

BEFORE THE OIL AND GAS CONSERVATION COMMISSION  
OF THE STATE OF COLORADO

IN THE MATTER OF THE APPLICATION OF CRESTONE  
PEAK RESOURCES OPERATING LLC FOR AN ORDER  
TO ESTABLISH AND ACCEPT A RULE 216  
COMPREHENSIVE DRILLING PLAN FOR PORTIONS OF  
SECTIONS 1, 2, 3, 10, 11 AND 12, TOWNSHIP 1 NORTH,  
RANGE 69 WEST, 6<sup>TH</sup> P.M. AND PORTIONS OF  
SECTIONS 25, 26, 27, 34, 35 AND 36, TOWNSHIP 2  
NORTH, RANGE 69 WEST, 6<sup>TH</sup> P.M. FOR THE  
COMPREHENSIVE DEVELOPMENT AND OPERATION  
OF THE CODELL AND NIOBRARA FORMATIONS,  
WATTENBERG FIELD, BOULDER COUNTY, COLORADO.

CAUSE NO. 1

DOCKET NO. 170500189

TYPE: GENERAL  
ADMINISTRATIVE

DIRECTOR'S FINDING OF SUITABILITY OF CRESTONE PEAK RESOURCES OPERATING  
LLC'S FINAL COMPREHENSIVE DRILLING PLAN CONTAINING ALL CONCEPTUAL,  
PRELIMINARY AND FINAL CDP PLAN ELEMENTS

Pursuant to Rule 216.d.(4), the Director submits to the Commission her Finding of Suitability of Crestone Peak Resources Operating LLC's ("Crestone") Final CDP Containing All Conceptual Preliminary and Final CDP Plan Elements, ("Final CDP"). With this Finding of Suitability, the Director has directed the Final CDP be placed on the Commission's agenda for the October 29-30, 2018 hearing. In support of this Finding, the Director states as follows:

Background

On September 29, 2017, Crestone filed its Conceptual and Preliminary Comprehensive Drilling Plan Elements with the Colorado Oil and Gas Conservation Commission ("COGCC"). ("Original Draft CDP"). Since its September 2017 filing, Crestone submitted three subsequent draft CDPs<sup>1</sup>, and its Final CDP on June 15, 2018. In developing its CDP, Crestone worked with Staff, the Colorado Department of Public Health and Environment ("CDPHE"), Colorado Parks and Wildlife ("CPW"), and other stakeholders, including Boulder County and other local governments. The Original Draft CDP, each subsequent draft CDP, and the Final CDP were made available to the public for review and comment. See Rule 216.d.(6). The Director reviewed and considered comments received from stakeholders and the public when evaluating the suitability of Crestone's CDP.

History and Purpose of CDPs

Under the Oil and Gas Conservation Act §§ 34-60-101 – 130, C.R.S. ("Act"), the Commission is the regulator of oil and gas operations in Colorado. The Commission promulgates rules that govern the application process to drill and operate oil and gas wells in the state. § 34-60-106)1)(f), C.R.S.

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<sup>1</sup> See Second Draft Preliminary Comprehensive Drilling Plan Elements, dated November 22, 2017; Third Draft Preliminary Comprehensive Drilling Plan Elements, dated December 28, 2017; and Fourth Draft Preliminary Comprehensive Drilling Plan Elements, dated March 29, 2018.

In 2007, the General Assembly adopted H.B. 07-1298. Among other things, H.B. 07-1298 required the COGGC to consult with CPW in the promulgation of rules to encourage “operators to utilize comprehensive drilling plans and geographic analysis strategies to provide orderly development of oil and gas fields.” (2007 COLO. SESS. LAWS, ch. 312, p. 1330 (H.B. 07-1298)); codified at § 34-60-106(11)(a)(I)(A), C.R.S. Following the 2007 legislation, the Commission embarked on “the most extensive rulemaking hearing in the Commission’s history.” Statement of Basis, Specific Statutory Authority, and Purpose, 2008 Rulemaking (“SBP”), at p. 5. This rulemaking effort spanned a year of public hearings and included thousands of stakeholders and parties. *Id.* at 3–6. One of the results of this year long rulemaking was Rule 216, Comprehensive Drilling Plans.

CDPs provide the Commission and operators the opportunity to consider oil and gas development in an area in a more holistic manner. As explained in the SBP accompanying the promulgation of Rule 216, CDPs provide more than just an efficient means of development for operators. CDPs “encourage landscape level planning and regulatory review....” SBP at p. 21. Such an approach to planning will “help to better address cumulative effects, promote [efficiency], and facilitate more win-win situations.” *Id.*

The regulatory review process of a CDP follows that of a Form 2A, Oil and Gas Location Assessment (“Form 2A”). See Rule 216.c. The CDP process allows for the “‘bundling’ of Form 2A requirements, presented in Rule 303.” SBP at p. 20. See *also* Rule 216.f.(1), (“... the Comprehensive Drilling Plan [will be] subject to procedures substantially equivalent to those required for a Form 2A...”). If a CDP satisfies all of the Rule 303.b. requirements, then the operator is not required to submit a Form 2A. Rule 216.f.(1). However, as the Commission has explained, a CDP is not a “shield” for operators to use to avoid the 2A process or public notice and public comment. SBP at p. 21. If a CDP does not substantially meet the Rule 303.b. 2A requirements, “then a Form 2A shall be required for a proposed oil and gas location included in the Comprehensive Drilling Plan.” Rule 216.f.(2).

When Staff determines that operators must submit a Form 2A, their review of a proposed CDP follows that of a Form 2A. A CDP may be found suitable even if all of the 2A requirements are not satisfied with the filing of the CDP. This does not exempt an operator from complying with the Form 2A requirements nor does it relieve the Director from her administrative role in the review and approval of Form 2As subject to the CDP. The operator will have to comply with all of Rule 303.b. at the time it submits its Form 2A for a CDP. Similarly, a finding of suitability will not exempt an operator from having to comply with the Commission’s regulatory process for applications for permits-to-drill (“APDs” or “Form 2s”), and applications to establish drilling and spacing units. Form 2s and drilling and spacing unit applications must be submitted by an operator for a CDP after the CDP is accepted by the Commission. The reason for this is that CDPs do not meet the administrative requirements of the Form 2, Form 2A, or drilling and spacing unit applications. Moreover, the information provided in a CDP does not satisfy the COGCC’s data management requirements. Accordingly, CDP operators must still submit Form 2, Form 2A, and drilling and spacing unit applications for CDP lands, though the Commission can alter requirements in its CDP acceptance based upon sufficient information being submitted with the CDP

A CDP can only be accepted by the Commission after a hearing. See Rule 216.d.(4); see *also* § 34-60-106(6) (“The commission has the authority, as it deems necessary and convenient, to conduct any hearings or to make any determinations it is otherwise empowered to conduct...”). And a CDP will not be placed on the Commission’s agenda for hearing unless the Director “considers [the CDP] suitable after consultation with the [CDPHE] and the [CPW], as applicable,

and consideration of any other comments.” *Id.* Moreover, the local government or governments affected by the proposed CDP are invited to be part of the development of the CDP before the Director considers whether the CDP is suitable and before the CDP is placed on the Commission’s agenda for hearing. Rule 216.d.(2). While Staff takes into consideration local government and other stakeholder comment, Staff must still conduct its review and analysis of a CDP in accordance with its Rules, which may result in a local government’s comments not being determinative in the Director’s finding of suitability of a CDP.

If the Commission accepts Crestone’s proposed development activities in the below described lands (the “CDP Area”), and accepts Crestone’s Final CDP, Crestone still must submit applications to the Commission for approval of all drilling and spacing units, Form 2s, and Form 2As. In the course of reviewing these applications the Commission will, as it does for all applications, determine whether they satisfy the Act and Commission Rules. And as with all applications before the Commission, the public will have the opportunity to provide public comment. As the Commission considers the Final CDP, it will be asked to consider and approve Crestone’s proposed development activities in the CDP Area. Not before the Commission are site-specific technical aspects of future Form 2s, 2As or drilling and spacing unit applications, such as siting of oil and gas facilities on a pad.

#### Crestone’s Proposed CDP and the Stakeholder Process

The CDP is a 10-square mile area located in Boulder County. The Final CDP contains the following lands:

##### Township 1 North, Range 69 West, 6<sup>th</sup> P.M.

Sections 1:	All
Section 2:	All
Section 3:	E½
Section 10:	E½
Section 11:	All
Section 12:	All

##### Township 2 North, Range 69 West, 6<sup>th</sup> P.M.

Section 25:	All
Section 26:	All
Section 27:	E½
Section 34:	E½
Section 35:	All
Section 36:	All

A majority of the CDP surface lands are either directly owned by Boulder County or are covered by conservation easements held by Boulder County. The remaining lands are privately owned. Boulder Creek and Coal Creek, both perennial streams, cross the CDP boundary. Irrigation ditches, reservoirs and small man-made ponds are present across the CDP Area. Wetlands are present in the CDP Area as are several riparian habitats including Great Blue Heron rookeries, Bald Eagle nests and winter roosts, Swainson’s hawk nests, and Burrowing Owl potential nesting habitat.

Crestone’s Final CDP proposes the following development:

- Three oil and gas locations that will have a combined total of five well pads
- Preferred site locations are in Sections 1, 3 and 35
- An alternative to locating the well pad on Section 1 is Section 36
- Each well pad will have up to 28 wells, with a combined total maximum of 140 wells to develop in the CDP
- Each of the oil and gas locations is proposed to be developed along Highway 52
- The CDP Area will be tankless. Crestone will utilize a pipeline to carry all produced liquids to a central processing facility.

As detailed below, the development proposed in the Final CDP has evolved considerably from the First Draft CDP. This evolution resulted from stakeholder comment and active and thoughtful conversation among Staff, Crestone, CDPHE, CPW, Boulder County, the Town of Erie, citizens and other stakeholders. Notably, several stakeholders believe that more information from Crestone should be required before the CDP is brought before the Commission for consideration. However, Staff, in accordance with Rule 216, has identified the information that is required for consideration of a CDP. Staff is satisfied that Crestone has provided the information required by Rule 216 to consider and determine whether the CDP is suitable. Staff understands that Boulder County and other governmental agencies will have regulatory requirements that carry their own set of information requirements that Crestone will have to satisfy as they proceed to develop the CDP. For purposes of the Commission's regulatory regime, the Final CDP meets the Rule 216 informational requirements. And while not all stakeholders are in agreement on whether the Final CDP should be advanced to the Commission for consideration, Staff finds that the Final CDP does positively address stakeholders' major concerns with the Original Draft CDP.

Crestone's Original Draft CDP proposed the development of six well pads and a total of 180 wells in the CDP Area. Original Draft CDP at p. 6. In the Original Draft CDP, Crestone committed that each of the six well pads would be tankless, with a pipeline carrying all produced liquids from the wells to Crestone's Liquid Gathering Hub in Weld County (the "Hub"). *Id.*

Stakeholders, including Boulder County, the Town of Erie and the CDPHE, raised concerns over the number of well pads proposed in the Original Draft CDP, and the proximity of the well pads to residential areas. Stakeholders and citizens urged Crestone to evaluate the Highway 52 corridor for all well site locations. Taking into consideration stakeholder and public comment, Crestone redesigned its CDP. Specifically, in its Third Draft CDP Crestone proposed a reduction in the number of well pads from six to five; further reduced the number of wells from 180 to 140; and located all well pads along Highway 52. Third Draft Preliminary CDP at p.7.

To accomplish this relocation of well pads, Crestone proposed surface development in Sections 1, 2, and 3 of the CDP Area (CPR Unit 35H-P269), excluded mineral acreage from the west halves of Sections 27, 34, 3, and 10, and eliminated proposed well pads in Sections 11, 25, 26 and 35. *Id.* The proposed Section 1 well pad is located in an environmentally sensitive area. The Section 1 pad is within an officially declared 100-year floodplain and in proximity to Great Blue Heron rookeries. Notably, the proposed Section 1 well pad is not in a Designated Setback Location.

Stakeholder and public comment to the Third Draft CDP continued to be robust. Comments submitted by Boulder County expressed its continued concern that a portion of the CDP lands are within a floodplain, and pending before the Colorado Water Conservation Board is a request that the same portion of the floodplain be designated a floodway. Boulder County's Comments

to Third Draft CDP at p. 3. The floodway designation included the entire proposed oil and gas location in Section 1. In its comments, CDPHE supported Crestone relocating all well sites to the Highway 52 corridor. However, CDPHE noted its concern that “some of the new proposed locations are in close proximity to residents.” CDPHE 3<sup>rd</sup> Preliminary Draft CDP Comments, dated January 24, 2018.

Taking into consideration stakeholder comments, Crestone proposes in its Final CDP an alternative to the Section 1 well pad. The alternative well pad proposed is located in Section 36 and does not lie within the floodplain or the to-be-designated floodway. The Section 36 alternative falls within a Designated Setback Location, and is proximate to an active Bald Eagle nest that is northeast of the proposed location. Section 1 remains Crestone’s preferred location in its Final CDP; however, in light of Boulder County’s objections Crestone has proposed for the Commission’s consideration development in Section 36. Final CDP at p. 6.

Stakeholders had the opportunity to provide comment to the Final CDP. CPW specifically requested that efforts be made to avoid locating a well pad in Section 1. CPW Comments at #1 dated July 5, 2018. CPW is concerned that a 100-year flood event could occur during the life-cycle of a well pad in Section 1. *Id.* If a 100-year flood event occurred, CPW fears that aquatic life downstream would be threatened from a discharge of hydrocarbons from the Section 1 wells. *Id.* CPW notes that Crestone’s proposed alternative Section 36 site is not “ideal” because of the location of a visible and active bald eagle nest in the Section. *Id.* at #2. However, if the Commission were to approve a well pad site in Section 36, CPW requests that a minimum 30-foot tall sound wall be installed, and that Crestone consult with CPW on the proposed construction schedule. *Id.*

CDPHE does not support Crestone’s alternative Section 36 location because it is closer to residents and falls within a Designated Setback Location. CDPHE Final CDP Comments dated June 21, 2018. CDPHE “believes public health will be better protected at the location in Section 1 of Township 1 North Range 69 West.” *Id.*

Finally, the City of Boulder and Boulder County do not support the location of a well pad on Section 1. The City of Boulder is concerned that should Crestone not install a pipeline and instead utilize tank batteries, tanks in the Section 1 floodplain or anticipated floodway could pose a threat to the City’s public water supply in the event of a flood event. City of Boulder’s Comments to Final Draft Preliminary CDP at p. 5. The City of Boulder does not provide any comment on Crestone’s proposed alternative Section 36, stating that “more analysis by the City, COGCC, and all interested parties is needed” before it can comment. *Id.*

Boulder County opposes locating oil and gas production in Section 1 due to the floodplain and proposal for designation of a floodway. Boulder County does not oppose the Section 36 alternative, but believes that it “should not be approved without significant analysis,” which it believes is lacking in the Final CDP. Boulder County’s Comments to Fifth Draft CDP at p.5.

#### Staff’s Analysis

Once a proposed CDP is received, Staff works with the operator to “review the proposal, identify information needs, discuss operations and potential impacts, and *establish measures to minimize* adverse impacts resulting from oil and gas development activities covered by the Plan.” Rule 216.d.(3). (emphasis added). Since Crestone submitted its Original CDP, Staff has worked with Crestone, while taking into consideration stakeholder comments and concerns, to determine whether the CDP satisfies Rule 216. Below is Staff’s analysis of the Final CDP.

## Introduction

COGCC Staff has reviewed Crestone Peak's Final CDP for lands in Boulder County and has determined the CDP complies with Rule 216. The CDP satisfies the Purpose specified in 216.a, the Scope specified in 216.b, and includes the information requirements in Rule 216.c. By its analysis, Staff considers the CDP to be suitable and recommends that it be placed on the Commission's hearing agenda. The Final CDP is the result of extensive comprehensive planning that involved COGCC, public, local government, CDPHE and CPW.

## CDP Phases and Comment Review

In March, 2017, Crestone contacted then COGCC Director Lepore to initiate discussions regarding the timing, requirements, and process for a Rule 216 CDP. In preparation for the first stakeholder meeting, COGCC Staff developed a list of CDP plan elements and prepared a timeline for the CDP. The plan elements consisted of three anticipated phases of deliverables: Conceptual, Preliminary and Final through which the requirements of Rule 216 would be met and details of the CDP would be solidified. The initial proposed timeline reflected an aggressive timetable with three distinct deliverables followed by a recommendation from the Director to the Commission for acceptance at the March 2018 Hearing. The Final CDP is a result of four prior drafts, acceptance of comment and input from numerous stakeholders, and feedback and revisions to Crestone's CDP. Throughout the process, COGCC has revised and updated the timeline and maintained the most current version of the CDP and timelines on the website with announcements posted on the homepage for changes.

In the seventeen months since Crestone initially contacted COGCC regarding plans to develop mineral acreage in eastern Boulder County through a CDP, COGCC Director(s) and Staff have:

- attended numerous meetings with the operator, local governments, CDPHE, and CPW;
- reviewed approximately 1,700 individual comments received through 75 days of open public comment;
- listened to or attended five town hall or telephonic town hall meetings;
- visited the proposed oil and gas locations with Crestone, Boulder County, and CDPHE; and
- carefully considered all the documents submitted by Crestone and the comments made by stakeholders to the draft and Final CDP documents.

The following paragraphs summarize the sequential submittals made by Crestone and briefly describes the feedback received.

The initial "conceptual and preliminary" submittal (Original Draft CDP), which was submitted to COGCC September 29, 2017, and published to the COGCC Special Projects webpage October 13, 2017 following COGCC's initial completeness review, included all required conceptual plan elements for the CDP. The Original Draft CDP proposed six Oil and Gas Locations in the 12 Section (square mile) CDP Area. The spacing between locations, siting and well counts were similar to the nearby oil and gas development in Weld County. The CDP locations were proposed to be "tankless" with oil, gas and water pipeline connections to a remote central processing facility (a.k.a. "The Hub") located outside the CDP Area in Weld County.

Crestone developed its initial location selection by applying buffers to various cultural and environmental features within the CDP Area—e.g. 200' from roads, 1,000' from houses—and

then sought out surface land to which they could verify a right of access for oil and gas operations. This method of siting is common for oil and gas operators to use when planning their development. The result sited two proposed oil and gas locations along the northern edge of the CDP Area, three oil and gas locations near Highway 52 at the center of the CDP area, and one oil and gas location in Section 11 at the southern edge of the CDP Area. A network of proposed and existing roads and proposed pipelines tied these scattered proposed locations together.

The COGCC developed and made available to the public a comment portal for the CDP on the COGCC website. 130 public comments were submitted for the Original Draft CDP. The dominant specific concern raised was the proximity of the location proposed in Section 11, Township 1 North, Range 69 West to the Kenosha Farms neighborhood. The Town of Erie comments also expressed similar concerns in their comment. Many public commenters and the Town of Erie advocated moving the locations closer to Highway 52, which is a corridor already heavily used by commercial traffic. Other commenters raised specific concerns regarding the locations proposed in Section 25 and Section 26, Township 2 North, Range 69 West and the impact on Oxford Road and nearby neighborhoods. Two-thirds of the Original Draft CDP comments had specific concerns regarding increased truck traffic and road damage. In addition to public comments made directly to the COGCC, Crestone held a town hall style meeting in which the CDP was introduced to residents within one-half mile of the proposed oil and gas locations.

The November 27, 2017 Second Draft Preliminary CDP had the same proposed locations as the Original Draft CDP. Crestone explicitly stated in their Second Draft that they were “conducting an in-depth review and analysis of the potential oil and gas locations” to determine the feasibility of locating all well sites along or adjacent to Highway 52. Thirty public comments were submitted for the Second Draft. There were increases in specific comments regarding the use of County open space, eagle nests, and the short timeframe between the Original Draft CDP and Second Draft submittals.

In the December 28, 2017, Third Draft Preliminary CDP, Crestone consolidated from six to three proposed locations all south of and adjacent to Highway 52. The size of CDP area was reduced from 12 to 10 square miles and the well count was reduced from 180 to 140. All locations were on Boulder County Open Space property where Crestone has active leaseholds (as evidenced by current producing wells). All wells at the three proposed locations were sited within COGCC Rule 318A Greater Wattenberg Area (GWA) drilling windows, to ensure that the locations were legal whether or not a surface use agreement was successfully negotiated with Boulder County. The Section 2 location was in a Buffer Zone. The Section 1 location was partially in the designated floodway and entirely within designated floodplain. The newly proposed alignment of oil and gas locations simplified the pipeline and access road network and reduced potential conflicts with residential development at the northern and southern ends of the CDP Area. It consolidated the necessary truck traffic along Highway 52, which is already subject to heavy commercial vehicle traffic.

The public submitted 990 comments for the Third Draft CDP. Only 11% of the comments made specific references to the proposed locations, compared to 34% and 39% of comments in the First and Second Drafts, respectively. The primary specific concern in the comments was the proximity of the Section 2, Township 1 North, Range 69 West location to residences. The majority of the comments received on the Third Draft CDP expressed general dissatisfaction with oil and gas development on open space, in Boulder County, and in general. Many comments also expressed various health and safety concerns and cited several journal articles.

As a result of the significant changes from the first two draft CDPs to the Third Draft CDP, Crestone and COGCC agreed that additional time was needed for Staff and the public to consider the changes. Accordingly, the timeline was extended to allow for additional public outreach and comment opportunities, and the final CDP submittal deadline and hearing were extended.

In the March 29, 2018, Fourth Draft Preliminary CDP, Crestone relocated the Section 2 location north of Highway 52 in Section 35, Township 2 North, Range 69 West on private (fee) surface. The Section 1 wells were moved west out of the Rule 318A GWA window to be out of the currently designated floodway. However, the proposed Section 1 location was still in the designated floodplain and a portion of the site (in the area subject to interim reclamation) encroached on the floodway. Because the wells were moved out of a 318A GWA window, a Rule 502.b variance is required if a Surface Use Agreement cannot be secured for Section 1.

There were 199 comments submitted for the Fourth Draft CDP via COGCC's comment portal. The majority of the comments expressed a general opposition to oil and gas development and fracking in Boulder County and on Boulder County open space. General health and safety, nuisance (dust, lights, noise, odors), and traffic concerns were also expressed in comments. The floodplain in Section 1 was specifically addressed in fewer than 10 comments.

In the June 30, 2018, Final CDP, Crestone provided both the previously proposed location in Section 1 and an alternate location in Section 36 Township 2 North, Range 69 West. The Section 36 alternate location is not in the floodplain, is on private surface, is in a Buffer Zone, and is between  $\frac{1}{4}$  and  $\frac{1}{2}$  mile from an active Bald Eagle nest (although the nest is not included in the Restricted Surface Occupancy or Sensitive Wildlife Habitat maps included in Appendix VII or VII to the COGCC Rules, respectively).

There were 375 public comments submitted for the Final CDP. The majority of comments expressed concerns regarding oil and gas development in general and especially on Boulder County Open Space. There were a few specific comments that expressed concerns about the locations in Section 36 and Section 35 being so close to each other and the proximity of the Bald Eagle nest. There were also comments concerning the floodplain and potential development in Section 1.

### **Staff Analysis**

During the development of Crestone's CDP, COGCC Staff made clear that although the plan would identify the proposed Oil and Gas Locations, the acceptance of the CDP would not satisfy the requirements of individual Form 2A Oil and Gas Location Assessments or Form 2 Applications for Permit to Drill. As such, COGCC Staff did not conduct a technical review in the same manner as would be done for Form 2 or Form 2 applications where site-specific analyses of specific potential impacts to specific receptors are addressed through mitigation measures. That granular level of review by Staff will be conducted when those applications are submitted to the COGCC. Instead, at this stage, Staff focused on avoidance. The goals for COGCC's review was to determine the "suitability" of the proposed CDP for "acceptance" by the Commission. Factors used to determine the suitability included an analysis of the plan elements to meet the specific recommendations contained within Rule 216 and a determination that the process was sufficiently robust to accommodate the numerous inputs found within the CDP Area.



As described, Crestone considered input from many sources as they developed their Final CDP. Each draft included direct outreach through telephone town halls, public comment, Staff review, and agency comments submitted by CDPHE, CPW, Boulder County, and municipal governments. The Final CDP incorporates the feedback received and solidifies much of the conceptual and preliminary information described in earlier drafts. Some changes along the way were major and as a result, the overall timeline was lengthened more than once, and additional drafts were created in the process. Some siting influences are outside of Crestone's control and outside of COGCC's control, such as the pending floodway designation in Section 1. However, the operator can address other siting influences, such as the availability of land north of Highway 52 through an agreement with a third party operator.

In conducting its review of the Final CDP, COGCC Staff also relied on prior draft versions and the morphology from the Original Draft CDP to the Final CDP with its proposed and alternative locations. In its review and analysis of the Final CDP, COGCC Staff also considered the same public comments and agency feedback that Crestone considered in revising its CDP. Further, COGCC evaluated Rule 216 itself, including the Statement of Basis and Purpose, drafted when Rule 216 was adopted. The COGCC does not consider a CDP to be a document that can or will eliminate all conflicts, or assuage all opposition to oil and gas development. However, the application of Rule 216 provides a forum for specific issues to be brought forward, evaluated, and addressed, and for potential conflicts to be identified in advance of oil and gas operations, such that those issues and conflicts can be reduced when drilling commences. The CDP process successfully identified potential issues and the Final CDP proposes effective ways of addressing and mitigating those issues.

For example, the potential conflicts with residents of certain neighborhoods were avoided by moving the locations to the Highway 52 corridor. Additionally, the conflict surrounding the floodplain in Section 1 and the potential expansion of the floodway designation necessitated the inclusion of an alternative site in Section 36. These two examples demonstrate the flexibility of the CDP process in planning for efficient development of the mineral resources.

Crestone's initial proposed six locations were viable and legal locations. Based on the feedback received, it was clear that location selection could be improved. The three proposed oil and gas locations and one alternate identified in the Final CDP do not eliminate all potential conflicts, but they do satisfy the vast majority of the site-specific comments that COGCC received in opposition to the outlying pads. The information submitted provides enough detail for Staff to evaluate the potential impacts to sensitive receptors from the proposed oil and gas locations, without going through the complete review and analysis of Form 2A (Oil and Gas Location Assessment) information or processes.

For example, when considering the proposed alternate location in Section 36, Staff is able work with our partners at CPW to evaluate the potential for oil and gas activity to impact the Bald Eagle nest, the potential to mitigate those impacts, and compare those potential impacts to potential impacts which may be incurred from the Section 1 pad location. COGCC Staff does not have to establish exact mitigation protocols for either location in the CDP process, but is able to confirm that mitigation is possible and can be defined during the Form 2A process. Additionally, COGCC does not weigh individual potential impacts against one another (i.e. potential impacts to human populations vs. potential impacts to wildlife), but evaluates the potential for impacts and the potential for avoidance or minimization of those impacts or mitigation where those impacts can't be avoided or minimized.

The Final Draft CDP includes two alternate locations for the eastern portion of the CDP.

Crestone will construct only one of the potential locations, either in Section 1, Township 1 North, Range 69 West or in Section 36, Township 2 North, Range 69 West. Staff determined that permits for either location could be comply with COGCC Rules. However, each location has unique issues that were considered in Staff's analysis.

The primary challenge of siting the Oil and Gas Location in Section 1, which is Crestone's preferred location, is the current floodway and floodplain designations and proposed expanded floodway designation. In order to minimize encroachment into the currently mapped floodplain and floodway, Crestone has proposed—with COGCC Staff support—to site the wells and production facilities outside the Rule 318A GWA window; doing so will require a Rule 502.b. variance if a Surface Use Agreement is not secured. Boulder County has requested the adoption of a new flood model which would effectively change the entire designated floodplain where the location is proposed into a designated floodway. This change would affect development restrictions as administered by Boulder County. COGCC rules allow for development of oil and gas locations within a floodplain, but local jurisdictions administer a floodway. Based on discussions with Crestone and with the Colorado Water Conservation Board, COGCC Staff concluded that the siting of the proposed oil and gas location within the currently designated floodplain could be mitigated to prevent impacts in the event of a flood (as provided for in Rule 603.h.) and that the site could be engineered and built to achieve "no rise" in the floodway (either as currently mapped or proposed under the new model).

Although the proposed Section 1 location is not in a Buffer Zone, residential Building Units are just over 1,000 feet from a planned well or production facility. COGCC rules provide for this proximity of development and existing technology allow for the minimization of potential impacts to nearby residents. Therefore, from COGCC's perspective this location is viable, has an existing access point off Highway 52, has an existing access road, and can be designed and operated in a manner that is protective of public health, safety, welfare, and the environment, including wildlife resources.

The primary challenges of siting the Oil and Gas Location in Section 36 include a Bald Eagle nest that is less than ½ mile away and commercial Building Units that are less than 1,000 feet from a from a well or production facility. COGCC's rules address locations in these settings and Staff often works with operators to apply site-specific BMPs to mitigate the potential impact of the oil and gas operations. Timing restrictions can avoid and minimize potential impacts to the Bald Eagle nest; sound walls and location design can further reduce disturbance. "Highline" powered electric drilling rigs and quiet frac fleet technology can reduce noise impacts to nearby residents, and the tankless facility design ensures that emissions from production equipment are reduced as much as possible. This proposed location allows the wells to be situated in a GWA drilling window, an existing access point off Highway 52 can be utilized, and the potential impacts to wildlife and the nearest residents can be minimized and mitigated.

In its June 21, 2018 comment letter to the Final CDP, CDPHE states that it does not support the alternate location in Section 36, compared to the Section 1 location, because the Section 36 location "is closer to residents and falls within a designated setback location." CDPHE also believes public health will be better protected at the location in Section 1."

COGCC Staff agrees that as mapped, the Section 36 location would be in a Designated Setback Location. However, this is due to the commercial Building Units that are south of Highway 52. A residential Building Unit within a tree farm may also be within 1,000 feet of a planned well or production facility (a survey would be necessary to confirm this). The Section 1 location is not in a Designated Setback Location, however; wells and production facilities will be

less than 1,100 feet from a residential Building Unit.

Regardless of which location is permitted and constructed, mitigation measures will be applied that are protective of public health and safety. Although the Section 36 location would be in Designated Setback Location, COGCC will require similar measures to be implemented at both potential locations due to their relative similar proximity to residences.

Based on the distances to wells and production facilities Building Units and the nature of the Building Units, there isn't an apparent material difference between the Section 1 and the Section 36 locations regarding impacts to public health.

### **Staff's Recommendation**

Based on Staff's review of the process and content of the Final CDP, the Commission should accept this CDP for development of the mineral resources in the CDP Area.

Staff recommends that the Commission order Crestone to submit Form 2A (Oil and Gas Location Assessments) for each selected location as provided in Rule 303.b. and Form 2 (Applications for Permit to Drill) for each well to be drilled. The CDP does not contain information substantively equivalent to the information that would be required on individual Form 2A for the proposed locations. Further, administrative needs of the COGCC require that the operator complete the Form 2A to populate publicly available database information and provide a complete "well file" as an information repository.

The Commission should further order Staff to work with Crestone through the processes outlined in COGCC Rules to develop site-specific Best Management Practices and Conditions of Approval to clarify how Rules will be implemented and how impacts will be minimized and mitigated and to provide details of how general compliance will be achieved. Site-specific issues to be addressed may include: specific wildlife and wildlife habitat concerns; nuisance concerns such as noise, lights, odors, and dust; sensitive environments and floodplains; access road and traffic issues; and site-specific 502.b. variance requests.

Staff recommends that the Commission order Crestone to complete development within the CDP Area utilizing the "tankless" design as proposed. Staff recognizes Crestone's intent to construct "tankless" facilities and pipelines for fluid transport to a central gathering facility. Staff is aware that Crestone has indicated in a community meeting and in the Final Draft CDP that it reserves the right to modify its position regarding pipeline installation if "unforeseen circumstances occur". Staff considers the "tankless" facilities and pipelines a crucial and necessary component to the planned development. Deviation from those plans would be a significant change that alters the comprehensive nature of the CDP.

Staff recommends that the proposed eastern drilling and spacing unit be developed from the proposed alternative location in Section 36, Township 2 North, Range 69 West. Site-specific potential impacts will be addressed during the Form 2A process for this location. Staff recommends that if Crestone cannot complete development from Section 36, that it file with the Commission an addendum to the Final CDP that provides a report documenting all efforts made to utilize the location and why development was not achievable. Such addendum and report must be filed prior to the filing of a Form 2A for Section 1.

## Staff's Response to Additional Comments Received

In addition to the comments described above, below is a summary of and response to other public comments received.

The CDP should be delayed to consider all of the feasible sites in the CDP.

Commission Rules do not require that all feasible sites within a CDP be considered. The Rules provide that an operator will submit to the Commission the operator's plan for "reasonably foreseeable oil and gas activities in a specified geographic area within a geologic basin." Rule 216.d.(1). Further, it is the operator who may customize the scope of the CDP "to address specific issues in particular areas," and the information included in the CDP "shall be decided upon by the operator..." Rules 216.a. and 216.c.

As noted above, numerous potential sites were considered during the initial phases of the CDP. Sections 1, 2, 35 and 36 were proposed by Crestone after copious public and local government comments were received regarding the initial sites. Crestone has no regulatory requirement to consider "all feasible sites" within the proposed CDP for development.

The Section 1 proposed site should be abandoned since it is partially located within an area proposed to be designated a floodway.

The proposed Section 1 pad is located within an officially declared 100 year floodplain and a small portion of the well pad perimeter (subject to interim reclamation) encroaches on the currently mapped floodway administered by Boulder County. Boulder County is in the process of requesting that the Colorado Water Conservation Board designate a portion of the floodplain as a floodway by the adoption of a new model of the river dynamics undertaken after the flood events of September 2013. As Boulder County noted in its public comments, a floodway is defined as a "channel of a river... and the adjacent land areas that must be reserved in order to discharge the base flood." 44 C.F.R. § 59.1. Notably all of the proposed Section 1 wells and associated production facilities are located within the area proposed to be designated a floodway. The proposed Section 1 wells and associated production facilities, are to be located within the currently mapped floodplain.

The Director recognizes and considered Boulder County's concern about locating oil and gas operations within a designated floodplain and near the area proposed to be a designated floodway. In September 2013, the Front Range experienced historic floods. An estimated 2,650 oil and gas facilities were located in the path of the flood. See "Lessons Learned" In The Front Range Flood of September 2013, March 14, 2014, p. 3. A majority of the wells located within the path of the 2013 flood were remotely shut-in by operators, which prevented those wells from releasing hydrocarbons. While oil, condensate, and produced water were released at some locations because of the flood, these releases were from above ground tank batteries, and other production equipment that were hit by debris or upset by flood waters. *Id.* at p. 5. These releases were not from shut-in wells.

After the 2013 flood, the COGCC conducted a survey of how many wells in Colorado were located within 500 feet of a drainage. That survey found that 20,850 oil and gas wells lie within 500 feet of a drainage. "Lessons Learned" p. 3. The survey further found that more than 5,900 wells lie within 500 feet of a Colorado river, stream or other waterway. *Id.*

As a result of the "Lessons Learned" from the 2013 flood, the Commission conducted a

rulemaking to revise the 600 Series Rules to improve floodplain protection from oil and gas operations. One of the many amendments to the 600 Series included the requirement that all new wells within a floodplain be equipped with remote shut-in capabilities. Rule 603.h.(1)B. The Commission also required that all new wells have secondary containment areas around tanks, and that containment berms meet heightened construction standards. See Rules 603.h.(1)C and 603.h.(2)C.

While there can be no guarantee that a major flood event will not impact oil and gas operations, the scope and depth of Rule 603 ensures that all necessary and available precautions will have been taken to prevent a spill from the proposed Section 1 wells during a flood. Additionally, the CDP will be served by a pipeline. Once initial flowback is completed, all liquids produced from the wells will be transported by pipeline to Crestone's centralized gathering facility, the Hub. Use of a pipeline, rather than permanent on-site storage tanks, coupled with remote shut-in technology significantly reduces the threat of a spill from Section 1 wells during a flood.

#### Crestone has failed to demonstrate a right to extract the minerals within the CDP.

Boulder County argues that Crestone "likely does not have the contractual right" to pursue development of the minerals in the CDP Area. Boulder County's Comments to Fifth Draft Preliminary Comprehensive Drilling Plan Elements, p. 3. Boulder cites to no Commission Rule that requires a CDP operator to provide with its CDP proposal proof of leasehold rights. Staff requested Crestone identify its mineral ownership percentage within the CDP area. Crestone has provided Staff with that information, noting that it owns 65.50% of the minerals in DSU #1, 71.10% of the minerals in DSU #2, and 77.95% of the minerals in DSU #3. Crestone has satisfied Staff's request for confirmation of the percentage mineral ownership it holds within the CDP. Staff has reviewed and confirmed that Crestone's production records are current for their operated 75 out of 75 active wells in the CDP Area. Additionally, Crestone is current on its quarterly mill levy payments.

#### Director's Finding of Suitability

The Director finds that Crestone's CDP is suitable for consideration and acceptance by the Commission. In making this finding the Director consulted with the CDPHE, CPW, Boulder County and other interested stakeholders, and considered public comment. The Director's determination that the Final CDP is "suitable" for Commission consideration occurred only after a thorough review of the CDP for compliance with Commission Rules, including Rule 303.b.; and consultation with the CDPHE and CPW and consideration of what information is necessary to the CDP and what information would be provided in the Form 2 and Form 2As, and applications to establish drilling and spacing units. In considering whether a CDP is suitable, Rule 216 calls on the Director to take into consideration whether the operator has satisfied the information requirements set forth in Rule 216.c, and whether the CDP meets the purpose of Rule 216.a. As set forth above in Staff's analysis, the Director finds that Crestone has satisfied the Information requirements set forth in Rule 216.c. Further, the Director finds that Crestone has satisfied the purpose of the CDP Rule.

As defined by Rule 216.a., the purpose of a CDP is to "facilitate discussions about potential impacts, and identify measures to minimize adverse impacts to public health, safety, welfare, and the environment, including wildlife resources, from such activities." The Final CDP accomplishes the purpose of Rule 216.a. Had Crestone elected to file individual Form 2 and 2As for the three proposed oil and gas locations instead of proposing a CDP, the CDP Area would not have had the benefit of landscape level planning. Through landscape level planning,

Staff and Crestone worked to first avoid impacts and then minimize adverse impacts from development to persons, the environment and wildlife. These benefits would not have been immediately, or potentially ever, attainable had Crestone pursued traditional individual well pad development. Moreover, during the permitting phase, Crestone will be required to mitigate impacts consistent with Commission Rules.

Through use of the CDP process, Staff was able to review, consider, and speak to the impacts of developing three well pads within the CDP Area. This landscape level planning gave Staff the opportunity to work with Crestone to identify areas and issues that could be improved upon in order to minimize adverse impacts to public health, safety, welfare, and the environment, including wildlife resources. For instance, the Original Draft CDP proposed 180 wells at six oil and gas locations. The Final CDP proposes up to 140 wells at three oil and gas locations. Also through the CDP process, the CPW worked with Crestone to identify areas where oil and gas development should not occur because of wildlife habitats and identify areas in the CDP lands for development that are less impactful to wildlife.

Another critical component of the CDP is Crestone's commitment to using a pipeline and not tank batteries. A tankless system mitigates potential spills and releases; cuts down significantly on air emissions; reduces truck traffic; mitigates impacts to residences; and minimizes public safety concerns related to tank batteries. By approaching development of the CDP Area through a Rule 216 CDP, Crestone has afforded Staff and stakeholders the opportunity to consider and recommend best practices for a more holistic approach to developing these lands. This would not have been available had Crestone elected to pursue a traditional individual well pad development.

While the Director finds the Final CDP suitable, Staff recommends that the Section 36 location be identified for development first rather than Section 1. The challenges facing the Section 1 location are potentially greater than those for the alternate location in Section 36. As discussed above in Staff's analysis, both Section 1 and Section 36 can be approved for oil and gas development under Commission Rules. And as Staff also discussed, both Section 1 and Section 36 have drawbacks and advantages to development. Section 1 would result in oil and gas development occurring in a floodplain, which is proposed to be designated as a floodway. Section 36 would result in oil and gas development within a Designated Setback Location. Section 36 does allow Crestone to drill within the Greater Wattenberg Area drilling window as set forth in Rule 318A. From Staff's technical review, both Section 1 and Section 36 can be approved for development because under the Commission's Rules impacts from development in either of these Sections can be sufficiently mitigated.

For the above reasons the Director finds the Final CDP suitable for Commission consideration in accordance with Rule 216. If the Commission adopts the Final CDP, the Director requests that the Commission include Staff's recommendations in the order. A draft order of the Commission will be provided as part of the prehearing process.

Dated July 30, 2018

/s/ Julie Murphy  
Julie Murphy  
Director  
Oil and Gas Conservation Commission of the State  
of Colorado