Boulder County Gross Reservoir Community Impact Mitigation Fund (The Fund)
Community Advisory Working Group (Working Group)
May 16, 2023, 5:30 pm to 8:30 pm
Zoom Meeting
Meeting Summary – FINAL

ATTENDANCE
Working Group members: Sunday Antley, Brian Campbell, Paul Ewald, Don Ferguson, John Gleason, Mary Hainstock, Katrina Harms, Jennifer Macoskey, Anna McDermott, Chris Passarelli, John Stevens, and Ed Wiegand

Pinyon Environmental, Inc. (Pinyon): Dustin Collins and Kaitlin Meszaros

Boulder County Staff: Barb Halpin

Facilitation: Samuel Wallace and Izzy Sofio

Working Group meetings are open to the public for observation and written comment. Several members of the public attended the meeting.

ACTION ITEMS

Working Group members	- Complete the survey to provide your perspectives on the remaining potential components of the recommendation. - Identify anomalies (defined as individuals households where rankings do not align with the surrounding household rankings) and send the anomalies to Peak Facilitation.
Jennifer Macoskey	Send Samuel and Izzy the interest earned memo for distribution to the Working Group.
Peak Facilitation Group (Peak)	- Distribute a survey to gather Working Group perspectives on the remaining potential components of the recommendation. - Compile anomalies that Working Group members identify via the homework assignment.

PROCESS REVIEW
Samuel Wallace, Peak, provided an overview of the Working Group process. Below are key points from the overview.
- The Working Group's purpose is to:
  - Weigh different scenarios, interests, collective impacts, and anomalies form a scientific and subjective standpoint, pulling from their lived experiences as a resident in this area; and
  - Make a recommendation to Boulder County about an equitable and fair way to distribute the money from The Fund.
- The roles and responsibilities of the Working Group include considering impacts on the community as a whole rather than focusing on individual circumstances and leaning into the challenges and complexities the topic presents.
- The Working Group will make decisions by consensus. Consensus is defined as "all members can live with the proposal." Consensus requires that Working Group members honestly engage and actively propose alternative solutions to meet the interests of the Working Group.

- For today's discussion, Working Group members are encouraged to engage in "yes, if" thinking rather than "no, because" thinking to progress the Working Group forward in its effort to make a recommendation to Boulder County.
- If the Working Group does not reach consensus, the final report will document any dissenting perspectives.

CLARIFYING DISCUSSION ABOUT THE PINYON REPORT
Pinyon's Dustin Collins and Kaitlin Meszaros joined the Working Group to provide answers to Working Group members' clarifying questions about the report. Questions are below in italics, and corresponding responses are in plain text.

What was the reason for rounding all numbers up when it is traditional to round up for values .50 and above and round down for values under .50?
The reason that the numbers in the Pinyon report are rounded up came from an internal decision at Pinyon. Pinyon did not want to downplay the impacts on residences, so Pinyon rounded up so that no residence received a whole number ranking less than their number determined to one decimal place (i.e., no one was rounded down to a whole number.)

What is the difference and purpose behind rounding a ranking up to the next full number instead of ranking a residence as a 1.3 or 1.4, for example?
Pinyon utilized the one through five scale for simplicity and to create categories for the rankings.

In a previous summary, there was a reference to Pinyon having a funding calculator. Is that true?
No. Pinyon does not have a mechanism to assign dollar values to residences.

Has Pinyon reviewed the anomalies that some Working Group members identified in the Pinyon report? If so, has Pinyon made adjustments to address these anomalies?
- Pinyon is reviewing the anomalies on an ongoing basis. After reviewing the model inputs and outputs again, Pinyon did not find any errors. The models are not perfect; they utilize data from the past to predict future impacts rather than actual conditions. Additionally, the air quality model Pinyon used is the recommended model by regulatory agencies.
- Regarding the air quality findings, specifically, rankings between households may be close but fall on opposite sides of a two or three, for example. This may result in the impact rankings being different on one side of a street from another side even though the rankings only differ slightly.

Was there a weighting methodology applied to the independent air quality, noise, and visual findings?
Pinyon weighted air quality impacts based on different air quality pollutants (e.g., PM2.5, PM10). The methodology weighted fugitive dust higher due to its impact.

The current total impact rankings weight air quality at 30%, visual at 35%, and noise at 35%. How did Pinyon determine which percentages to use for weighting in its models? Did the models assume the same weight across every residence?
Pinyon determined the weighting percentages based on feedback gathered by Boulder County on the residents' experiences. The reason for assigning those values was to bring the impacts closer together. Originally, there was heavier weighting on noise and air quality, and very low weighting on visual (including light).

If the Working Group determines to use non-rounded numbers, does that assume more accuracy in the model than what exists?
Providing more significance to a weighting could infer more accuracy in a model that is not perfect.

Is it easy for Pinyon to add additional receptors (households) because Pinyon has already developed the models?
Adding a receptor is not as easy as adjusting the weight in the models. It would require Pinyon to re-run each model.

DEVELOPING A RECOMMENDATION
Working Group members discussed potential components of the recommendation for how to distribute the Fund with the objective of reaching consensus on the various components. Below are key points from the discussion organized by the potential components of the recommendation.

Distribution Methodology Discussion
- The distribution methodologies developed by Don Ferguson, John Stevens (John S), and Anna McDermott and Ed Weigand each provide useful approaches to distributing the funding.
- After reviewing micro areas scenarios proposed in Anna and Ed's tool, the idea of identifying micro areas as part of the recommendation increases the complexity of the methodology and may lead to a subjective interpretation of objective data. Ultimately, that element of the methodology does not need to occur.
- Splitting the data into the three subcategories (e.g., air quality, noise, and visual) rather than totals can help ensure relativity.
- Implementing a linear benefit approach where totals above $1,000 are increased to reduce the gaps between individuals could provide a baseline for the distribution.
- The report and its findings are widely available. While it may not be perfect, the report is sound enough for this purpose despite some anomalies, and it is defendable. Incorporating the three categories into calculations can help acknowledge the significance across different areas and impacts.
- Determining what is equitable is challenging. A baseline amount for all 404 households could be equitable from one perspective and inequitable from another. Utilizing a residence's actual ranking, with decimals, appears most equitable.
- For example, if $4 million is assigned to Phase I, and the actual calculated ranking is used, the lowest ranking of 0.3 would receive more than $1,000.
- The multiplier in Don's model allows for subjective considerations as part of the objective model. However, it is challenging to insert subjectivity into the distribution methodology.
- Ensuring that the distribution methodology is explainable is critical.
- Expanding the scale in which the rankings fall, from one to five or one to 10, could potentially assist with communicating the distribution methodology. On the other hand, that approach could be more confusing than a one-to-five scale.
- Most of the concerns around the rankings in the Pinyon report are about having too low of a ranking. Adjusting the rankings so that each is higher essentially creates an inflation effect.
- Comparing the three models visually could be helpful; however, that could lead to a selection of the model based on the outputs the model provides, which is not subjective.

Clarifying Questions
Working Group members asked clarifying questions about the proposed distribution methodologies. Questions are below in italics, and corresponding responses are in plain text.

Is there a sense of the level of complexity that the Board of County Commissioners (Board) would approve?
The Board is eager to hear the recommendations from this Working Group. Boulder County staff and the Working Group will not know where the board is leaning until the Board provides their comments at a public meeting on June 29.

Would the model results include additional homes if the rankings are not rounded numbers?
If the report includes any additional houses, that is likely due to initially missing houses from the County Assessor's Office pull for the data. Regardless of the recommendation, Boulder County will ensure that the numbers and data in the recommendation are correct.

Distribution Methodology Recommendation
- Working Group members were in consensus to apply the distribution methodology to all impacted areas equally rather than applying them by geography or "micro area."
- Working Group members reached a consensus to move forward with the distribution methodology that Anna and Ed developed (i.e., using the more precise values from averaging the air quality, visual, and noise impact rankings).
- It will be important to clearly and simply describe the distribution methodology in the Working Group's recommendation. Samuel and Izzy will write the final report and pay special attention to ensuring that the language is clear and simple. Additionally, they will circulate a draft version of the report to the Working Group to gather feedback, including feedback on how to more clearly or more simply describe the methodology.

Weighting Discussion
- There are several resources the Working Group could use to identify a weighting method for air quality, noise, and visual impacts. The exercise in which community members weighed air quality, noise, and visual impacts at the April 29 meeting could provide insight into what is most important to the community; however, it did not gather feedback from a representative portion of the impacted population. Additionally, the community survey, which has a larger sample size of 170 residents, may provide insight into how the community weighs the air quality, noise, and visual impacts. The breakdown of the community survey provided by a Working Group Member suggested a weighting of 50% for noise, 27% for air quality, and 23% for visual.
- Working Group members considered the following four weighting options:
  - Using Pinyon's weighting system of 35% for noise, 35% for visual, and 30% for air quality,
  - Using the community survey system of 50% for noise, 23% for visual, and 27% for air quality,
  - Splitting the weighting evenly, using 33.3% for each subcategory, and
  - Using 40% for noise, 40% for visual, and 20% for air quality.
- Noise impacts can lead to mental and physical impacts. Infrasound, which is a frequency of 20 hertz or below, created by motors, water pumps, and construction equipment, can impact the central nervous system, leading to organ and hearing damage.
- Air quality impacts are relatively mitigatable. Funding can go towards an indoor filtration system, for example.

- Noise and light are tangible impacts for most, while air quality tends to be less tangible, aside from individuals with sensitivities to air quality (e.g., asthma). For many residences, noise impacts are typically followed by air quality impacts from trucks, for example.
- Many Working Group members hear that noise is the most impactful to residents through conversations with their neighbors.
- Visual impacts, like lighting, can be mitigatable. However, there are also long-term visual impacts that are unmitigable.
- The weighting in the Pinyon report initially included higher weighting for noise and air quality. As Pinyon worked on the analysis, Boulder County shared the feedback they gathered with residents, which indicated that residents were experiencing significant impacts from noise and visual, especially light. Pinyon incorporated that feedback and developed a weighting approach so that noise was weighed at 35%, visual was weighted at 35%, and air quality was weighted at 30%.
- The community survey results weighting is based on 170 responses, when there are 404 impacted homes. The survey has been open for nine months and still collects responses. Now, there are 181 submissions. The survey does not provide a representative sampling of the impacted residences, and it only accounts for experiences so far rather than the impacts in 2024 and beyond.
- It is generally agreed that all of the impacts of the construction are awful and affect residents differently and to varying degrees. Utilizing a weighting of 33.3% is a neutral, objective approach. However, utilizing equal weighting appears to take away from the concept of weight.
- Any deviation from the Pinyon report weighting will require an explanation.

Weighting Recommendation
Working Group members were polled on which weighting to recommend. Working Group members reached a consensus to move forward with the recommendation to weight impacts as 30% air quality, 35% noise, and 35% visual.

Individual Rankings and Anomalies
- Anomalies are defined in this discussion as differences in dot colors within close vicinities.
- Reviewing the air quality, noise, and visual maps generated by Pinyon to identify which dots appear to be anomalies could be one way for the Working Group to address the anomalies. Several Working Group members have worked through this exercise before.
- The Working Group could recommend that Boulder County review the maps for anomalies. However, Working Group members prefer to identify the anomalies to bring to the Board.
- The anomalies that the Working Group identifies could be brought back to Pinyon for review. However, diving too deep into Pinyon's data could become a protracted process. On the other hand, there are several Working Group members with an interest in adjusting or revising the data to address the anomalies.
- If there are some anomalies overlooked at this time, there could be corrections to address those overlooked during the disbursement of funds for Phase II.
- Addressing anomalies could lead to lower ratings for some residences, of which several Working Group members are not in favor due to concerns about subjectivity.
- Boulder County has discussed the idea of an appeals process for homeowners who are not satisfied with the rankings they receive from the Pinyon report. The challenge with an appeals process is that it is challenging to objectively review an appeal of that nature. If the Working Group recommends an appeals process, the Board would require clear direction on how to approach an appeal.

- For the specific examples of how the rankings do not align with personal experiences, such as the difference in air quality rankings on one side of the street to another, the model works to account for air quality inputs and outputs as they relate to topography, meteorological data, and other factors that explain how a ranking could differ on different sides of the same street despite observed events like how smoke settles in the area from a prescribed burn.

Clarifying Questions

Working Group members asked clarifying questions about anomalies. Questions are below in italics, and corresponding answers are in plain text.

Will the anomalies already brought to Pinyon lead to adjustments in the report?
Pinyon has not made any adjustments to the report since April 20. Unless there is a direct recommendation from the Working Group to adjust the rankings, Pinyon will not adjust them as Pinyon has not found any obvious errors in the models. It is possible to adjust the weighting of inputs in the model to adjust results.

Once the turn-off from State Highway 72 (SH 72) and Gross Dam Road is complete, will that be considered an anomaly?
It is unclear if the Pinyon report already included the impacts of the turn-off.

Will Boulder County continue to pay for Pinyon's services if the Working Group recommends addressing anomalies, or would that come from the Fund?
Boulder County will pay for Pinyon's services.

Is the noise ranking map missing in the report?
The first version of the report shared with the Working Group did not include the noise ranking map. However, there is nothing missing in the final version of the report.

Will Boulder County not consider anomalies or a resident's satisfaction with a ranking?
Boulder County is reluctant to adjust the rankings because that process requires the application of subjectivity to otherwise objective data. Boulder County has a collection of addresses that residences have reported received an incorrect ranking, and Pinyon is investigating those to see if there is an error(s) in the model.

Individual Rankings and Anomalies Recommendation
- Working Group members were polled on whether to recommend addressing anomalies amongst individual rankings. Eight of the twelve Working Group members were in favor of leaving the Pinyon data as is. Four of the twelve Working Group members were in favor of addressing anomalies amongst individual rankings.
- Peak will document dissenting perspectives when there are not majority opinions or consensus reached in the final report. In this case, Peak will document that four of eight Working Group members were in support of addressing anomalies amongst individual rankings to ensure that residences receive accurate ratings and that the modeling is correct.
- At the next Working Group meeting, the Working Group will discuss opportunities for ranking appeals to Boulder County, which could also support the process of addressing anomalies from the perspective of the residents.

NEXT STEPS

- Working Group members have a homework assignment to review Pinyon's noise, visual, and air quality maps to identify potential anomalies within the geographic area that they represent in the Working Group. Samuel, Barb, and Izzy will compile this information. During the next meeting, the Working Group will review this information to finalize the recommendation related to anomalies.
- Peak will develop a survey to gather Working Group members' perspectives on the remaining components of the recommendation that require decisions.
- Jennifer Macoskey wrote a memo about the Fund's ability to earn interest for dispersal to impacted residents, which could be a potential component of the recommendation. Jennifer will send the memo to Samuel and Izzy for distribution to the Working Group.
- During the last meeting on June 1, Working Group members will discuss a recommendation for the following components:
  - Whether to recommend an appeals process,
  - How to account for SH72 and Gross Dam Road construction,
  - How to allocate the funding for Phase I and Phase II,
  - How to proceed with homeowner eligibility, and
  - Other unique ideas, such as recommending that the interest earned by the Fund be dispersed to residents.
- The goal of the last meeting is to finalize the Working Group's recommendation to the Board.