December 1, 2015

Tessa Wallace, BLM Project Manager
Attention: Tendoy Project Scoping
BLM Dillon Field Office
1005 Selway Drive, Dillon, MT 59725

Delivered via email to: tlwallace@blm.gov

Re: Scoping Comments for the Tendoy Project exploration well

Dear Ms. Wallace,

Montana Trout Unlimited (MTU) and Trout Unlimited (TU) respectfully submits the following comments pertaining to Lima Energy Company's application to drill for the Tendoy 13-1 well.

TU represents 150,000 members across the country and MTU represents the organization's 3,900 members and 13 TU chapters in Montana. TU's mission is to conserve, protect and restore coldwater fisheries and their watersheds. Consistent with that mission, it is TU's policy that energy development should eliminate, minimize, or mitigate impacts to coldwater fisheries and their watersheds. In areas that are suitable for energy development, TU works to ensure that energy projects are designed, sited, constructed, operated, and decommissioned in a manner that does not degrade coldwater fisheries and their watersheds.

Summary

Many of our members fish in streams located on, or that flow from, public lands administered by the BLM's Dillon Field Office and the Beaverhead-Deerlodge National Forest, including both Big Sheep Creek and Little Sheep Creek in the vicinity of the project area. Our members have a passion for the conservation of these watersheds and the coldwater fisheries they support, and it is our desire that if the Tendoy 13-1 well moves forward, that the BLM and Forest Service take all necessary precautions to avoid impacts to these fisheries.

In order to fully evaluate potential impacts to coldwater fisheries, and to develop effective mitigation measures that avoid these impacts, the Environmental Assessment needs to address several issues, including:

- Water use
- Spills and other accidental releases
- Stream sedimentation

- Fishery resources
- Hydraulic fracturing
- Monitoring
- Alternative drilling locations
- Mitigation

MTU feels that these issues need to be fully addressed in order for the project to successfully avoid impacts to fisheries in Big Sheep Creek, Little Sheep Creek, and downstream waters, including the Red Rock River, Clark Canyon Reservoir and the Beaverhead River. The following provides detailed comments regarding these issues.

Comments on specific issues

1) **Water use**

MTU notes that the location of the proposed exploration well and the exploratory unit is within a "closed basin", meaning that all surface water rights have been appropriated and that ground water development permits can be issued only if a hydrological study shows that the groundwater is not hydrologically connected to surface flows, or, if it is the applicant commits to a credible mitigation plan demonstrating to Montana's Department of Natural Resources and Conservation that water will be replaced bucket-for-bucket and arrive in the stream at the same place and time as occurred before the groundwater was pumped. In short, new groundwater permits will not be approved if there is a connection between the groundwater source and surface water unless a mitigation plan is in place. This raises two questions: 1) how much water will the project require; and 2) where will this water come from?

The environmental analysis will have to answer these two questions in order to ascertain the impacts on both ground and surface water. If Lima Energy forgoes developing a well, and instead chooses to purchase a nearby senior water right, it would trigger a formal application for a change of use with Montana DNRC and a disclosure of how it would affect other water right holders, while also requiring disclosure in the NEPA analysis as to how it would affect instream flows. Proposed water use is particularly important because Montana Fish Wildlife and Parks data shows that Little Sheep Creek suffers from periodic dewatering, while Big Sheep Creek and the Red Rock River are chronically dewatered.. MTU feels strongly that the BLM must demonstrate that permitting the Tendoy 13-1 well does not exacerbate dewatering of local streams.

2) **Spills and accidental releases**

Any development within the watershed of a fish bearing stream introduces the risk of a spill and the resultant impacts to aquatic habitat and fisheries; these impacts can range from minimal to catastrophic depending on the severity of a given spill. The history of oil and gas activities throughout the country indicates that even though improvements have been made in procedures, chemicals used, and environmental protection, unforeseen spills, ruptures, and leaks, can and do occur. The recent track record of oil and gas development is not perfect, and there are no guarantees that the development of

the Tendoy 13-1 would not result in a catastrophic spill. Therefore, it is important that the environmental analysis consider the impacts of such a spill and identify measures that will minimize risks. Considerations should include well location, access routes and project design. Additional conditions of approval may be necessary in order to minimize the risk of a spill.

3) Stream sedimentation

Along with spills, the other risk factor for coldwater fisheries is stream sedimentation. This issue is particularly important given the high coldwater fishery values in both Little Sheep Creek and Big Sheep Creek. The environmental analysis needs identify all potential sediment sources, and address prevention and mitigation measures, including both stipulations and conditions of approval, necessary to avoid the potential for point and non-point sources of sedimentation.

4) Fishery resources

As previously noted, Big Sheep Creek and Little Sheep Creek are important coldwater fisheries. Big Sheep Creek is a popular recreational fishery, primarily comprised of wild brown and rainbow trout. The popularity of this stream has been steadily increasing over the past decade. In addition to the impacts to to water quality and fishery health, the environmental analysis should consider recreational angling values of this stream and how activities associated with the proposed Shearing Pen Gulch drilling location could impact quality of experience for anglers fishing this stream.

Little Sheep Creek is a valuable native trout stream populated by a conservation population of upper Missouri River Basin westslope cutthroat trout. Westslope cutthroat trout are a Species of Concern for the state of Montana and a Forest Service and BLM Sensitive Species. Populations of Westslope cutthroat trout in the upper Missouri River Basin are especially rare, with genetically unaltered fish occupying less than 2 percent of their historical range. This makes the Little Sheep Creek population extremely valuable and vulnerable.

Both the BLM and Forest Service are partners in the *Memorandum of Understanding and Conservation Agreement for Westslope Cutthroat Trout and Yellowstone Cutthroat Trout in Montana* (2007)[1], which list among other objectives, the goal of protecting and securing existing conservation populations. The environmental analysis should consider commitments made for protecting upper Missouri River Westslope Cutthroat Trout, and agencies should develop alternatives that will altogether avoid impacts to the conservation population. In particular, we are concerned that an access route that includes Little Sheep Creek Road could pose unacceptable risks to this stream, especially in the event of a vehicular accident resulting a spill of crude oil, produced water, fracking fluids or other potentially harmful constituents.

5) Hydraulic fracturing

If Lima Energy plans to use hydraulic fracturing, the environmental analysis should consider impacts specific to this practice. Additionally, the BLM and/or Forest Service should require conditions of

[1] http://fwp.mt.gov/fwpDoc.html?id=28662

approval addressing the use of hydraulic fracturing. The BLM's Final Rule for Hydraulic Fracturing on Federal and Indian Lands, issued March 26, 2015 includes many provisions that may be appropriate to include as conditions of approval. We note that while the final rule is currently enjoined pending disposition of the lawsuit filed by the State of Wyoming, that does not mean that applicable mitigation measures that may be part of the rule cannot be included as conditions of approval. Indeed, Onshore Oil and Gas Order No. 1 states that:

> The BLM or the FS may require reasonable mitigation measures to ensure that the proposed operations minimize adverse impacts to other resources, uses, and users, consistent with granted lease rights. The BLM will incorporate any mitigation requirements, including Best Management Practices, identified through the APD review and appropriate NEPA and related analyses, as conditions of approval.

Conditions of approval that address mitigation measures for hydraulic fracturing are entirely appropriate, even if some of them are included as part of the enjoined rule. We request that the following conditions of approval be included as part of the alternatives to be analyzed:

- Require the use of rigid enclosed, covered or netted and screened above-ground tanks to store recovered fluids
- Require submission of the cement monitoring report to the BLM at least 48 hours prior to commencing hydraulic fracturing operations
- Require baseline groundwater quality monitoring[2]
- Require disclosure of chemicals of fracturing fluids

This is not intended to be an exhaustive list of conditions of approval, and others will likely be required to mitigate other resource concerns, but we hope that this is a starting point for addressing issues specific to hydraulic fracturing.

6) Monitoring

In addition to baseline groundwater monitoring, periodic testing should be required in order to detect changes. Additionally, mitigation employed to prevent stream erosion and sedimentation will require monitoring to ensure the effectiveness of mitigation measures and if additional mitigation is necessary. Lastly, an effective monitoring program needs to be adaptive with trigger points for actions that will abate undesirable effects.

7) Alternative drilling locations

The two drilling locations under consideration, White Pine Ridge and Shearing Pen Gulch, both have shortcomings relative to fishery resources in Big Sheep Creek and Little Sheep Creek. For this reason we

[2]Due to difficulties consistently implementing a national baseline monitoring requirement, the BLM chose not to include this in the final rule, instead stating that, "The BLM supports and encourages baseline testing and monitoring, and will require those activities on a case-by-case basis where appropriate…these mitigation measures would be imposed as a condition of the BLM's approval for a given project."

as that you consider other locations that, while perhaps less desirable to the applicant, are environmentally preferable. For instance, is it technically (as opposed to economically) feasible to require a drilling location at the base of White Pine Ridge in the vicinity of Chute Canyon or Norris Canyon? And if so, would this result in potentially fewer environmental impacts? We urge the BLM and Forest Service to consider additional alternative drilling locations, even if those locations are not ideal for the project proponent.

8) Mitigation

We use the term mitigation to include both stipulations and conditions of approval. With respect to stipulations, it seems that there would be different stipulation depending on whether the project location is on lands administered by the Forest Service or the BLM. The underlying land use plans for the Beaverhead-Deerlodge National Forest and the BLM's Dillon Field Office provide similar stipulations for many, but not all like resources.

While not related to fisheries, notable stipulation differences exist between the BLM and the Forest Service related to bighorn sheep and big game calving/birthing areas. For BLM lands, there is a timing limitation for calving/birthing areas from April 1-June 30, as well as a timing limitation from November 1 - June 30 in bighorn rutting, winter and lambing habitat; the Forest Service does not appear to have stipulations for these resources. However, the Forest Service could apply these same restrictions, as applicable, as conditions of approval[3]. We ask that the environmental analysis analyze impacts to big game calving/birth areas and bighorn sheep ranges. Additionally we ask that, as applicable, BLM timing limitations for big game calving/birth areas and bighorn sheep ranges be applied to Forest Service lands as conditions of approval.

With respect to the White Pine Ridge drilling location, this would require access up Little Sheep Creek Road, a popular route for accessing the forest during hunting season. More traffic will increase the risk of an accident that could result in a spill in Little Sheep Creek. For this reason, we ask that you consider a condition of approval that prohibits using this route during hunting season, except for routine maintenance activities.

Finally, we are concerned that construction activities and heavy road use during wet and muddy periods would result in increased erosion and resulting sedimentation. For this reason, we ask that you consider a condition of approval that activities may be prohibited during muddy and/or wet soil periods.

In conclusion, thank you for the consideration of our suggestions and input. If you have any questions, please do not hesitate to contact us. We hope our comments helpful as the Forest Service and BLM develop the appropriate analysis for the project and seek ways to avoid and minimize impacts.

Sincerely,

[3] See Yates Petroleum Corporation, 176 IBLA 144, 155-156 (2008), affirming that agencies have the authority to impose timing restrictions as reasonable conditions of approval, even if they exceed sixty days.

Corey Fisher
Energy Team Lead
Trout Unlimited
111 N. Higgins Ave. Suite 500
Missoula, MT 59801
406-546-2979

Bruce Farling
Executive Director
Montana Trout Unlimited
111 N. Higgins Ave. Suite 500
Missoula, MT 59801
406-543-0054