

June 6, 2018

Pitkin County Open Space and Trails

**RE: Crystal River Trail Draft Plan**

Dear Gary/Dale:

I have read ERO Consultants' report and the Draft Plan for the proposed Crystal River Trail and would like to make some comments. I would also reference you to the 2 other letters I have written dated 11-15-15 and 3-23-17 as I believe they are pertinent to this issue.

As you know, I was a District Wildlife Manager for Colorado Division of Wildlife (now Colorado Parks and Wildlife) for 31 years serving the Carbondale and Aspen districts. John Groves, DWM Carbondale, has approximately 14 years of service in the Carbondale district, so together we have approximately 45 years experience managing the wildlife populations of the Roaring Fork and Crystal River Valleys. We have conducted aerial surveys and classification counts for mule deer, elk and bighorn sheep, have conducted habitat improvement projects, trapped/marked/conducted radio telemetry on the Crystal's bighorn sheep, and have conducted countless land use reviews for the county and U.S. Forest Service for these specific wildlife populations and in this specific area. This has provided us with extensive in-depth knowledge and reliable information in which to manage these wildlife populations and make good solid biological decisions.

With that as background, both of us, as well as Rick Thompson, Western Ecosystems (independent consultant who conducted a review of the project for Wilderness Workshop), agree that Alignment A is the most environmental sensitive route with the least amount of impacts. Only the county's consultant ERO believes that Alignment B can be successfully mitigated. However, given that the most likely scenario is a combination of A and B, it is absolutely imperative that the trail avoid the most sensitive and undisturbed habitats. This can be accomplished with the viable A alignment through these important habitat type areas.

The Draft Plan says that it will use science based decisions with a stated goal of being a steward to the environment and biodiversity through sensitive route selection and long term management. However, I would put forth that best available science is NOT being followed in the most sensitive and critical wildlife habitats. There is nothing sensitive about placement of the trail along sections of B alignment that pass through some of the most sensitive and biologically diverse habitats there are on the entire route when there is a much less impactful viable alternative alignment. Even ERO acknowledged that the B alignment has the most impacts to riparian, wetlands, and wildlife habitat in most every section of trail.

All of the biologist who reviewed the project (ERO, John Groves, Rick Thompson, and I) agree on the sensitive and high quality habitat areas: Red Wind Point, Janeway North and South, Avalanche, Narrows, and Filoha. We disagree with ERO that it can be successfully mitigated if B alignment is followed through these areas. The mitigation contained in the plan is drastically insufficient and lacks any kind of detail. It also relies on the use of seasonal closures which i will discuss later.

The best available science dictates that a trail should not be placed through these sensitive and high quality habitats as alignment B does when there is a viable and less impactive alignment A. In most county land use decisions, this would not be allowed when there is an alternative. Why put a potentially high use trail through predominantly undisturbed sensitive habitat when there is an alternative to avoid this?? B alignment through these areas goes against best available science and the recommendations of 3 of 4 biologists who reviewed the project. In fact, ERO states on page 76 of their report **“overall combined impacts of Alternative B on elk winter range, bighorn sheep migration corridor, and undisturbed high-quality habitat would be high....These impacts would be among the highest in the entire study area”**. **“The impacts of Alternative A on wildlife habitat would be minor”**.

I would like to remind the county of one of the county’s Environmental Bill of Rights (Land Use Policy Guidelines 2002). “Policy of the county to ensure that proposed land uses are compatible with the ecosystem of wildlife habitats and do not pose immediate, long term or potential detrimental impacts to such habitats. The county seeks to preserve, restore, and perpetuate native wildlife and plant diversity by maintaining sufficient habitat”. In addition, the Crystal River Caucus Master Plan (2016) states “trail designed for user safety, wildlife and habitat protection and consider best science”.

In the Draft Plan OST (Open Space and Trails) recommends A alignment for Janeway North and Filoha citing high quality habitat, environmental and wildlife impacts, and the length of seasonal closures. This is very positive, but why was this decision not made for Janeway South, Avalanche, and Narrows which contain some of the highest quality and sensitive wildlife habitats along the entire trail?? ERO even states how impactive this will be (see above).

Throughout ERO’s report and the Draft Plan it states that there will be minor impacts to elk winter range along A alignment. This is strictly based upon their use of the 100m zone of influence. Basically, there will be no impact to elk winter range along the A alignment as it is not considered winter range and it lies between the river and the highway, a major disturbance corridor. Elk mostly avoid this area except to cross the highway and river. In addition, the 100m zone of influence is rather small. ERO says that the zone of influence can be greater depending on a lot of factors, which I believe to be the case, especially in more open and undisturbed areas. Wisdom et al 2004 found disturbance to elk up to 1500m by mountain bike trail users.

In the executive summary of the Draft Plan, it states that the elk population is stable in the Roaring Fork and Crystal. It depends on your perspective. In the short term of the last 3-5 years, that may be the case but not so over the longer term. Elk population is much lower than it used to be as well as it still suffers from low cow:calf ratios which indicate that there is something askew in the population. John Groves called the population "barely stable" (person. comm).

Bighorn sheep in the Crystal are hovering around 40-50 sheep (person. comm. Groves and Julie Mao, wildlife biologist, CPW). This population is fairly genetically pure with only one transplant of 6 rams back in the 1980's. No other sheep have been brought in. The section of the Draft Plan in Action Items, "Bighorn Resiliency" is very misleading. The idea that these sheep are resilient is highly questionable. They have gone from 200-220 in the 1980's to 40-50 today. They are not growing, recovering, or rebounding. They are struggling. Any additional stress factors could have significant impacts to this population.

One of the concerns expressed about the B alignment is the potential for secondary or social trails. ERO states that only a few have been established. I believe they have significantly underestimated this potential. There are examples all over the valley to the contrary of their statement. Some of these trails are in areas where there is active enforcement, signage, and gates. This potential impact should NOT be dismissed as minor.

Another concern is the effectiveness of seasonal closures as a mitigation strategy. I believe that depending on seasonal closures could be a fatal flaw. The public just does not always comply with closures and this will only get worse as our human population continues to increase and the demand for recreation continues to increase. As I have stated many times in the past, how can there be any guarantee there will be adequate active and aggressive enforcement of closures into the future, perhaps 25, 30, 50 years down the road? Once the trail is built, it will always be there, OST may not; or priorities and enforcement may change over time. Why take the risk when there is a viable alternative? Will the public stand for a 6+ month closure over time, especially with the amount of money being spent on the trail??

Seasonal closures should only be used when there is no other alternative. They are only as effective as they are aggressively enforced. The Draft Plan does not provide any detail about an enforcement plan, what adequate enforcement would be, or if they can say it will always be there into the future. OST says it has demonstrated its ability to enforce closures. It is very difficult to enforce closures on areas that are out of public view. There are countless examples of closure violations all over the Roaring Fork and Crystal River Valleys. Avalanche Creek has had constant violations, E. Village/Burnt Mountain where there are signs, gates, and enforcement, Sky Mountain had violations every year I flew classification counts, Glassier had violations within 2 weeks of opening which is a

critical time for deer and elk, Dart property/Rio Grande Trail with dogs during winter, etc. It becomes what level of violation is acceptable? Even very few violations in sensitive habitats can have significant impacts.

It was stated that large mammals become habituated to predictable and recurrent human use of trails. This is partially true. Just because an animal such as an elk or bighorn sheep does not run away does not mean it is not impacted. It must make a decision on what strategy costs less energy - fleeing or staying put. No matter which they choose, metabolic rates increase, stress increases, and it has been shown that there is a negative impact to reproductive success. They are negatively impacted.

The Draft Plan states that seasonal closures will be monitored for effectiveness. How is this defined? What happens if it is found closures are not effective but the trail has been built? Rick Thompson, Western Ecosystems, said he contacted several DWMs and asked them how effective they thought seasonal closures are. Most replied that they did not think they were an effective mitigation strategy. Placement of the trail along a proper alignment can avoid these issues and impacts altogether.

Please find below my comments for certain sections of trail. Most of these comments are centered around the sensitive habitat areas:

1. Red Wind Point: The plan states that the majority of the habitat is located on the upper pasture. This is not completely accurate. The cliff bands above the railroad grade are used extensively by the sheep as evidenced by radio telemetry and personal observations. Both J. Groves and I have trapped and placed radio collars on bighorn along the cliff bands. Any use along the railroad grade or above it from Dec. 1 - June 15 will disturb and stress bighorn sheep in their winter and lambing habitat. Placement of a trail along the Alignment B will substantially increase the potential for closure violations and will become an enforcement challenge. There is currently few violations of the closure for the upper pasture but are several along the railroad grade. 5 rams were observed in the cliff band at the end of May 2018.

Alignment A should be selected to avoid impacts.

2. Janeway North - this area contains high quality habitat (riparian, wetlands, oxbows). Contrary to the report, elk winter range extends to the river so any use of B alignment would negatively impact elk winter range. B alignment also has more tree removal. The plan states that impacts to wetlands would be avoided if possible and mitigated as necessary. Any wetland loss needs to be mitigated but no detailed mitigation plan is contained in the report. The area also receives little human disturbance. Under the Trail Action item in the plan, OST selected A alignment to avoid high quality habitat. This is good and very positive.

Alignment A should be selected

3. Janeway South - This area contains elk winter range and is adjacent to severe winter range and winter concentration area. (consultants report did not state this). The area is also adjacent to bighorn sheep winter range and lambing farther up the ridge. It is currently fairly undisturbed with no existing formal trail. ERO states that there will be minor impact to habitat and river frontage. If B alignment is selected, there **will be** negative impacts to elk and bighorn sheep winter range. There will be **high potential** for a social trail up to the saddle and ridge between Janeway Meadow and Avalanche Creek which leads to more critical habitat and an existing USFS winter closure. I strongly disagree with the report that states most wildlife impacts are in Janeway North. They are in both areas. I believe that the impacts to this area is dismissed because there is a proposed seasonal closure. See discussion on closures. The plan states that there is a single track trail on the county's OST property known as the Boat Launch parcel. Why is there a trail on OST which leads to USFS lands that has no formal trail? This only promotes social trail development on adjacent USFS lands and creates disturbance in an area that is mostly undisturbed.

Alignment A should be selected for this segment.

4. Avalanche - This is most likely one of the most sensitive high-quality wildlife habitats that contains little disturbance. It contains elk winter range and leads to bighorn sheep migration/travel corridor and winter range. The area contains a major creek crossing, floodplain, debris flow, and high quality "pristine" meadow and other high quality undisturbed habitat. It contains several CNHP (Colorado Natural Heritage Program) species. The area is ranked #3 most biodiverse area out of 55 designated in the Roaring Fork watershed by CNHP. The B alignment will have significant negative impacts to elk and bighorn sheep winter range and migration and to high quality undisturbed habitat. It will result in significant habitat fragmentation. ERO, the county's consultant, even states the following regarding this section and Narrows: "**overall combined impacts of Alternative B on elk winter range, bighorn sheep migration corridor, and undisturbed high-quality habitat would be high...These impacts would be among the highest in the entire study area**". "**The impacts of Alternative A on wildlife habitat would be minor**". So why would you run a trail through the middle of an area that is ranked so high in biodiversity and contains such significant habitat? This alignment **should no longer** be considered if there is any environmental conscious due to its significant environmental impacts. If B alignment is selected OST is going against the best science and biologists' recommendations. There is a viable alternative in A alignment.

A alignment should be selected without hesitation

5. Narrows - This section should be considered in concert with Avalanche. Again, this area contains high quality undisturbed habitat. It contains bighorn sheep winter range and migration/travel corridor. It has taken decades for this area to reclaim and regenerate itself. ERO's report states that the trail should be placed along the lower ter-

race so that bighorn sheep can have more readily available escape terrain in the tallus and cliffs above. If this is the case, there should not be a trail here if it has the potential to negatively impact bighorn sheep. It is not Ok for sheep just to run to their escape terrain. The plan states that impacts to wildlife are only moderate. I believe they will be **significant**. The B alignment also leads to the Filoha area which is closed to the public 9 months of the year and which OST selected A alignment. Any B alignment would create another enforcement issue. There is a viable alternative in A alignment.

A alignment should be selected without hesitation.

6. Filoha - This area contains high quality habitat and is currently managed for its wildlife and habitat values. There is already an extensive closure in place and OST recommends A alignment which is very good and positive.

Alignment A should be selected without hesitation

7. Redstone - Hawk Creek - there is potential for negative impacts to the riparian and wetlands along this section if B alignment is selected. It would be important to control people and dogs and keep them out of the wetlands.

8. Bear Creek - this area contains elk winter range and most likely some limited production. It also contains bear denning sites. There is very little disturbance in a fairly high quality habitat. One cannot assume limited winter use as ERO states. Once the trail is built/advertised there will most likely be a substantial increase in use during winter and spring transition. This will negatively impact elk during winter and spring transition. This is an area there should be no dogs allowed during winter and spring transition if B alignment is selected. From a wildlife perspective, A alignment would have much less impacts.

A alignment should be selected.

9. McClure Pass - This area contains some high quality habitat and elk winter range. Winter use by elk is limited depending upon the winter. It would be best to keep the disturbance along an existing highway disturbance corridor. As a side note: the base of the old McClure Pass road is used and has been historically used as a rifle/shooting range. This has been a traditional use for over 35 years.

A alignment would be preferred to minimize impacts

In summary a few closing thoughts. Trails placed in high quality and non disturbed habitats will change species diversity, density, and abundance. It results in habitat fragmentation which negatively impacts many species. Displacement of native species by non-native parasitic species occurs. Trails can lead to increased stress, disturbance, and

displacement to less preferred habitats or abandonment of habitats, and reduced reproductive success. It is critical to plan, design, and place trails in an environmentally sensitive manner.

B alignment in the sensitive areas of Red Wind Point, Janeway North and South, Avalanche, Narrows, and Filoha will threaten the viability and well being of wildlife that utilize these areas. It threatens environmental health and IS NOT an environmentally friendly alignment. A lot of dollars will be spent building this trail and if B alignment is selected in these sensitive areas it will need to be closed for 6-9 months of the year. If other B alignment sections are adopted there will already be a compromise to wildlife and environmental values. We don't need to compromise these values along the entire length of trail.

There can be a trail that the public can enjoy while being sensitive to our environment and wildlife populations. Placement of the trail along the A alignment through the sensitive wildlife habitat areas can be a win-win for all. There can then be year round access with no closures or restrictions. It eliminates most impacts while providing for the public and meeting the Governors Top 16 Priority. We can continue to have our important wildlife areas and bike at the same time. Everybody wins.

Respectfully,

Kevin Wright