USDA Forest Service, Rocky Mountain Region
ATTN: Reviewing Officer
1617 Cole Blvd Building 17
Lakewood, CO 80401
Via web portal:
https://cara.fs2c.usda.gov/Public//CommentInput?Project=56913

March 13th, 2023

Dear Reviewing Officer:

This letter constitutes the notice required by 36 CFR 218.8 that the parties listed below object to the proposed Redstone-McClure Pass Trail Project on the Aspen-Sopris Ranger District of the White River National Forest (WRNF) This project is described in the Final Environmental Assessment (FEA), dated January, 2023; Draft Decision Notice (DDN); and other project documents. The decision notice would be signed by the responsible official, WRNF Supervisor Scott Fitzwilliams.

Pursuant to 218.8(d)(3), the Colorado Chapter of Sierra Club shall be the lead objector.

Objectors have previously submitted comments that addressed the issues raised in this objection. The Sierra Club letter, Hudson and the Roaring Fork Audubon letter were each dated February 22, 2022. All are incorporated by reference.

We are willing to discuss the objection issues raised herein, per 218.11(a).

Sincerely,

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ARGUMENTS FOR OBJECTION

I. THE APPROVAL WOULD VIOLATE THE CEQ REGULATIONS IMPLEMENTING THE NATIONAL ENVIRONMENTAL POLICY ACT

Objectors previously addressed the issue of compliance with NEPA regulations in their comments on the draft EA: Sierra Club letter at 4 et seq., Hudson letter at 2 et seq. These letters include citations to case law supporting our position. Hudson's scoping comments dated January 17, 2020 also addressed NEPA issues. These letters are incorporated by reference here in their entirety.

Under the applicable CEQ regulations implementing the national Environmental Policy Act[1], agencies must consider the following types of actions:

> Connected actions, which means that they are closely related and therefore should be discussed in the same impact statement. Actions are connected if they:
>
> (i) Automatically trigger other actions which may require environmental impact statements.
> (ii) Cannot or will not proceed unless other actions are taken previously or simultaneously.
> (iii) Are interdependent parts of a larger action and depend on the larger action for their justification.
>
> 2. Cumulative actions, which when viewed with other proposed actions have cumulatively significant impacts and should therefore be discussed in the same impact statement.
>
> 3. Similar actions, which when viewed with other reasonably foreseeable or proposed agency actions, have similarities that provide a basis for evaluating their environmental consequences together, such as common timing or geography. An agency may wish to analyze these actions in the same impact statement. It should do so when the best way to assess adequately the combined impacts of similar actions or reasonable alternatives to such actions is to treat them in a single impact statement.

40 CFR 1508.25(a); emphasis added.

As the Draft Decision Notice (DDN) states:

> The proposed project was identified in Pitkin County's Carbondale to Crested Butte Trail Plan …and was proposed to the Forest Service for implementation in 2019.

Id. at 1; see also FEA at 5.

[1] Since the project began before the CEQ issued revised regulations in 2020, the White River National Forest chose to use the 1978 Regulations. See EA at 3.

The Memorandum of Understanding (MOU) between the Forest Service and Pitkin County states: "The proposed project is a component of the long-envisioned Carbondale to Crested Butte Trail." Id. at 1; emphasis added. The Forest Service also acknowledges that the CCB Trail is a reasonably foreseeable future action that should be analyzed for potential cumulative effects, based on "the presence of an adopted plan for the corridor." CCB Trail Plan (Pitkin County 2018). FEA at 67.

As the FEA states:

> Reasonably foreseeable future actions are those federal or nonfederal activities not yet undertaken for which there are existing decisions, funding, or identified proposals.

FEA at 66. The CCBT is clearly not only an identified proposal, as noted at DDN p. 1, EA at 6, and many other places in project documents, but is also embodied in a Pitkin County-approved Final Plan (CCB Trail Plan (Pitkin County 2018). FEA at 67. Thus the CCBT is a reasonably foreseeable project. with which the Forest Service agrees. Id.

The FEA states that since Pitkin County is not currently dedicating money toward planning for or constructing the CCBT and because the precise alignment of the remainder of the CCBT is not known, the agency is not obligated to analyze its impacts. FEA at 68. We disagree. Enough is known about the general alignment (set forth in detail in the CCB Trail Plan, and supporting documents), and about the increase in human use it is likely to generate and that cumulative impacts are likely to occur, as is discussed below in section II. The CCBT is thus a reasonably foreseeable project, as both the DDN at 7 and the FEA at 67 clearly acknowledge.

CEQ imposes the following responsibilities on the Forest Service with regard to its impact assessment related to reasonably foreseeable future acts like the CCB Trail. CEQ regulations require the analysis of three types of "effects," or impacts, of its actions to the human environment prior to undertaking those actions - the "direct," "indirect," and "cumulative" effects of its actions - and assess their significance. §1502.16(a), (b) and (d); see also §1508.25(c). Direct effects include all impacts that are "caused by the action and occur at the same time and place." *Id.* § 1508.8(a). Indirect effects are "caused by the action and **are later in time or farther removed in distance but are still reasonably foreseeable.**" *Id.* § 1508.8(b). Cumulative effects include the impacts of all past, present, **and reasonably foreseeable actions**, regardless of what entity or entities undertake the actions. *Id.* § 1508.7 (emphasis added).

Finally, CEQ requires that connected actions and cumulative actions be discussed in the same impact statement:

> 1. Connected actions, which means that they are closely related and therefore should be discussed in the same impact statement. Actions are connected if they:

(i) Automatically trigger other actions which may require environmental impact statements.

(ii) Cannot or will not proceed unless other actions are taken previously or simultaneously.

(iii) Are interdependent parts of a larger action and depend on the larger action for their justification.

2. Cumulative actions, which when viewed with other proposed actions have cumulatively significant impacts and should therefore be discussed in the same impact statement.

40 CFR 1508.25(a).

The Forest Service is further directed by the CEQ regulations and its own NEPA regulations, in considering the potential impacts of the action proposed by the County, to evaluate direct, indirect and cumulative impacts. §1508.25(c).

The CEQ regulations provide the following definition for cumulative impact:

> "Cumulative impact" is the impact on the environment which results from the incremental impact of the action when added to other past, present, and r**easonably foreseeable future actions** regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions **taking place over a period of time.**

40 CFR 1508.7 (emphasis added).

Finally, in considering the potential impacts of the action proposed by the County, the CEQ regulations direct the Forest Service to evaluate:

> (7) **Whether the action is related to other actions with individually insignificant but cumulatively significant impacts.** Significance exists if it is reasonable to anticipate a cumulatively significant impact on the environment. **Significance cannot be avoided by terming an action temporary or by breaking it down into small component parts.**

See 40 CFR §1508.27(b)(6 and 7), cited in 36 CFR §220.7(b)(3)(iii) (emphasis added).

As is discussed in sections III and IV below, there are cumulative impacts associated with the Redstone-McClure Trail and the full CCBT.

Federal courts have established the need for a single review document to properly analyze the potential impacts associated with trails. Federal courts require the Forest Service to analyze the cumulative effects of a trail segment where the trail will connect to other trails. *Sierra Club v. United States Forest Serv.*, 857 F. Supp. 2d 1167, 1181 (D. Utah 2012) (citing *N.*

Cascade Conservation Council v. U.S. Forest Serv., 98 F. Supp. 2d 1193, 1199 (W.D. Wash. 1999) and *Wash. Trails Ass'n v. U.S. Forest Service*, 935 F. Supp. 1117, 1123 (W.D. Wash. 1996)). This is because the "proper reference point for a cumulative impacts inquiry is the entire trail system." *N. Cascade Conservation Council*, 98 F. Supp. 2d at 1198. Indeed, the "environmental significance of [a trail] cannot be accurately assessed unless the potential for increased use resulting from the cumulative impact of the projected network of trails . . . is carefully considered." *Wash. Trails Ass'n*, 935 F. Supp. at 1123.

To meet these clear CEQ environmental review requirements, rather than segmenting the environmental review of the CCB trail into a number of different sections, the Forest Service should consider the whole CCB trail project in one EIS.

The Forest Service could issue a programmatic EIS for the CCBT, and subsequently issue environmental assessments for specific segments of it. This would help ensure compliance with NEPA and relevant case law. The Council on Environmental Quality, the executive branch agency responsible for interpreting NEPA, issued guidance in 2014[2] on preparing programmatic documents for various types of agency proposals. The CEQ states therein that "programmatic NEPA review may be appropriate" for

Approving Multiple Actions. Decision to proceed with multiple projects that are temporally or spatially connected and that will have a series of associated concurrent or subsequent decisions.

Programmatic examples include: …

o A suite of ongoing, proposed or reasonably foreseeable actions that share a common geography or timing, such as multiple activities within a defined boundary (i.e., Federal land or facility).

2014 Guidance at 13-15; emphasis original. And to emphasize this point, the 2014 Guidance states:

CEQ recommends agencies give particular consideration to preparing a [programmatic EA] or EIS when: …

(3) making decisions on common elements or aspects of a series or suite of closely related projects.

2014 Guidance at 15, emphasis added. The guidance cited above seems very applicable to the CCBT and the Redstone-McClure segment.

Federal Court decisions have emphasized the key CEQ NEPA principle that where "several actions have a cumulative ... environmental effect, this consequence must be considered in an EIS." (*Neighbors of Cuddy Mountain v. U.S. Forest Service*, 137 F.3d 1372, 1378 (9th Cir. 1998), citing *City of Tenakee Springs v. Clough,* 915 F.2d 1308, 1312 (9th Cir. 1990); *see also*

[2] *Effective Use of Programmatic NEPA Reviews*, December 18, 2014; hereafter "2014 Guidance".

40 C.F.R. § 1508.25(a) (stating that the "scope" of an EIS includes consideration of "connected actions")). The purpose of this requirement is to prevent agencies from dividing one project into multiple individual actions "each of which individually has an insignificant environmental impact, but which collectively have a substantial impact." *Thomas v. Peterson,* 753 F.2d 754, 758 (9th Cir.1985).

In addition, the Supreme Court has held that under NEPA, an agency not only has a duty to consider cumulative impacts, but also a separate duty to consider those impacts in a single NEPA process:

> proposals for ... related actions that will have cumulative or synergistic environmental impact upon a region concurrently pending before an agency must be considered together. Only through comprehensive consideration of pending proposals can the agency evaluate the different courses of action.
>
> *Kleppe v. Sierra Club,* 427 U.S. 390, 410, 96 S.Ct. 2718, 2730, 49 L.Ed.2d 576 (1976).

See also *Native Ecosystems Council v. Dombeck*, 304 F.3d 886, 893-94 (9th Cir. 2002), which found that federal courts have concluded "[a] single NEPA review document is required for distinct projects when there is a single proposal governing the projects or when the projects are connected, cumulative, or similar actions under the regulations implementing NEPA."

Federal courts have found that this is particularly true for the analysis of the potential impacts associated with trails. Federal courts have established the need for a single review document to properly analyze the potential impacts associated with trails. Federal courts require the Forest Service to analyze the cumulative effects of a trail segment where the trail will connect to other trails. *Sierra Club v. United States Forest Serv.*, 857 F. Supp. 2d 1167, 1181 (D. Utah 2012) (citing *N. Cascade Conservation Council v. U.S. Forest Serv.*, 98 F. Supp. 2d 1193, 1199 (W.D. Wash. 1999) and *Wash. Trails Ass'n v. U.S. Forest Service*, 935 F. Supp. 1117, 1123 (W.D. Wash. 1996)). This is because the "proper reference point for a cumulative impacts inquiry is the entire trail system." *N. Cascade Conservation Council*, 98 F. Supp. 2d at 1198. Indeed, the "environmental significance of [a trail] cannot be accurately assessed unless the potential for increased use resulting from the cumulative impact of the projected network of trails . . . is carefully considered." *Wash. Trails Ass'n*, 935 F. Supp. at 1123.

To meet these clear CEQ environmental review requirements, rather than segmenting the environmental review of the CCB trail into a number of different sections, the Forest Service should consider the whole CCB trail project in one EIS, or in the alternative, prepare a programmatic EIS addressing the potential impacts of the entire CCBT Trail plan.

In sum, the Redstone-McClure trail is part of the CCBT and the CCBT is a connected action with cumulative impacts. Therefore, the potential impacts of the entire CCBT must be analyzed at the same time the Redstone-McClure Pass segment is analyzed in one DEIS. Approving the Redstone-McClure segment without an analysis of the entire CCBT project violates the CEQ Regulations:

> Significance cannot be avoided by terming the action temporary or by breaking it down into small component parts.

40 CFR 1502.27(b)(7).

II. TRAIL DEVELOPMENT WILL FURTHER FRAGMENT HABITAT AND DRIVE INCREASED HUMAN RECREATIONAL USE WHICH WILL ADVERSELY IMPACT WILDLIFE WITH LOCAL POPULATION DECLINES.

The USFS fails to consider that small populations are more susceptible to extinction than larger populations due to demographic and environmental stochasticity, diminished genetic diversity and Allee effects (Stephens and Freckleton 1999, Primack, 2014).

Development of the trail in the Redstone-McClure pass segment will negatively impact local wildlife population abundance due to fragmentation impacts and the resulting increased human use. The goal of the proposed CCB trail development is **increased human recreational use**. **From the draft DEA (p.19): Completion of the proposed trail, regardless of CCB alignment alternative, is anticipated to *benefit recreational access and opportunities throughout the Crystal River Valley*. The proposed CCB trail would provide non-motorized recreation and access opportunities for a variety of recreationists, including cyclists, runners, walkers, and equestrians, as well as localized connections between subdivisions, Redstone, Carbondale, and other trails and recreation destinations within the valley. (**From Sierra Club's comment letter which addressed the issue of recreation having a negative effect on wildlife beginning at p. 3 therein.)

Currently, according to data taken from year-round cameras placed by Pitkin County Open Space and Trails from June 2018 through July 2021, human use in the project area is very low. The most use, people on foot, amounted to only an annual average of 3.4 people on foot per day on the southern portion of the Rock Creek Wagon Road and 3.5 people per day at the base of the Old McClure Pass Road. Bike use was much lower yet: only seven passes were recorded during this period on the Rock Creek Road and only 70 on the Old McClure Pass Road. See FEA at 45-46, BE at 45.

Best available science informs that increased human use will result in 'habitat compression' (habitat loss) and fragmentation resulting in reduced carrying capacity, increasing human disturbance and **declining wildlife populations** (Wisdom et al. 2018). Further, in combination with approved future trail development, the cumulative impacts of trail development will further negatively impact wildlife population' abundance and viability.

Avian abundance and community composition are negatively impacted by both recreational trail-induced fragmentation and by associated human disturbance. Bird populations in North America have continued to plummet over the past five decades, dropping by nearly three billion across North America—an overall decline of 29 percent from 1970 (Rosenberg et al. 2019) the magnitude of which could significantly affect the continent's food webs and ecosystems (Daly 2019). Bird populations have declined across nearly all habitats and for a

multitude of reasons including climate warming, habitat conversion, pesticides, habitat compression and loss, and human disturbance.

Breeding bird surveys conducted by Roaring Fork Audubon at the Old Wagon Road proposed trail development site documented the presence of 45 species of breeding birds; 23 of the species that are designated on at least one conservation organization as a species of concern: USFW's Birds of Concern, State of the Birds (The North American Bird Conservation Initiative (NABCI)), Audubon's Species Most Vulnerable to Climate Change with 18 of these 23 species are vulnerable to extinction (Audubon 2022). Preventing further habitat fragmentation and human disturbance from recreational trails is essential to help prevent local avian extinctions.

Science documents that both trails and human disturbance cause habitat loss and fragmentation, resulting in avian declines and community alteration. Recent research from the Swiss Ornithological Institute, shows **that the number of birds, as well as bird species, is lower when trails are used on a more regular basis** (Frontiers 2018). Botsch et al. 2018) research results document that the mere presence of people in forests can negatively affect the forest bird community along trails and that the physical **presence of trails has less of an impact on forest birds than how frequently these recreational paths are used by people** (Botsch et al 2018).

Birds may perceive humans as potential predators (Frid and Dill 2002) and react with important changes in their behavior and physiology (e.g., increased vigilance, flight, release of stress hormones (Tablado and Jenni 2017) which negatively impact survivability. **Researchers recommend preventing trail construction in undeveloped natural habitats to reduce human access and thus disturbance**, and that new trails into remote forest areas not be promoted (Botsch et al 2018).

As indicated by GIS mapping, currently the Redstone to McClure Pass area is one of the least fragmented and least used habitats in the Crystal River Watershed providing important refugia from human disturbance for wildlife (Figure 1). ERO's camera trap data documents that currently the social trails on the Old Wagon Road and in Bear Gulch have very low human recreational use. Decades of scientific research informs that wildlife is displaced from recreational trails – be they social trails or developed trails.

Wisdom et al (2018) found that the elk moved away from the trails during recreation and back toward trails when no humans were present and that elk moved significantly farther during ATV riding and mountain biking, compared to hiking and horseback riding (Figure 3). Additionally, they found that elk avoidance of trails was strongest during ATV riding, and that although elk avoidance of trails during mountain biking, hiking and horseback riding was statistically similar, the distribution of elk locations during these three types of recreation indicated that elk shifted farther from trails during mountain biking. Thus, wildlife impact and habitat lost to displacement **depends on the type and level of human recreational use** (Wisdom et al 2018).

A 2022 study in the Routt National Forest in Colorado showed how human recreation is leading to decreases in area elk habitat. Desjardina et al. (2022) found that elk may avoid 60% of

the studied landscape, or more than 74,000 acres. A flight response from elk could take place in 88% of the landscape, or almost 110,000 acres.

> **The USFS fails to consider that wildlife managers and biologists from CPW and USFS have been unequivocal in their assessment that seasonal closures are not successful in mitigating the impact of a bike-pedestrian trail trails on wildlife.**

To offset trail-induced human-disturbance impacts, trail proponents suggest that seasonal closures be implemented to prevent recreational use of the newly proposed trail during the most sensitive times of the year. CPW wildlife biologists have been consistent in their assessment of the effectiveness of seasonal closures: **Seasonal wildlife closures have limited success at protecting wildlife. This has been well documented by: 1) Wilderness Workshops' Crystal River Trail Report by Richard Thompson; 2) Kevin Wright (CPW DWM retired) throughout his career with CPW and letters he submitted to the BOCC in 2015 and 2017; and 3) numerous other professional wildlife biologists.**

In an Inventory and Assessment of Habitat in the Crystal River Valley (2007) stated that, based on input from CPW and USFS wildlife biologists, seasonal closures are not sustainable in protecting the winter range of elk and bighorn sheep and cannot be used to mitigate the impact of a bike-pedestrian trail. The report also recommended that inactive Forest Service trails within the valley and along the railroad grade not be activated in the Forest Service Travel management plan. A portion of the proposed CCB trail segment would be constructed on an inactive trail/road grade.

As documented by Pitkin County Open Space and Trails, the current amount of "unmanaged recreation" is exceedingly low. Yet, the desire to control this is said to be a need for the project. DDN at 1.See FEA at 45-46, BE at 45.

Use is however expected to increase once the proposed trail is constructed and opened to use:

> In addition, more visitors in general, and mountain bikers in particular, are likely to use these routes as a recreational outing or connection to other regional trails.

EA at 52. As described above, use of the project area is very low right now, likely because few people know about the closed and decommissioned road and trail. This will certainly change if the trail is approved, constructed, and opened for public use, as there would be signs and other information available to the public that the Redstone-McClure pass trail is open for use. Indeed, information about the proposed winter closure (see more below) would notify people of the trail's existence if they did not already know.

The FEA further elaborates on the benefit to mountain bikers:

> who would gain a new route option (an approximately 15-mile round-trip ride) in an area that currently has few trails that are open to or appropriate for bike use.

FEA at 54.

Biking on trails in natural areas has a strongly adverse impact on wildlife. See Sierra Club comments at 12-13. See also Naidoo and Burton, 2019, which found effects on wildlife from mountain biking to be similar to those for motorized use. See also Rowland, 2019, who found that wildlife avoid areas with bike use for a distance of up to 1500 meters.

Adding to the impact would be that dogs would not have to be leashed. EA at 14. In fact, there is specific direction in the project design criteria NOT to require leashing: "Do not require dogs to always be on-leash…". FEA at A-3. Dogs will generally chase or harass wildlife. Unleashed dogs on the proposed trail would greatly increase the impact to wildlife, as there is very little dog use now, but such use would undoubtedly increase with an increase in human use.

The Forest Service would retain the right to impose leash restrictions. Ibid. But the County would enforce the winter closures (discussed below). BE at 47. It is not clear if the County would also be tasked with enforcing any leash requirement, or if they could legally do so.

To reduce impacts from the expected increase in use in the project area, the Forest Service proposes a closure on the portion of the new trail on national forest land (i. e., south of Hayes Creek Falls) from December 1 through April 30. If elk calving is detected within the project area, the closure would be extended to June 30. FEA at A-3.

> Long-term habitat management and enhancement projects aim to make the lower McClure/Placita area more useful for wintering elk. Increasing visitor use in this area would need to be managed to ensure sustainability of those long-term goals.
>
> Why wouldn't the Forest recommend that, as at Filoha Meadows which is located downstream of this project area, any closures to protect wildlife include the rutting season beginning October 1st and be extended through the calving season on June 30th ?

FEA at 9.

The Biological Evaluation (BE) states that

> Compliance from trail users for the seasonal restrictions for elk will be critical to mitigate potential disturbance and displacement.

BE at 47.

Part of the project area is in an elk migration corridor. BE at 46.

However, violations of any closure order are expected. FEA at 38. And the plan for addressing closure violations is less than robust:

> Forest Service staff, Pitkin County staff, and volunteers will monitor compliance with seasonal closures. Install signs educating the public and users about the seasonal closure at access points.
>
> If compliance monitoring determines there are violations during the seasonal closure, Pitkin County should enter into an awareness campaign about the importance of wildlife closures and the use of authorized routes.
>
> Temporary or permanent trail closures would be considered if seasonal or off-trail violations are persistent and awareness efforts are not effective.

FEA at A-3. It doesn't appear that sufficient action would be taken to deter human recreational use during the elk wintering period. Does the third measure mean that the proposed new trail to be built would be permanently closed if violations are still occurring after other measures have been applied? If so, don't build it in the first place, and there won't be much disturbance to wintering elk, since the current use is minimal, as noted above.

Pitkin County would enforce the winter closures. BE at 47. Could the County enforce restrictions on national forest lands?

III. WILDLIFE IN THE ROARING FORK VALLEY AND SURROUNDING AREA ARE ALREADY IMPACTED BY HUMAN DEVELOPMENT AND RECREATIONAL USE DISTURBANCE; THE PROPOSED TRAIL WOULD ADD TO THESE IMPACTS BOTH INDIVIDUALLY AND CUMULATIVELY TO RESULT IN FURTHER DECLINES OF NATIVE WILDLIFE SPECIES.

From p . 7 of Sierra Club's comments:

GIS mapping (Figure 1) reveals that much of the Crystal River watershed is heavily fragmented by recreational trails and roads which currently serve to provide an abundance of recreational opportunities. The few remaining, relatively large, unfragmented habitats are thus especially valuable to wildlife. Fragmentation reduces the amount of a habitat type, apportioning remaining habitat into smaller, isolated patches (fragments). Fragmentation decreases interior habitat and increases edge habitat, limits dispersal and colonization, restricts access to resources and simplifies habitat. The proposed trail segment traverses Bear Gulch which is **one of the few un-trailed and un-roaded natural areas remaining** in the Crystal River watershed and thus provides wildlife with a much-needed refuge from recreational disturbance.

As documented by decades of peer reviewed science, wildlife is negatively impacted both by recreational trails and by human presence-induced disturbance on those trails. In a systematic review of the scientific literature, researchers analyzed 274 articles on the effects of non-consumptive recreation on animals across all geographic areas, taxonomic groups, and recreation activities. The evidence was incontrovertible with over 93% of reviewed articles documenting at least one effect of recreation on animals, the majority of which (59%) were classified as negative effects, followed by unclear (25.9%) and positive (14.7%) effects. (Larson et al. 2016). Effects of recreation on native wildlife include behavioral responses such as increased flight and vigilance;

changes in spatial or temporal habitat use; declines in abundance, occupancy, or density; physiological stress; reduced reproductive success; and altered species richness and community composition (Larson et al 2016).

Human presence directly impacts wildlife by causing a flight response and movement away from human disturbance which raises stress levels and displaces wildlife from essential resources. Indirectly, trails impact wildlife by fragmenting and compressing available habitat (a form of habitat loss) thereby diminishing essential resources and reducing the landscape's carrying capacity (abundance of individuals and species that can be supported in that habitat) (Forman, 1999, Gaines et al. 2003, Wisdom et al. 2018, Botsch et al.2018). Because trails and associated human disturbance fragment habitat and displace human-intolerant wildlife species, trails can also disconnect metapopulations, inhibiting emigration between subpopulations thereby contributing to the decline of local populations (Singer and Gudorf 1999, Hanski 2003).

If the Redstone-McClure Pass trail is developed in the proposed location, local wildlife populations will be negatively impacted both by trail-induced habitat fragmentation and by the increased human presence-induced disturbance enabled by trails. Existing road- and trail-induced habitat fragmentation (Figure 1) in combination with the additional habitat fragmentation and human disturbance that will result from the proposed trail development, will further diminish species' abundance and consequently population viability for human-intolerant wildlife species. As the approved CCBT development proceeds, more and more habitat will be lost to wildlife. This accumulating loss of habitat will result in the decline and potential loss of local populations of native wildlife.

Additionally, analyzing trail impacts only in the context of the Redstone-McClure Pass Trail segment might lead one to reach a conclusion that the impacts are insignificant, as the Forest Service does at EA 37-39. But in the context of the larger area encompassed by the proposed CCBT, the loss of generally undisturbed habitat is significant in a landscape where such habitat is rapidly disappearing. This death-by-a-thousand cuts to wildlife populations scenario is playing out in the Crystal River Valley with the cumulative impacts of trail development diminishing the viability of wildlife populations one trail, one cut, at a time.

The USFS fails to consider the essential habitat connections required by sub-populations to sustain their metapopulation and the negative consequence of the cumulative loss of subpopulations on metapopulation viability. Numerous species including elk, bighorn sheep, and some bird populations are structured as metapopulations – a structure that is essential to population health (Singer and Gudorf 1999, Hanski 2003). Dispersal between sub-populations enables meta-population persistence even when subpopulations go extinct. The proposed trail will fragment habitat and diminish dispersal ability thereby contributing to the decline of metapopulations of wildlife including elk.

For those species' populations that are structured as metapopulations the negative impacts of fragmentation and human disturbance on one sub-population will impact the viability of other sub-populations, and ultimately the entire metapopulation. Cumulative loss of subpopulations will ultimately result in a downward population spiral and diminished viability

for the entire metapopulation if dispersal between subpopulations is limited such as by human recreational trails and disturbance.

Habitat loss and fragmentation are the main drivers of ongoing loss of biodiversity (MEA 2005, Brooks et al. 2002). Recreational trails both directly impact habitat with fragmentation and indirectly through the loss or alteration of habitat (Benninger-Truax et al., 1992 Reed et al., 1996; Bregman et al., 2014). Habitat fragmentation results in both a quantitative and qualitative loss of habitat for species originally dependent on that habitat type (Temple, 1986). Consequently, the abundance and diversity of species originally present often declines. Most importantly, fragmentation affects movement and dispersal and modifying behavior (Haila, 2002).

Scientific research from the USFS' Pacific Northwest Research station and others document that recreational trail fragment habitat with negative consequences for wildlife (Wisdom et al. 2018). Key findings from the research at USFS's Pacific Northwest Research Station concluded that elk are quite sensitive to the presence of humans and found that elk avoided not only recreationists but also the trails associated with their activities. Their intolerance (as indicated by the distances they maintained) was highest for ATV riding, followed by mountain biking and to a lesser degree, the elk also avoided hikers and horseback riders. Their research documented that: 1) elk avoid people and trails associated with all-terrain vehicle (ATV) use, mountain biking, hiking, and horseback riding; 2) Avoidance was strongest in response to ATV use, followed by mountain biking, and was less strong in response to hiking and horseback riding; 3) In response to these recreation activities, elk moved to areas where they were less likely to encounter recreationists; 4) Increased movement and flight added energetic costs and decreased foraging times, which can affect animal health and diminish their ability to reproduce.

Human disturbance that accompanies outdoor recreational trails also negatively impacts wildlife in natural areas. Human recreational disturbance is documented to displace wildlife, decrease species diversity, introduce, and spread invasive species, and decrease survival and reproduction rates in big game mammals (Gaines et al 2003, Larson et al 2016). These impacts are due to wildlife often perceiving that humans are potential predators (Botsch et al. 2018). Thus, when exposed to human presence, animals may react with important changes in their behavior and physiology (e.g., increased vigilance, flight, release of stress hormones which in turn may have consequences for individual fitness and the dynamics of animal populations (Botsch et al. 2018).

Wildlife in the proposed Redstone to McClure Pass trail development area will be negatively impacted by 1) habitat loss through alteration and diminished interior habitat due to edge effects; 2) habitat fragmentation which both diminishes habitat connectivity and compresses habitat which effectively results in habitat loss and 3) increased human disturbance (Gaines et al. 2003). Each trail segment in the planned CCBT development that encroaches into natural habitat will negatively impact wildlife with each of these factors. Further, cumulatively, the negative impacts to wildlife from trail-related habitat loss, fragmentation and disturbance will ultimately result in a downward population spiral and diminished viability for local populations and metapopulations of wildlife.

Evidence for this future scenario of declining wildlife populations resulting from recreation and trail development is found in Colorado Parks and Wildlife's report for Avalanche Creek Elk Herd E-15 Data Analysis Unit Plan Game Management Units 43 and 471 (CPW 2013) which includes the Crystal River Valley. This and more recent information indicate that the elk population in this DAU has been declining for several decades.

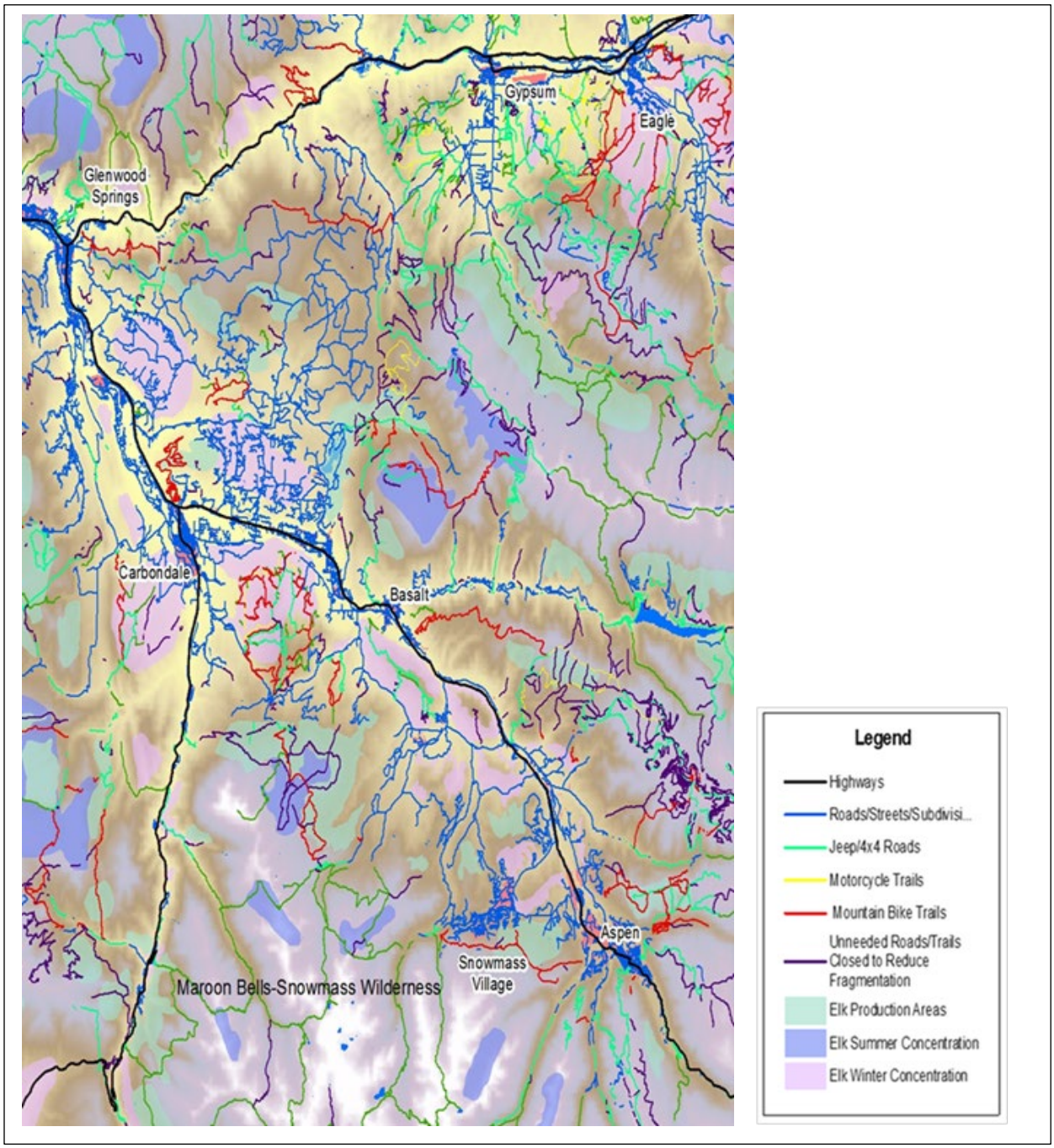

Figure 1. Elk use areas and road and trail-induced fragmentation in the Roaring Fork watershed. Purple lines show unneeded roads and trails closed by the Forest Service, many receiving unauthorized mountain bike or motorcycle use.

From p. 14 of Sierra comments:

Elk populations in the Roaring Fork watershed have experienced a 50% reduction since around the year 2000 (Paul Millhouse, pers.comm 2020). Colorado Parks and Wildlife biologists state that significant issues impacting the elk herd in the Avalanche Creek DAU include outdoor recreation and other human disturbance, habitat loss and fragmentation due to land development, and continued lack of large-scale habitat improvement projects. Further, CPW states: **"*Outdoor recreation has become a year-round presence on the landscape, particularly on public lands, and is the largest indirect impact to the area's wildlife populations.*** There is increasing demand for more recreational trails to be established, as well as frequent use and expansion of unofficial trails, all of which fragment and diminish the quality of remaining wildlife habitat and create disturbances to wildlife on a year-round basis." (CPW 2020).

Kevin Wright, retired CPW District Wildlife Manager, penned a letter to Pitkin County's Board of County Commissioners, OST and the governor (March 23, 2017) regarding the impacts that a recreational trail that OST proposes to build up the Crystal River Valley would have on wildlife ... "All this trail-building is coming at a cost, and it's the local wildlife that's taking it in the shorts because of habitat fragmentation and overuse."

IV. WILDLIFE IMPACTS SUMMARY: DIRECT, INDIRECT AND CUMULATIVE EFFECTS ON WILDLIFE FROM BOTH THE PROPOSED PROJECT AND THE REASONABLY FORESEEABLE AND CONNECTED CCB TRAIL DEMONSTRATES THAT CUMULATIVE IMPACTS ARE LIKELY.

1. Habitat loss and fragmentation are the main drivers of ongoing loss of biodiversity (MEA 2005, Brooks et al. 2002). Recreational trails both directly impact habitat with fragmentation and indirectly through the loss or alteration of habitat (Benninger-Truax et al., 1992 Reed et al., 1996; Bregman et al., 2014). Additionally, best available science documents that the mere presence of humans in natural areas disturbs and negatively impacts wildlife resulting in population declines which diminish population viability.

    - Native wildlife in the area of the proposed trail development will be negatively affected in at least three ways:1) habitat loss through alteration and diminished interior habitat due to edge effects; 2) habitat fragmentation which will both diminish habitat connectivity and compress habitat effectively resulting in habitat loss and 3) drive increased human use-induced disturbance of a natural area that experience very low human use.
    - Individual trail segments in the planned CCBT development that encroach into natural habitat will negatively impact wildlife due to each of the above factors and will contribute to the decline of native wildlife species.
    - Cumulatively, the negative impacts to wildlife from the sum of CCB trail-related habitat loss, fragmentation and disturbance will ultimately result in a downward population spiral and diminished viability for both local populations and metapopulations of wildlife.

- The USFS has failed to consider the essential habitat connections required by sub-populations to sustaining the metapopulation and the consequence of the cumulative loss of subpopulations on the viability of metapopulation

2. Habitat fragmentation results in both a quantitative and qualitative loss of habitat for species originally dependent on that habitat type (Temple, 1986). Consequently, the abundance and diversity of species originally present often declines. Most importantly, fragmentation affects movement and dispersal and modifying behavior (Haila, 2002).
    - Ultimately, habitat fragmentation diminishes the landscape's capacity to sustain healthy populations and metapopulations in five primary ways: loss of original habitat, reduced habitat patch size, increased edge, increased isolation of patches, and modification of natural disturbance regimes (Forman, 1999).

3. Humans disturb and negatively impact wildlife in natural areas which is enabled by recreational trails. Human recreational disturbance is documented to displace wildlife, decrease species diversity, introduce, and spread invasive species, decrease survival and reproduction rates in big game mammals and diminish abundance and species richness in forest bird communities (Gaines et al 2003, Larson et al 2016, Wisdom et al. 2018 Botsch et al. 2018).

    - Effects of recreation on native wildlife include behavioral responses such as increased flight and vigilance; changes in spatial or temporal habitat use; declines in abundance, occupancy, or density; physiological stress; reduced reproductive success; and altered species richness and community composition.
    - Forest bird communities are negatively affected by the mere presence of people in forests along trails with both the number of birds, as well as bird species, lower when trails are used on a more regular basis (Botsch et al. 2018).
    - Key findings from the research at USFS's Pacific Northwest Research Station (Wisdom et al. 2018) documented that: 1) elk avoid people and trails associated with all-terrain vehicle (ATV) use, mountain biking, hiking, and horseback riding; 2) Avoidance was strongest in response to ATV use, followed by mountain biking, and was less strong in response to hiking and horseback riding; 3) In response to these recreation activities, elk moved to areas where they were less likely to encounter recreationists; and 4)Increased movement and flight added energetic costs and decreased foraging times, which can affect animal health and diminish their ability to reproduce.

4. Conclusions from professional wildlife biologists are that seasonal closures are not effective in protecting the winter range of elk and bighorn sheep and cannot be used to mitigate the impact of a bike-pedestrian trail.

    - To offset trail-induced human-disturbance impacts, trail proponents suggest that seasonal closures be implemented to prevent recreational use of the newly proposed trail during the most sensitive times of the year.
    - CPW wildlife biologists have been consistent in their assessment of the ineffectiveness of seasonal closures: **Seasonal wildlife closures have limited**

success at protecting wildlife. This has been well documented by 1) Wilderness Workshops' Crystal River Trail Report by Richard Thompson; 2) Kevin Wright (CPW DWM retired) throughout his career with CPW and letters he submitted to the BOCC in 2015 and 2017; and 3) numerous other professional wildlife biologists.

5. The CCB trail is clearly a reasonably foreseeable action with impacts that may accumulate with the building of each trail segment which, in combination, may result in potentially significant impacts. If the Forest proceeds with its current segmented approach to evaluating the CCB trail, the agency will fail to comprehensively evaluate the potentially significant cumulative impacts of this major recreational development project, denying the public a meaningful opportunity to engage in and provide input on the entire project, thereby undermining the purpose of NEPA.

V. FULL CONSIDERATION OF THE DIRECT, INDIRECT AND CUMULATIVE EFFECTS ON WATER RESOURCES OF BOTH THE PROPOSED PROJECT AND THE REASONABLY FORESEEABLE AND CONNECTED CCB TRAIL DEMONSTRATES THAT CUMULATIVE IMPACTS ARE LIKELY.

Because the FEA fails to take a hard and complete look at the direct, indirect and cumulative impacts of both the Proposed Project and the full CCB trail on water resources, including the Crystal River, as detailed below, it cannot serve as the basis for the Forest Service to make a Finding of No Significant Impact. The Forest Service's FEA fails to both identify and fully analyze the proposed Project's direct, indirect and cumulative impacts on water resources that may result from implementation of both the Redstone to McClure Pass Trail segment and the full, Pitkin County-approved CCB trail. Therefore, it is impossible for it to conclude that such impacts are insignificant.

NEPA and its implementing regulations clearly provide that a federal agency must prepare an EIS when a major federal action "significantly affects the quality of the human environment." 42 U.S.C. § 4332(2)(C); 40 C.F.R. § 1502.4. A federal action "affects" the environment when it "will or *may* have an effect" on the environment. 40 C.F.R. § 1508.3 (emphasis added); *see also Airport Neighbors Alliance v. U.S.*, 90 F.3d 426, 429 (10th Cir. 1996). Significance is gauged based on both the context and intensity of the proposed action. 40 C.F.R. § 1508.27. Context "means that the significance of an action must be analyzed in several contexts such as society as a whole (human, national), the affected region, the affected interests, and the locality." *Id.* § 1508.27(a). Intensity "refers to the severity of impact," and is determined by weighing ten factors, including "[2] [u]nique characteristics of the geographic area such as proximity to historic or cultural resources, park lands, prime farmlands, wetlands, wild and scenic rivers, or ecologically critical areas," and "[4] [w]hether the action is related to other actions with individually insignificant but cumulatively significant impacts." *Id.* §1508.27(b)(2)–(5), (7). For this final factor, "[s]ignificance exists if it is reasonable to anticipate a cumulatively significant impact on the environment. Significance cannot be avoided by terming an action temporary or by breaking it down into small component parts." *Id.*

Finally, even "[i]f an agency decides not to prepare an EIS, **it must supply a convincing statement of reasons to explain why a project's impacts are insignificant**." *Blue Mtns Biodiversity Proj. v. Blackwood,* 161 F.3d 1208, 1212 (9th Cir. 1998) (internal quotations omitted, emphasis added); *see also S. Utah Wilderness All. v. Norton,* 457 F. Supp. 2d 1253, 1261 (D. Utah 2006), *aff'd in part, appeal dismissed in part sub nom. S. Utah Wilderness All. v. Kempthorne,* 525 F.3d 966 (10th Cir. 2008). Thus, NEPA requires the Forest Service to present a robust analysis of these significance factors in its FEA, and specifically that it give careful consideration to the evidence currently in the record of the potential for significant river/water resource and wildlife impacts that would result from the build-out of the entire Pitkin County-approved trail project. That evidence, which was provided to the Forest Service in a number of project scoping comment letters, including from Katherine Hudson (incorporated herein), make it clear that there is the potential for significant impacts. Yet that evidence is not fully discussed in the Forest Service's January 2022 Redstone to McClure Trail Project FEA.

1. The Forest Service's FEA Clearly Acknowledges the Importance of Examining Potential Impacts to River and Water Resources given the Proposed Project's Location in the Crystal River Valley.

CEQ regulations require the Federal agency conducting an environmental assessment in compliance with NEPA to give serious consideration to the context in which the proposed action will take place, in particular, the unique characteristics of the geographic area, including "wild and scenic rivers" and "ecologically critical areas." 40 C.F.R. § 1508.27(b)(3). The FEA does in fact acknowledge that several specific resources warranted a broader geographic scope of analysis of potential impacts than just the project area. The resources identified include water resources, Wild and Scenic River, and recreation. DEA at 17, 69. Specifically, the DEA states that CCB Trail segments outside of the project analysis area (Redstone to McClure Pass) "may affect resources that necessitate" a broader geographic analysis of potential impacts. These resources include:

> • Water resources – Crystal River Valley, **due to the potential for downstream implications of effects**
> • Wildlife – Crystal River Valley, based on regional habitat use for key species of interest, including elk, bighorn sheep, and Canada lynx
> • Recreation – Crystal River Valley, based on the regional scope of recreation opportunities, trail connectivity, and community dynamics
> • Wild and Scenic River – Crystal River from (near) Marble to Perham Creek, based on the eligible Wild and Scenic River segment
>
> FEA at 69 (emphasis added). See also DDN at 4 ("the context of this decision is limited to the land in and adjacent to the project area and, **for broad ranging resources, the Crystal River Valley**" (emphasis added).

The FEA also concedes that "Potential wetlands and waters of the U.S. in the project area are associated with the Crystal River, Hayes Creek, Bears Gulch, Huntsman Gulch, and multiple small unnamed tributary streams." FEA at 23.

In addition, both the FEA and the Draft Decision Notice make a point of highlighting the special characteristics of the broader project setting related specifically to the Crystal River:

"The project area includes several small streams that drain the west flank of the Crystal River Valley south of Redstone. The Crystal River is a large, regionally significant water body that flows from its headwaters in the Elk Mountains to its confluence with the Roaring Fork River near Carbondale (about 16 miles downstream from the project area) and is one of the longest undammed rivers in Colorado (Lotic Hydrological 2016)." FEA at 20.

"The project area is known for its mountainous scenery and character, which is characterized by the Crystal River, dramatic cliffs, and surrounding mountain ranges." FEA at 42.

"The Crystal River within the project area is eligible for Wild and Scenic River designation, as directed by the 2002 WRNF Forest Plan. The river within and adjacent to the project area is recognized to have recreational Outstandingly Remarkable Values (ORVs)." DDN at 6.

Given these acknowledgments by the Forest Service of the importance of analyzing the Proposed Project's potential direct, indirect and cumulative effects on such an important resource as the Crystal River, a key determination to be made in evaluating the sufficiency of the FEA's impact analysis and conclusions is whether the FEA's analysis of those particular effects meet the requirements of CEQ's NEPA regulations.

2. The Effects and Significance Findings of the Water Resources Impact Analysis that the Forest Service FEA did Conduct Establishes that there is the Potential for Short Term Impacts and Cumulative Effects.

At the outset of the FEA, the Forest Service confirms that certain identified resource issues would be considered in detail, including Water Resources ("Streams, drainages, and surface runoff"), Vegetation (including wetland and riparian areas), Recreation (including potential changes to trail access), and Wild and Scenic River ("Potential changes t documented Outstandingly Remarkable Values for the Crystal River"). FEA at 7. However, in contrast to its DEA, the Forest Service chooses to bifurcate its analysis of the potential impacts to particular resources into two sections, one that focuses on the direct and indirect effects and another, separate section that analyzes the potential cumulative impacts on those resources. This approach confuses cumulative actions and cumulative effects and complicates the analysis required to determine whether past, present and reasonably foreseeable future actions that are individually minor but collectively significant over a period of time have the potential to result in cumulatively significant impacts. See §1508.7.

a. The FEA's bifurcated Direct and Indirect Effects analysis does acknowledge the potential for impacts to some Water Resources, Wetlands and Waters of the U.S, and Riparian Communities in the Project area. See FEA at 20 – 29.

"The project area includes several small streams that drain the west flank of the Crystal River Valley south of Redstone . . . . The proposed project would directly intersect several intermittent drainages and gullies, as well as Bears Gulch, Huntsman Gulch, and the large intermittent stream that crosses the Old McClure Pass Road." FEA at 20. The project area's vegetation includes: "(r)iparian and wetland communities . . . found along the Crystal River and along several small streams." "Potential wetlands and waters of the U.S. in the project area associated with the Crystal River, Hayes Creek, Bears Gulch, Huntsman Gulch and multiple small unnamed tributary streams." FEA at 23-24; see Table 5 – Wetlands and Waters in the Project Area, FEA at 25.

See also Summary of Effects Table 14, DEA p. 73, wherein the impacts are identified as:

> Water Resources: • Short-term impacts from construction and potential sedimentation; insignificant long-term effects
>
> Vegetation • Insignificant, localized impacts from vegetation clearing along the trail corridor and potential interface with several small wetlands

The activities that would cause these "short term, localized impacts" to Water Resources, Vegetation, and Wetlands and Waters of the U.S are described in the FEA's Direct and Indirect Effects analysis as follows:

> "The proposed project would cross multiple intermittent drainages along Highway 133, requiring extended culverts or other structures. These would be designed to ensure that water conveyance during and after storm events is not negatively affected, resulting in no effects on water resources.
>
> At Bears Gulch, the historic road ford would be reconfigured and enhanced to provide a suitable surface crossing for trail traffic. . . . some short-term disturbance may occur during trail construction (depending on seasonal runoff conditions), **resulting in localized disturbance to the streambed and small amounts of sedimentation** within the first year after construction. **This could result in indirect effects on the Crystal River by contributing sediment.** However, the small amount of sediment produced and the short duration of construction. **Long-term impacts (greater than 1 year after construction) would be insignificant** and may result in an improvement over existing conditions due to more durable and stable (and less erosive) surfaces.
>
> On Old McClure Pass Road, the intermittent stream crossing would be improved by elevating and armoring the trail tread with large rocks and improving the function of the existing culvert. At Huntsman Gulch, a trail bridge would be constructed to span the stream channel and associated wetlands. These activities . . . **would result in localized short-term**

disturbance during construction activity (up to 1 year), along with small amounts of sedimentation. In both locations, **any sediment is unlikely to affect water quality in the Crystal River** due to the small scale and duration of activity, the length of the active stream channel between the disturbance site and the river, and adherence to PDC (Appendix A)." Excerpts from FEA at 22 emphasis added.

"The proposed trail would intersect a small portion of a depressional wetland associated with a roadside ditch and culvert adjacent to Highway 133 (Wetland 2) and may also intersect Wetlands 1 and 4. The size and extent of these wetland impacts are not currently known but would be less than 0.044 acre, which is the total size of all three wetlands **(and would be the maximum impact if they were completely eliminated).** Construction of a trail bridge across Huntsman Gulch would be designed to span the stream channel and associated wetlands (OHWM5/Wetland 6). **Construction activity would result in short-term impacts on the stream channel and wetlands (up to about 3 years),** affecting less than 0.03 acre; no long-term impacts (greater than 3 years) on wetlands would occur at this location. **These short and long-term impacts on wetlands would be considered** and, if possible, minimized, during final design and adherence to PDC (Appendix A), and would be subject to authorization by the U.S. Army Corps of Engineers under Section 404 of the Clean Water Act. Effects to wetlands would not be significant, **because any permanent impacts would be limited in scale** and would be minimized through design measures and PDC, while temporary impacts would be allowed to recover and revegetate.

"The proposed trail would involve a crossing of Huntsman Gulch. Impacts on riparian and wetland vegetation would be minimized by constructing a trail bridge across Huntsman Gulch and by aligning the trail through the uplands outside of the riparian and wetland community along Huntsman Gulch. **Any riparian impacts at Huntsman Gulch would be insignificant, due to the limited scale of the potential impact and design and PDC measures to further limit impacts** to vegetation." FEA at 29, emphasis added.

The FEA also acknowledges the potential for short-term impacts to soils as a result of trail construction. "These activities would result in short-term impacts (occurring within 6-12 months of construction) on soils due to new ground disturbance and minor erosion in the months following construction." According to the FEA, "the potential for long-term impacts (occurring over more than 1 year after construction) on soils (such as major erosion, downcutting, and sedimentation) in these areas would be minimized using BMPs for erosion control and revegetation," and therefore would not be significant. "Trail construction along the existing non-system trails on historic roadbeds would primarily use the existing trail tread with minor improvements (such as water bars and knicks) to maintain surface water drainage. These activities would result in new soil disturbance and minor erosion in the immediate vicinity in the months following construction." FEA at 19.

In sum, the FEA's Direct and Indirect Effects analysis clearly identifies the potential for Direct and Indirect effects to Water Resources, Wetlands of the US and Riparian communities

(Vegetation), while characterizing their "Intensity" as insignificant for various reasons, including that those impacts would be short-term or localized.

b. The FEA's Separate Cumulative Effects Analysis,

After acknowledging that the Forest Service considers the full CCB trail to be a reasonably foreseeable future action that should be analyzed for potential cumulative effects, "based on an adopted plan for the corridor. Pitkin County 2018," the FEA conducts a separate Cumulative Effects Analysis. FEA at 67. For reasons that are not entirely clear, the FEA chooses not to analyze Wetlands and Waters of the US and Riparian Vegetation for cumulative effects because potential effects to vegetation on the "remaining segments of the CCB Trail are located outside the analysis area." FEA at 70. The FEA also contains no evaluation of potential cumulative effects related to soils and soil erosion, because "the effects on soils from foreseeable actions are not expected to occur in the same time frame (1-2 years) or within the same analysis area as the proposed action and therefore would not result in cumulative effects." FEA at 70.

However, the FEA does evaluate the potential for cumulative effects to Water Resources, Wildlife, Wild and Scenic River, as well as Scenery and Recreation. The FEA does determine the potential for cumulative effects to Water Resources and Wildlife, as well as the Crystal Rivers's Wild and Scenic River eligibility and Recreation. See Table 14 at FEA 73. The FEA characterizes potential Water Resource cumulative effects as "insignificant" because Proposed Action-related effects from "construction and potential sedimentation" would be short term, and therefore have "insignificant long term effects." See Table 14, FEA at 73. See also Table 13, FEA at 70: "The incremental effects of each segment of CCB trail implemented . . . are not expected to occur within the same time frame (1-2 years) as the Proposed Action, and therefore would be insignificant." Wildlife Cumulative Impacts are also characterized as insignificant "due to their dispersed nature and PDC to reduce direct effects on wildlife." FEA at 71. Cumulative impacts on Wild and Scenic River eligibility are dismissed as only beneficial. FEA at 71 and 73.

The overarching conclusion reached by the Forest Service as a result of its Environmental analysis is that the Proposed Project will indeed result in a number of direct, indirect and cumulative impacts, including to Water Resources, Wetlands and Riparian Vegetation, and Wildlife, but that none of those impacts will be significant.

3. The Water Resources Significance Analysis in the FEA Fails to Take the Hard Look at Potential Cumulative Impacts Required by CEQ.

The Forest Service must not improperly segment its CEQ analysis of the water resource impacts associated with the Proposed Project and the larger, reasonably foreseeable, Pitkin County-approved plan to build the entire Carbondale to Crested Butte Trail. The Forest Service FEA clearly acknowledges that the Pitkin County-approved Carbondale to Crested Butte Trail is

a reasonably foreseeable future action: a non-Federal activity for which there are identified proposals and existing decisions. (FEA at 67). Given that, in evaluating the potential impacts of the Proposed Action (the segmented Redstone to McClure Trail Project), CEQ directs that the Forest Service to consider the incremental impacts of the proposed action with the added impacts of reasonably foreseeable future actions, all of which may be individually minor but collectively have the potential to be significant. (See 36 CFR §§220.3 and 220.7; 40 CFR §1508.7).

Moreover, numerous courts have ruled that an EIS must be prepared when expected impacts **may** be significant; in other words, an EIS must be prepared for a project even if it is not certain to have significant impacts. See, e. g., *Anderson v. Evans*, 314 F.3d 1006 (9th Cir. Dec. 2002).

a. CEQ Regulations preclude the segmented approach to impact analysis taken by the FEA.

Analyzing just the Redstone-McClure segment now and analyzing other segments only when they are specifically proposed for implementation, as the Forest Service appears to propose to do (FEA at 5), would be segmenting the analysis of a large project to avoid a finding of significance. The Forest Service's intentions to segment the NEPA-required analysis of the entire CCB trail seem clear from the opening language of the FEA: "From the perspective of the Forest Service, any decision on the Proposed Action does not, and should not, preclude full and appropriate analysis of other sections of the CCB Trail under NEPA . . . . If those segments are proposed for implementation, the Forest Service will, as appropriate, conduct the necessary NEPA analysis to analyze and disclose the environmental effects of those actions." (Ibid.)

This is expressly prohibited by the CEQ Rule that requires agencies to consider the following in determining significance:

> Whether the action is related to other actions with individually insignificant but cumulatively significant impacts. Significance exists if it is reasonable to anticipate a cumulatively significant impact on the environment. Significance cannot be avoided by terming an action temporary or by breaking it down into small component parts.
>
> 40 CFR 1508.27(b)(7).

The Forest Service DEA clearly acknowledges that the Pitkin County-approved Carbondale to Crested Butte Trail is a reasonably foreseeable future action: a non-Federal activity for which there are identified proposals and existing decisions. FEA, pp. 69. In addition, there is also no question that the CCB Trail is a connected action with the Redstone to McClure Pass Trail, because the latter is clearly part of the CCB proposal. See the Final Trail Plan, pp. 148-171 (Pitkin County 2018). Thus the Redstone to McClure Pass Trail is an interdependent part of the larger CCB proposal, and it depends on the larger proposal for its justification. Given that, in evaluating the potential impacts of the Proposed Action (the segmented Redstone to McClure Trail Project), CEQ directs the Forest Service to consider the incremental impacts of the

proposed action with the added impacts of reasonably foreseeable future actions, all of which may be individually minor but collectively have the potential to be significant, in the same impact statement. (See 36 CFR §§220.3 and 220.7; 40 CFR §1508.7 and §1508.25(a)(1)(iii)).

Given these unambiguous CEQ requirements and the Forest Service's acknowledgement, in both its DEA and FEA for the Proposed Project, that the CCB is a reasonably foreseeable future action that has the potential to result in cumulative impacts, CEQ requires that the Forest Service give careful consideration to the evidence currently in the record of the potential for significant river/ water resource and wildlife impacts that would result from the build-out of the entire Pitkin County approved trail project. That evidence from both the Trail Sponsor, Pitkin County, and its consultants, as well as from independent experts, previously provided to the Forest Service in a number of project scoping and DEA comment letters, including from Katherine Hudson (incorporated herein), make it clear that there is the potential for significant impacts to water resources and the Crystal River's Wild and Scenic eligibility.

Instead, the FEA takes the position that "the Forest Service does not have the ability to speculate on future implementation plans beyond what was documented in the CCB Trail Plan" and the exact trail location has not been selected" as its justification for only being able to consider "general impacts on resources" from the Pitkin-County approved, ultimate intended build-out of the CCB Trail north of Redstone. FEA at 68. The FEA states, incorrectly, that because "no specific trail route is currently proposed, the site specific resource impacts of the proposed project are unknown at this time." FEA at 69. In fact, as the FEA does reference, there is a Pitkin County-approved trail plan (Pitkin County 2018) which details two specific trail alignments and which discusses the potential impacts of those alignments, FEA at 68 – 69. The FEA then goes on to dismiss what it terms as the general description of potential impacts in that trail plan, without even addressing the discussions of water resource/ river impacts contained in those documents, and other Pitkin County consultant documents previously shared with the Forest Service as attachments to scoping and DEA comment submissions. Ultimately, the Forest Service chooses to ignore that information regarding Project sponsor- and consultant-identified potential water resource and river impacts in its FEA Cumulative Effects analysis, incorporated into Table 13, FEA at 70 – 72.

Given these unambiguous CEQ requirements and the Forest Service's acknowledgement, in both its DEA and FEA for the Proposed Project, that the CCB is a reasonably foreseeable future action that has the potential to result in cumulative impacts, CEQ requires that the Forest Service give careful consideration to the evidence currently in the record of the potential for significant river/ water resource and wildlife impacts that would result from the build-out of the entire Pitkin County approved trail project.

b. Evidence in the record of indirect and long-term cumulative effects to Water Resources unexamined by the FEA.

The FEA fails to adequately acknowledge and evaluate the potential indirect and cumulative effects on water resources, as well as wildlife and other resources, of the increased trail use which is in fact the primary goal of the CCB trail plan. See Section II and III of these comments. The FEA does concede the implementation of the Proposed Project "would increase the frequency and magnitude of recreational use along the trail corridor," especially for mountain bikers. See FEA at 72 and 54. However, the FEA significance analysis completely fails to address the direct and indirect impacts that have the potential, if not the likelihood, to result from that increased human use to soils, water resources, and wetland and riparian areas as a result of erosion, loss of vegetation, and resulting sedimentation due to increasing trail use by a larger numbers of hikers and mountain bikers. Unlike construction impacts, these would not be short term, but could have long-term effects, which would not "dissipate before other actions are implemented." See Table 14, Summary of Effects - Water Resources. FEA at 73.

The potential for these longer-term effects on Water Resources, which would continue and possibly increase as future segments of the CCB are constructed, must be considered in the FEA's cumulative impacts analysis related to water resources and to the Crystal River's Wild and Scenic eligibility. In fact, the Forest Service's DEA does concede that the Proposed Project does have the potential to cause cumulative effects on water resources: "When combined with the effects of past, present, and reasonably foreseeable future actions, **the proposed project could result in cumulative effects on water resources resulting from sedimentation in tributary streams and the Crystal River during and immediately after construction.**" DEA at 27 (emphasis added). (This language was omitted from the FEA.)

The FEA's Cumulative and Summary of Effects analyses for water resources does clearly acknowledge the potential for sedimentation impacts from both the Project and the final build-out of the planned CCB trail, but erroneously dismisses those impacts as insignificant because only construction-related impacts were evaluated and then dismissed as temporary, an incremental effect of each trail segment when implemented that would not overlap. FEA at 70 and 73.

The FEA completely fails to weigh or even consider the potential for cumulative impacts to water resources resulting from sedimentation caused by short term, construction-related impacts, in combination with long term sedimentation impacts from increasing trail use. The absence of that analysis violates CEQ §1508.7, §1508(a)(2) and §1508.27(b)(7), which require that cumulative impacts that can result from individually minor but collectively significant action over a period of time be considered, and that significance cannot be avoided by terming an action temporary or breaking it down into small component parts.

c. Evidence in the Record of the potential for significant cumulative impacts to Water Resources associated with construction of the entire Pitkin County-approved CCB Trail.

Having conceded the potential for short term or minimal impacts to water resources and vegetation related to implementation of the Redstone to McClure Trail project, and in light of the potential for long-term water resource impacts from sedimentation caused by increasing trail use discussed above, the FEA must address the potential for significant cumulative water resource impacts associated with the construction of the entire CCB trail, as planned. Yet, FEA's discussion of potential cumulative impacts completely ignores the significant evidence of impacts to water resources and minimizes impacts to riparian vegetation that were presented to the Forest Service in scoping and DEA comments submitted to the Forest Service in 2020. That evidence from both the Trail Sponsor, Pitkin County, and its consultants, as well as from independent experts, previously provided to the Forest Service in a number of project scoping and DEA comment letters, including from Katherine Hudson (incorporated herein), make it clear that there is the potential for significant impacts to water resources and the Crystal River's Wild and Scenic eligibility.

The Forest Service must give serious consideration to Pitkin County's own conclusions regarding the potential river/ riparian impacts associated with the build out of its entire, approved CCB trail project, which identified the potential impacts of trail implementation on the Crystal River as including: "new structures or hardening (e.g., riprap, walls, bridge abutments, or piers) would further degrade or constrict the stream channel, or result in a significant loss of wetland and riparian habitat" within and along the Crystal River stream channel and floodplain. December 2018 Final Trail Plan, p. 52 (Pitkin County 2018).

Moreover, a detailed analysis of potential impacts to river/ riparian resources associated with build-out of the approved CCB Trail was provided by Pitkin County Open Space to Pitkin County Healthy Rivers Board (also included with previous K. Hudson Comment submissions), which are confirmed in the County's Final Trail Plan at pp. 49-53 and at pp. 19-23 in Appendix B of the Plan. In its response to the River Board (attached), OST summarized potential impacts to aquatic resources by Alignment Alternatives (Alignment A – the "Highway" Alignment, on the east/ river side of Highway 133 along the bank of the Crystal River, and Alignment B – on the east side of the Crystal River, following existing trails and roads). These potential impacts are confirmed in the County's approved December 2018 Final Trail Plan (pp. 49 – 53), as well as in Appendix B of the Plan (the March 2018 Crystal River Section Environmental Review prepared by ERO Resources), pp. 19 – 23. (Note that the County does not address impacts to water resources in its own section of the Environmental Review of the Trail, but rather under a section titled "Vegetation Resources.").

Appendix B of the Final Trail Plan (pp. 19, 21-23) documents the potential for new impacts to stream habitat associated with the implementation of both CCB trail alternatives resulting from:

- the installation of additional narrow bridges, which would further constrict the floodplain;

- installation of piers, retaining walls, riprap or other hardened structures along or within the streambed, which would further constrict stream morphology and function and result in increased channelization;
- removal or fragmentation of high-quality floodplain riparian habitats due to trail construction and hardening; and
- further dissection of floodplain connections due to new construction.

The Final Trail plan then summarizes the potential Instream and Riparian impacts along the Crystal River by trail alternative (emphasis added):

> Anticipated impacts from **Alternative A,** which follows the existing alignment of SH 133 for its entire length, include:
>
> - **Existing riparian vegetation would likely be removed** to make way for the trail bench, **with little opportunity for revegetation and mitigation.**
> - Assuming a narrow trail disturbance width of up to 15 feet from centerline, **the trail would disturb up to about 75 acres of vegetation throughout the corridor,** most of which would be **adjacent to the Crystal River**.
> - Challenging trail design solutions along **the narrow strip between the highway and the streambank would require about <u>11,300 feet (2.1 miles) of new riprap, walls, piers, or other hardened structures</u>.**
> - **New hardened structures would further incise and degrade stream function in affected areas.**
> - **New construction and excavation** along the Crystal River streambank, and in some cases within the channel, **would increase erosion and sedimentation and the potential for impacts to water quality and in-stream habitat.** While these impacts would be reduced by construction timing, best management practices (BMPs) and engineered solutions, the location and extent of this impact would elevate the risk of impacts.
>
> Anticipated impacts from **Alternative B:**
>
> - Several small areas of wetland and riparian vegetation would be disturbed during construction.
> - A larger extent of wetland and riparian vegetation in the Janeway North area (about 0.35 acre) would be impacted.
> - Assuming a wider trail disturbance of up to 25 feet from centerline, the trail would disturb up to about 120 acres of vegetation throughout the corridor, most of which would be in upland locations.
> - **Increased drainage and sedimentation would occur along the length of the trail during and immediately following construction, potentially impacting water quality and in-stream habitat.** Construction BMPs and the vegetated buffer distance between the trail alignment and the Crystal River in many areas would reduce these impacts.

Moreover, Pitkin County's Final Trail plan acknowledges that implementation could require up to fourteen bridges along the Crystal River. Some of the identified bridges are new structures, while others are adjacent to or replacements of existing bridges. "To the extent that trail alignment options utilize bridges to switch between Alternative A and Alternative B

segments, **new bridge abutments could result in impacts to wetlands, riparian habitat, or stream function**." Having acknowledged these bridge-related impacts likely to result from the build-out of the CCB Trail, the County Final Trail plan notes that because the exact location and span length of new bridges has not yet been selected, the significance of these impacts cannot be determined at this time.

Finally, as has been cited in previous submissions (including K. Hudson DEA comments dated 2-12-2022), the stream and riparian scientist who led the assessment of river health for the Crystal River Management Plan in 2016, Mark Beardsley, has determined that **the Crystal River is generally a very healthy river, and that building a new trail up the valley "will introduce long-term impacts to river health that will be difficult or impossible to reverse in the future."** In **Mark Beardsley's Report** on the impacts of the trail on the Crystal River titled Impacts of the Carbondale to Crested Butte Trail on the Health of the Crystal River, November 8, 2017 (attached), Beardsley found that bridges presented the greatest risk of impacts to river health by the proposed trail. He concluded that **8 of the 10 new bridges proposed would have "high to very high levels of impact to the river** because they cross at areas where the river has active floodplain and wider riparian areas. . . . **Building bridges in these locations would likely involve channelizing and armoring segments of the river and filling portions of active and functional floodplain with native riparian vegetation."** Because of that, Mr. Beardsley concludes that considering these impacts is critical to minimize the amount of permanent damage to a healthy river.

d. Evidence in the Record regarding the potential for negative cumulative impacts on the Crystal River's eligibility for Wild and Scenic designation.

The FEA's failure to fully consider the potential for direct, indirect and cumulative impacts to water resources discussed above undermines the FEA's analysis of the potential impacts of CCB trail buildout on the Crystal River's Wild and Scenic eligibility, which concludes that trail buildout will only result in cumulative benefits to that eligibility. FEA at 71 and 73. This effect determination ignores not only the completely unanalyzed potential for long term, negative water quality impacts to the Crystal and its tributaries from sedimentation caused by increasing trail use, but also the significant evidence provided by Pitkin County and its consultants regarding the negative impacts that CCB trail buildout has the potential to cause to the Crystal River as a result of removal of vegetation, erosion and sedimentation, potentially impacting water quality and instream habitat, new excavation along the Crystal River streambank, added hardened structures (rip rap, walls, piers, bridge abutments), and channelizing and armoring of segments of the river associated with bridge building, among others. See the discussion of potential impacts to river/ riparian resources associated with the build-out of the approved CCB Trail above.

As the FEA clearly acknowledges, "the Crystal River within the project area was found to be eligible under 5(d)(1) study criteria in the National Wild and Scenic Rivers Act (WSR)

during the 2002 WRNF Forest Plan (Forest Service, WRNF 2002) planning process. Based on these criteria, the Crystal River corridor was designated in the Forest Plan as Management Area 4.4 – Recreational Rivers, Designated and Eligible." FEA at 55. The Forest Service is directed by its own Forest Plan to manage the areas that it designates as eligible "to protect and perpetuate eligible river segments in their current conditions so that their recreation river qualities are not diminished," with the goal of preserving the river corridor's identified Outstandingly Remarkable Values (ORVs) and to maintain its eligibility or suitability." (Forest Service, WRNF 2002). Finally, the FEA confirms that fishing and boating are popular recreational activities directly related to the Crystal River. FEA at 51 and 55.

Given the potential impacts to aquatic resources of the Crystal River related to sedimentation from increased trail use, with the potential to negatively affect water quality not addressed in the FEA, and the potential impacts confirmed in the County's approved December 2018 Final Trail Plan (pp. 49 – 53) and appendices, the DEA's conclusion that the cumulative impacts of the reasonably foreseeable action of the County-approved buildout of the CCB would result in "cumulative benefits" to the Crystal River's Forest Service-confirmed ORVs is not supported by the facts already in the record. In particular, these cumulative impacts have a significant potential to negatively affect the quality of fishing and boating experiences on the Crystal into the future, recreational activities that are among the recreational ORVs which are the basis for the Forest Service's Wild and Scenic River eligibility determination for the Crystal.

The potential for construction of up to 14 new bridges, the channelizing and armoring segments of the river, and the filling of portions of active and functional floodplain are completely inconsistent with the stated goal of the Forest Plan "to protect and perpetuate eligible river segments in their current conditions" to preserve the Crystal River's identified ORVs and maintain its eligibility and suitability for Wild and Scenic designation. These potential impacts are confirmed by the County's own consultant, ERO Resources, in Appendix B of the Final Trail Plan, pp. 19, 21-23, as well as by Mark Beardsley's Report, cited above, which concluded that building a new trail up the valley "will introduce long-term impacts to river health that will be difficult or impossible to reverse in the future" and that a number of the new bridges proposed would result in "high to very high levels of impact to the river."

In fact, the Forest Plan does not allow uses that do not conserve wild-scenic-recreational river eligibility:

> Proposed new uses, management actions, or facilities on National Forest System lands are not allowed if they alter the recreational characteristics of the land and physical resources, or affect the eligibility, potential classification, or potential suitability of the area. Forest Plan at 3-48.

Thus, the buildout of the CCB is completely inconsistent with the Forest Plan's direction to "protect and perpetuate eligible river segments in their current conditions" and to preserve the river corridor's ORVs to maintain its eligibility. FEA at 55, quoting 2002 WRNF Forest Plan.

e. Given the evidence of the potential for significant direct, indirect and cumulative impacts to Water Resources currently in the record before the Forest Service, governing CEQ regulations and controlling case law do not support the issuance of a FONSI and require the preparation of a full EIS on the entire approved CCB Trail plan.

The Forest Service FEA fails to give consideration to the significant evidence of the potential cumulative impacts to water resources, as well as other key resources, from CCB trail build out, dismissing it with the statement that "site-specific resource impacts of the proposed project are unknown at this time." FEA at 69. Based on this disregarding of the clear potential for cumulative impacts detailed by the project sponsor, Pitkin County, in its own trail plan documents cited by the Forest Service in the FEA, the Forest Service concludes, as to Cumulative Effects on Water Resources related to the Crystal River from Placita to Carbondale: "The incremental effects of each segment of CCB trail implemented would be dissipated with time, are not expected to occur within the same time frame (1-2 years) as the Proposed Action, and therefore would be insignificant." FEA at 70.

This conclusion ignores Pitkin County's own description of the potential for wetland, riparian and instream impacts associated with construction of the full CCB, confirmed in its approved Final Trail Plan, as well as in the ERO Resources-prepared Appendix B to that Plan. This documentation makes it clear that impacts on aquatic and riparian resources resulting from the Proposed Action, when combined with impacts to these resources in other parts of the CCB Trail, could be significant. As a result, the direction of CEQ, and the case law interpreting it, is clear: significance cannot be avoided by terming an action temporary or by breaking it down into small component parts and an EIS must be prepared for a project even if it is not certain to have significant impacts. §§1508.7 and 1508.27(b)(7). See discussion of CEQ requirements in Section I above.)

Federal Court decisions have consistently reiterated these key CEQ NEPA principles, and support the conclusion that an EIS must be prepared to assess all of the potentially significant impacts associated with the full CCB Trial. Where "several actions have a cumulative ... environmental effect, this consequence must be considered in an EIS." (*Neighbors of Cuddy Mountain v. U.S. Forest Service*, 137 F.3d 1372, 1378 (9th Cir. 1998); *see also* 40 C.F.R. § 1508.25(a) (stating that the "scope" of an EIS includes consideration of "connected actions")). The purpose of this requirement is to prevent agencies from dividing one project into multiple individual actions "each of which individually has an insignificant environmental impact, but which collectively have a substantial impact." *Thomas v. Peterson,* 753 F.2d 754, 758 (9th Cir.1985).

In addition, the Supreme Court has held that under NEPA, an agency not only has a duty to consider cumulative impacts, but also a separate duty to consider those impacts in a single NEPA process. *Kleppe v. Sierra Club,* 427 U.S. 390, 410, 96 S.Ct. 2718, 2730, 49 L.Ed.2d 576 (1976). See also *Native Ecosystems Council v. Dombeck*, 304 F.3d 886, 893-94 (9th Cir. 2002), which found that federal courts have concluded "[a] single NEPA review document is required for distinct projects when there is a single proposal governing the projects or when the projects are connected, cumulative, or similar actions under the regulations implementing NEPA."

Finally, Federal courts have found that this particularly true for the analysis of the potential impacts associated with trails. Federal courts require the Forest Service to analyze the cumulative effects of a trail segment where the trail will connect to other trails. *Sierra Club v. United States Forest Serv.*, 857 F. Supp. 2d 1167, 1181 (D. Utah 2012). This is because the "proper reference point for a cumulative impacts inquiry is the entire trail system." *N. Cascade Conservation Council*, 98 F. Supp. 2d at 1198. In particular, **the "environmental significance of [a trail] cannot be accurately assessed unless the potential for increased use resulting from the cumulative impact of the projected network of trails . . . is carefully considered**." *Wash. Trails Ass'n*, 935 F. Supp. at 1123 (emphasis added).

V. FULL CONSIDERATION OF THE DIRECT, INDIRECT AND CUMULATIVE EFFECTS ON WILDLIFE AND WATER RESOURCES OF BOTH THE PROPOSED PROJECT AND THE REASONABLY FORESEEABLE AND CONNECTED CCB TRAIL DEMONSTRATES THAT SIGNIFICANT CUMULATIVE IMPACTS ARE LIKELY. THEREFORE, A FONSI IS PRECLUDED AND AN EIS MUST BE PREPARED.

Because the Forest Service's FEA fails to fully analyze what direct, indirect, and cumulative impacts on wildlife and water resources may occur as a result of implementation of both the Redstone to McClure Pass Trail segment and the full, approved CCB trail, it is impossible for it to conclude that such impacts are insignificant. Consequently, given all of the potential environmental effects of constructing the full trail, both discussed above and in the incorporated documents, and given that the Forest Service's FEA, as well as Final Trail Plan documents prepared by the Trail sponsor, Pitkin County, considered together appear to establish the potential for at least one, if not more than one, significant environmental impact that may result from the CCB project to wildlife, the river or another resource, the issuance of a FONSI is not justified. The preparation of a DEIS is required.

VI. SUGGESTED REMEDIES

The Forest should not approve the Redstone-McClure Pass segment of the full, Pitkin County-approved CCBT at this time. Since the entire CCBT is clearly a reasonably foreseeable action having cumulative impacts with the Redstone-McClure segment, there must first be an

analysis of the possible impacts from constructing and operating the entire CCBT. This overall project must be documented in an environmental impact statement.

If the Forest Service proceeds with its current piecemeal approach to evaluating the CCB trail, the agency will fail to comprehensively evaluate the potentially significant impacts of this major recreational development project. In doing so the Forest will deny the public a meaningful opportunity to engage in and provide input on the entire project, frustrating the fundamental goals of NEPA.

Consequently, the Forest Service should rescind its proposed FONSI and undertake a comprehensive examination of all potential impacts likely to result from the full CBB trail, as documented in Pitkin County's trail plan and associated documents. rather than the segmented environmental review of just one portion of that trail that its FEA attempts to do. Rather than segmenting the CEQ environmental review of the CCB trail into a number of different pieces, the Forest Service should consider the whole project in one EIS.

As recommended by CPW and USFS wildlife biologists (Inventory and Assessment of Habitat in the Crystal River Valley 2007) inactive Forest Service trails within the valley and along the railroad grade, should not be activated in the Forest Service Travel management plan. If any part of the CCBT is built, including the Redstone-McClure Pass segment, dogs must be leashed at all times. If any trail is built, winter and/or calving season closures must be imposed as needed to protect wildlife, and the EIS must show how enforcement of these closures would be effective.

VII. REFERENCES.

1. PREVIOUS SUBMISSIONS

Sierra Club Trail DEA. 2-22-22. Comments on USDA Forest Service Draft Environmental Assessment (DEA) for Redstone to McClure Pass section of Carbondale to Crested Butte (CCB) Trail (Trail Project #56913)

Roaring Fork Audubon Society. 2-22-22. Comments on USDA Forest Service Draft Environmental Assessment (DEA) for Redstone to McClure Pass Section of Carbondale to Crested Butte (CCB) Trail (Trail Project #56913)

K. Hudson Scoping Comment letter to NFS re Pitkin trail review, 1-17-20, Scoping Comment Redstone to McClure Pass Trail #56913

K. Hudson Scoping Comment letter to NFS re Pitkin trail review, 1-17-20, Scoping Comment Redstone to McClure Pass Trail #56913

K. Hudson Comments on USDA Forest Service Draft Environmental Assessment (DEA) for Redstone to McClure Pass section of Carbondale to Crested Butte (CCB) Trail (Trail Project #56913)

2. PREVIOUSLY SUBMITTED SUPPORTING DOCUMENTS:

Pitkin County Request for Forest Service Review of Carbondale to Crested Butte Trail Proposal – Redstone to McClure Pass Segment 5-24-19

Pitkin County. 2018. Carbondale to Crested Butte Trail Plan. https://pitkincounty.com/1132/Carbondale-to-Crested-Butte-Trail-Plan.

Healthy Rivers and Streams Board 9-28-17 letter to Pitkin OS&T re River Impacts

OST response to Healthy Rivers and Streams Board, November 28, 2017, re Carbondale to Crested Butte Trail Study

Beardsley Assessment of Impacts of Carbondale to Crested Butte Trial on Health of Crystal River, November 8, 2017 (Att. Caucus 3-16-20 Scoping Letter)

Carbondale to Crested Butte Trail Study – Crystal River Section Environmental Review March 2018 (updated) https://pitkincounty.com/DocumentCenter/View/15684/Appendix-B---Environmental-Analysis--Carbondale-to-Crested-Butte-Trail

Kevin Wright – Wildlife Impacts: Crystal Trail Draft Plan, June 6, 2018 (Att. Crystal River Caucus 3-16-20 Scoping Letter)

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