1. INTRODUCTION

Laramie Energy, LLC (Laramie) (Operator # 10433) is pursuing a Form 2A for an Oil and Gas Location Assessment permit in Mesa County, Colorado. The CCR 0994-23-02 well pad (CCR Pad) is a proposed, new location. Laramie is proposing to drill two (2) new horizontal wells at the CCR Pad in Section 23 of Township 9 South, Range 94 West, 6th P.M. The CCR will develop fee and federal minerals.

The CCR Pad is not located within a High Priority Habitat (HPH). The 2024 CCR 0994-23-02 Oil and Gas Development Plan (OGDP) will not result in any disturbance to HPH. The proposed well pad, access road, and buried pipeline segment are not situated within mapped HPH. Laramie is proposing to lay temporary, freshwater dedicated surface lines in aquatic; however, these temporary lines will lay on the surface and will not result in HPH disturbance. The OGDP is adjacent to aquatic HPH; therefore, Laramie consulted with Colorado Parks and Wildlife (CPW) regarding the proposed project.

2. PRELIMINARY ASSESSMENT

During preliminary planning of the CCR Pad well pad, Laramie assessed ECMC HPH map (2023 & 2024) layers. Initial map layers indicated potential mapped HPHs within the proximity of the proposed location.

Table 1. High Priority Habitat within a One-Mile Radius

ECMC Rule	Species HPH	Distance from WPS to HPH at Nearest Point (feet)
1202.c(1).S.	Aquatic Sportfish Management Waters	66
1202.d.(2)	Elk Winter Concentration Habitat	613
1202.c(1).R.	Aquatic Native Species Conservation Waters	2049
	Aquatic Cutthroat Trout Designated Crucial Habitat	3147

CPW attended a virtual meeting, where Laramie presented on proposed operations and two locations (the proposed CCR Pad and the existing David Pad (Alternative Location 1)), freshwater take-out & proposed equipment, surface water flow path, and sensitive receptors near the development area. For the fresh water take-out from Buzzard Creek, Laramie will utilize a previous Mesa County right-of-way that used to be former 64 3/10. The area is gravel and was previously disturbed. CPW reviewed proposed BMPs for freshwater take-out. CPW stated the BMPs were protective and did not have concerns regarding the freshwater take-out in HPH. The presentation is provided in **Attachment 1**.

CPW attended the ECMC OGDP Pre-Application on June 27, 2024. Representatives from the ECMC, CDPHE, and CPW (CPW Northwest Energy Liaison) attended the meeting which proposed operations, alternative locations, RBUs, HPHs, and general location was presented.

CPW was not able to attend the onsite on July 10, 2024. On July 23, 2024, Laramie provided CPW with the finalized pre-application onsite notes (**Attachment 2**).

Since the CCR Pad will be situated within 1,000 feet of Buzzard Creek OHWM, Laramie requested a modification to ECMC Rule 1202.a.(10).C. CPW approved modified inspection schedule for ECMC Rule 1202.a.(10).C. on August 27, 2024. CPW stated "Given the real-time monitoring of fluid levels during the production phase, CPW does not feel that daily in-person inspections are necessary. In fact, reducing well site visitations by using remote monitoring technology will help alleviate production phase disturbance associated with increased traffic. Additionally, CPW is comfortable knowing that Laramie maintains emergency spill response equipment in relatively close proximity to this location and will be able to quickly respond to any unforeseen incidents." CPW's approval for Laramie's best management practice for Rule 1202.a.(10).C is provided in **Attachment 3**.

3. CONSULTATION

The table below summarizes Laramie's consultation and communication with CPW regarding the proposed CCR Pad.

Table 4. Pre-Application Consultation Summary

Date	Meeting	Regulatory Agency Attendees	Discussion
April 11, 2024	Virtual	CPW	Pre-Application Consultation: PP presentation on Brush Creek Development and gave a high-level overview. Laramie discussed two pads and sensitive receptors (at the time of consultation, Laramie has eliminated some alternative location but was still assessing two possible locations.) Discussed temporary fresh water surface lines and freshwater take out along Buzzard Creek. CPW had no issues with surface lines in HPH or equipment footprint. Laramie stated their goal was to avoid disturbance to HPH; however, aquatic sports management waters were near the development area. Since this Pre-Application consultation occurred in April, field surveys had not been completed at time of consultation.
June 27, 2024	Virtual	CPW, ECMC, CDPHE	ECMC OGDP Pre-Application Consultation: Laramie discussed all aspects of project, including proposed operations, alternative

			locations, onsite meeting, fresh water take-out, avoiding HPH, RBUs nearby
June 11, 2024	Email		Communication with CPW on availability in order to schedule onsite to accommodate CPW.
June 18, 2024	Invitation		Laramie sends invitation to CPW for a pre-application onsite meeting at the CCR Pad Location.
July 9, 2024	Phone		CPW is unable to attend onsite but expresses no concerns.
July 23, 2024	Email		Laramie emails finalized onsite meeting notes to CPW.
August 27, 2024	Email		Laramie request a modification to Rule 1202.a.(10).C. Laramie also asks CPW if they have any additional concerns or would to schedule a meeting since CPW was not able to attend the onsite and offered to present drone videos.
August 27, 2024	Email		CPW approves the modified language for Rule 1202.a.(10).C. "*During drilling, completions, and flowback phases, the CCR Pad will have personnel onsite fulltime, and the pad will be inspected daily. During production phases, the CCR Pad will be inspected at least two to three times per week. In addition, the site will be monitored via remote telemetry. During production, tanks will be equipped with dedicated continuous monitoring through a SCADA platform at the CCR Pad for remote monitoring, alerting, and shut-in capabilities. Laramie's SCADA system, which provides real-time fluid level data, will allow for continuous monitoring of tank volumes.*"
August 27, 2024	Email		CPW states "Given the lack of HPH overlap…" further consultation is not required.

4. CONCLUSION

CPW granted a modification for ECMC Rule 1202.a(10)C and modification of BMP language on August 27, 2024. CPW stated further consultation was not necessary due to the lack of HPH overlap.

ATTACHMENT 1

Preliminary Pre-Application Presentation to CPW April 11, 2024

Laramie Energy, LLC
Brush Creek Development Area
Project Proposal

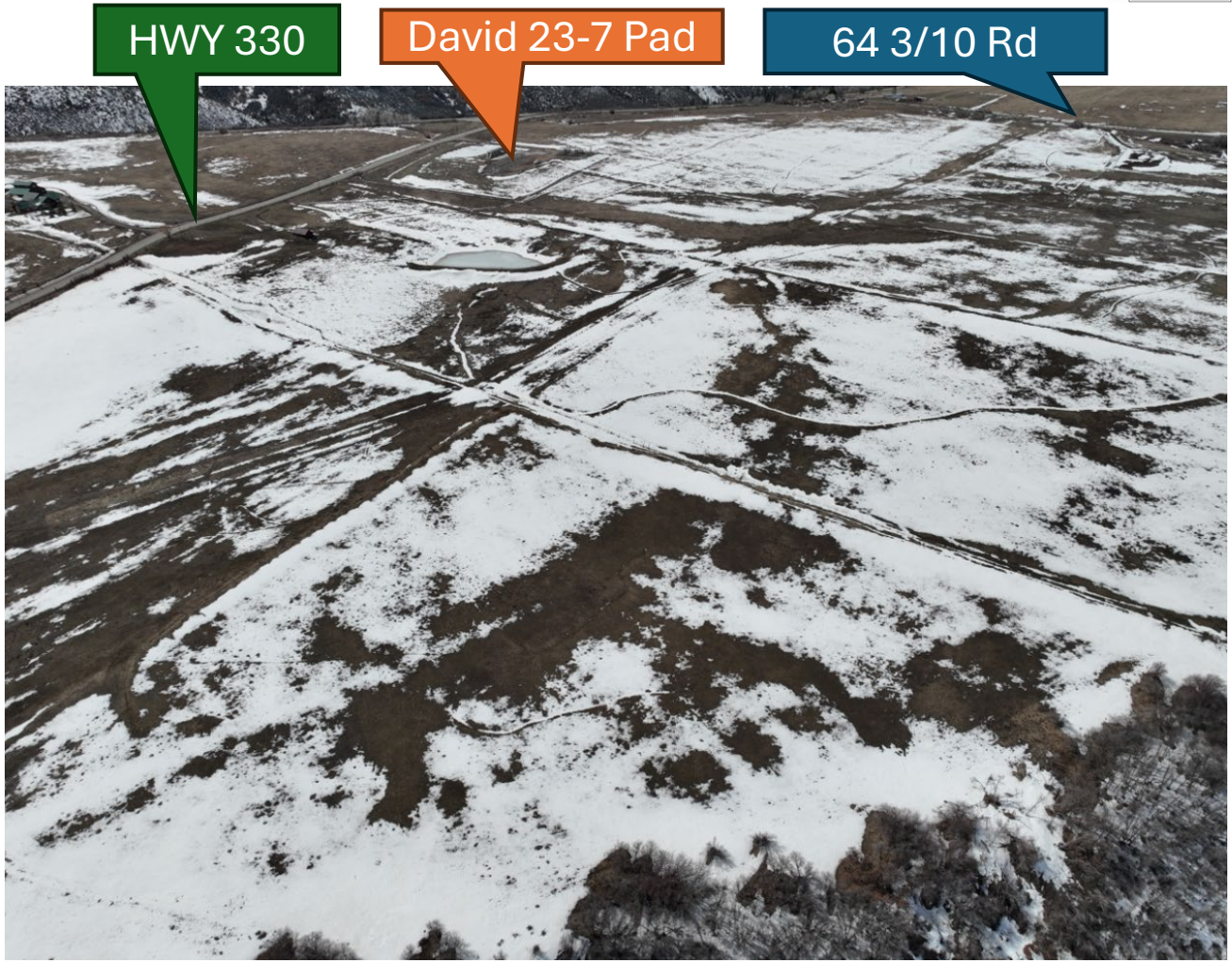
April 11, 2024

Brush Creek Development Area

- Laramie is proposing one well pad
  - Drill Two (2) Wells
- Oil and Gas Location (well pad) and access road will be constructed on private surface lands.
- Laramie is currently in the preliminary planning stage
  - Currently assessing two possible locations for the development

Location Details

- Brush Creek Area
- Approximately 6 mapped miles east of Collbran
- Nearest Public Roads
  - Hwy 330 & 64 3/10 Road



Brush Creek Development Area
Facing Southwest

North Vega Operations Area

Pipelines to Accommodate Development

- Gas pipelines and water lines in place near location.
- Buried gas pipeline and water line will be installed.
- Additionally, a temporary surface water line will be utilized during pre-production (drilling & completions) activities for fresh water.
- New well pad will tie into existing infrastructure, reducing truck traffic in area.

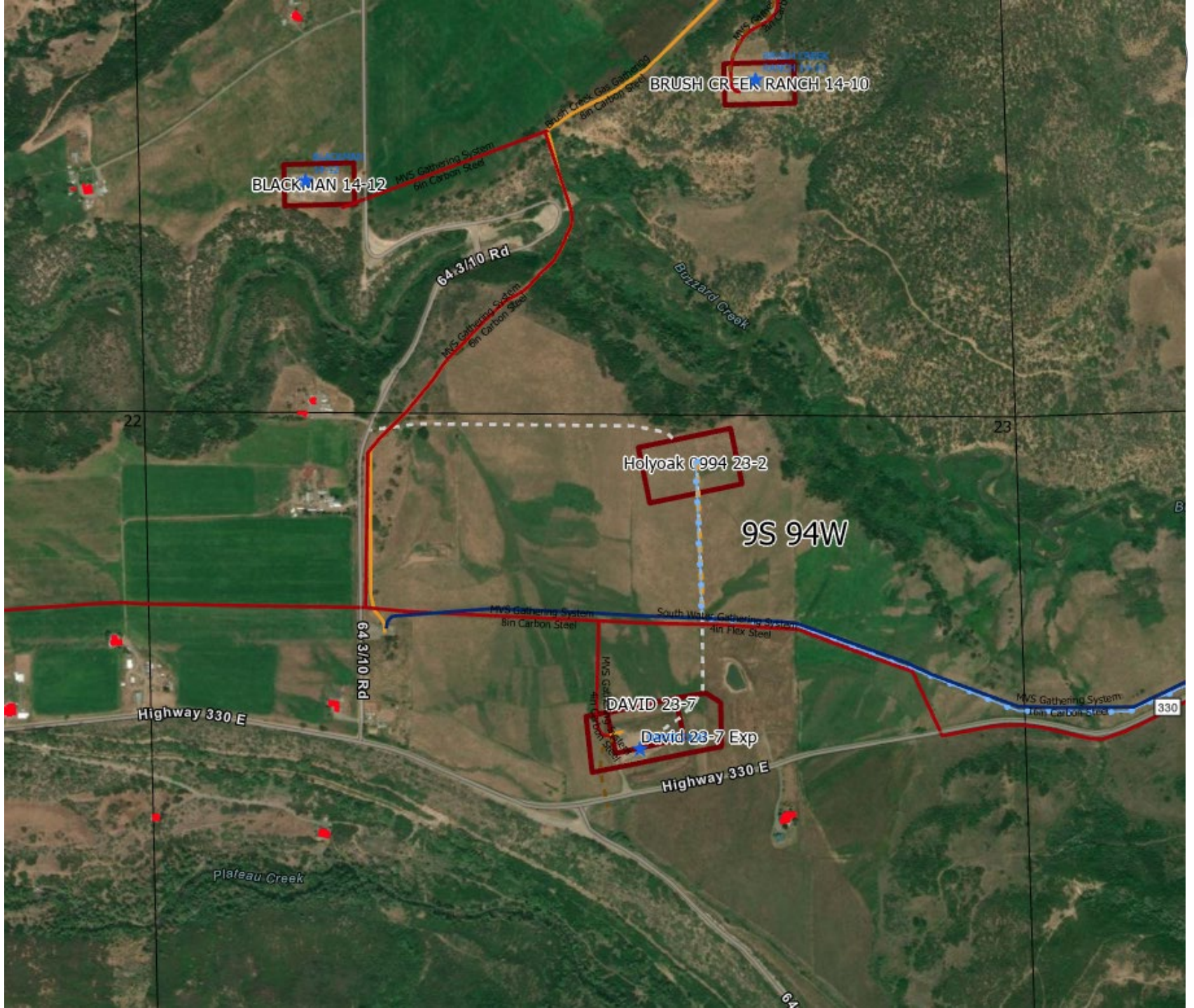
Support Infrastructure in Area

- Harrison Creek Water Treatment Facility
- SWD wells
- Primary sources of fresh water and recycled produced water
- Mega Vega Gas Compression Facility

Development Area facing Southwest

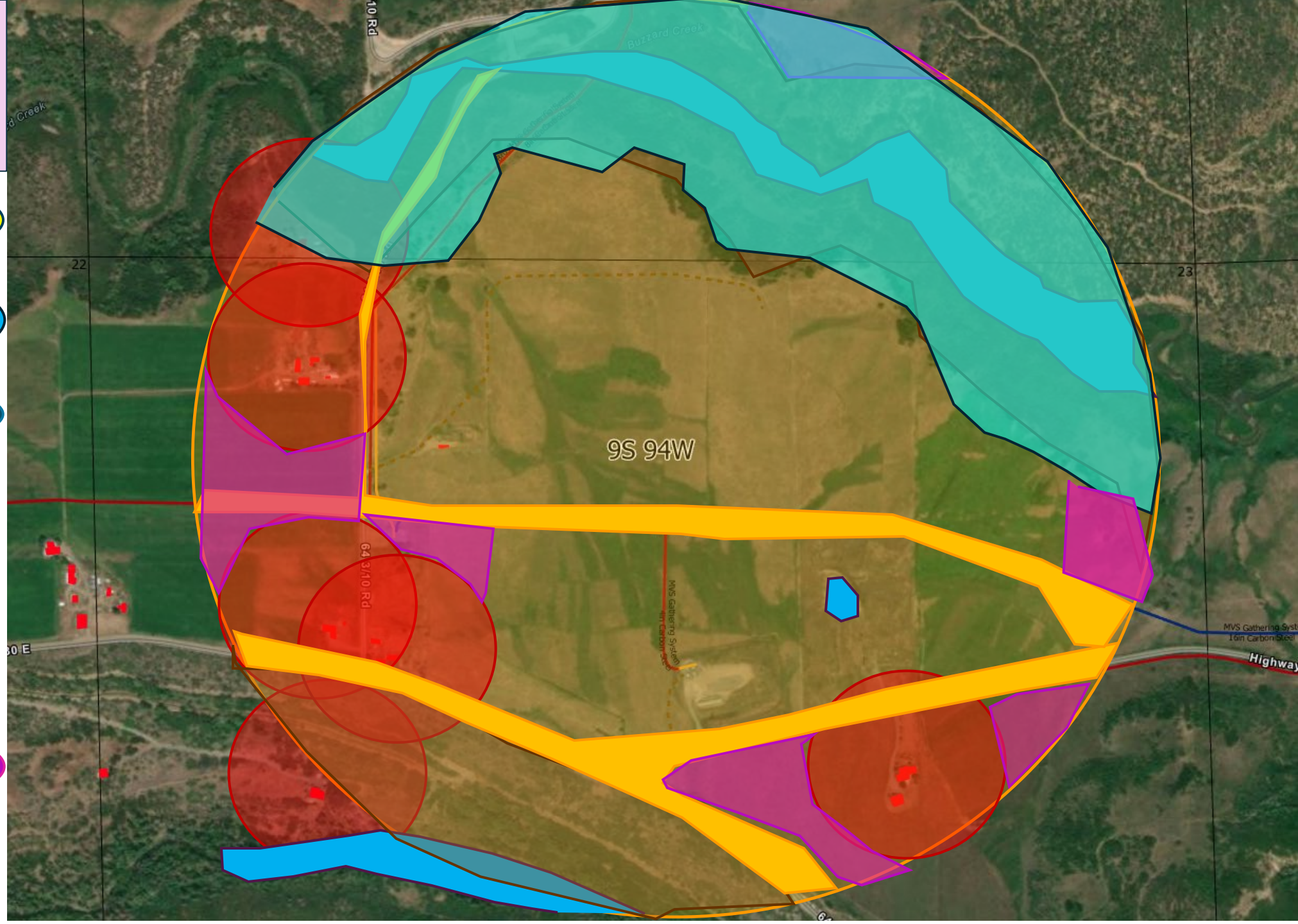
Well Pad Location Options

- Expansion of the David 23-7 Well Pad
- New Location: Holyoak 0994-23-2 (Pad Name Subject to Change)
- Surveys not conducted yet
- Pad boundaries are for illustration purposed only and subject to change pending survey & well pad design.



Alternative Locations Analysis

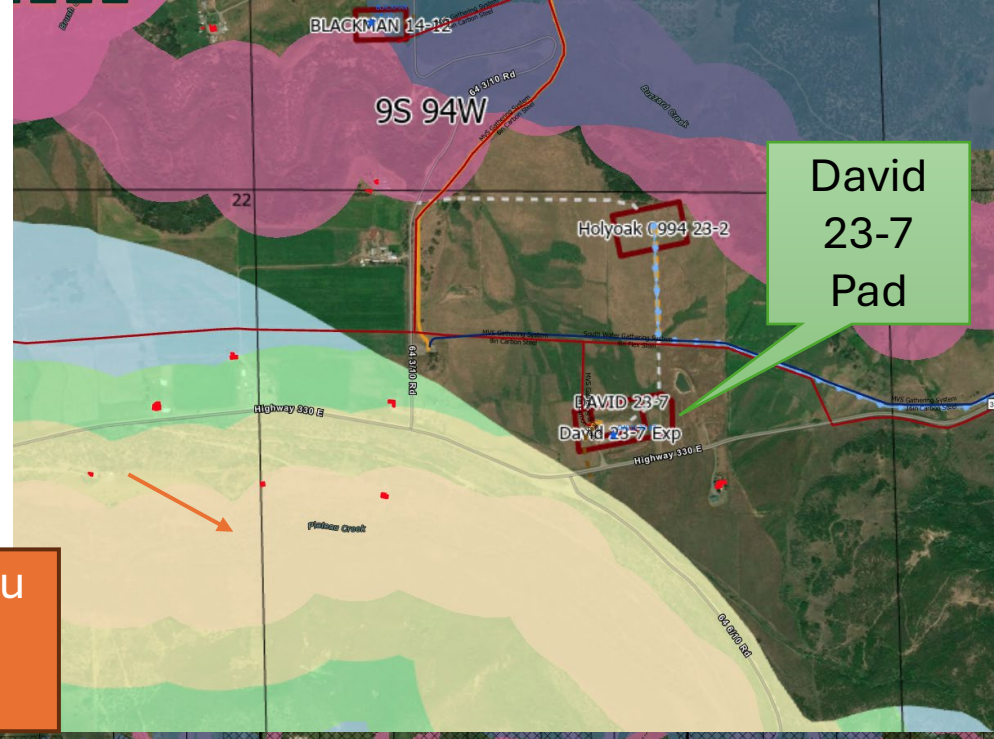
1. Development Area
2. Mapped and known Surface Waters & Floodplains
3. Steep Slopes & Geologic Hazards
4. Public Roads and Utility Infrastructure
5. RBU 500 ft Buffer
6. NSO - HPH
7. Surface Area Available to Accommodate Pad



Public Water Systems (PWS)

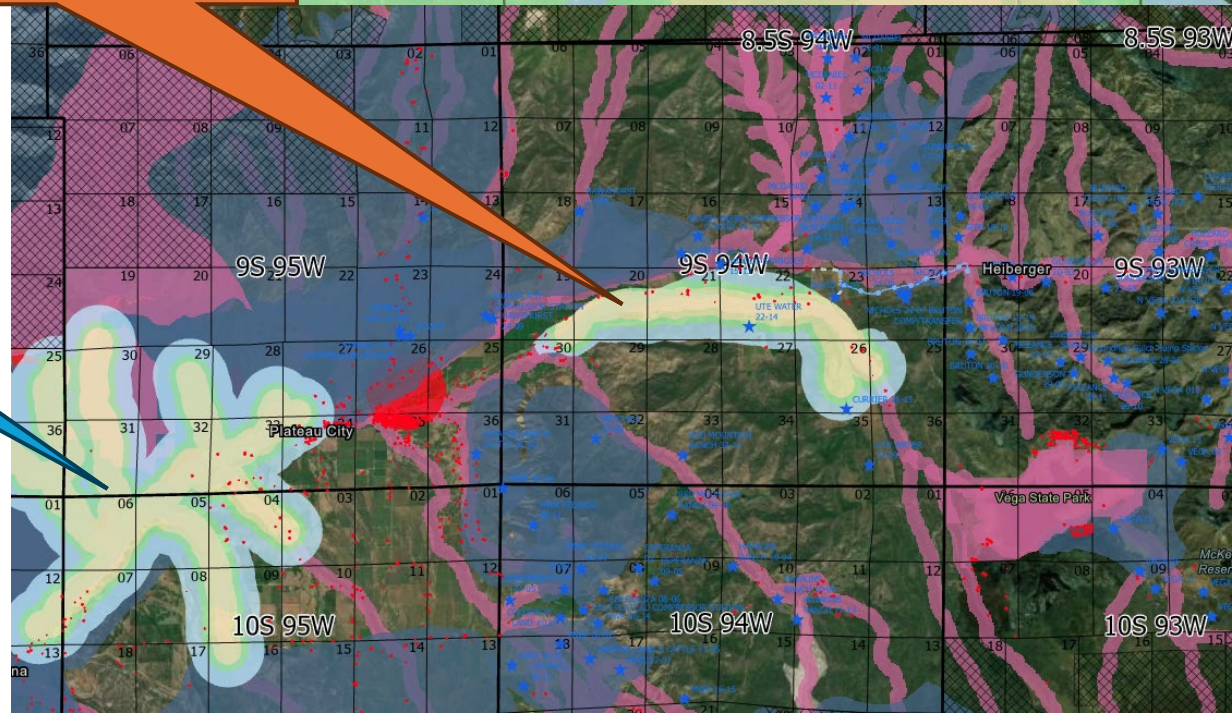
- Development area is located within 15 miles of two (2) PWS intake.
  - (ECMC Rule 411.a)
  - WestWater is currently preparing hydrology maps with surface flow path

- Ute Water (Buzzard Creek)
  - Downgradient ~ 13 streams miles?
- Town of Collbran
  - PWS is upgradient of development area along Plateau Creek
  - But development area is near mapped buffer
  - Laramie is presenting to the Town of Collbran on May 7th



Town of Collbran Plateau Creek Surface Water Intake Buffer

Ute Water

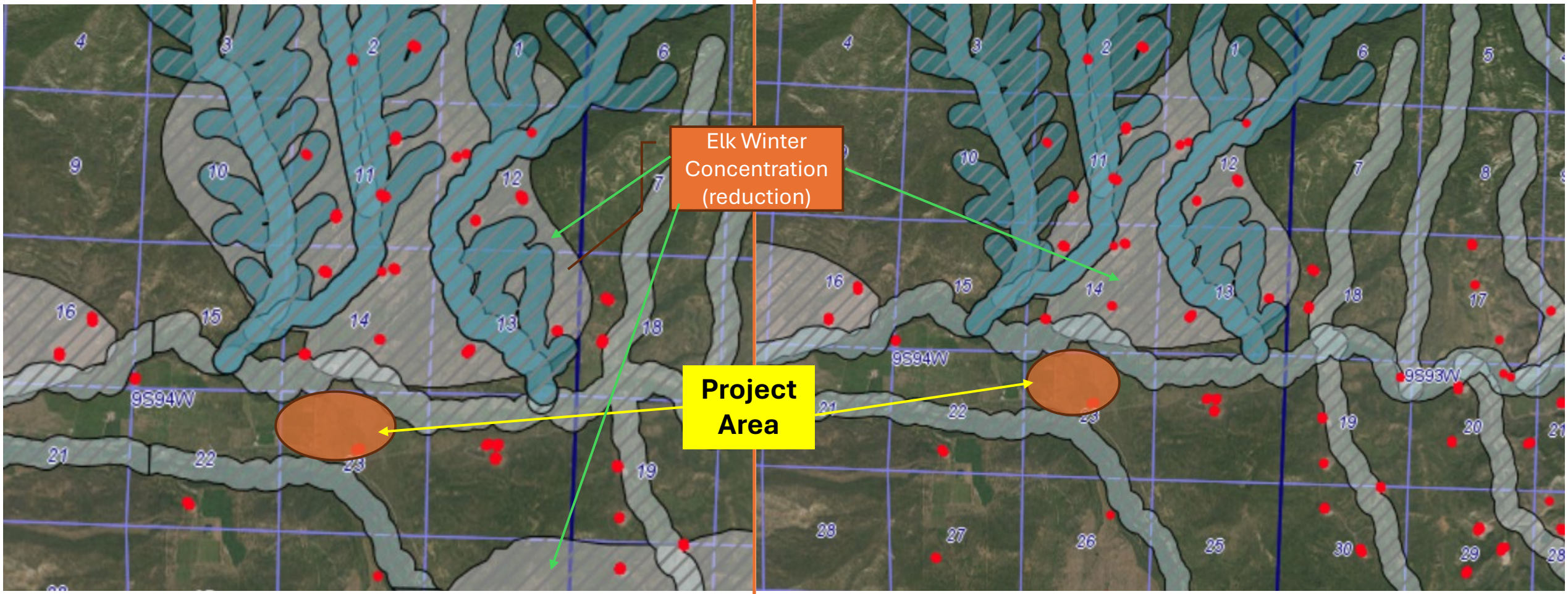


HPH – CPW 2023 & 2024 Map Layers

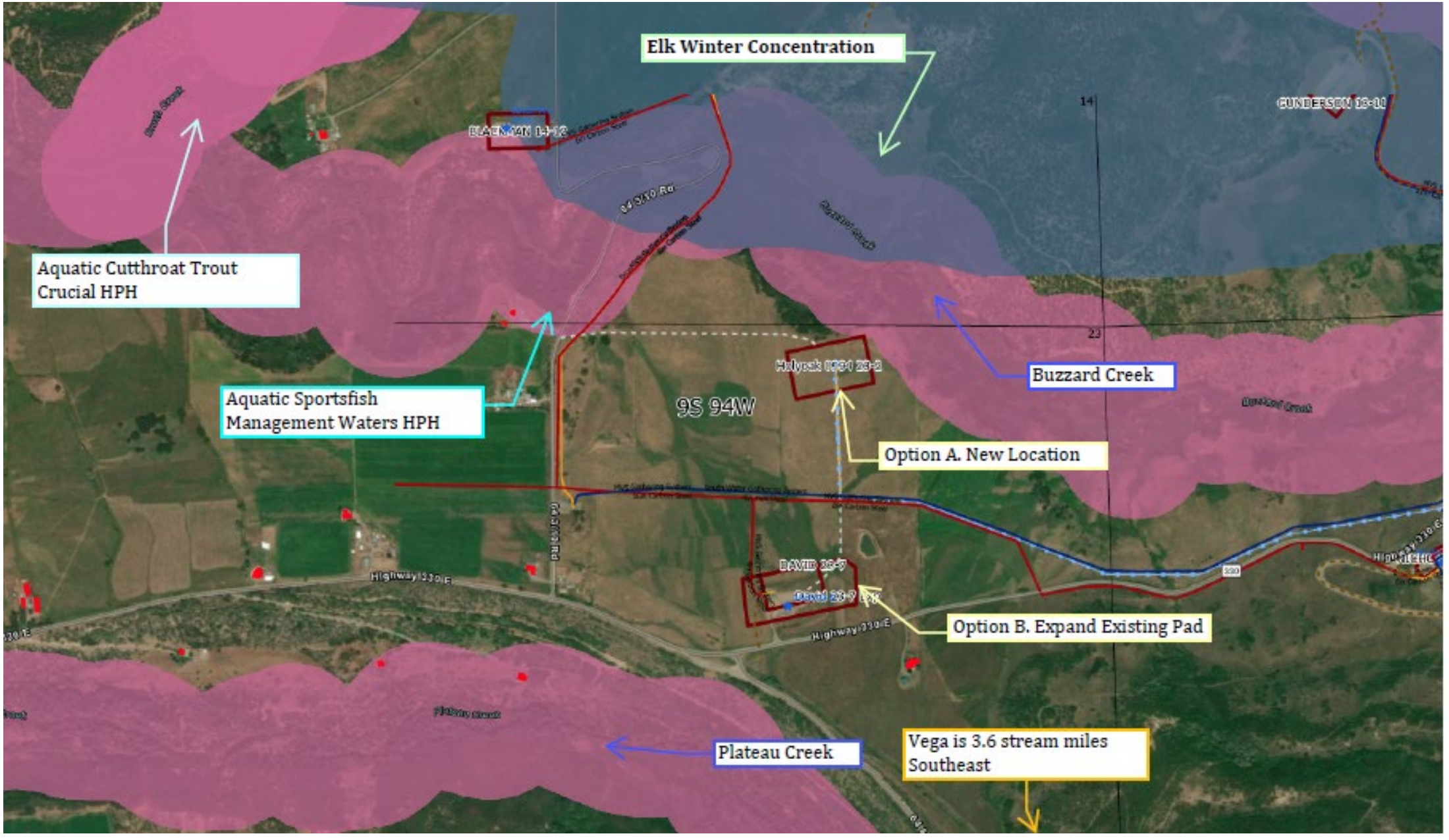
2023 CPW HPH Buffers

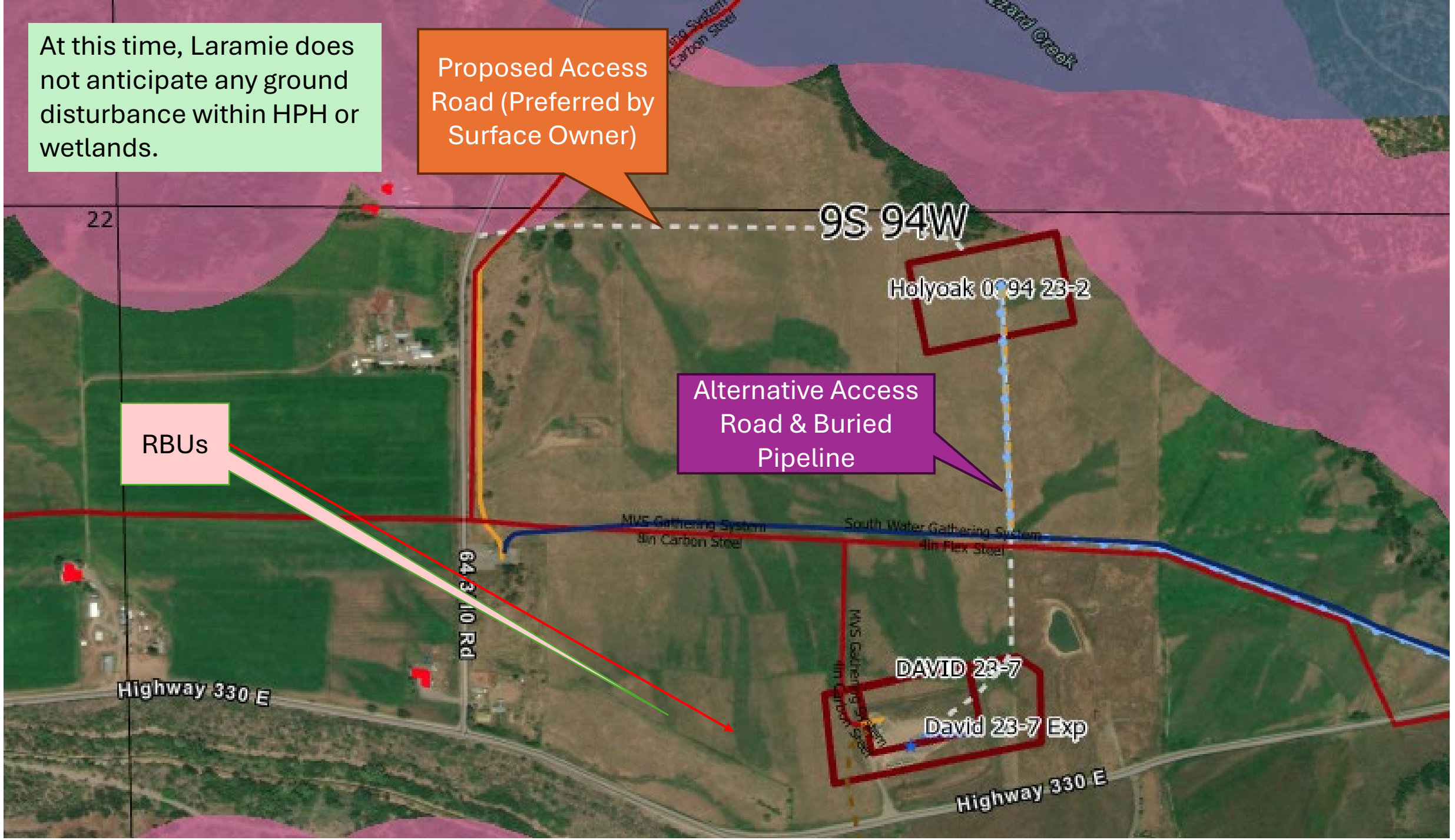
Various aquatic HPH exist within one mile. No changes from 2023 to 2024 mapper buffers.

2024 Proposed CPW HPH Buffers

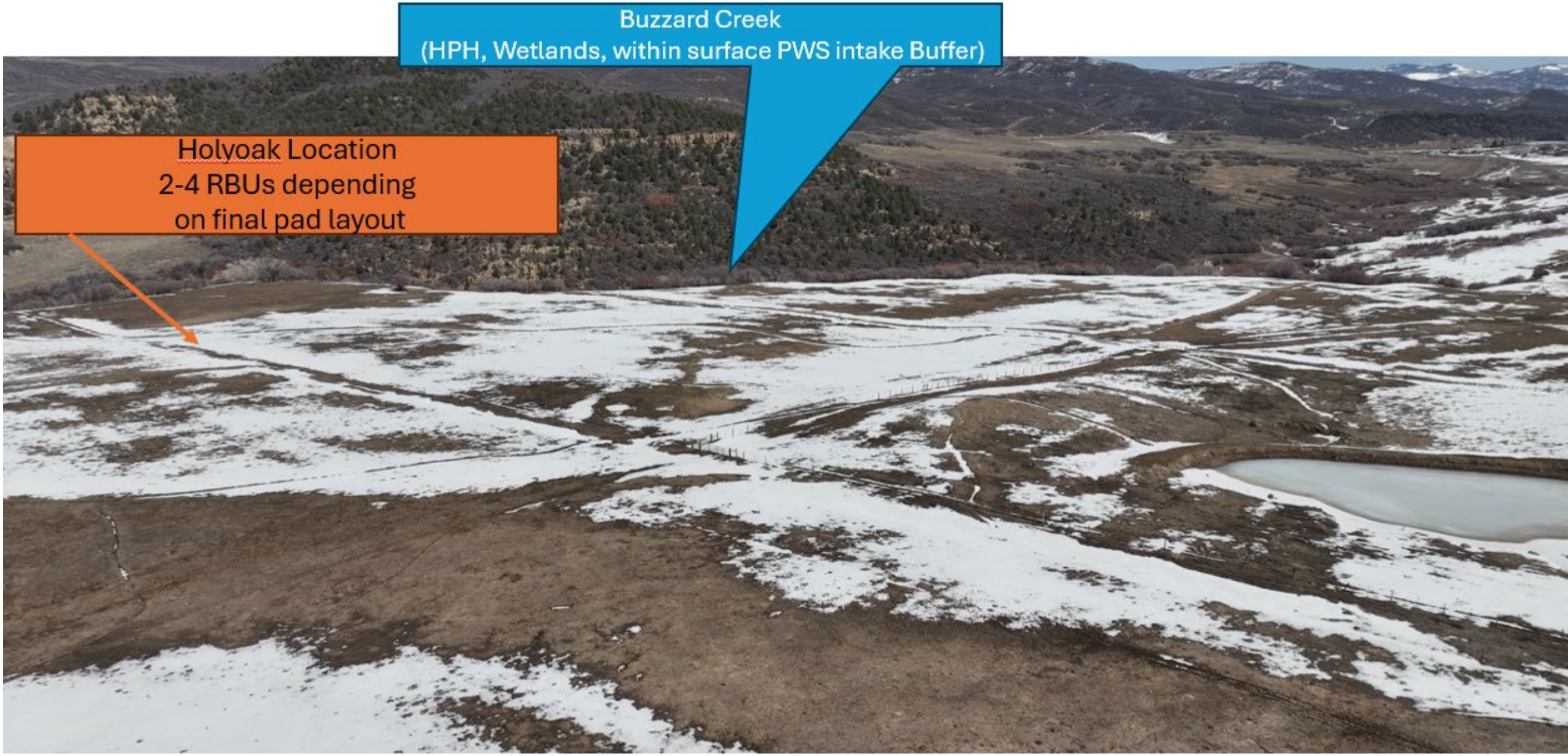


HPH & Well Pad Location

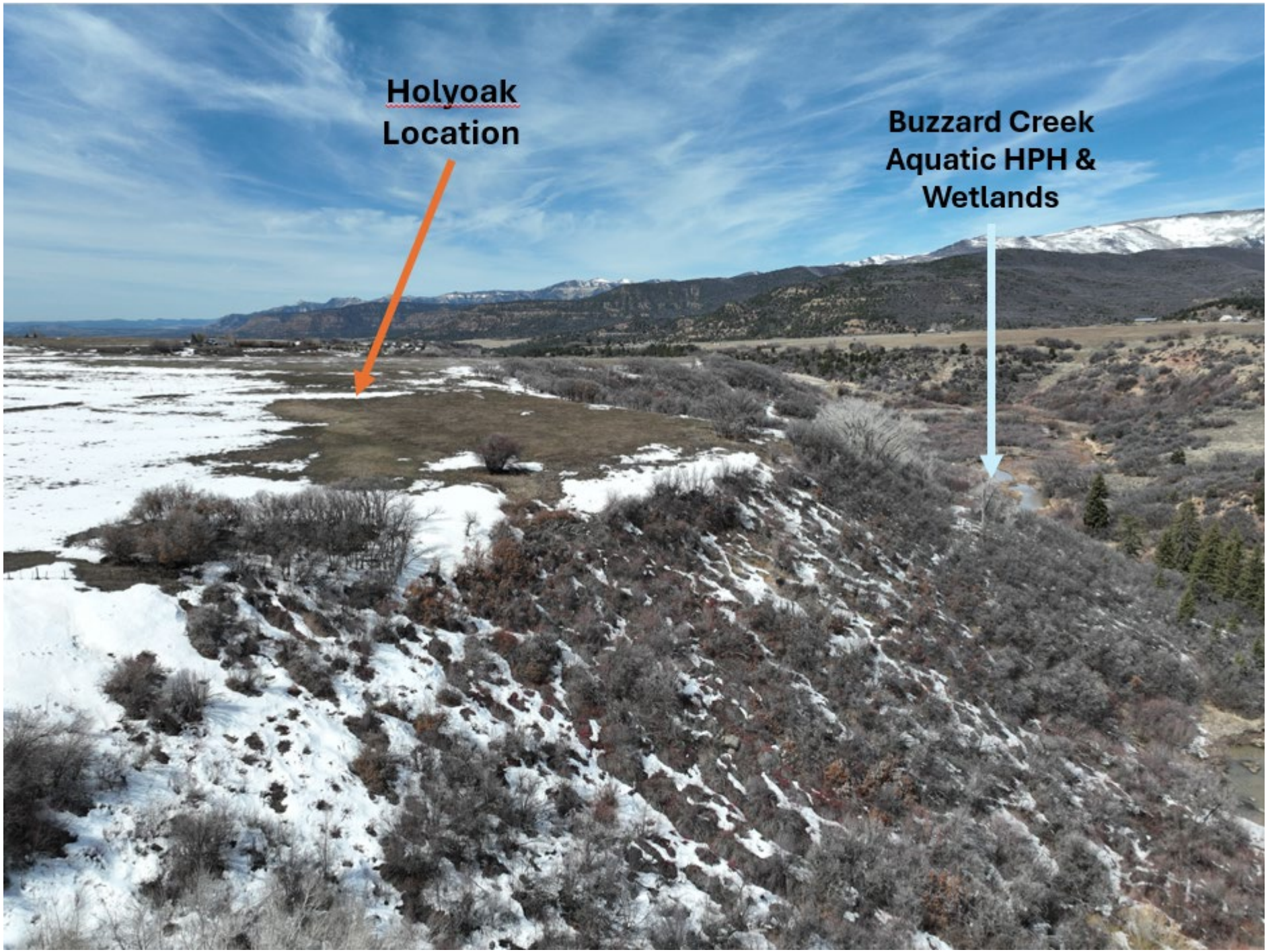



At this time, Laramie does not anticipate any ground disturbance within HPH or wetlands.
Proposed Access Road (Preferred by Surface Owner)
22
9S 94W
Holyoak 0 94 23-2
Alternative Access Road & Buried Pipeline
RBUs
MVS Gathering System
8in Carbon Steel
South Water Gathering System
4in Flex Steel
64 3/10 Rd
MVS Gathering System
4in Carbon Steel
DAVID 23-7
David 23-7 Exp
Highway 330 E
Highway 330 E

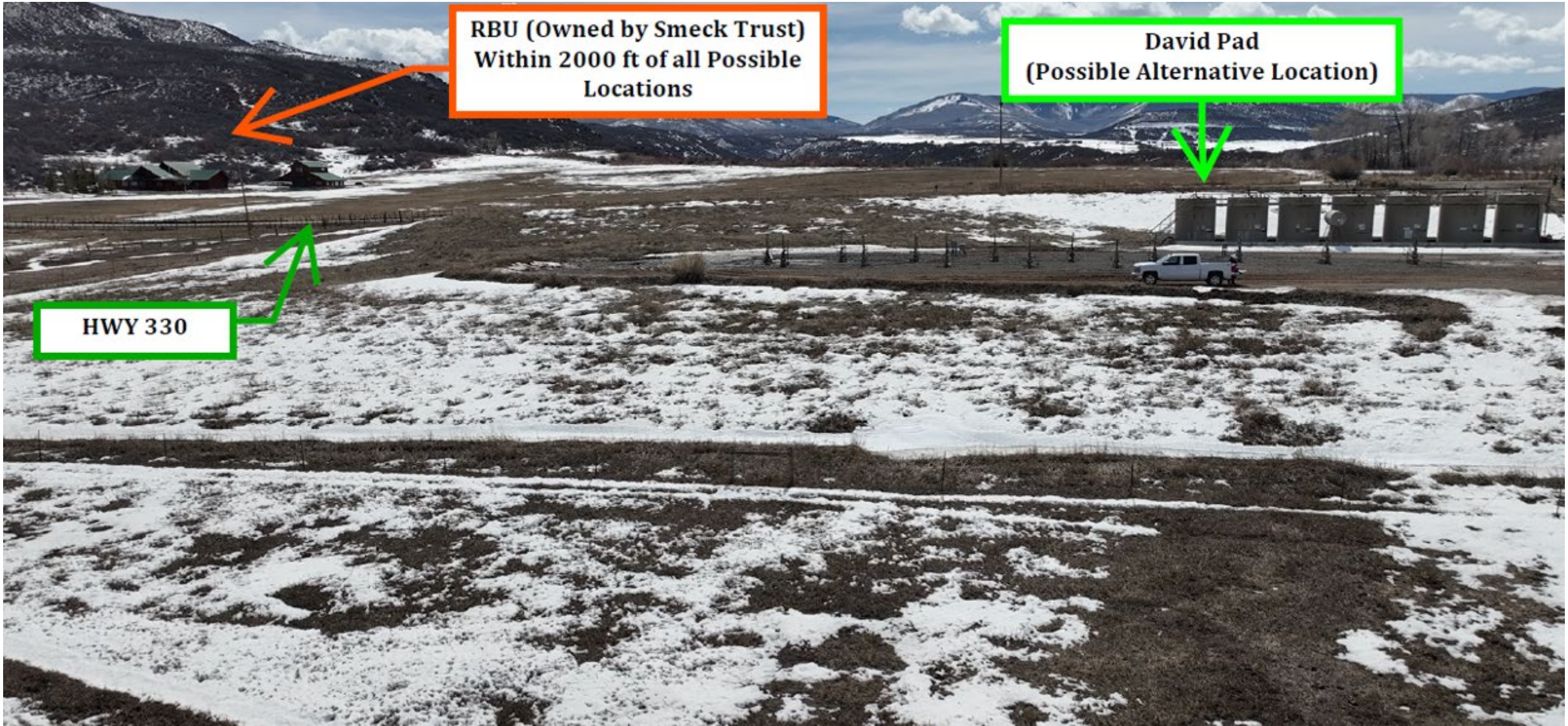
Facing Northeast



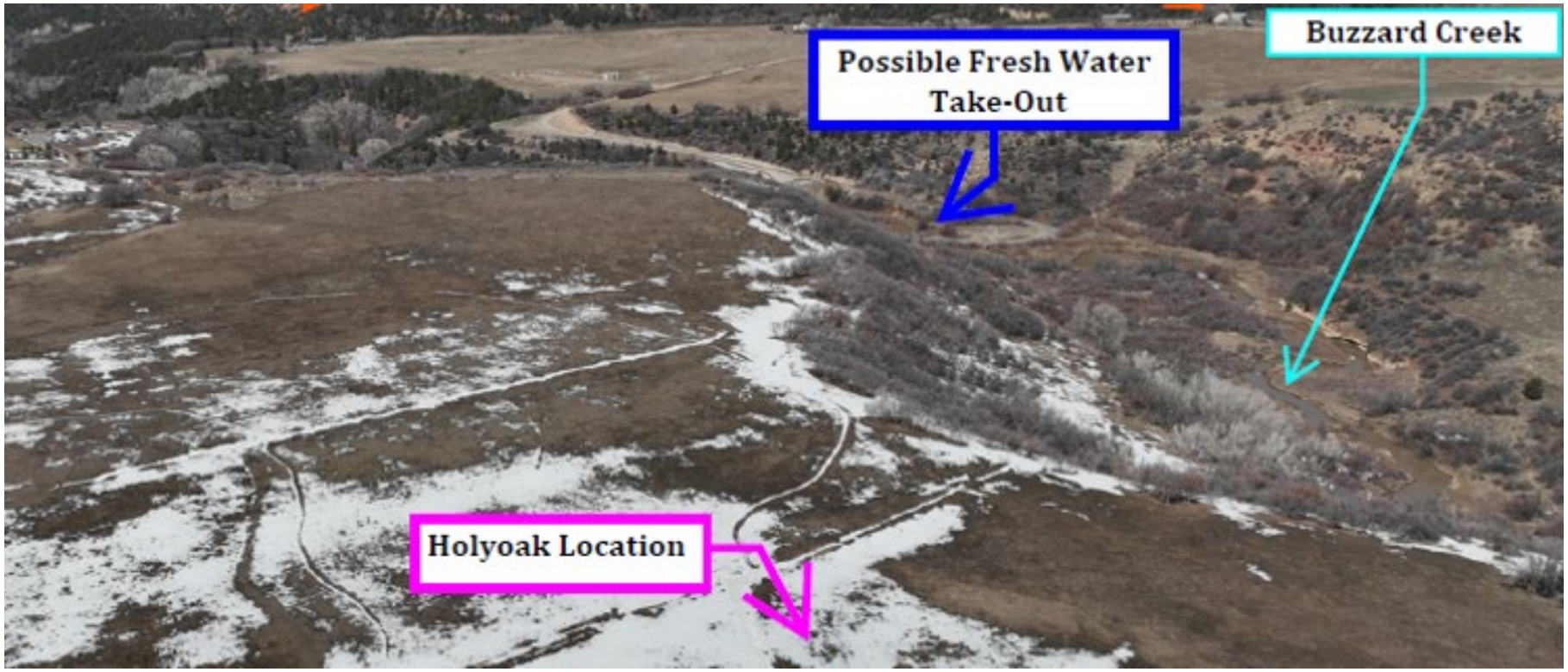
Facing West



Facing South – David 23-7 Well Pad

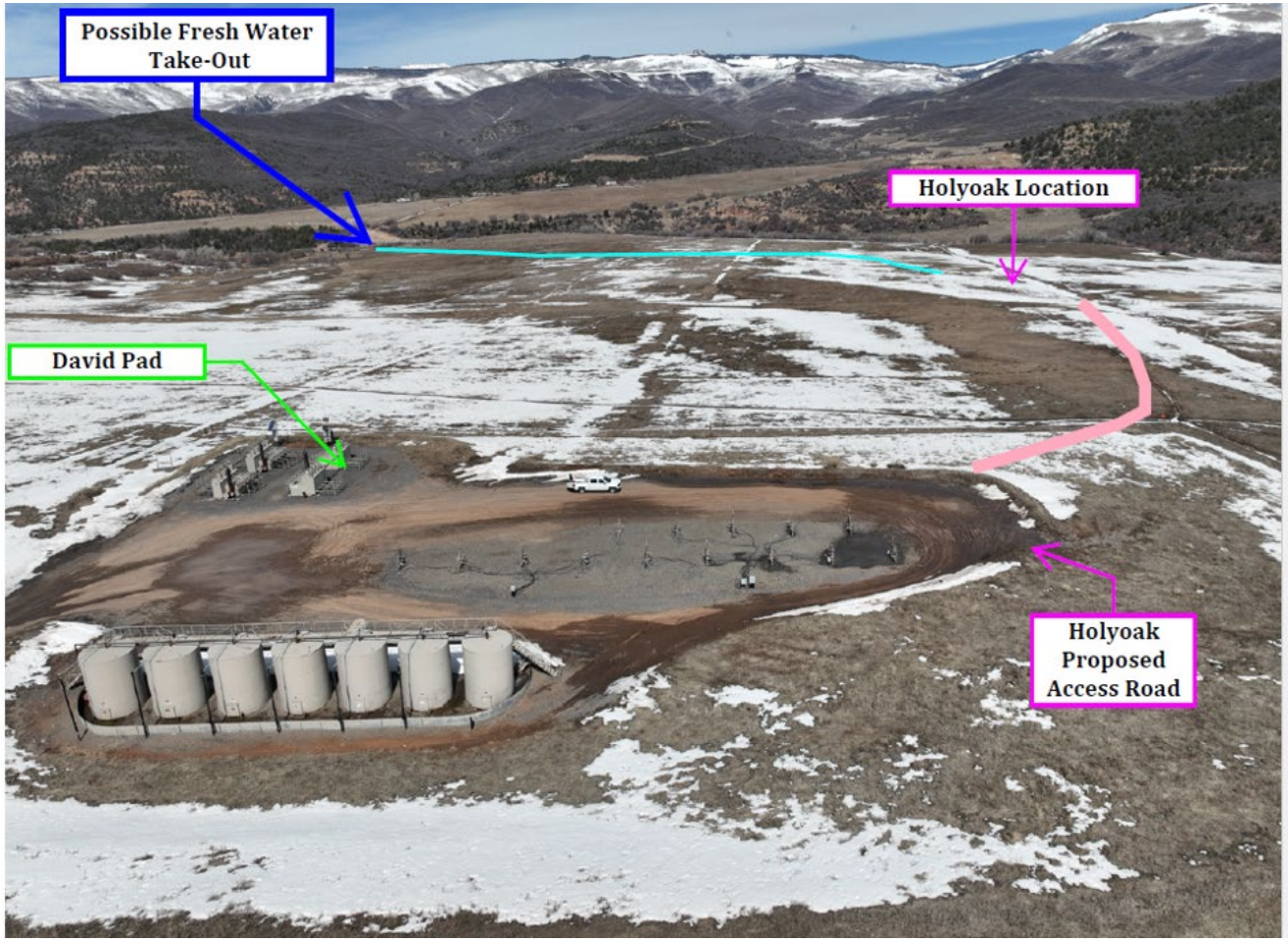


Temporary Fresh Water Take Out



Temporary Fresh Water Surface Line

- Laramie is proposing to lay a temporary surface line for fresh water intake from Buzzard Creek.
  - Will reduce truck traffic associated with project
  - Fresh water will be sourced from
    - Laramie Ground Hog Gulch pond
    - Purchased from Currier Reservoir
  - Will only be utilized during drilling & completions.
  - Drilling pump much smaller
  - Temporary
  - No disturbance associated with activity
  - Daily inspections of lines and equipment will occur – operation will be manned 24/7
  - Will require off-location temporary pumps and temporary line to be located within Aquatic Sportfish Management Waters HPH & within wetlands buffer.
  - Line to Holyoak roughly ½ mile. David pad around ¾ mile.

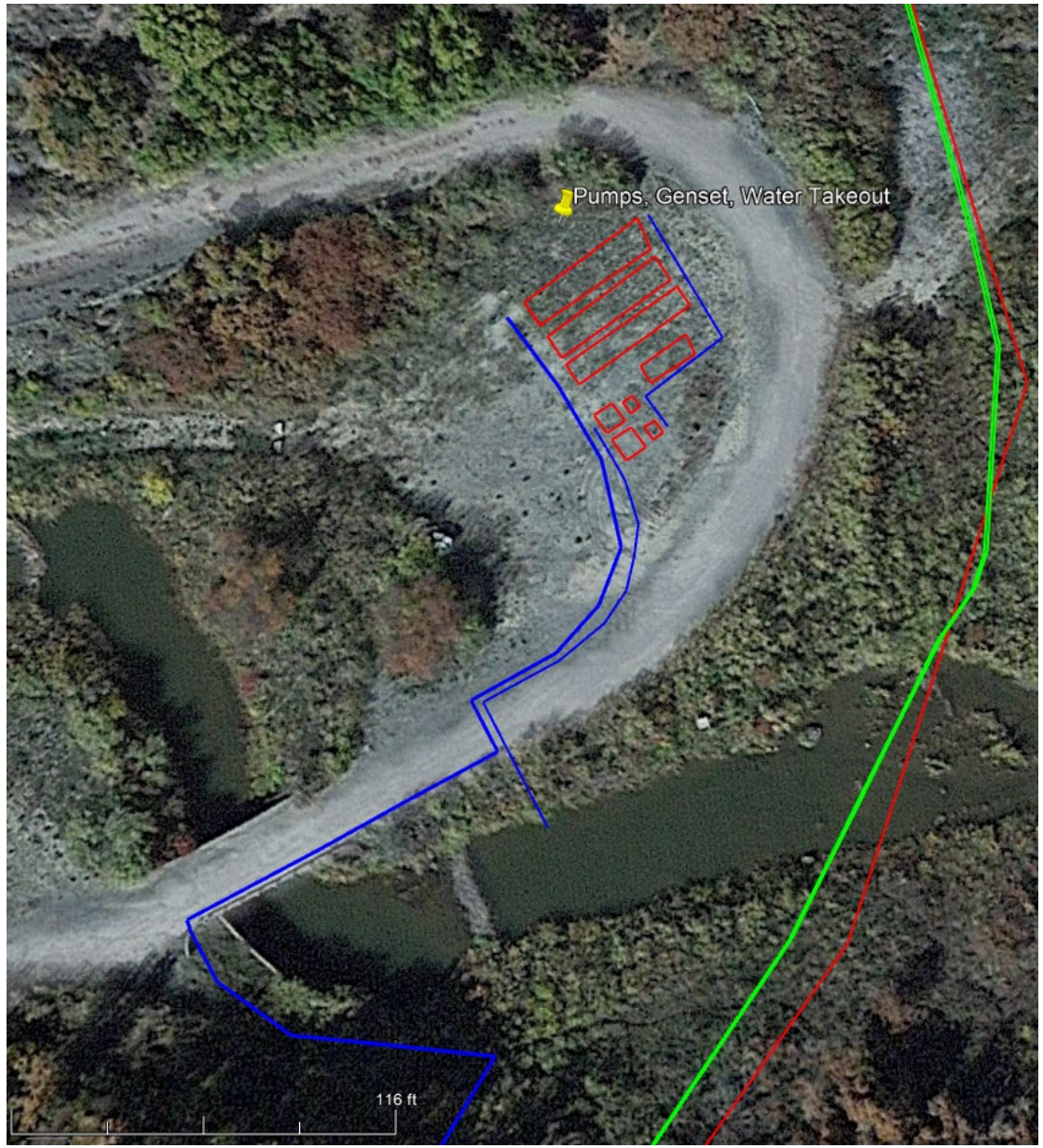


Temporary Fresh Water Equipment

- Fuel Source: Natural gas fired genset.
  - Will tie into existing gas gathering lines shown in green.
  - Eliminates the needs for diesel fuel & refueling.
  - New gas line from existing gathering to genset approx. 100 ft long.
  - Ditch witch install or narrow backet excavator, trench 24-in wide = 200 square feet (0.005 acres) cut on existing /previous county ROW.

- Completions Operations: Total equipment footprint anticipated to be less than 100 ft x 80 ft.
- 3-4 pump trailers, approx. 10 ft x 40 ft
- 2-3 booster pumps, approx. 10 ft x 10 ft
- Filter skids as needed, approx. 5 ft x 8 ft

- Drilling Operations: equipment needed significantly less than completions.
  - Single pump + booster or potentially just booster based on selected pump performance.



Fresh Water Take Out BMPs

- Water suction hoses shall be new and previously unused OR:
  - 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. Disinfection will be performed by pre-rinsing equipment away from water bodies to remove all mud, plants, and organic materials and then by implementing one of the following practices:
    - Spray/soak equipment with CPW-approved disinfectant solution capable of killing whirling disease spores and other aquatic nuisance species defined by CPW; or
    - Spray/soak equipment with water greater than 140 degrees Fahrenheit for at least 10 minutes. All equipment and any compartments they contain will be completely drained and dried between each use.
- Operator will not release unused water from water transportation tanks into rivers, intermittent, or perennial streams, ponds, lakes, or wetlands. Unused water will be discharge into upland habitats away from these water sources to avoid possible spread of aquatic nuisance species and disease vectors.
- If the pump head to the water takeout is to be located in a river or stream channel where larval fish are known to occur the following measures will apply:
  - Do not situate the pump in a low-flow or no-flow area as these habitats tend to concentrate larval or young-of-year fishes. Instead place the pump into fast moving/riffle habitat.
- Screen all pump intakes with ¼” or finer mesh material.
- Operator will first employ best management practices such as eco-Matting, tracking pads, etc. to protect stream banks, wetlands, and riparian vegetation.

Form 2A Location Assessment Requirements

- Various Maps & Figures
  - Wildlife Maps
  - Hydrology Maps
  - Access Road Maps
  - Soil Figures
  - Location Design Drawings
  - Cultural Distances Figure
  - Disproportionately Impacted Communities Map
- Consultation Summaries
  - CDPHE
  - Mesa County
  - Colorado Parks & Wildlife
- Numerous Operations & Mitigation Plans
- Alternative Location Analysis
- Best Management Practices (BMPs)
- Informed Consent

Plans Submitted with Form 2A
304.c.(1) Emergency Spill Response Program
304.c.(2) Noise Mitigation Plan
304.c.(3) Light Mitigation Plan
304.c.(4) Odor Mitigation Plan
304.c.(5) Dust Mitigation Plan
304.c.(7) Safety Management Program
304.c.(8) Operations Emergency Response Plan
304.c.(11) Waste Management Plan
304.c.(13) Fluid Leak Detection Plan
304.c.(14) Topsoil Protection Plan
304.c.(15) Stormwater Management Plan
304.c.(16) Interim Reclamation Plan
304.c.(17) Wildlife Plan
304.c.(18) Water Plan
304.c.(19) Cumulative Impacts Plan
304.c.(20) Community Outreach Plan
304.c.(21) Geologic Hazard Plan

ATTACHMENT 2

Pre-Application Onsite Summary
July 10, 2024

PRE-APPLICATION ONSITE MEETING – JULY 10, 2024
PROPOSED CCR 0994-23-02 WELL PAD
LARAMIE ENERGY, LLC

DRAFT Notes Provided: July 12, 2024
FINAL Notes Provided: July 23, 2024

ATTENDEES:
BLM: Jason Gross, Wesley Toews, Emily McCall
Town of Collbran: Mike Nichols
KLJ Engineering: Will Harmon & Jacob Huene
WestWater Engineering: Amie Wilsey
Ute Water Conservation District: Dave Payne
Laramie Energy: Matt Kasten (environmental), Lori Muhr (regulatory), Dwayne Knudsen (air/emissions), Wayne Bankert (environmental/ regulatory), Devon Smith (operations), Kenny Sackett (operations), Dusty Tucker (land), Austin Edge (engineering), Trey Fitzpatrick, Rory Mortenson (operations), Chris Clark (operations)
Fielding Hill: Katy Middleton (Permitting)

NOTE: Well pad (Working Pad Surface & Area of Disturbance), Access Road, and Well Head/ Surface Hole Locations were staked by the KLJ / Wasatch for the onsite meeting. Attendees were provided several maps and preliminary layout drawings.

The group met at the intersection of the proposed entrance and Mesa County 64 3/10. The onsite started at 10 AM. Sunny with mild breeze.

PROPOSAL: Laramie Energy, LLC is proposing to permit and develop one (1) well pad in Mesa County, CO.

SITE LOCATION DETAILS

Location: CCR 0994-23-02
ECMC Location ID: New Location
Legal Description: NWNE of Section 23, Township 9 South, Range 94 West, 6th P.M
Elevation (Graded): 7142 feet
General Location: 6 mapped miles east of Collbran, Colorado.
County: Mesa
Zone District: Agricultural, Forestry, Transitional District (AFT)
Wells: 2 New Horizontal Well: *1 Fee Well
*1 Federal Well: Fee/Fee/Fed

Preliminary Disturbance Estimates	Acres
Area of Disturbance	7.5
Working Pad Surface	4.3
Proposed Access Road (~2500Feet)	1.88
Pipeline (`~900 Feet)	0.2

Phase/Activity /Stage	Timeframe (Days)
Construction	50
Production Equipment Installation	30
Drilling Mobilization	7
Drilling	46
Drilling Demobilization	7
Completions Mobilization	10
Completions and Flowback	48
Completions Demobilization	10
Interim Reclamation	14

MINERAL DEVELOPMENT

- Laramie will apply for a Drilling Spacing Unit with ECMC
  - Niobrara/Mancos Formation
  - Acreage will be communitized with the BLM

PRE-APPLICATION ONSITE MEETING – JULY 10, 2024
PROPOSED CCR 0994-23-02 WELL PAD
LARAMIE ENERGY, LLC

- Minerals to be Development from Section 23, 14 & 11 of Township 9 South, Range 93 West
  - Fee Minerals Sec. 23, 14, and 11
  - Federal Wells Sec. 11 (NE Qtr.) - Federal Lease: 50945

SURFACE OWNER & SURFACE USE AGREEMENT (SUA)

Surface: Fee Surface
Surface Owner: Colorado Canyon Ranch = CCR

Laramie is currently working with the landowner to establish an SUA. The Surface Owners are in support of the development. Well pad, access road, and pipeline will be located on surface owned by Colorado Canyon Ranch (multiple parcels owned by CCR). All production equipment will be located on one (rather than across) parcel.

ACCESS ROAD: An access road will be constructed to access the project area from Mesa County Road 64 3/10 (also known as Brush Creek Road). The access road will be located on private Fee surface. KLJ has designed the access road to minimize visual impacts from traffic and met BLM's Gold Book Standards.

PIPELINE

About 900 feet of gas pipeline and water line will be installed south of the pad to connect to a tie-in located directly south of the proposed well pad.

PROJECT PROPOSALS

- **Horizontal Wells**
  - Well heads were placed on cut or directly adjacent to the cut/fill to minimize permanent equipment on fill
  - Water-based drilling mud for vertical
  - Oil-based drilling mud for horizontal
  - Drill cuttings will be hauled for disposal
    - Drilling cuttings will result in about 80 truck = 160 truck trips

Water-Based Drill Cuttings	Utilized for the vertical portion (Approximately 9,000 ft)	Estimate 320 cubic yards per well	1,080 Cubic Yards for the Well Pad
Oil-Based Drill Cuttings	Utilized for the horizontal portion (Approximately 11,000 feet)	Estimate 220 cubic yards per well	

Five (5) production tanks are planned for the well pad. The tanks will be 400 barrels each, with a total capacity of 2,000 barrels for Location. All production equipment will be located on the "cut" portion of pad.

Oil Tanks		**Produced Water Tanks**		**Gunbarrel Tanks**		**Sand Tank**	
# Of Tanks	Barrels	# Of Tanks	Barrels	# Of Tanks	Barrels	# Of Tanks	Barrels
1	400	2	800	1	400	1	400

Tanks that will be installed at the CCR Pad will have a capacity of 400 barrels each with a total capacity of 2,000 barrels for the Location. Each tank will be located more than 3 feet apart in accordance with ECMC Rule 608.a.(2).A. Installed tanks will be connected to combustors and will not be vented. Laramie will label all tanks on the subject pad to comply with ECMC Rule 605.h. and Rule 608.a.(12).

Tanks will be installed within secondary containment, in accordance with ECMC Rule 603.o.(1). Secondary containment will be sized to contain 150 percent of the volume of the largest tank. All proposed tanks have a capacity of 400 barrels. The capacity for secondary containment, therefore, will be sized to contain a minimum of 600 barrels. The containment will be constructed of metal wall and spray-in liner. Spray-in liner is more durable and has a longer lifespan than HDPE liners. The spray-in liner will minimize potential spill incidents and impacts.

HIGH PRIORITY HABITAT (HPH)

Currently, no surface disturbance is anticipated within HPH. Within a half-mile radius of the proposed CCR well pad exists the following mapped HPH exist.

CPW MAPPED HPH	Distance (ft) From WPS	Disturbance (Acres)
Elk Winter Concentration ECMC Rule 1202.d. Density	613	0
Aquatic Native Species Conservation Waters	66	0

Aquatic Native Species Conservation Waters Buffer is along Buzzard Creek & is downgradient of the site; however, no disturbance will occur to this HPH. Dense vegetation exists on the slope between Buzzard Creek and the site, which would help buffer any erosion or runoff impact on Buzzard Creek. In addition, the fracking fluid proposed for use at this site is fresh water, which poses a much smaller risk to aquatic life in Buzzard Creek than a traditional fracking solution (see "Water Sources").

Frac tanks would locate onsite during completions and flowback to store flowback water. However, Niobrara / Mancos wells are known to be dry wells and are not anticipated to generate the volume of flowback water that occurs from the Williams Fork / Iles formation.

North of the proposed well pad is Elk Winter Concentration (ECMC Rule 1202.d. Density). No disturbance is within this HPH and during the 2024 CPW map revisions, the Elk Winter Concentration reduced in size.

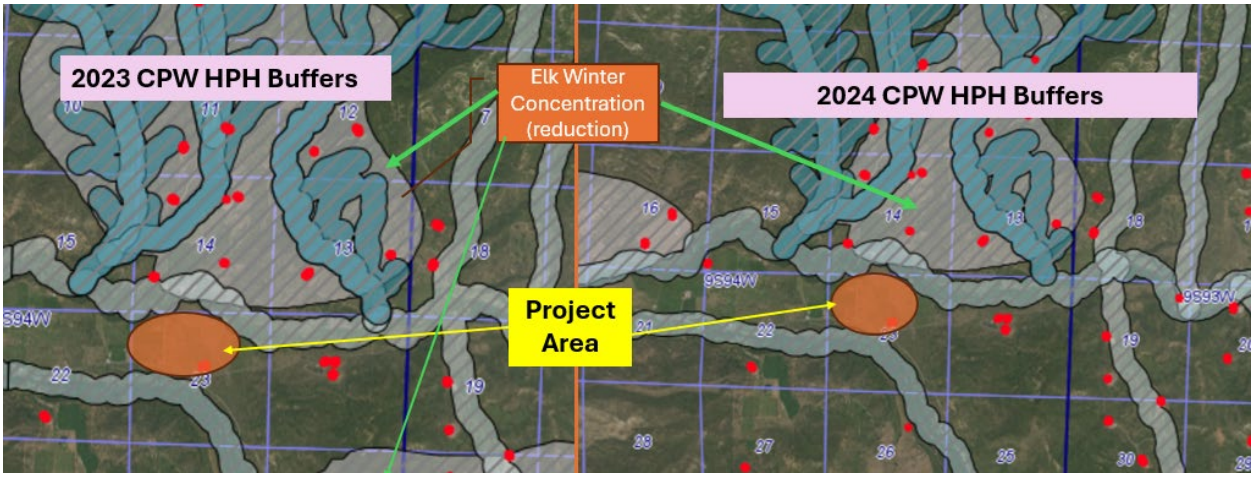


Figure 1. CPW 2023 to 2024 Changes to Mapped HPH

CPW was not able to attend onsite, but Laramie consulted with CPW via virtual meetings. CPW has not expressed any concerns regarding the project.

PRE-APPLICATION ONSITE MEETING – JULY 10, 2024
PROPOSED CCR 0994-23-02 WELL PAD
LARAMIE ENERGY, LLC

PUBLIC WATER SYSTEMS INTAKE
Within 15 streams miles of Ute Water Conservation District (Ute Water) surface intake. Laramie has consulted with Ute Water at their GJ office on June 5, 2024. Ute Water attend the July 10, 2024, onsite meeting.
Laramie will prepare an Emergency Spill Response Program Plan (ESRP) per ECMC rules. Laramie will provide the (ESRP) to Ute Water for review, comments, and approval.

FIELD SURVEYS
Biological, wetlands, and surface water surveys were conducted in June of 2024 by WestWater Engineering. The proposed project will not result in disturbance to wetlands. If this project is approved, a raptor nest survey covering a 0.5 mile buffer around the work area must be conducted no more than two weeks in advance of construction.

WATER SOURCES
Laramie is proposing 100% fresh water usage for this project. Laramie explained the lack of infrastructure to meet water volumes needed during completions resulted in Laramie assessing other water sources. Laramie concluded that utilizing fresh water from Buzzard Creek would result in the least amount of impact. Laramie is proposing to lay a temporary surface line for fresh water intake from Buzzard Creek.

- Will reduce truck traffic associated with project
- Fresh water will be sourced from
    - Laramie Ground Hog Gulch Pond
    - Purchased from Currier Reservoir
- Will only be utilized during drilling & completions.
- No disturbance associated with activity
- Daily inspections of lines and equipment will occur – operation will be manned 24/7

Below are the current estimates for fresh water usage per horizontal well.

Activity	**Fresh Water Per Well (BBL)**	**Acre-Feet Per Well**
Drilling	11,500	1.1
Completions	525,000	57.8
Total	536,500	58.9

Name	**Owner**	**Parcel #**	**Coordinates: Latitude/ Longitude**	**Water Source**
Groundhog Gulch Pond	Laramie Energy, LLC 1001 17th Street Suite 1900 Denver, CO 80202	2661-282-00-319	39.251261°/ -107.781546°	Pond (Surface Water) *Operator Owned*
Currier Reservoir	Vander Laan Merial C PO Box 27059 Denver, CO 80227-0059	2657-071-00-003	39.290369°/ -107.718387°	Reservoir (Surface Water) *Purchased*

Fresh Water Take-Out BMPs (As discussed with CPW)
Water suction hoses shall be new and previously unused OR: 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. Disinfection will be performed by pre-rinsing equipment away from water bodies to remove all mud, plants, and organic materials and then by implementing one of the following practices: • Spray/soak equipment with CPW-approved disinfectant solution capable of killing whirling disease spores and other aquatic nuisance species defined by CPW; or • Spray/soak equipment with water greater than 140 degrees Fahrenheit for at least 10 minutes. All equipment and any compartments they contain will be completely drained and dried between each use.
Operator will not release unused water from water transportation tanks into rivers, intermittent, or perennial streams, ponds, lakes, or wetlands. Unused water will be discharged into upland habitats away from these water sources to avoid possible spread of aquatic nuisance species and disease vectors.
If the pump head to the water takeout is to be located in a river or stream channel where larval fish are known to occur the following measures will apply: • Do not situate the pump in a low-flow or no-flow area as these habitats tend to concentrate larval or young-of-year fishes. Instead place the pump into fast moving/riffle habitat.
Screen all pump intakes with ¼" or finer mesh material.
Operator will first employ best management practices such as eco-Matting, tracking pads, etc. to protect stream banks, wetlands, and riparian vegetation.

STORMWATER

Stormwater control measures were discussed during the onsite. At the time of the onsite, the interim reclamation drawing (production pad) was not provided since Laramie and KLJ are working on a design to satisfy the Surface Owners request of 15 feet from the parcel line.

Laramie discussed stormwater control measures with the BLM. Ute Water inquired about stormwater control measures and direction of flow. The pad has been designed by KLJ for a 2 year / 24 hr. storm event.

For construction / pre-production pad, KLJ designed the pad with a significant sized stormwater detention pond along the eastern side.

SPILL RESPONSE

During drilling, completions, and flowback operations, a fully equipped emergency spill response trailer will be staged at an adjacent David 23-7 well pad and prepared for immediate response in the event of the release or spill during pre-production activities. A second emergency spill response trailer will be available for immediate mobilization if needed at Laramie's Harrison Creek Water Treatment Facility (Location ID # 413056). An emergency spill kit (95-gallon drum spill kit) will be placed on the pad for any spills that might occur for the life of the producing wells.

BLM suggested installing culverts near pad and along the road accessing the pad have manually operated gates as a spill control feature. BLM also asked which way stormwater would drain from pad in the event of a spill as Buzzard Creek is relatively near and steeply downhill from the proposed site. It appears that stormwater in the construction phase would drain to a large sediment basin below the pad. Unclear where stormwater would drain during interim reclamation. BLM recommends that Laramie consider directing stormwater to the west along the access road towards the private pond, instead of towards Buzzard Creek. If stormwater cannot be drained, west, recommend including a comprehensive list of BMPs such as perimeter berms, culvert gates, secondary containments, etc in the APD.

PRE-APPLICATION ONSITE MEETING – JULY 10, 2024
PROPOSED CCR 0994-23-02 WELL PAD
LARAMIE ENERGY, LLC

Stormwater is designed in all phases of construction to stay near site or flow east or west from the site with a focus of not allowing anything to discharge towards Buzzard Creek to the north. One main function of protection to the north is the berm designed at the edge of working disturbance that will perform as protection if an undesirable event were to occur. During construction and drilling operations, east of the location is a large sediment and stormwater basin designed/sized according to a 2 year – 24 Hour storm where no water is expected to leave but rather permeate. The rest of the site is designed to flow west down ditches and sediment traps until following the roadside ditch where it can either continue down the road or be transported north via headgate. Headgate if needed could be utilized to contain free fluids if an spill event was to send fluids down roadside when closed. During the production phase, after interim reclamation, the stormwater will basically function in same logistics but with a smaller footprint and no large basin to hold large amounts of water. When interim reclaim is completed all water will be transported west by ditches, sediment traps, culverts, and roadside ditches where a stock pond and/or field will be ending point (dependent upon Landowner preference and watering needs).

Laramie is currently working with the landowner regarding the irrigation ditch just south of the proposed pad. Since the surface is Fee surface, Laramie and the Surface Owner will on a route for the irrigation ditch outside the scope of permitting the project. As of 072324, the Surface Owner, prefers the irrigation ditch to be re-routed to the east.

CULTURAL DISTANCES (Approximate distances to be Finalized Prior to submittal)

- The nearest public road crossroads are Highway 330 & 64 3/10 Road (Mesa County roads).
- Two (2) RBUs within 2000 ft of Working Pad Surface
    - Nearest RBU: ~1873 ft west of CCR Pad
    - ~1948 feet southeast of CCR Pad
- Three RBUs between 2000-2500 ft from CCR Pad
- A total of 12 RBUs within one mile

Laramie has been in communication with the 5 RBUs that are less than 2,500 feet. One RBU within 2000 ft has a tenant. No RBU or tenants have expressed any concern regarding the project.

WEEDS

The area is used for pasture for grazing livestock. BLM identified some weeds within the proposed disturbance area and suggested spraying for weeds prior to construction activities. Laramie will have to ask about spraying prior to construction since the Surface Owner does use the land for grazing. No livestock was present during the onsite meeting.

ALTERNATIVE LOCATIONS

Laramie analyzed several alternative locations when designating a site for the proposed development. Laramie took into consideration parcel boundaries, surface ownership, accessibility, HPH, proximity to RBUs, topography, and disturbance. Laramie analyzed the existing David 23-7 to the south; but current pad size would not accommodate proposed drilling and completions equipment. Laramie has KLJ assess expanding the pad within the parameters of the parcel boundary; however, the expansion would result in an 80,000-cy fill imbalance and would require 80,000 cy of dirt to be trucked to construct the expanded pad. The David 23-7 would also be closer to an RBU at 535 feet.

EMISSIONS

- Emissions Modeling Inventory Tool (EMIT): Laramie will prepare data and submit the EMIT Form for the Federal APD. Data will include truck trips from cuttings hauling.

PERMITS REQUIRED

PRE-APPLICATION ONSITE MEETING – JULY 10, 2024
PROPOSED CCR 0994-23-02 WELL PAD
LARAMIE ENERGY, LLC

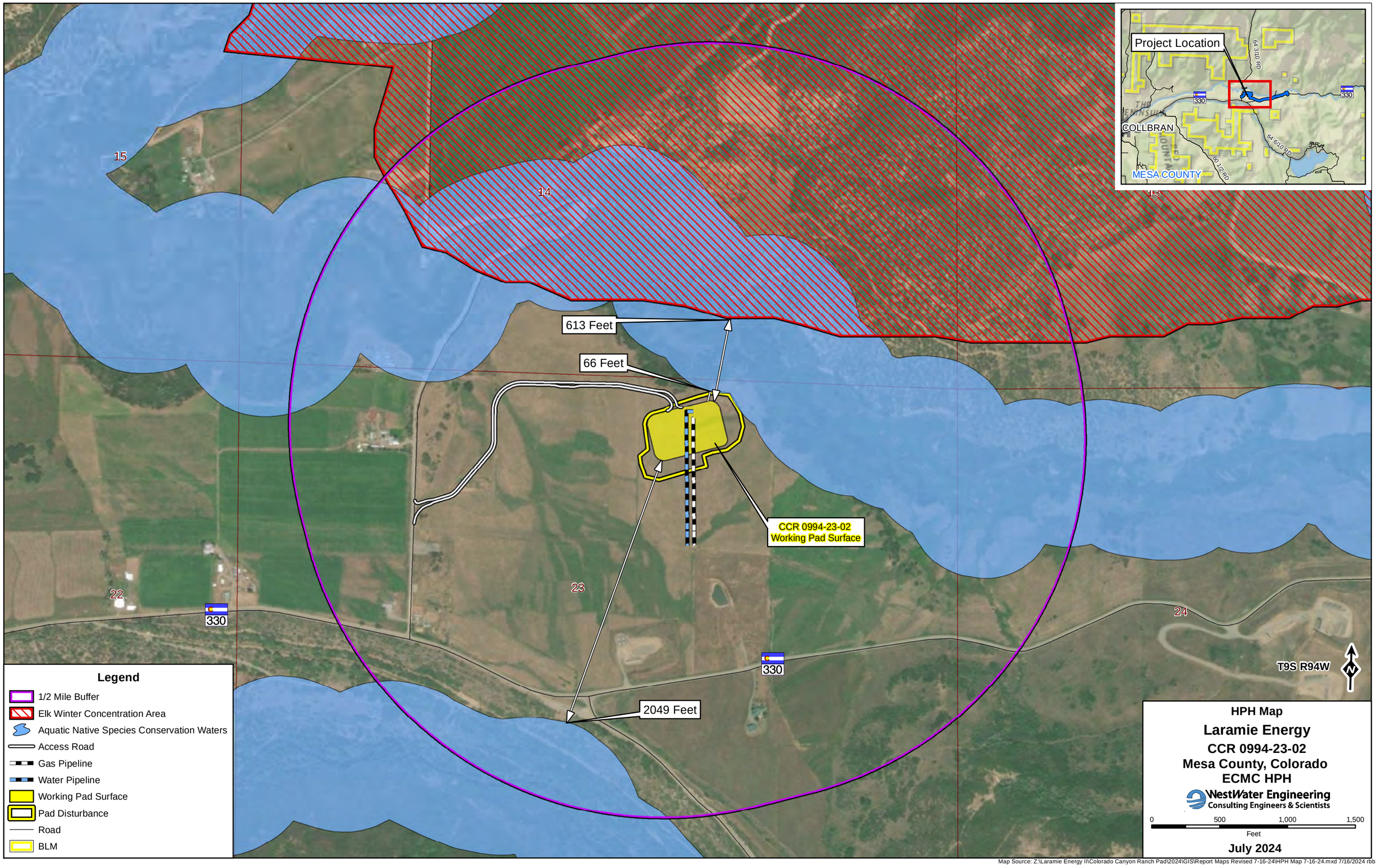
Laramie is aiming to submit the Federal APD and the ECMC OGDP in early Fall 2024.

Mesa County	ECMC	BLM
• Oil and Gas Location Application • Driveway Access Permit	(Oil and Gas Development Plan – OGDP) • Form 2A – Location Assessment • Form 2B – Cumulative Impacts • Form 2C – OGDP Certification	• 1 Federal APD

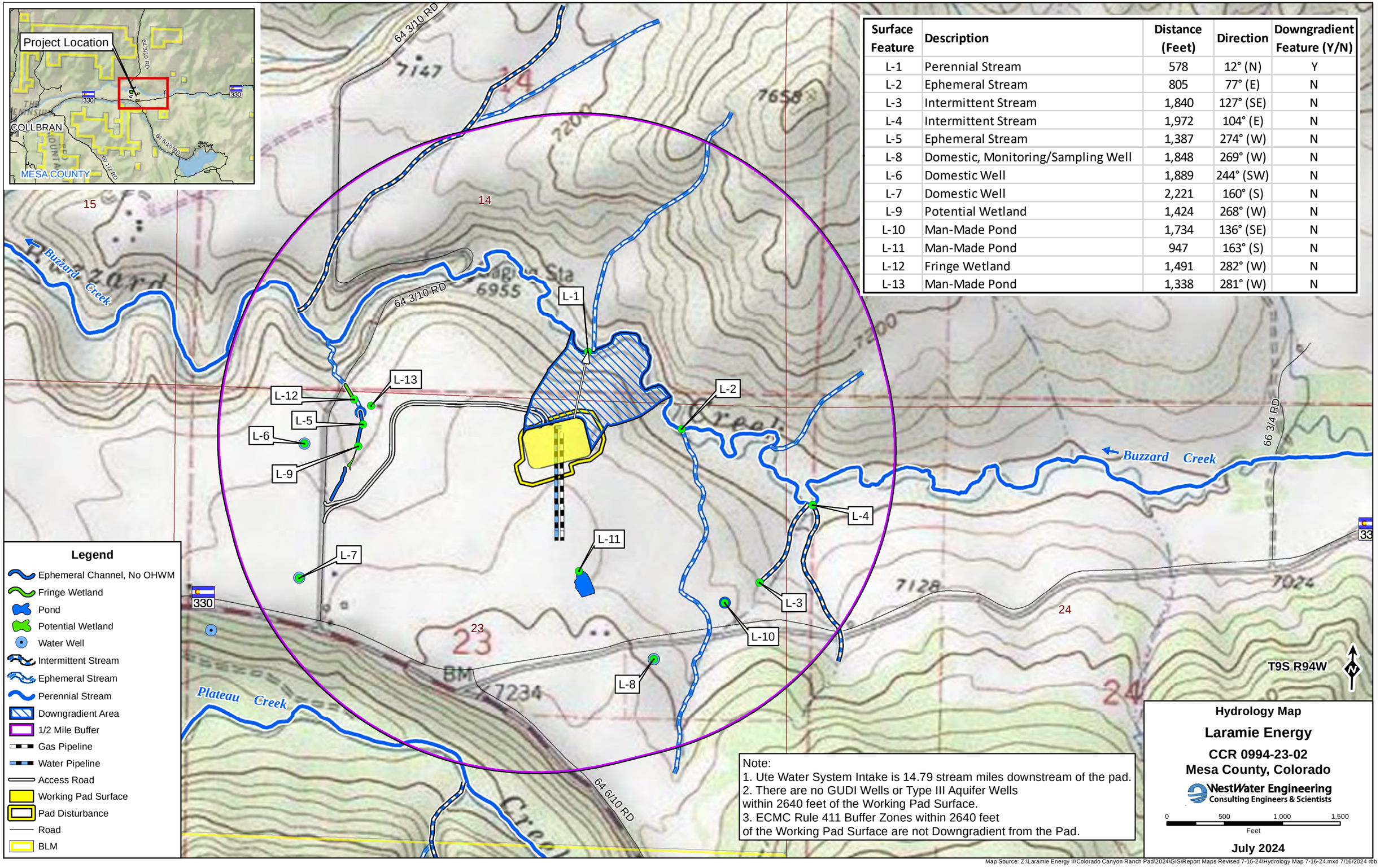
ACTION ITEMS

- Laramie will ask the Surface Owner about the irrigation heads that are located within the Area of the Disturbance.

- Laramie will prepare a figure showing the proposed temp fresh water line, proposed buried water line, and existing infrastructure lines.
- Laramie to edit notes to show 900 feet of the proposed buried pipeline.



Map Source: Z:\Laramie Energy II\Colorado Canyon Ranch Pad\2024\GIS\Report Maps Revised 7-16-24\HPH Map 7-16-24.mxd 7/16/2024 rbb



Surface Feature	Description	Distance (Feet)	Direction	Downgradient Feature (Y/N)
L-1	Perennial Stream	578	12° (N)	Y
L-2	Ephemeral Stream	805	77° (E)	N
L-3	Intermittent Stream	1,840	127° (SE)	N
L-4	Intermittent Stream	1,972	104° (E)	N
L-5	Ephemeral Stream	1,387	274° (W)	N
L-8	Domestic, Monitoring/Sampling Well	1,848	269° (W)	N
L-6	Domestic Well	1,889	244° (SW)	N
L-7	Domestic Well	2,221	160° (S)	N
L-9	Potential Wetland	1,424	268° (W)	N
L-10	Man-Made Pond	1,734	136° (SE)	N
L-11	Man-Made Pond	947	163° (S)	N
L-12	Fringe Wetland	1,491	282° (W)	N
L-13	Man-Made Pond	1,338	281° (W)	N

Note:
1. Ute Water System Intake is 14.79 stream miles downstream of the pad.
2. There are no GUDI Wells or Type III Aquifer Wells within 2640 feet of the Working Pad Surface.
3. ECMC Rule 411 Buffer Zones within 2640 feet of the Working Pad Surface are not Downgradient from the Pad.

Hydrology Map

Laramie Energy

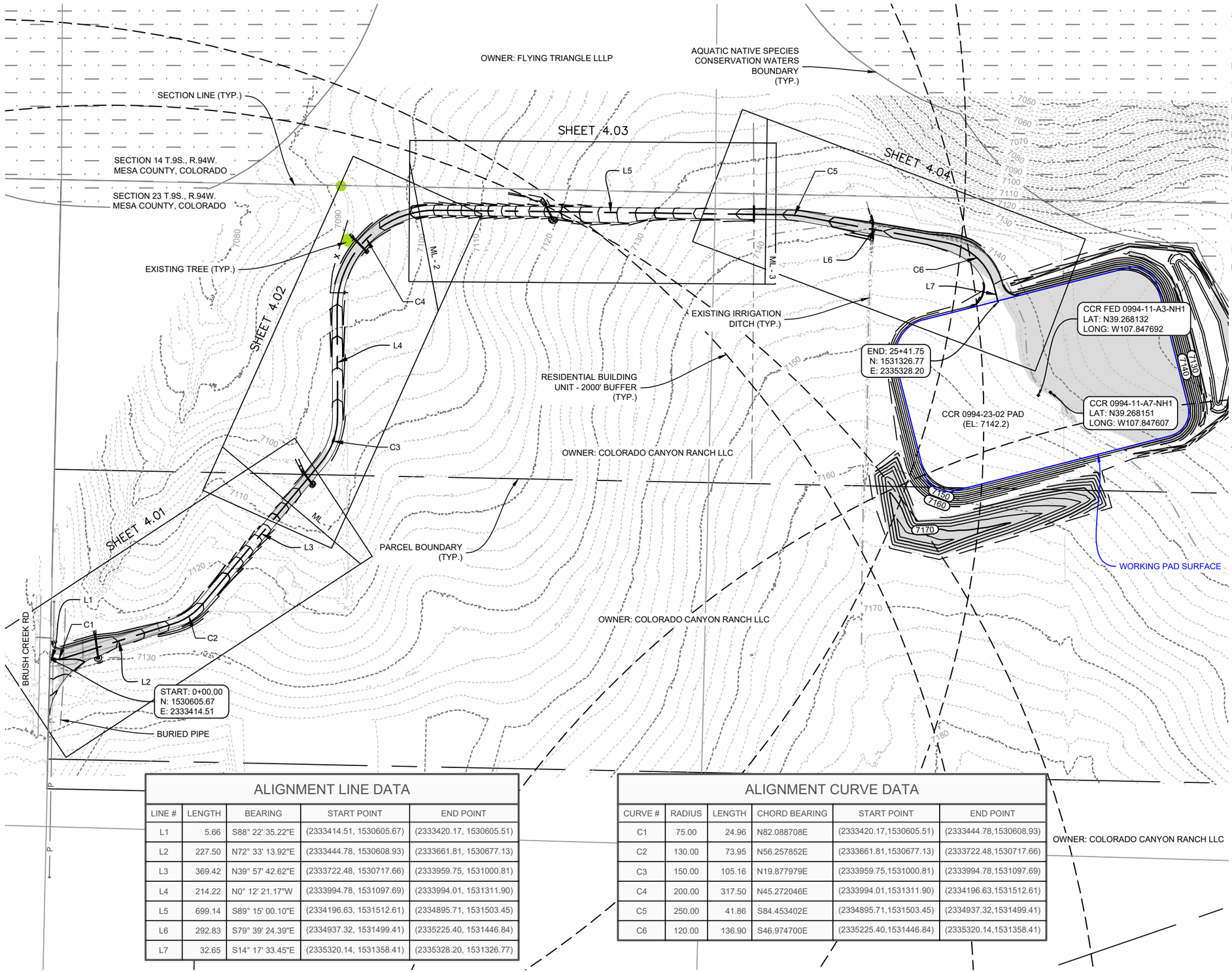
CCR 0994-23-02
Mesa County, Colorado

WestWater Engineering
Consulting Engineers & Scientists

0 500 1,000 1,500
Feet

July 2024

Map Source: Z:\Laramie Energy II\Colorado Canyon Ranch Pad\2024\GIS\Report Maps Revised 7-16-24\Hydrology Map 7-16-24.mxd 7/16/2024 rbb



APPROXIMATE QUANTITIES OF ROAD

GRAVEL VOLUME	1,450 CY
CUT VOLUME	1,730 CY
FILL VOLUME	1,640 CY
CUT FACTOR	1.0 (SWELL)
FILL FACTOR	1.15 (COMPACTION)
ROAD LENGTH	2,542 FEET
ROAD AREA OF DISTURBANCE	1.9 ACRES
ROAD RUNNING SURFACE	1.4 ACRES
ROAD TOPSOIL DISTURBANCE	1,516 CY

APPROXIMATE QUANTITIES OF PAD

PAD AREA OF DISTURBANCE	7.5 ACRES
WORKING PAD SURFACE	4.3 ACRES
INTERIM RECLAMATION AREA	3.8 ACRES
PRODUCTION PAD SURFACE	2.2 ACRES

NOTES

1. CONTOUR INTERVAL IS 2 FEET.
2. EXISTING TOPOGRAPHY AND FEATURE DATA WERE COLLECTED BY WASATCH SURVERYING.
3. ALL BEARINGS, DISTANCES AND DIMENSIONS SHOWN HEREON ARE BASED ON THE COLORADO COORDINATE SYSTEM OF 1983 CENTRAL ZONE, US SURVEY FEET.
4. BASIS OF ELEVATION: NAVD 88 (DEOID 18)
5. WELL PAD DIMENSIONS AND EQUIPMENT LAYOUTS PROVIDED BY LARAMIE ENERGY, LLC.

N

100 0 100 200
SCALE FEET

ALIGNMENT LINE DATA

LINE #	LENGTH	BEARING	START POINT	END POINT
L1	5.66	S88° 22' 35.22"E	(2333414.51, 1530605.67)	(2333420.17, 1530605.51)
L2	227.50	N72° 33' 13.92"E	(2333444.78, 1530608.93)	(2333661.81, 1530677.13)
L3	369.42	N39° 57' 42.62"E	(2333722.48, 1530717.66)	(2333959.75, 1531000.81)
L4	214.22	N0° 12' 21.17"W	(2333994.78, 1531097.69)	(2333994.01, 1531311.90)
L5	699.14	S89° 15' 00.10"E	(2334196.63, 1531512.61)	(2334895.71, 1531503.45)
L6	292.83	S79° 39' 24.39"E	(2334937.32, 1531499.41)	(2335225.40, 1531446.84)
L7	32.65	S14° 17' 33.45"E	(2335320.14, 1531358.41)	(2335328.20, 1531326.77)

ALIGNMENT CURVE DATA

CURVE #	RADIUS	LENGTH	CHORD BEARING	START POINT	END POINT
C1	75.00	24.96	N82.088708E	(2333420.17,1530605.51)	(2333444.78,1530608.93)
C2	130.00	73.95	N56.257852E	(2333661.81,1530677.13)	(2333722.48,1530717.66)
C3	150.00	105.16	N19.877979E	(2333959.75,1531000.81)	(2333994.78,1531097.69)
C4	200.00	317.50	N45.272046E	(2333994.01,1531311.90)	(2334196.63,1531512.61)
C5	250.00	41.86	S84.453402E	(2334895.71,1531503.45)	(2334937.32,1531499.41)
C6	120.00	136.90	S46.974700E	(2335225.40,1531446.84)	(2335320.14,1531358.41)

COLORADO LICENSED
MARC JAMISEN KENNEY
41215
07/22/2024
PROFESSIONAL ENGINEER

KLJ

REVISION | DATE | NO.

DRAFTED: JRH
REVIEWED: MJK
PROJECT NUMBER: 2307-01465.2
ISSUE DATE: 7/22/24

CCR 0994-23-02 WELL PAD DESIGN

LARAMIE ENERGY, LLC

NWNE OF SECTION 23, T.9S., R.94W., 6TH P.M., MESA COUNTY, CO

PLAN SHEET LAYOUT

SHEET 3.01

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FLYING TRIANGLE LLLP

PROPERTY LINE / SECTION LINE

ACCESS ROAD

WORKING PAD SURFACE

COLORADO CANYON RANCH LLC

WATTLES AT EDGE OF DISTURBANCE (7.5 ACRES)

REMOVE EXISTING CULVERT

SECTION 14 T.9S., R.94W. MESA COUNTY, COLORADO

SECTION 23 T.9S., R.94W. MESA COUNTY, COLORADO

BUFFER 6'

BUFFER 5'

2' SUBSOIL CONTAINMENT BERM AT TOE OF SLOPE 2H:1V

AQUATIC NATIVE SPECIES CONSERVATION WATERS

STORMWATER DETENTION POND 2H:1V

2' COMPACTED SUBSOIL CONTAINMENT BERM AT EDGE OF DISTURBANCE 2H:1V

REROUTE EXISTING DITCH AS PER DIRECTION FROM LANDOWNER

PARCEL BOUNDARY

CUT/FILL LINE

Pad Cross Section

1 CUT -5.5

2 FILL 1.9

3 FILL 10.5

4 FILL 13.3

5 FILL 7.1

6 CUT -9.8

7 CUT -16.5

8 CUT -11.8

CCR 0994-23-02
(EL: 7142.2)

CCR FED 0994-11-A3-NH1

CCR 0994-11-A7-NH1

WELL HEAD (TYP.)

LAT: N39.268151
LONG: W107.847607

LAT: N39.268132
LONG: W107.847692

TOPSOIL STOCKPILE

205'

350'

262'

145'

550'

25'

2%

3:1

7:1

7050 7060 7070 7080 7090 7100 7110 7120 7130 7140 7150 7160 7170

A B C

STORMWATER VOLUME
DESIGN STORM = 2-YEAR 24-HOUR
NOAA POINT PRECIP. = 1.28 INCHES
REQUIRED STORAGE VOLUME = 35,532 CUBIC FEET*
(1.28 IN / 12 IN/FT * 7.5 AC * 43560 SQFT/AC)
(* ASSUMES ZERO LOSS (E.G., INFILTRATION/EVAPORATION))
VOLUME PROVIDED = 44,037 CUBIC FEET**
(** INCLUDES FREEBOARD VOLUME)

STORMWATER BASIN DIRT BALANCE (IN CUBIC YARDS)
BASIN: CUT = 2,138 / FILL = 56; NET = 2,082 CY (CUT)

PAD VOLUME SUMMARY
CUT FACTOR = 1.0
CUT VOLUME = 32,444 CY (INCLUDES STORMWATER BASIN)
FILL FACTOR = 1.15 (COMPACTION)
FILL VOLUME = 31,133 CY
NET = 1,311 CY (CUT)

TOPSOIL VOLUME
EXISTING TOPSOIL DEPTH = 6.00 INCHES*
(*AREA WEIGHTED AVERAGE DEPTH)
AREA OF DISTURBANCE = 7.5 (ACRES)
WORKING PAD SURFACE = 4.3 (ACRES)
TOPSOIL VOLUME = 6,076 CY
TOPSOIL STOCKPILE VOLUME = 6,502 CY

NOTES
1. CONTOUR INTERVAL IS 2 FEET.
2. EXISTING TOPOGRAPHY AND FEATURE DATA WERE COLLECTED BY WASATCH SURVERYING.
3. WELL PAD DIMENSIONS AND EQUIPMENT LAYOUTS PROVIDED BY LARAMIE ENERGY, LLC.

LEGEND

- WATTLE
- EXISTING FENCE
- FILL

N

SCALE 50 0 50 100 FEET

COLORADO LICENSED
JAMISEN K. HUMMEL
41215
07/22/2024
PROFESSIONAL ENGINEER

KLJ

NO.	DATE	REVISION

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REVIEWED MJK
PROJECT NUMBER 2307-01465.2
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CCR 0994-23-02 WELL PAD DESIGN

LARAMIE ENERGY, LLC

NWNE OF SECTION 23, T.9S., R.94W., 6TH P.M., MESA COUNTY, CO

CONSTRUCTION LAYOUT

SHEET 7.01

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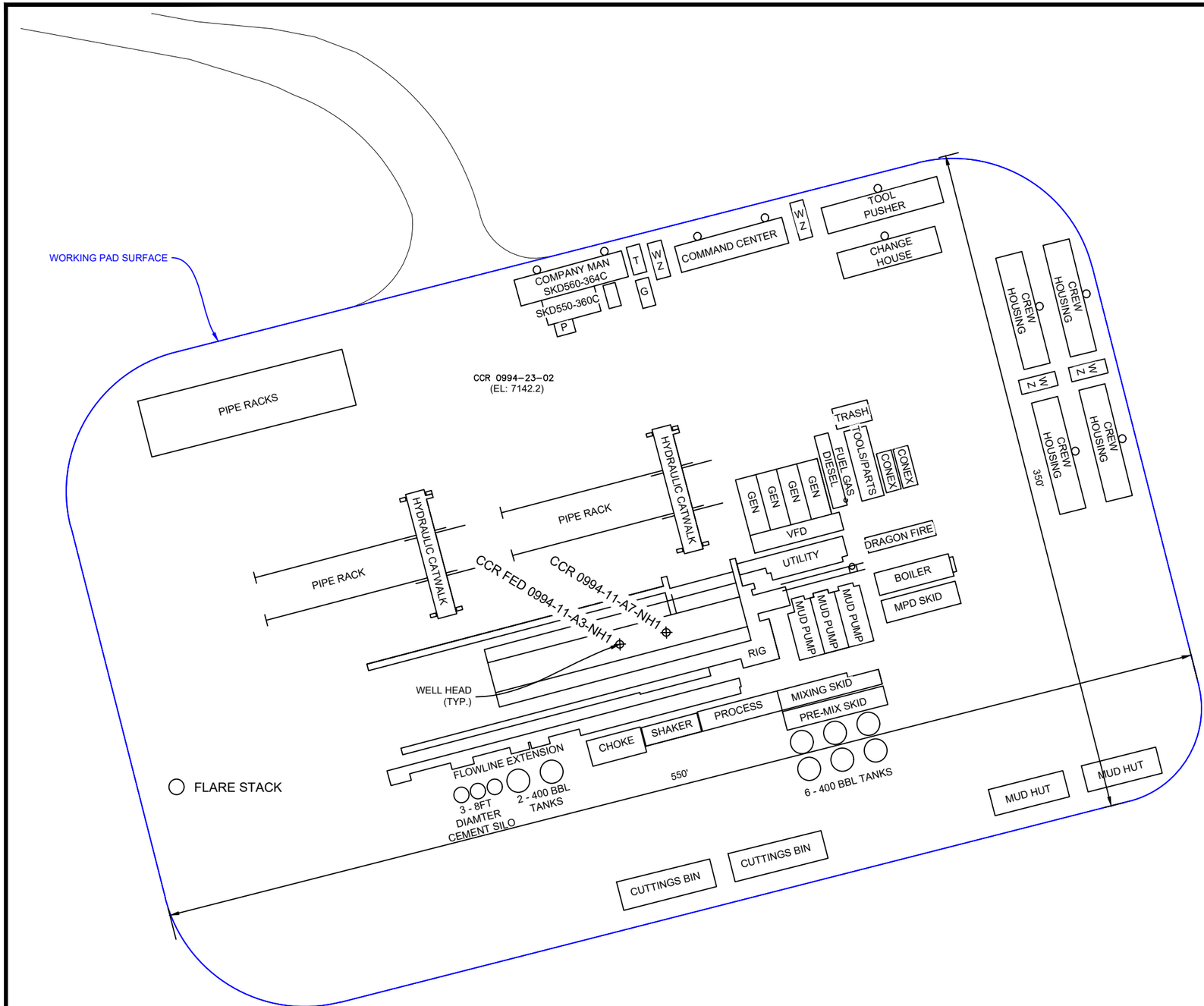

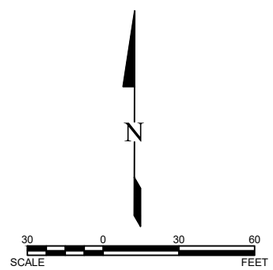

KLJ

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CCR 0994-23-02 WELL PAD DESIGN

LARAMIE ENERGY, LLC

NWNE OF SECTION 23, T.9S., R.94W., 6TH P.M., MESA COUNTY, CO

RIG DETAIL

SHEET
7.03

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FLYING TRIANGLE LLLP

PROPERTY LINE / SECTION LINE

SECTION 14 T.9S., R.94W.
MESA COUNTY, COLORADO

SECTION 23 T.9S., R.94W.
MESA COUNTY, COLORADO

PROPOSED EDGE
OF DISTURBANCE
(7.5 ACRES)

AQUATIC NATIVE SPECIES
CONSERVATION WATERS

WORKING PAD SURFACE

SECONDARY
CONTAINMENT
100' X 30'

CCR 0994-23-02
(EL: 7142.2)

SAND SILOS

LIGHT PLANT

COLORADO CANYON RANCH LLC

GUN BARREL, WATER,
OIL PRODUCTION TANKS

G W W O S

PUMPS

GENSET

LIGHT PLANT

FRAC PUMPING EQUIPMENT

LIGHT PLANT

FRAC TANKS

WELL HEAD
(TYP.)

CCR FED 0994-11-A3-NH1

CCR 0994-11-A7-NH1

CHEMICAL
STORAGE
(TOTES)

WIRELINE

CRANE

LIGHT PLANT

STORMWATER STORAGE

KNOCKOUT
PUMP

COMBUSTOR AND
KNOCKOUT FLARE

IA
RTU

LINE HEATERS, SEPARATOR,
FUEL, GAS SCRUBBERS, HEAT
EXCHANGERS WITH BURNERS

FRAC TANKS

FLOW BACK
EQUIPMENT

LIGHT PLANT

TOPSOIL STOCKPILE

PARCEL BOUNDARY

COLORADO CANYON RANCH LLC

7050 7060 7070 7080 7090 7100 7110 7120 7130 7140 7150 7160 7170

N

SCALE 50 0 50 100 FEET

COLORADO LICENSED
MARK JANISEK KENNEY
41215
07/22/2024
PROFESSIONAL ENGINEER

KLJ

NO.	DATE	REVISION

DRAFTED
JRH
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MJK
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CCR 0994-23-02 WELL PAD DESIGN

LARAMIE ENERGY, LLC

NWNE OF SECTION 23, T.9S., R.94W., 6TH P.M., MESA COUNTY, CO

COMPLETIONS LAYOUT

SHEET
9.01

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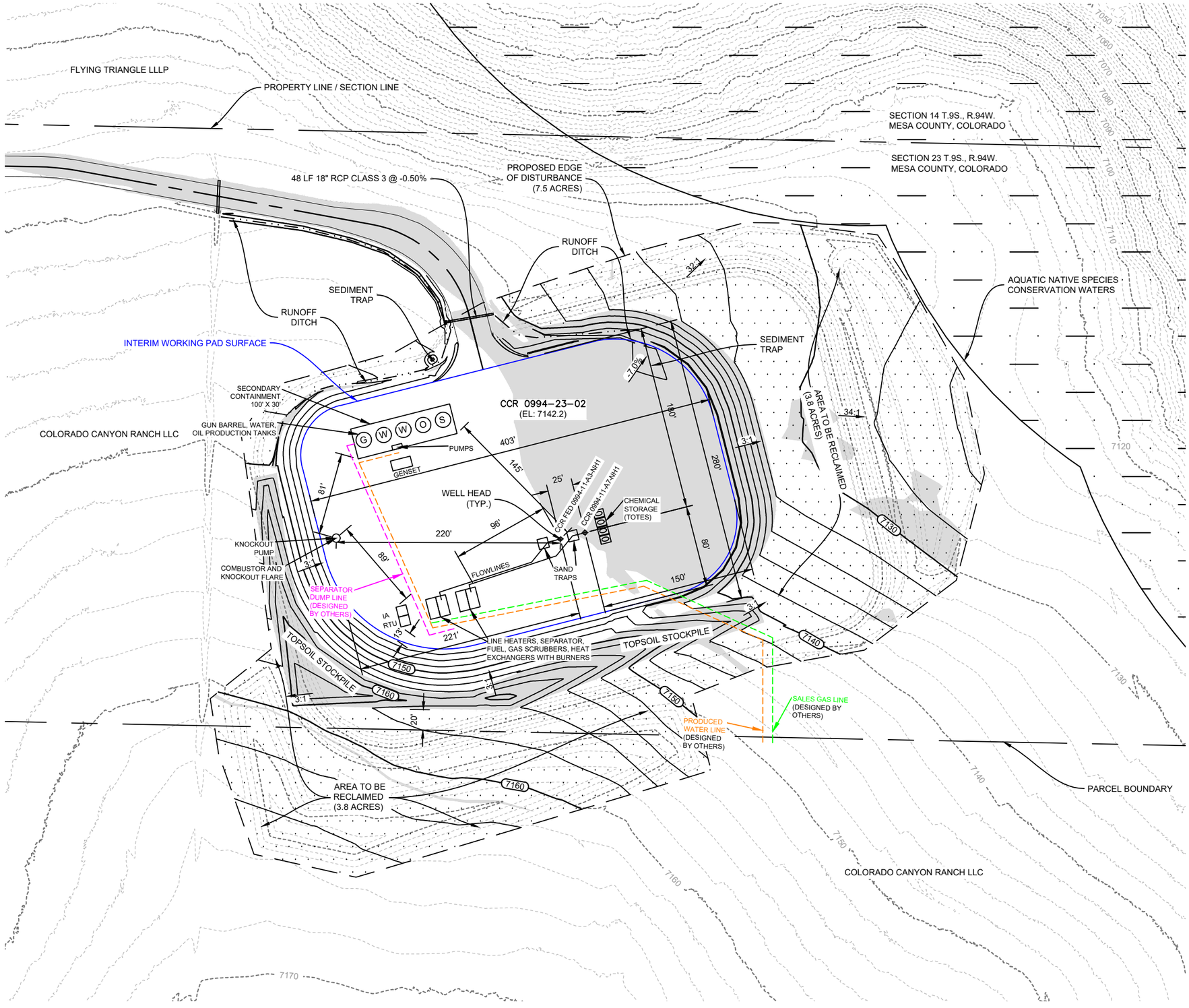

INTERIM PAD VOLUME SUMMARY
CUT FACTOR = 1.0
CUT VOLUME = 18,191 CY
FILL FACTOR = 1.0
FILL VOLUME = 17,837 CY
NET = 355 CY (CUT)

INTERIM RECLAIM AREA = 3.8 (ACRES)
ORIGINAL AREA OF DISTURBANCE = 7.5 (ACRES)
PRODUCTION PAD SURFACE = 2.2 (ACRES)

REMAINING TOPSOIL VOLUME = 1,900 CY
TOPSOIL STOCKPILE VOLUME = 1,912 CY

ROAD LENGTH (BRUSH CREEK RD TO INTERIM PAD) = 2,564 FEET
ROAD AREA OF DISTURBANCE = 1.9 ACRES
ROAD RUNNING SURFACE = 1.4 ACRES

LONG-TERM DISTURBANCE = 4.1 ACRES

NOTES
1. CONTOUR INTERVAL IS 2 FEET.
2. EXISTING TOPOGRAPHY AND FEATURE DATA WERE COLLECTED BY WASATCH SURVERYING.
3. WELL PAD DIMENSIONS AND EQUIPMENT LAYOUTS PROVIDED BY LARAMIE ENERGY, LLC.

LEGEND
- REVEGITATED AREA
- FILL

N

50 0 50 100
SCALE FEET

COLORADO LICENSED
MARC JAMISEN KENNEY
41215
07/22/2024
PROFESSIONAL ENGINEER

KLJ

NO.	DATE	REVISION

DRAFTED: JRH
REVIEWED: MJK
PROJECT NUMBER: 2307-01465.2
ISSUE DATE: 7/22/24

CCR 0994-23-02 WELL PAD DESIGN

LARAMIE ENERGY, LLC
NWNE OF SECTION 23, T.9S., R.94W., 6TH P.M., MESA COUNTY, CO

PRODUCTION LAYOUT

SHEET 9.02

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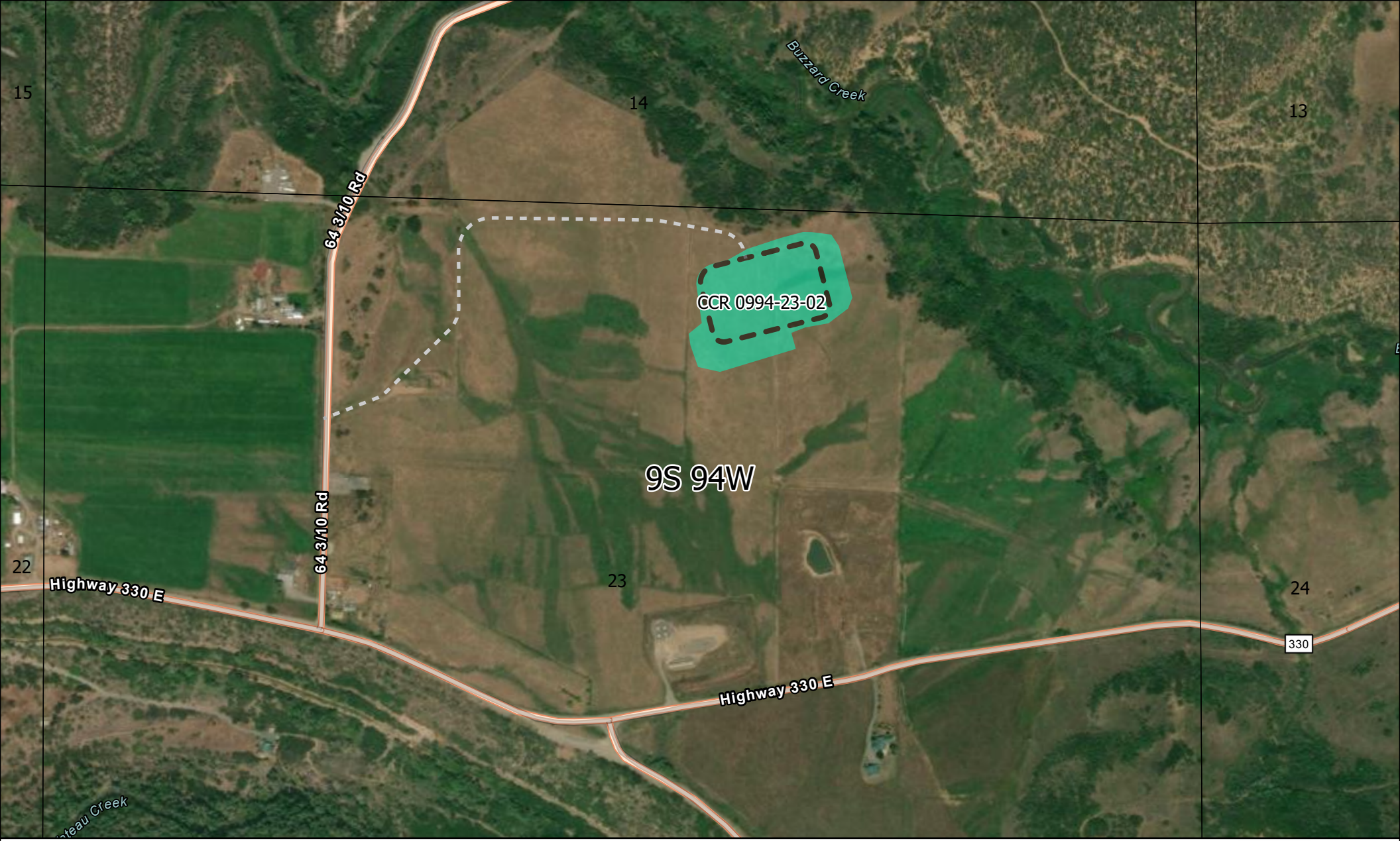


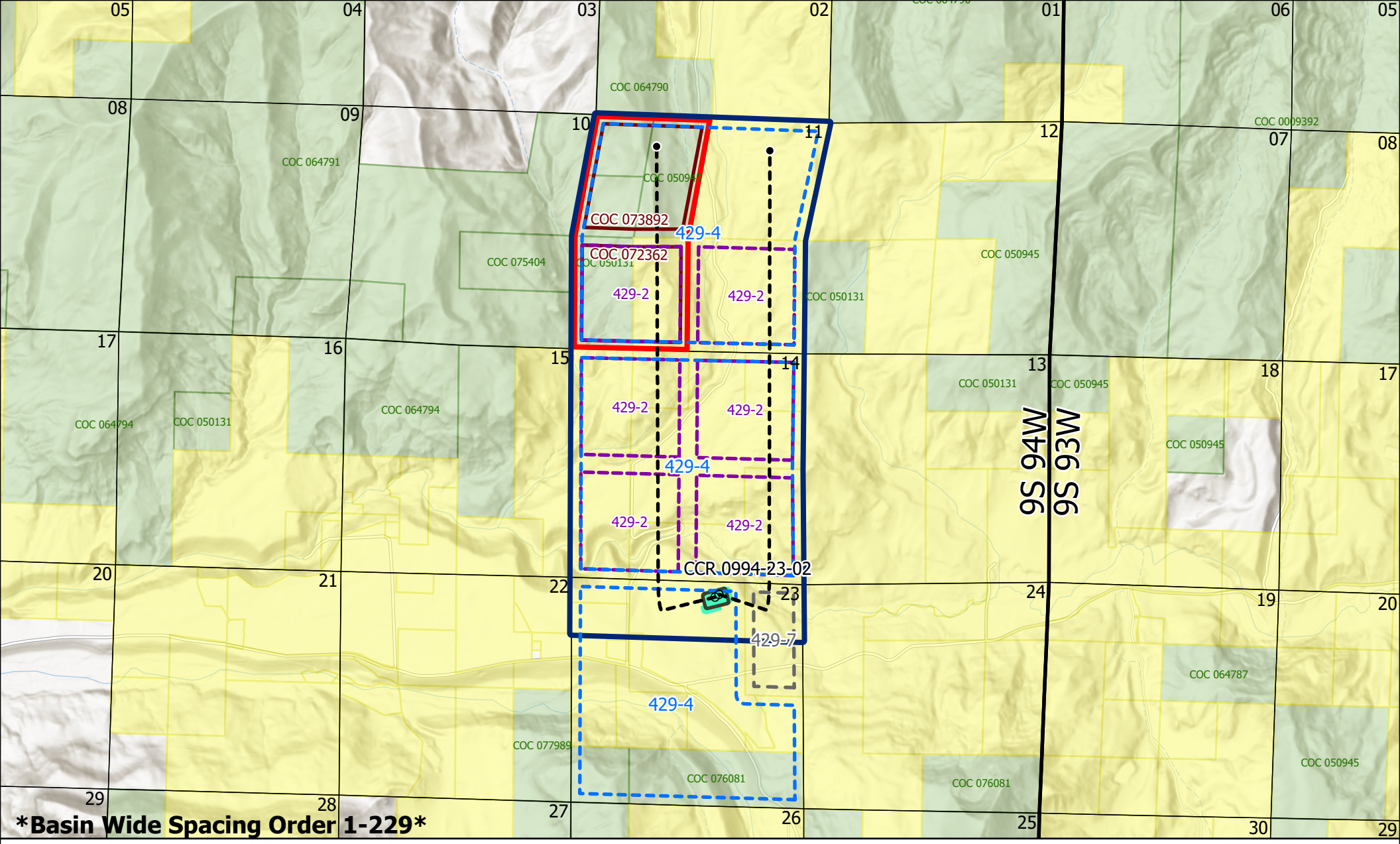
Proposed Access Road
Mesa County Roads
Working Pad Surface
Area of Disturbance

N

0 0.15 0.3 Miles

ECMC Pre-Application

CCR 0994-23-02 Pad
NWNE, SECTION 23,
T9S, R94W, 6th P.M.
MESA COUNTY, CO



CCR 23-2 SHL
CCR 23-2 BHL
CCR 23-2 Paths

ECMC Spacing
Order
429-2
429-4
429-7
BLM CA

Proposed Spacing
CA
ECMC

Pads
CCR 0994-23-02
CCR 0994-23-02 Disturbance

Laramie Leasehold
FED
FEE

N

0 0.75 1.5 Miles

ECMC Pre-Application Leasehold

CCR 0994-23-02 Pad
NWNE, SECTION 23,
T9S, R94W, 6th P.M.
MESA COUNTY, CO

Pre-Application Onsite Meeting - July 10, 2024
Proposed CCR 0994-23-02 Well Pad
Laramie Energy, LLC

NAME	AGENCY / COMPANY
Matt Lasten	Laramie
Lori Muhr	Laramie
Dwayne Knudson	Laramie
Anne Wilson	WestWater
Wayne Bankert	Laramie
Jason Gross	BLM
Wesley Toews	BLM
Devin Smith	Laramie
Kenny Sackett	Laramie
Dusty Tucker	Laramie
Rory Mortensen	Laramie
Mike Nichols	Town of Collbran
Will Harmon	KLJ Eng.
Jacob Huene	KLJ Eng.
Trey Fitzpatrick	Laramie
Austin Edge	Laramie

Pre-Application Onsite Meeting - July 10, 2024
Proposed CCR 0994-23-02 Well Pad
Laramie Energy, LLC

NAME	AGENCY / COMPANY
Chris Clark	LE
DAVE PAYNE	UTE WATER
Emily McCall	BLM
Katy Middleton	FIELDING HILL > Representing LARAMIE

Mesa County, CO
Section 23, Township 9 South, Range 94 West, 6 PM

ATTACHMENT 3

CPW Approval & Correspondence On Modification of BMP Language August 27, 2024

From: Taylor Elm - DNR
To: Katy Middleton
Cc: Lori Muhr; Danielle Neumann - DNR
Subject: Re: CCR Pad - Modification to Rule 1202.a.(10).C
Date: Tuesday, August 27, 2024 12:33:29 PM

CAUTION: This email originated from outside of the organization. Further inspection is required if the message contains attachments or links.

Hi Katy,

Thank you for reaching out on this matter. This email is sufficient for Laramie to formally request an alternative inspection frequency related to Rule 1202.a.(10).C. I have reviewed the proposed inspection language including the use of remote monitoring technologies and CPW concurs with this approach. Given the real-time monitoring of fluid levels during the production phase, CPW does not feel that daily in-person inspections are necessary. In fact, reducing well site visitations by using remote monitoring technology will help alleviate production phase disturbance associated with increased traffic. Additionally, CPW is comfortable knowing that Laramie maintains emergency spill response equipment in relatively close proximity to this location and will be able to quickly respond to any unforeseen incidents.

Please consider this email as CPW's official concurrence with the alternative inspection frequency/method of compliance for Rule 1202.a.(10).C. If there are any other questions or we can provide additional information, please let me know.

Thank you,

Taylor Elm
NW Region Energy Liaison
C 970.986.9767 | P 970.947-2971
0088 Wildlife Way
Glenwood Springs, CO 81601
taylor.elm@state.co.us | cpw.state.co.us

On Tue, Aug 27, 2024 at 9:24 AM Katy Middleton <kmiddleton@laramie-energy.com> wrote:

> Greeting Taylor,
>
> Laramie is requesting modification to best practice listed in Rule 1202.a.(10).C.. The CCR Pad is located 66 feet from Aquatic Sportfish Management Waters buffer and 578 feet from

the OHWM of Buzzard Creek. Please see attached maps.

Modification to Rule 1202.a.(10).C is shown below:

During drilling, completions, and flowback phases, the CCR Pad will have personnel onsite fulltime, and the pad will be inspected daily. During production phases, the CCR Pad will be inspected at least two to three times per week. In addition, the site will be monitored via remote telemetry. During production, tanks will be equipped with dedicated continuous monitoring through a SCADA platform at the CCR Pad for remote monitoring, alerting, and shut-in capabilities. Laramie's SCADA system, which provides real-time fluid level data, will allow for continuous monitoring of tank volumes.

Please let me know if you would like additional information or a formal letter for this request.

Thank you!

Katy Middleton | Consultant

3199 D Rd. Bldg A2

Grand Junction, CO 81504

kmiddleton@laramie-energy.com
Cell: 970.985.8240