Operators will disinfect water suction hoses and water transportation tanks withdrawing from or discharging into surface waters (other than contained pits) used previously in another river, intermittent or perennial stream, lake, pond, or wetland and discard rinse water in an approved disposal facility. Disinfection practices will be repeated prior to completing work and before moving to the next water body.*

During operations associated with the development of the Proposed Project, freshwater trucks used to support construction, drilling, completions, and production operations will be cleaned by spraying and soaking the tank cavity and all suction hoses with water greater than 140° Fahrenheit for at least ten (10) minutes when the tank and/or hoses have been used previously in another river, intermittent or perennial stream, lake, pond, or wetland. During drilling operations NueVida will only utilize trucks assigned directly to the rig. All suction hoses associated with the water source will remain in place throughout the duration of drilling operations. Any hoses switched out will be cleaned using the same guidelines mentioned above.

3. *At new and existing Oil and Gas Locations, Operators will not situate new staging, refueling, or chemical storage areas within 500 feet of the Ordinary High-Water Mark (“OHWM”) of any river, perennial or intermittent stream, lake, pond, or wetland.*

There are no rivers, perennial or intermittent streams, lakes, ponds, or wetlands within 500 feet of any proposed new staging, refueling, or chemical storage areas. The hydrologic features that receive and may transport seasonal flows at this location include two (2) paleo channels, which the United States Army Corps of Engineers (USACE) has determined to be non-active waterways and as such are non-jurisdictional. Additionally, there is one ephemeral wash within 200 feet of the proposed working pad surface, however it occurs upgradient of this location, and is impounded downstream at 2 locations, making the environmental impacts on downstream waters at this proposed location extremely unlikely. CPW has concurred with the determination that this drainage is an ephemeral wash, thus a waiver for 1202.a.(3) is not required.

4. *To prevent access by wildlife, including birds and bats, Operators will fence and net or install other CPW-approved exclusion devices on new drilling pits, production pits, and other pits associated with Oil and Gas Operations that are intended to contain fluids.*

There are no drilling pits, production pits, or other pits associated with planned operations on the Ardourel pad. The storage tanks that will be used are enclosed and not accessible to animals from the outside.

## Wildlife Mitigation Plan

5. *For trenches that are left open for more than 5 consecutive days during construction of pipelines regulated pursuant to the Commission's 1100 Series Rules, Operators will install wildlife escape ramps at a minimum of one ramp per ¼ mile of trench.*

NueVida will install wildlife escape ramps if any trench is left open for more than 5 consecutive days at a minimum of one ramp per ¼ mile of trench as required by COGCC regulations.

6. *When conducting interim and final reclamation pursuant to Rules 1003 and 1004, Operators will use CPW-recommended seed mixes for reclamation when consistent with the Surface Owner's approval and any local soil conservation district requirements.*

NueVida has consulted with and received approval from the Ardourel family, CPW, and La Plata County for the proposed seed mix, outlined in Table 6-1, to be used for reclamation and inter-seeding of the Ardourel pad.

7. *Operators will use CPW-recommended fence designs when consistent with the Surface Owner's approval and any Relevant Local Government requirements.*

NueVida will not be fencing the Ardourel property as the landowner has chosen not to. The pipeline will cross some property boundary fences during construction. All fences will be reconstructed in the same or better condition. NueVida will select and install CPW-recommended fence designs from their "Fencing with Wildlife in Mind" (Hanophy, 2009) manual with the Surface Owner's approval.

8. *Operators will conduct all vegetation removal necessary for Oil and Gas Operations outside of the nesting season for migratory birds (March 15 to August 31). For any vegetation removal that must be scheduled between March 15 to August 31, Operators may implement appropriate hazing or other exclusion measures prior to March 15 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.*

If NueVida schedules any construction that requires removal of vegetation during this closure, a nest survey will be completed prior to construction.

9. *Operators will treat drilling pits, production pits, and any other pit associated with Oil and Gas Operations containing water that provides a medium for breeding mosquitoes with Bti (*Bacillus thuringiensis v. israelensis*) or take other effective action to control mosquito larvae that may spread West Nile virus to wildlife resources. Such treatment will be conducted in a manner which will not adversely affect aquatic wildlife resources.*

There are no drilling pits, production pits, or other pits associated with planned operations for the Proposed Project. The storage tanks that will be used are enclosed and not accessible to animals from the outside.

10. *Operators will employ the following minimum Best Management Practices on new Oil and Gas 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:*

NueVida's Ardourel Project is not within HPH identified in Rule 1202.c. (1) Q-S. As such, BMPs under this operating requirement are not applicable.

## 5 OPERATION COMPLIANCE WITH RULE 1202.B

NueVida's Proposed Project is not within, nor will it cross, any perennial streams identified as aquatic HPH.

## 6 WILDLIFE BEST MANAGEMENT PRACTICES

### 6.1 Employee and Contractor Education

NueVida employees and contractors will all be informed and educated on matters related to wildlife resources on this project. NueVida will implement a driver training program that addresses driver safety, including wildlife awareness and speed restrictions in wildlife areas. At no time does NueVida allow for employees or contractors to harass wildlife at or around their project locations, and this will be part of NueVida's education program. All trash, food, and other attractants for wildlife will always be removed from the project site daily during pad construction, drilling, completion, and operation for the life of the wells.

### 6.2 Reclamation and Inter-seeding

All disturbed areas that are no longer being used after drilling and completion will be seeded with the seed mix developed in concert with CPW and the landowner, outlined in Table 6-1. Prescribed Pinyon/Juniper Woodlands-Shrubland Community Seed Mix. below. This seed mix will also be used to inter-seed areas identified by EIS outside of the project area on the Ardourel Trust land, for the benefit of wildlife. The areas identified for reseeding are areas infested by weedy species. NueVida is proposing to chemically treat these areas and subsequently reseed with the desired seed mix. The establishment of preferred vegetation will help to combat weeds long term and increase forage value for wildlife. For further details on reclamation and seeding procedures, see NueVida's Ardourel 33081718 Pad Surface Reclamation Plan. The seed mix listed below was proposed to Brian Magee with CPW by EIS biologist Tanner Paulek on June 1, 2021. Brian Magee responded in an email with his approval on June 3, 2021.

**Table 6-1. Prescribed Pinyon/ Juniper Woodlands-Shrubland Community Seed Mix.**

Common Name	Scientific Name	Variety	Season	Form	PLS lbs/acre <sup>1</sup>
Fourwing saltbush	<i>Atriplex canescens</i>	VNS	Cool	Shrub	2.0
Winterfat	<i>Krascheninnikovia lanata</i>	VNS	Cool	Shrub	2.0
Sand dropseed	<i>Sporobolus cryptandrus</i>	VNS	Warm	Bunch	0.5
Galleta	<i>Pleuraphis jamesii</i>	Viva florets	Warm	Bunch/Sod-forming	3.0
Indian ricegrass	<i>Achnatherum hymenoides</i>	Paloma or Rimrock	Cool	Bunch	4.0
Bottle brush squirreltail	<i>Elymus elymoides</i>	Tusas or VNS	Cool	Bunch	3.0
Blue flax	<i>Linum lewisii</i>	Apar	Cool	Forb	0.25

## Wildlife Mitigation Plan

Rocky Mtn. bee plant	<i>Cleome serrulate</i>	Local collection or VNS	Cool	Forb	0.25
Artemesia <sup>2</sup>	<i>Artemesia</i>	VNS	Cool	Shrub	0.25
<sup>1</sup> Based on 60 PLS per square foot, drill seeded; double this rate (120 PLS per square foot) if broadcast or hydro-seeded.					
<sup>2</sup> <i>Wyomingensis</i> or <i>nova</i> depending on site.					

### 6.3 Wildlife Best Management Practices/Standard Operating Practices (SOP's)

Pursuant to 1201.b.(2) NueVida will implement the following practices in its construction and operational design to mitigate potential impacts to wildlife:

All Phases:

- As previously described, NueVida will implement a wildlife education program for all employees and contractors. Key components will include informing and educating all employees and contractors on wildlife conservation practices, including, but not limited to:
  - Driving the speed limit in rural areas to avoid animal-vehicle collisions, especially during the early morning and evening hours.
  - Prohibiting intentionally harassing or frightening wildlife.
  - Removing all food and trash items to avoid attracting wildlife to facility sites.
- Use existing routes and the existing well pad disturbance as much as possible to avoid new disturbance and habitat fragmentation and to minimize new construction.
- No feeding of wildlife will be allowed on location.
- This location will have no pits.

Construction Phase:

- NueVida will be adhering to the mule deer winter closure period between December 1 and April 30 to protect wintering wildlife. NueVida will not conduct any construction, drilling, or completion activities during this time.
- If construction is to be conducted between March 15<sup>th</sup> and August 31<sup>st</sup>, a migratory bird nest survey will be conducted before clearing and/or grubbing takes place.
- NueVida will install wildlife escape ramps at a minimum of one ramp per ¼ mile of trench if any trench is left open for more than 5 consecutive days as required by COGCC regulations.

Drilling Phase:

- Operator will utilize a pit-less, closed loop system for drilling. Wells shall be drilled, completed, and operated using closed-loop, pitless systems for containment and/or recycling of all drilling, completion, flowback, and produced fluids.

Production Phase:

- Install exclusionary devices to prevent bird and other wildlife access to equipment stacks, vents, and openings.
- Install screening or other devices on the stacks and on other openings of heater treaters or fired vessels to prevent entry by migratory birds.
- During interim and final reclamation phases, a CPW approved, wildlife-friendly seed mix will be used.
- If needed, reclaimed areas will be fenced to minimize livestock/wildlife impact until plant species are established.
- If fencing is required, NueVida will use CPW-recommended fence designs with the Surface Owner's approval.

#### 6.4 Additional Mitigation Planned to Benefit Wildlife Resources

In addition to the BMP's listed above and the compensatory mitigation commitment outlined below, NueVida plans to implement the following mitigations as part of their proposed project to contribute to wildlife habitat improvement in the area.

- Weed management & control that includes monitoring and reporting for the next 4 years outside the permitted area within the Ardourel property. The areas identified during the baseline weed survey conducted on September 1, 2021, total an area of 1.17 acres and are illustrated in NueVida's Weed and Reseeding Map as part of NueVida's Weed Management Plan.
- Inter-seeding areas on the Ardourel property to promote foraging habitat for mule deer wintering range. The areas identified for inter-seeding during the initial survey of the property and conducted on September 1, 2021, total an area of 0.84 acres and are illustrated in NueVida's Weed and Reseeding Map as part of NueVida's Weed Management Plan.
- NueVida will clean up and reseed an area in E/2 SE/4 Section 13, 33N-9W that the landowner has identified as an illegal dumping area for trash.

## 7 MITIGATION COMMITMENTS TO OFFSET UNAVOIDABLE ADVERSE IMPACTS TO WILDLIFE RESOURCES

---

Because the proposed project is within HPHs listed in Rule 1202.d, NueVida has chosen to pay a Direct Impact Habitat Mitigation Fee to CPW, as provided by Rule 1203.c. The proposed project falls within an area that exceeds 5 locations per square mile and therefore indirect impacts under 1203.d were not assessed. The CPW has calculated the reimbursement of all reasonable and necessary direct impacts as described here in consultation with NueVida. NueVida will pay to CPW the habitat mitigation fee listed below no less than 30 days prior to submitting a Form 42 pursuant to Rule 405.b. NueVida's proposed project disturbances will total 33.62 acres.

Because the drill schedule of subsequent wells on this lease will depend on the production results of the first two (2) wells drilled from the proposed pad, there is some uncertainty around to timing of full reclamation of the Ardourel tank pad TUA. If it makes reasonable sense for NueVida's future development, NueVida plans to utilize the proposed Ardourel tank pad TUA for potential future development in the area to reduce any further new disturbance. CPW understands this and agrees with the general goal of reducing disturbance to the larger area over the long term by maintaining and utilizing the areas disturbed (e.g. Ardourel tank pad TUA) for future development. NueVida understands that until

## Wildlife Mitigation Plan

successful reclamation has occurred, the disturbed areas will not provide any wildlife habitat value. Furthermore, the direct impacts from the proposed permanent, temporary, and 5-year temporary disturbance acreages are to be compensated for and are included in the CPW's fee calculation. The habitat mitigation fee of \$35,554.00, calculated below, to offset the direct impacts associated with the project assumes that all reclamation has been completed by year 6. NueVida commits to revisiting the project disturbance with CPW and revising the fee calculations so that the fee sufficiently mitigates impacts from any potential expanded time frame, once known.

**Table 7-1. Direct Impact Habitat Mitigation Fee Paid to Colorado Parks and Wildlife for the Ardourel 33081718 Pad**

<b>Project Disturbance</b>	<b>Total Project Disturbance Acres</b>	<b>Fee</b>
Acreage disturbed and reclaimed within 5 years of initial disturbance	33.62 acres	\$35,554.00
Any acreage not reclaimed and planned to persist beyond 5 years from the initial project disturbance	TBD as necessary	TBD (CPW will revisit and revise fee calculation to sufficiently offset acreage planned to persist for the expanded time frame.)

## 8 REFERENCES

---

Hanophy, W. 2009. Fencing with Wildlife in Mind. Colorado Parks and Wildlife, Denver, CO. 36 pp

Colorado Oil and Gas Conservation Commission (COGCC) GIS Online.

[https://cogccmap.state.co.us/cogcc\\_gis\\_online/](https://cogccmap.state.co.us/cogcc_gis_online/). Accessed June 24, 2021

Colorado Oil and Gas Conservation Commission (COGCC) Regulation.

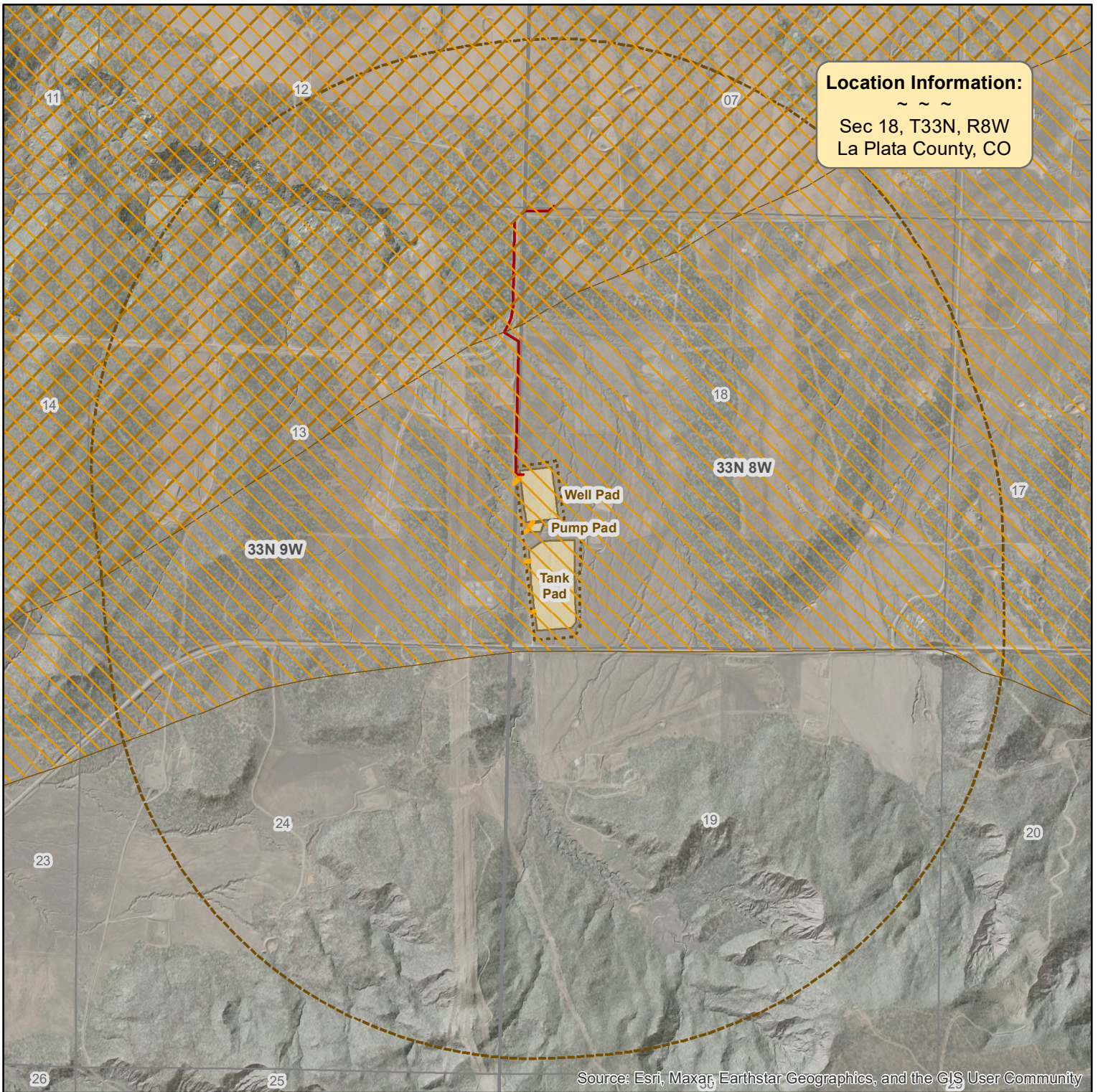
<https://cogcc.state.co.us/reg.html#/rules>. Accessed September 6, 2021



## 9 WILDLIFE HABITAT MAP

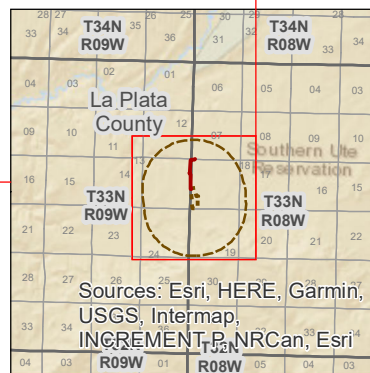
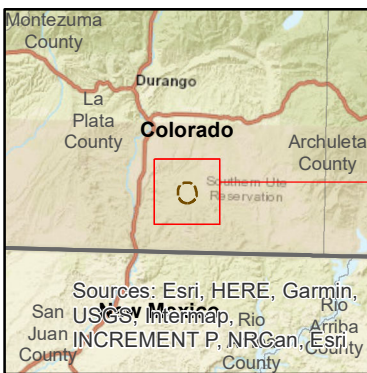
---





**Location Information:**  
~ ~ ~  
Sec 18, T33N, R8W  
La Plata County, CO

Source: Esri, Maxar, Earthstar Geographics, and the GIS User Community



- Working Pad Surface 1 Mile Buffer
- Area of Disturbance
- Working Pad Surface (WPS)
- New Access Road to
- Pipeline
- CPW Mule Deer Severe Winter Range
- CPW Mule Deer Winter Concentration Area
- Public Land Survey:
  - Township Range
  - Section

0 500 1,000 Feet  
1" = 1,700' 1:20,400

Author: MM, EIS Environmental & Permitting Solutions

Date: 9/20/2022