



## **Questions & Answers: Boulder County Fourth Draft Preliminary Comprehensive Drilling Plan (CDP) April 4 Surface Owner Meeting**

*Included below is a summary of questions and responses from our surface owner meeting on April 4 – this includes questions received via phone caller, web portal submission and email. In addition to this document, the presentation deck and audio recording from the telephone town hall-style meeting are available under the CDP tab of our website, [www.crestonepeakresources.com](http://www.crestonepeakresources.com).*

*We welcome your ongoing feedback and questions – please reach out to us via email ([cdpboulder@crestonepr.com](mailto:cdpboulder@crestonepr.com)) or by phone at 720-410-8537.*

### **Does Crestone have experience operating well pads of this proposed size and with this many wells? What is the average size of well pads in Crestone’s current operations?**

Operating well pads of this size is a practice of scale, meaning it does not change our processes, it just adds additional wells to our current practices. For these oil and gas locations, we will draw from our experience in DJ Basin operations and scale the number of wells as needed. Current operations at our well pads near the intersection of County Road 5 and Highway 52 are similar in size to our proposed Section 35 location. By the time we are to begin operations in Boulder County, we will have drilled a well pad of over 30 wells in Weld County. Sections One and Three will be about 30 to 40 percent bigger based on attributes or efficiencies specific to their locations.

A pivotal piece to the over-arching plan for development is utilization of our Hub facility in Weld County, east of Erie. The Hub was constructed as a single location for collection and processing equipment, which reduces the typical pad size and thus the overall footprint can decrease by as much as 70 percent.

### **What steps will be taken to mitigate odor, light pollution and noise for local communities?**

We utilize several mitigation strategies based on our experience in the DJ Basin, the latest technologies and industry best practices. For example, we’ve installed 40-foot sound walls and odor-masking products, which help alleviate and neutralize odors. We also do baseline testing and ongoing monitoring throughout the operation to ensure we comply with state regulations.

Regarding noise, Crestone will employ the most current technology available at the time of operation and will continuously monitor noise readings during construction, drilling and completion operations with instruments placed between the oil and gas location and residential properties. Crestone will also conduct an ambient sound level survey and a noise study to determine if additional permanent noise mitigation measures are needed. To provide long-term noise mitigation, depending on available resources, production equipment will be powered by electricity. During all phases of operations, low-frequency noise levels will not exceed 65 dBC as measured from the nearest building unit. If sound levels exceed 65 dBC, Crestone will remedy the exceedance within 48 hours of the occurrence.



Lastly, due to the potential for odor from oil-based mud, we'll utilize a variety of mitigation measures, like installing chillers, enclosed mud tanks and walls to contain potential odors. We're continually evaluating opportunities to improve our operations and will evaluate any alternatives so that we continue to maintain compliance with regulations while addressing concerns from our neighbors.

### **Why is it necessary to drill at night?**

The advantage of continuous drilling, including overnight, is that it enables us to expedite the drilling process. Only drilling during the day, for example, extends or could even double the amount of time our drilling operations are on site. Our goal is to mitigate the temporary impacts our operations have on nearby communities and to operate in a safe and efficient manner, while being good neighbors.

### **How will traffic management and, specifically, the addition of more trucks on local roads be addressed? What will the traffic pattern look like? Is there any traffic-specific information you can share related to Section 35?**

A Traffic Impact Study (TIS) will be completed as part of the well pad permitting process, which will help us designate the proposed haul route and overweight haul route for construction, drilling, completion, and production traffic. We consult with outside engineering firms to provide this expertise, and they will then propose the least impactful routes. This will be included as part of the Boulder County permitting process, though we will provide the Colorado Oil and Gas Conservation Commission (COGCC) with this information if they require it as part of the CDP process. With 28 wells located in Section 35, we estimate that throughout the different phases of the project lifecycle (from construction of the location to producing oil and gas from the location), it will take approximately 20,000 truck trips to develop that location.

One of the major mitigation measures we will utilize to reduce truck traffic is connecting the CDP oil and gas locations to the Hub via pipeline, which will minimize truck traffic and related impacts like dust and noise. Instead of by truck, Crestone intends to pipe water, oil and gas from the well sites via pipeline.

To manage day-to-day traffic and ensure safety at the proposed sites, we hope to establish routes with right-hand turns only, meaning trucks avoid crossing traffic, with one protected left-hand turn onto Highway 287. Finally, we'll look at the traffic study to address any high-traffic periods, aiming to limit or stagger the amount of deliveries or other activity during those high-traffic times.

### **Will the trucks be licensed in the state of Colorado?**

Crestone is a Colorado-based corporation, so our employees and trucks are properly licensed here. We do utilize many third-party contractors, who are responsible for ensuring they are properly licensed and have the appropriate credentials to operate in Colorado. As with other aspects of our operations, we operate within the state requirements.

### **One of the potential oil and gas locations is in a floodplain – how have the associated risks been evaluated and addressed? Have you consulted with the Army Corps of Engineers?**

We understand the level of concern about floodplains, and that's why we have and will continue to make carefully-calculated plans to ensure we maintain safe and responsible operations for the



life of the wells. In our operations, we rely on our experience operating near and around wetlands in the past as well as industry best practices. For example, while we've moved the wells and production facilities outside Boulder County's floodway area, we'll engage in discussion with the Army Corps of Engineers to obtain any needed permits to ensure proactive planning and safe operations.

Additionally, potential risks associated with a floodplain location are addressed as part of the wellsite design characteristics. We'll work with an engineer to ensure compliance with relevant state rules, including orienting the wellsite to minimize potential flood impact and ensuring equipment is inventoried and properly anchored. A current inventory of all equipment on-site will be maintained, and equipment will have automatic shutoffs installed in the event of a catastrophic event. No tanks will be utilized on location, at this wellsite or at any other pad in the CDP area. Secondary containment will be constructed using steel berms and an impervious liner. We have also mitigated the risks associated with on-site storage of hydrocarbons (crude oil, natural gas and natural gas liquids) by eliminating tanks and instead utilizing pipelines.

**The oil and gas location in Section 35 is now located next to the Panama Reservoir -- how have the associated risks been evaluated and addressed?**

As part of the CDP process, we've consulted with and received feedback from multiple natural resource and wildlife consultants in planning our operations. We utilize mitigation techniques and technologies based on past experience in the DJ Basin and industry best practices. At this time, no additional concerns have been identified.

**What steps have been taken to address neighboring wildlife habitats?**

Throughout the CDP process, we've consulted with and received feedback from wildlife consultants and Colorado Parks and Wildlife. Through their feedback, we know there is a bald eagle's nest and blue heron rookery within the CDP area, among other wildlife. To ensure our operations do not have an impact on the wildlife in the area, we've utilized constraints analysis to maintain the 1,000-foot buffer around habitats and will remain in contact with Colorado Parks and Wildlife to protect the wildlife and their habitats.

**Has Crestone recently received complaints associated with noise or an old well?**

During the telephone town hall meeting, there was reference to noise complaints and unidentified issues with an old well. We want to be clear that Crestone was not the subject of the complaints referenced or the well mentioned. However, any concerns should be directed to the Colorado Oil and Gas Conservation Commission (COGCC) through their website (<http://cogcc.state.co.us>).

We pride ourselves on maintaining safe, environmentally responsible production sites that comply with state and local requirements.

**Is Crestone considering using multiple rigs and completion fleets? If so, will you be conferring with residents on implications of doing so?**

The oil and gas locations in Sections One and Three have been designed so that two drilling rigs could be located on each site at the same time, while the Section 35 location can accommodate one rig. At this point, a decision has not been made regarding whether or not to utilize two rigs at Sections One and Three. We welcome your comments and feedback as we continue to address your concerns.



**Have water resources for operations been identified yet?**

We do not identify water resources. We utilize a third-party to provide water, and they are responsible for securing the necessary water rights for the project. This process will begin closer to the start of operations and can change depending on the time of year and differences in water rights for each oil and gas location.

For more information on our approach to water safety and water conservation, visit the Community Relations tab on our website.

**Why did you move one proposed well pad from Section Two to Section 35? Was there any attempt or discussion with leasehold owners to move the Section One well pad north of Highway 52?**

We conducted an in-depth review and alternative analysis of the proposed oil and gas locations taking into account the more than 500 pages of feedback from stakeholders and the constraints analysis that we've previously explained, and we believe the three oil and gas locations outlined in the fourth draft are the optimal locations for developing these resources while minimizing temporary impacts on the surface.

One of the considerations from the review and analysis included the possibility of moving the well pad in Section One north of Highway 52. However, after consulting with Colorado Parks and Wildlife, we determined it was not possible to move the Section One location north of Highway 52 with respect to the bald eagle population and other surrounding wildlife in the area.

**You've already reduced the number of wells and well pads. Can you reduce them any further?**

Based on feedback from surface owners and stakeholder groups, we have reduced the number of oil and gas locations from six to three; the number of well pads from six to five; and the number of wells from 180 to 140. We believe the fourth draft preliminary CDP presents the optimal oil and gas locations and well count to develop our resources completely and responsibly, while minimizing temporary impacts. However, as we begin the seismic studies and the process of subsurface mapping, we will evaluate the current development of the sub-surface to determine if we are able to further reduce the number of wells.

**Has Crestone acquired the mineral rights in Section 35 yet? If not, is there a timeline for acquiring the mineral rights? What happens if Crestone is unable to acquire the mineral rights?**

Based on public comment, and feedback and conversions with surface owners, COGCC and the CDPHE, we recognize that the primary placement of this specific oil and gas location will need to be in Section 35. We are actively working with another operator in the area regarding the mineral rights in Section 35. At this point in time, we have not acquired those mineral rights.

That said, changes could occur between the fourth preliminary draft and final CDP submission. If there is potential for changing one of the oil and gas locations, Crestone will reach out to all relevant stakeholders to determine the best path forward.



**How will surface owners and Boulder County benefit from the local oil and gas operations? What percentage of oil and gas resources extracted by Crestone will be used within Boulder County, in Colorado or in the U.S.?**

To determine the fiscal impact or tax benefit our operations would have on the surrounding community over the 25-year project lifecycle, we conducted a study with a local research company, THK Associates, Inc. In addition to the creation of jobs in the area, the study found that our proposed operations could have a projected total tax benefit of more than \$398 million to the surrounding community. Those projections could mean nearly \$100 million in tax benefits to Boulder County, more than \$240 million to local schools, more than \$6 million to water districts and another \$50 million to the local fire district.

The natural gas extracted by Crestone is sold to our third-party gathering company at the well pad and is then transported to the identified point of sale. The oil is transported from the Hub to our refineries here in Colorado and then transported for use, which may be out of state. Regardless of whether or not the oil and gas is sold locally, all of the tax benefits go directly to the surrounding communities.

**Do the references to a 25-year project lifecycle mean this project will be over in that amount of time? If the project lifecycle expands past 25 years, will the almost \$400 million tax benefit increase?**

We have not estimated the full project lifecycle yet. However, horizontal drilling in the DJ Basin began in early 2010 and based on the production rates of most of the wells we and other operators in the basin are seeing, we predict that these wells will be at the end of their life span within a 25-year timeframe.

Yes, each year that Crestone is in production and the wells remain active, additional revenue and tax benefits will be generated.

**If Crestone is owned by the Canadian Pension Plan Investment Board (CPPIB), how does the local tax benefit compare to that of the revenue going to the company owner? How much money will go to the Canadian economy?**

Crestone Peak Resources is a Colorado-based corporation – the jobs created by our operations, the wages and tax revenue all benefit the local economy. More specifically, a recent study we conducted with a local research company, THK Associates, Inc., estimated more than \$398 million to the surrounding community. Those projections could mean nearly \$100 million in tax benefits to Boulder County, more than \$240 million to local schools, more than \$6 million to water districts and another \$50 million to the local fire district.

We are 95 percent owned by CPPIB, revenue from our operations does go on to benefit other groups. The fiscal impact study was solely based off the current area's mill levy and tax structures, and therefore cannot estimate the fiscal impact for the Canadian economy.

**Can Crestone provide a list of the surface and minerals owners within the CDP?**

Yes, this list can be found on pages 14 to 16 in the fourth preliminary draft available on the COGCC website (<http://cogcc.state.co.us>).

**Would you ever consider not moving forward with plans to drill in Boulder County, based on stakeholder feedback?**



At this time, we do not view that as an option. We voluntarily filed a Rule 216 Comprehensive Drilling Plan (CDP) Application with COGCC because we recognized the need for a collaborative, methodical and transparent planning process for responsible oil and gas development. While we believe ongoing engagement with nearby surface owners and other stakeholders is an important piece of the process, we have a legal right to develop these resources. In addition, there are also mineral owners who have the right to see their minerals developed.

We believe in the work that we do to produce the energy that we all use every day and we are committed to operating safely, responsibly and with minimal impacts on the communities where we work, using the best available technology and mitigations techniques based on industry best practices and previous operations.

**How many existing wells are currently within the proposed CDP area? What is the plan for those wells?**

It's important to remember that energy has been produced in this part of Boulder County for many years. There are currently 95 producing wells, across 60 acres of what regulators call "oil and gas disturbance" in the proposed CDP area. These are all vertical wells accessing the same reservoirs that we will reach with our horizontal wells. Our proposed development plans for adding an additional 30 acres of oil and gas disturbance along Highway 52, combined with our plan to "plug and abandon" certain wells throughout the CDP area and reclaim the land, will decrease the "oil and gas disturbance" areas currently in the CDP area.

Our goal is a net addition of zero acres of oil and gas disturbance in the CDP area, subject to a few factors that are beyond our control. When we are finished with the "plug and abandon" activity and reclamation work, the oil and gas disturbance areas will be limited to a corridor along Highway 52. Additional reclamation details can be found in the fourth draft preliminary CDP.

**According to a recent article in the *Journal of Environmental Science and Technology*, oil and gas companies are not being required to put down sufficient bonding to cover the costs of plugging and abandoning. Can Crestone assure that taxpayers won't have to cover those costs?**

At this point in time, the bonding requirements are set by the state. We are currently in discussions with the state to address funding for plugging and abandoning old wells. We will comply with any state mandates that are determined, just as we comply with current state bonding requirements.

**Why are potential oil and gas locations on Boulder County Open Space? Will Crestone compensate Boulder County for any damage or impacts to the land?**

Crestone owns the mineral rights under these portions of Boulder County Open Space in the CDP area. Under Colorado law, mineral rights owners have the right to "reasonable access" on the surface to develop underlying minerals. As a mineral rights leasehold owner, we can use the surface as is reasonably necessary per Colorado's Reasonable Accommodation Act.

We have provided Boulder County underlying leases demonstrating our Open Space mineral rights. Additionally, we have reached out to Boulder County to include them in the process with respect to potential oil and gas locations on Boulder County Open Space. Typically, with surface



use agreements, there is an agreed upon plan in place for compensation of facilities and use of the surface for oil and gas locations.

**Can surface owners still provide feedback on these plans?**

Yes, there are still several more opportunities to provide feedback on the CDP. On the COGCC website there is the opportunity for written public comment on our fourth draft preliminary CDP through April 15. After we've submitted the Final CDP Package, there will be another public comment period through COGCC from April 30 to May 13. You can also present your feedback and comments at the COGCC Hearing on July 30, when the CDP will be on the docket. Lastly, you can always submit questions or feedback to us by email ([cdpboulder@crestonepr.com](mailto:cdpboulder@crestonepr.com)) or phone (720-410-8537).

**Do you expect the COGCC to approve your final plan as submitted?**

We don't want to speculate what the COGCC will do. We look forward to submitting our Final CDP Package and addressing any questions or feedback from the COGCC through the course of preparing for and during the commission hearing on July 30.

**Assuming your plan is approved as submitted by the COGCC, what's next? Why did you start with the COGCC process, before the Boulder County review?**

If our plan is approved by the COGCC, we expect to begin the Boulder County permitting process. We elected to seek state review and approval first because the COGCC has primacy over our operations under current Colorado case law, statutes and regulations. We intend to work cooperatively with Boulder County throughout their permitting process.

**Will you be using statutory pooling to develop these minerals?**

For clarification, statutory pooling allows operators to group mineral rights they do not own, through a lease, with mineral rights they do own, in order to develop their minerals in exchange for fair compensation. In compliance with current state requirements, we may make an offer to lease mineral rights that we do not own. There is no sale of those mineral rights; the record title interest remains with the mineral interest owners. This gives unleased mineral rights owners the ability to participate in the process, through one-on-one meeting with us and at COGCC hearings.