



# **Boulder County Gross Reservoir Community Impact Mitigation Fund Advisory Working Group**

Recommendations to Distribute Phase 1 of the Fund

Thursday, June 29, 2023

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# Background and Process



## Recommendation Development

- Consensus decision-making
- Poll on each recommendation
- Incorporation of minority perspectives



## Recommendation Topics

The Working Group's recommendations address four high-level topics:

- How to utilize the Pinyon Environmental Analysis impact rankings to develop a methodology for distributing funding
  - How to address anomalies
- How to determine eligibility for funding
- What amount of funding to distribute in Phase 1 and reserve for Phase 2
- Other unique recommendations



## Characteristics of a “Good” Proposal

- Follows the Settlement Agreement.
- Easy to communicate, uses an understandable methodology, and is defensible.
- Considers the weight of the impacts proportionally against each other.
- Accounts for the lived experience of residents (e.g., accounts for stressors like mental health, well-being, etc.).
- Based on quantitative information.
- Includes a methodology that is "data-agnostic," meaning the method will hold true even if the underlying rankings change.
- Preserves funding for Phase 2 and additional future observed experiences of residents.

# Focus on Air Quality, Noise, and Visual Impacts

Focus on a methodology for funding distribution based on air quality, noise, and visual impacts associated with construction, per the Settlement Agreement. **A community survey of 170 residents reflected these impacts to their lives.**

Effects of Air Quality Impacts	Effects of Noise Impacts	Effects of Visual Impacts
<ul style="list-style-type: none"><li>● Reduced/degraded access to fresh air through open windows</li><li>● Reduced/degraded access to outdoor recreation (e.g., hiking, running, biking, etc.)</li><li>● Reduced/degraded access to hobbies (e.g., astronomy, bird watching, gardening, etc.)</li><li>● Reduced/degraded access to socializing outdoors</li><li>● Damages to homes from air quality (e.g., dust)</li></ul>	<ul style="list-style-type: none"><li>● Sleep deprivation</li><li>● Reduced/degraded access to fresh air through open windows</li><li>● Reduced/degraded ability to meditate</li><li>● Reduced/degraded access to outdoor recreation (e.g., hiking, running, biking, etc.)</li><li>● Reduced/degraded access to hobbies (e.g., astronomy, bird watching, gardening, etc.)</li><li>● Reduced/degraded access to socializing outdoors</li><li>● Lack of privacy</li><li>● Disruptions to work-from-home environments</li><li>● Damages to homes from vibrations</li><li>● Emotional and mental trauma to pets</li></ul>	<ul style="list-style-type: none"><li>● Sleep deprivation</li><li>● Reduced/degraded access to fresh air through open windows</li><li>● Reduced/degraded access to hobbies (e.g., astronomy, bird watching, gardening, etc.)</li><li>● Reduced/degraded access to scenic views</li><li>● Lack of privacy</li></ul>



## Additional Impacts From the Survey

- Increased fire risks from construction activities
- Increased recreational traffic and trespassing from the changes in reservoir access
- Decreased road safety from trucking activity
- Impacts on road conditions from trucking activity
- Poor and inaccurate communication/alerts from Denver Water about dangerous or disruptive activities
- Non-enforcement of Denver Water's agreement with Boulder County
- Lack of met commitments from Denver Water's agreement with Boulder County

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# Recommendations on the Distribution Methodology





## Pinyon Environmental Analysis Overview

- Established project area and determined impacts from air quality, noise, and visual
- Methodology
  - “Receptor” placement
  - Predictive modeling based on Denver Water Project Plan
  - Noise assessment - SoundPLAN
  - Air Quality model - EPA AERMOD
  - Visual - direct line-of-sight or lighting + distance



## High-Level Steps for Using the Report

Committee consensus to meet three requirements:

- Utilize Pinyon data as a starting point
- Determine methodology for weighing Pinyon noise, air quality, and visual rankings
- Check Pinyon data against real life experience



## Methodology for Distributing Funds

- Three potential tools and models were developed and reviewed to determine funding methodology.
- Key considerations:
  - Utilize Pinyon rounded ranking numbers vs actual point ranking
  - Utilize a multiplier to apply to Pinyon scores
  - Establish a floor or base amount
  - Weighting of N/A/V criteria
- The determination was to use the least subjective and most accurate and equitable model.



## Recommendation on Total Impact Rankings

- Total impact rankings were rounded up to the nearest whole number.
  - 3.1 -> 4
  - 3.9 -> 4
  - 4.1 -> 5
- With consensus support, the Working Group recommends calculating the total impact ranking using decimal places to the tenth rather than the rounded whole number to make total impact ranking results more precise and granular.



## Weighing Impacts Discussion

- Weigh the impact rankings against each other (e.g., air, noise, and visual)
- Options considered:
  - **Geographic** grouping
  - Results of community **survey** - 50% noise/23%visual/27%air quality
  - Using **Pinyon** recommended weighing - 35%noise/35% visual/30% air quality
  - **Anecdotal evidence** from community members - 40%noise/40%visual/ 20%air quality
  - Split weighing **evenly** - 33% for each



## Geographic Groupings and Recommendation

- Proposal to apply different weighting systems based on geography
- Concerns with subjectivity
- **With consensus support, the Working Group recommends applying the same weighting system across all communities in the impacted area rather than addressing specific geographies differently.**



## Weighing Impacts Recommendation

- With majority support, the Working Group recommends keeping the weighting system of 35% for noise, 35% for visual, and 30% for air quality to calculate total impact ranking.
- Minority perspective:
  - Applying an even weighting (33.3% to air quality, visual and noise) is more equitable as it considers all impacts equally.



# Methodology for Distributing Funds

Total impact rankings were calculated using the following formula:

$$\begin{aligned} & (\text{Noise Impact Ranking}) * (\text{Weighted Value}) \\ & (\text{Air Quality Impact Ranking}) * (\text{Weighted Value}) \\ & \underline{+ (\text{Visual Impact Ranking}) * (\text{Weighted Value})} \\ & \text{Total Impact Rating} \end{aligned}$$

Examples:

Receptor Number	35% Noise	30% Air Quality	35% Visual	Total score 0 through 5
123	4.7	2.3	5	4.1
345	4.7	1.3	4	3.4
516	4	2.2	3	3.1



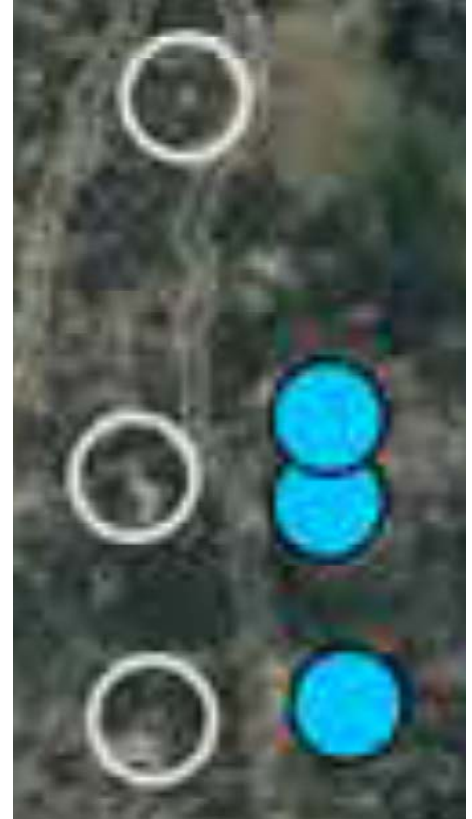
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# Recommendations on Anomalies

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## How to Address Anomalies

- What is an anomaly?
  - A household ranking that:
    - Deviates from the rankings of the houses in the nearby vicinity
    - Does not align with lived experience.
- The Pinyon Environmental Analysis Report, while useful, is not perfect.



# How to Address Anomalies

- Actual values vs rounded values for air quality and noise impact rankings to potentially even out the anomalies.
  - Visual impacts for direct line-of-sight and lighting impacts are still being verified by Boulder County for accuracy.
- With consensus support, the Working Group recommends using air quality and noise impact rankings to the nearest tenth-decimal place in order to calculate the total impact ranking.

Noise Ranking	AQ Ranking	Visual Ranking
0 through 5	0 through 5	0 through 5
4	5	4
5	4	4

Original Pinyon rankings



Noise Ranking	AQ Ranking	Visual Ranking
0 through 5	0 through 5	0 through 5
4.7	5.0	4
5.0	4.5	4

More precise rankings



## How to Address Anomalies

- Using actual values vs rounded values for air quality and noise ranking
- Submission of anomalies for Boulder County Commissioners to either approve or reject
  - Utilizing the Pinyon maps to identify receptors and discrepancies in rankings combined with observed real life experience
  - Submissions include addresses, proposed rankings, and the rationale for the recommendation.
- Fourteen anomalies submitted

# Anomalies

Address	Proposed Adjustment	Reasoning for Adjustment
87 Gross Dam Road	Adjust the residence's air quality, noise, and visual impact rankings to all 5s	Denver Water legally obtained the residential property for the construction project, which required alterations of the road to accommodate a new highway turnoff. Denver Water's construction activities resulted in significant grading and a slope change to the southwest corner of the impacted resident's property, the removal of several trees, and the rearrangement of the residence's shed and other yard items. While Denver Water reimbursed the residence for the land it took for the intersection construction, the reimbursed amount was not adequate for the residence's impacts. *Addressed later in the presentation
8566 Flagstaff Rd	Adjust the visual ranking from a 4 to a 5	The neighbor to the east has a visual ranking of 5; they have the same exposure to the site.
1064 Lakeshore Dr	Adjust the air quality ranking from a 0 to 0.8	This property should have the same result for air quality rankings as the three households to the east of the road (1101, 1239, 1245) due to geographic factors and historical experience with previous pollution sources.
1290 Lakeshore Dr	Adjust the air quality ranking from a 0 to 0.8	This property should have the same result for air quality rankings as the three households to the east of the road (1101, 1239, 1245) due to geographic factors and historical experience with previous pollution sources.

# Anomalies

Address	Proposed Adjustment	Reasoning for Adjustment
1406 Lakeshore Dr	Adjust the air quality ranking from a 0.4 to 0.8	This property should have the same result for air quality rankings as the three households to the east of the road (1101, 1239, 1245) due to geographic factors and historical experience with previous pollution sources.
1503 Lakeshore Dr	Adjust the noise ranking from a 0 to 4.0	This property has a line of sight exposure and is 1.55 miles from the construction site. The neighboring property, 1406 Lakeshore Drive, is 1.48 miles away with a ranking of 4.3, and the other neighboring property, 8585 Flagstaff Road, is 1.30 miles away with a ranking of 4.6. The noise ranking should be adjusted to a 4.0 as it sits higher on the ridge than 8585 but is a further distance.
31581 Coal Creek Canyon Dr	Adjust the air quality ranking from 1.8 to a 2.3	This property sits directly above and slightly east of the gravel pit, carrying noise and particulate matter toward the residence. The air quality ranking should be adjusted to 2.3 to align with the air quality impact ranking of the neighboring property at 32101 Coal Creek Canyon Drive.

# Anomalies

Address	Proposed Adjustment	Reasoning for Adjustment
62 Lichen Lane	Adjust the air quality ranking from 1.0 to 2.0	Lichen Lane is approximately 500 feet off Gross Dam Road and runs parallel to it. It is also located on the east side of Gross Dam Road. Throughout the year, the prevailing winds come out of the west with average winds of 10mph, with wind gusts well exceeding 70mph and higher. Even with the small amount of traffic that used to occur on Gross Dam Road, dust has always impacted this area. The air quality ranking should be adjusted to 2.0 to align with the air quality ranking of 320 Tunnel 19 Road and other nearby properties.
125 Lichen Lane	Change air quality ranking from 1.3 to 3.5	125 Lichen Lane is about 400 feet from Gross Dam Road. This area is also located very near the entrance off State Highway 72 and is uphill, where diesel trucks are fully loaded and climbing to speed. This is when the maximum exhaust will be expelled, along with increased noise. The air quality ranking should be adjusted to 3.5 to align with the air quality ranking of 1743 Gross Dam Road and other nearby properties.
126 Lichen Lane	Adjust the air quality ranking from 1.0 to 2.0	Lichen Lane is approximately 500 feet off Gross Dam Road and runs parallel to it. It is also located on the east side of Gross Dam Road. Throughout the year, the prevailing winds come out of the west with average winds of 10mph, with wind gusts well exceeding 70mph and higher. Even with the small amount of traffic that used to occur on Gross Dam Road, dust has always impacted this area. The air quality ranking should be adjusted to 2.0 to align with the air quality ranking of 320 Tunnel 19 Road and other nearby properties.

# Anomalies

Address	Proposed Adjustment	Reasoning for Adjustment
128 Lichen Lane	Adjust the air quality ranking from 1.5 to 3.5	128 Lichen Lane is about 400 feet from Gross Dam Road. This area is also located very near the entrance off State Highway 72 and is uphill, where diesel trucks are fully loaded and climbing to speed. This is when the maximum exhaust will be expelled, along with increased noise. The air quality ranking should be adjusted to 3.5 to align with the air quality ranking of 1743 Gross Dam Road and other nearby properties.
130 Lichen Lane	Adjust the air quality ranking from 1.0 to 2.0	Lichen Lane is approximately 500 feet off Gross Dam Road and runs parallel to it. It is also located on the east side of Gross Dam Road. Throughout the year, the prevailing winds come out of the west with average winds of 10mph, with wind gusts well exceeding 70mph and higher. Even with the small amount of traffic that used to occur on Gross Dam Road, dust has always impacted this area. The air quality ranking should be adjusted to 2.0 to align with the air quality ranking of 320 Tunnel 19 Road and other nearby properties.



# Anomalies

Address	Proposed Adjustment	Reasoning for Adjustment
32179 Miramonte	Adjust the noise ranking from 3.4 to 4.8	32179 Miramonte has a much lower noise ranking than the other households in Miramonte. 32179 Miramonte is no less subjected to the noise impacts from the quarry/crushing area and dam construction than the more obvious ones that received much higher noise scores. These anomalies likely stem from Miramonte's unique and complex geography and terrain. 32179 is lower down and much closer to the quarry/crushing operation than most of the other homes in the community. This may explain its higher air quality ranking than the rest of Miramonte, but the noise ranking should also follow. 32179 Miramonte's noise ranking should be adjusted to 4.8 to better align with the other nearby Miramonte households.
32161 Miramonte	Adjust the noise ranking from 3.2 to 4.4	32161 Miramonte has a much lower noise ranking than the other households in Miramonte. 32161 Miramonte is no less subjected to the noise impacts from the quarry/crushing area and dam construction than the more obvious ones that received much higher noise scores. 32161 is a little farther away from the quarry and the dam but up so high that there is less ground interference with the noise carried there. 32161 Miramonte noise ranking should be adjusted to 4.4 to better align with the other nearby Miramonte households.



## Distribution Methodology Recommendations

- Calculate the air quality and noise impact rankings to the nearest tenth-decimal place (*consensus decision*)
- Use the weighting system of 30% air quality, 35% noise, and 35% visual to calculate total impact ranking (*majority decision*)
- Apply the same weighting system across all communities in the impacted area rather than addressing specific geographies differently (*consensus decision*)
- Calculate the total impact ranking using decimals (*consensus decision*)
- Assign funding amounts based on the total impact ranking using decimals (*consensus decision*)



# Recommendations on Homeowner Eligibility



## Homeowner Eligibility Considerations

- Settlement Agreement language - Boulder County “households near the project”
- During the April 29 community members raised concerns about eligibility for:
  - Renters
  - Owners of agricultural lots without residential homes
  - Property owners in the process of building home



## Homeowner Eligibility Considerations

- Renters consideration
  - Difficult to track and identify renters
  - Challenging to distinguish between short-term and long-term renters
  - Rental property owners are business owners with financial responsibilities
- People in the process of building home considerations
  - Will not have lived through all the years of the Project and may never complete their build
  - Need to demonstrate occupancy to be eligible for funding



## Homeowner Eligibility Recommendations

- With consensus support, the Working Group recommends not to include renters as direct recipients of the funds.
- With consensus support, the Working Group recommends not to include lots zoned as agriculture without a residential home as eligible recipients for funds.
- With consensus support, the Working Group recommends including people in the process of building homes as eligible recipients of the Fund if they have a certification of occupancy two weeks before the date that Boulder County approves and begins to issue payments.

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# Recommendations on Phase 1 and 2 Funding Allocation



## Phase 1 and 2 Funding Allocation Considerations

- Tree removal plan scheduled for 2025 and 2026
- Lack of detailed operations plan
- Per the Denver Water 390-page FERC approved plan, the following determinations were made regarding the tree removal plan:
  - A two-year timeframe instead of seven-year timeframe
  - Daytime only instead of 24/7 operations
  - Will not be year round due to legal requirements





## **Phase 1 and 2 Funding Allocation Recommendation**

With consensus support, the Working Group recommends dedicating 80% of the Fund (\$4,000,000) for distribution to the impacted residences of Phase 1 and 20% (\$1,000,000) for the impacted residences of Phase 2 of the Project.



# Recommendations on Other Unique Ideas



## Appeals Process Consideration

- Proposal to establish a formal appeals process for homeowners to contest their impact rankings
- Multiple perspectives were shared on whether to advance this recommendation:
  - Gives residents a chance to rebut their impact rankings they do not think reflect lived experiences
  - Challenging to develop a fair and effective process as there are no established resources nor processes and guidelines in place
  - Likely results in a delay in payments



## Appeals Process Recommendation

With consensus support, the Working Group did not support advancing a recommendation to establish a separate appeals process for homeowners to contest their ranking. However, the Working Group did support homeowners having the ability to follow pre-established Boulder County processes for Boulder County to provide feedback on their rankings.



## Unique Property Consideration

- At the request of the Boulder County Commissioners, the Working Group reviewed a specific request for funding as a result of impacts due to the realignment of the Gross Dam Road/State Highway 72 intersection.
- The Working Group had multiple perspectives:
  - Some considered this request outside the purview of the Working Group.
  - Some did not think it was appropriate to consider this request in isolation as other residents may feel that their individual circumstances deserve special consideration.
  - Some considered this request to be different than the other anomalies as this request was based on current lived experience and not the Pinyon rankings.
- **With majority support, Working Group members recommend submitting the anomaly at the the GDR/SH 72 to the Boulder County Commissioners to consider adjusting the household rankings to all fives.**



## Allocating Interest Earnings Consideration

- Proposal to allocate interest earnings generated by the Fund back into the Fund
- Multiple perspectives were shared on whether to advance this recommendation:
  - Diverts from Boulder County's practice of designating all interest earned from all funds into a separate funding account
  - Apply an average interest earnings rate of 2.5% to reduce workload



## **Allocating Interest Earnings Recommendation**

With consensus support, the Working Group recommends that Boulder County allocate the interest generated by the Fund using an average interest-earning rate back into the Fund for future distribution to impacted residents in Phase II. One Working Group member supported the recommendation and also wanted to acknowledge that Boulder County paid for consultants and staff time without using the Fund and that they are appreciative of that.

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Questions?