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295 Interlocken Boulevard, Suite 300  
Broomfield, Colorado 80021  
Tel 303.487.1183  
www.swca.com

## TECHNICAL MEMORANDUM

**To:** Alan Goldich  
Senior Planner  
Planning Department  
Routt County, Colorado

**From:** Erik Hartung, Project Manager, SWCA Environmental Consultants

**Date:** December 3, 2024; revised January 31, 2025

**Re:** **Response to Comments on Special Use Permit Application – Trapper Solar Project  
Application Number PL20240046**

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Dear Alan Goldich:

On June 7, 2024, on behalf of RWE Solar Development, LLC (the Applicant or RWE), SWCA Environmental Consultants (SWCA) submitted an application (Application Number PL20240046) to Routt County for a Special Use Permit for the proposed Trapper Solar Project (Project). On July 19, 2024, the Applicant received a signed application acceptance letter from Routt County indicating that the application was deemed complete and under review. On November 20, 2024, the Applicant received comments on the application (content included on the following pages) from Alan Goldich of Routt County Planning Department as well as from referral agencies; Cirrus Ecological Solutions, LC; and Northwest Colorado Council of Governments Water Quality/Quantity Committee. SWCA is providing responses to the county's comments on behalf of the Applicant, so that Routt County can complete their review of the Project pursuant to Routt County's Unified Development Code. Comments from Routt County; referral agencies; Cirrus Ecological Solutions, LC; and Northwest Colorado Council of Governments Water Quality/Quantity Committee, and RWE's responses are provided herein on the following pages. The comment letter from Routt County is included herein as Attachment A.

On behalf of RWE, we look forward to continuing work with Routt County and thank you for your time in completing this review.

Sincerely,

A handwritten signature in black ink that reads "Erik W. Hartung". The signature is written in a cursive, flowing style.

Erik Hartung  
Project Manager  
SWCA Environmental Consultants  
Erik.Hartung@swca.com  
(330) 861-9061

## SPECIAL USE PERMIT APPLICATION COMMENT RESPONSES

Routt County’s; referral agencies’; Cirrus Ecological Solutions, LC; and Northwest Colorado Council of Governments Water Quality/Quantity Committee comments are provided below, with the Applicant’s responses immediately following in [blue](#).

### Routt County Corrections Letter

1. The UDC was adopted, along with a re-adoption of the section on Utility scale solar. The new section number is 2.77. The table in section 2.1 of the narrative, and all other references, need to be updated to have the correct section number reference in the UDC. Sections 2.3 and 2.4 of your narrative need to be updated to reflect the numbering in the UDC.

#### [Applicant Response:](#)

[1. The code section references have been updated in the tables and narrative to reflect the UDC. A revised narrative is attached as Attachment G.](#)

2. Your materials state that the total solar panel coverage (i.e., the area that would be covered by solar panels when the panels are oriented parallel to the land) is approximately 384 acres (221 acres on private land and 163 acres on state land). My measurements indicate that approximately 1,485 acres will be covered in panels. Why are these numbers so different? 384 is also referenced in the visual impact analysis.

#### [Applicant Response:](#)

[2. In Section 1.1 of the Special Use Permit \(SUP\) application narrative, solar panel cover is the land area that would be covered by solar panels when the panels are oriented parallel to the land. For this Project, solar panel cover is approximately 384 acres \(221 acres on private land and 163 acres on state land\) and does not include the area between solar panels \(i.e., spacing between rows\). The Applicant is unsure how the reviewer arrived at 1,485 acres.](#)

3. Section 3.22, Public Benefit, is not addressed. Please provide information on compliance with section 3.22.

#### [Applicant Response:](#)

[3. Chapter 10 of the Routt County Master Plan indicates that Routt County has been identified as an ideal location for solar energy production \(Cushing Terrell 2022\). The plan identifies Routt County’s policies of supporting a transition of energy production to renewable sources and the promotion and facilitation of renewable energy production in unincorporated areas. The Project fits in the Tier 2 Targeted Growth Area for unincorporated areas and within the planned areas for future land use in the Hayden Forward Master Plan. The Project addresses the community’s growing need for clean and sustainable energy. In the Sustainability & Climate Action section of the master plan, Policy Number 6 is to “Promote and facilitate renewable energy development opportunities in unincorporated areas” \(Cushing Terrell 2022:59\). Action I.HL1.1. of the Hayden Forward Master Plan is to “Prioritize key properties for renewable energy infrastructure including publicly owned properties \(State Land Board\)” \(Routt County Planning Department 2020:28\). Being sited on both private land and publicly owned properties \(i.e., Colorado State land Board\), this Project supports this action and property rights for development of this use.](#)

4. Section 3.21, Employee Housing, is not addressed. Please provide information on compliance with section 3.21.

**Applicant Response:**

4. The Applicant has provided an employee housing impact study, in Appendix H of the SUP application, which analyzes the number of employees that the development is anticipated to require to construct and operate the Project. As stated in the Project' SUP application narrative, fewer than 10 full-time on-site employees would be needed for operation of the Project. Section 3.21.D. requires that applicable developments mitigate at least 15% of the number of year-round full-time equivalent (FTE) employees that their development will require to operate. That means the Applicant would need to mitigate for 1.35 or fewer full-time equivalent employees (15% of 9 employees is 1.35 employees). As the Applicant intends to hire as many local community members as possible, this may eliminate the needs for new housing. The Applicant would like to request a waiver from the Board of County Commissioners for this requirement as 1.35 employees is not enough to necessitate building an entire housing unit.

5. Recreation impacts – Narrative stated that recreation and tourism would not be impacted. The 1,878 acres of State Land Board land currently has a public hunting lease on it through CPW that has been in place since 1994. The removal of this land from public hunting will have a significant impact on recreational opportunities. These impacts must be mitigated. Please provide information on how you plan to mitigate these impacts.

**Applicant Response:**

5. The Project area does not have any public trails, or recreational water access, so activities are mostly limited to hunting. Regarding hunting access, only 5.2% of the total available public land in GMU 13 intersects with the Project area. According to email correspondence with The Western Way, a conservation organization, GMU 13 is not viewed as premier hunting land. The Town of Hayden also indicated in a letter to Routt County and shared with the Applicant that Stokes Gulch state trust land specifically is not prime hunting land. The Applicant has incorporated wildlife corridors in the Project's design to reduce potential impacts on migration patterns, if any. The local economy will be stimulated by workers spending wages in the community for food, lodging, gas, entertainment, and other amenities. The Project would also pay an estimated \$30,158,730 in property taxes over its 35-year lifespan. The revenue generated by sales taxes during construction and property taxes throughout the lifetime of the Project will likely outweigh any lost revenue from changes in hunting opportunities. The lease revenue generated from the Project collected by the Colorado State Land Board goes to fund K-12 education in the State of Colorado, including Routt County. The Colorado State Land Board prioritizes getting the best lease rate they can in order to provide the most funding for K-12 education in the State of Colorado, including Routt County. The Project will benefit long-term energy supply and resiliency in Routt County and Colorado. Additionally, the Applicant has mitigated impacts through planned donations prior to construction to local organizations including the Colorado Cattlemen Association to conserve wildlife habitat in the Yampa Valley and a donation to the Colorado Crane Coalition, as recommended by Colorado Parks and Wildlife (CPW). The Applicant has and will continue to coordinate with local experts, elected officials, and organizations in Routt County and Colorado to identify options for mitigation that best address the concerns above.

6. It has been determined that the Town of Hayden will not be able to provide the water needed for construction of this project. Please provide information on where water will come from for both the construction and operations phases.

Applicant Response:

6. RWE is exploring the possibility of obtaining water from one of the landowners in the Project area. The landowner has the water rights to JC Temple Reservoir and Emrich Reservoir. RWE currently is in conversations with the water rights owner and is confident that will be the source for the Project's construction and operations phases.

7. Please give details on how the site design was influenced by vegetation removal and restoration costs, effectiveness in infiltration, and diversity of an ecosystem, both under and between arrays. Please identify all environmental and culturally sensitive resources that were used to influence the site design.

Applicant Response:

7. In Section 4.2.1 (PDF page 18) of the submitted vegetation establishment and management plan (Vegetation Plan) for the Project, minimizing vegetation removal and soil disturbance to the extent practicable will be a top priority. Vegetation removal and restoration costs were taken into consideration in the Vegetation Plan, as evidenced by the Vegetation Plan recommending, for example, implementation of primarily drive-and-crush and, secondarily, mow-and-go techniques for soil and vegetation management, rather than excavation or grading when possible. Drive-and-crush is a technique in which vegetation and soils are crushed by vehicle and equipment tires or tracking machinery. Mow-and-go is a technique in which vegetation is mowed or cut low to the ground before construction—typically, between 1 and 3 inches. Clearing or grubbing of vegetation should not occur with these practices, which greatly improves the retention of vegetative cover on-site and expedites revegetation success. The site design was influenced by effectiveness in infiltration as evidenced by the soil compaction mitigation (e.g., designating traffic areas, temporarily construction activities suspending during wet soil conditions, and using low ground pressure vehicles to the extent practicable) and remediation measures (e.g., deep tillage) in the Vegetation Plan to restore porosity and infiltration. Regarding diversity of an ecosystem, the Vegetation Plan notes how microplots were surveyed for vegetation diversity within the Project area. The permanent seed mixes developed for the Project were designed based on preconstruction vegetative cover classes and the expected ecological sites within the Project area. Seed mix species are based upon prairie grasses and forbs native to Colorado, selected with the support of CPW's Colorado Seed Tool (CPW 2024) and were based on their known occurrence or likelihood of occurrence in the Project area using the vegetation assessment completed for the Project (see Appendix A of the Vegetation Plan) and ecological sites (see Section 3.1 of the Vegetation Plan), tolerance of clay soils, rooting depth, erosion control capabilities, growth height, and commercial availability. Additionally, the site has been designed to avoid impacts to federally and state-listed threatened or endangered species. As stated in the wildlife mitigation plan submitted as part of the Project SUP application, no federally or state-listed threatened or endangered species are known to occur or are likely to occur within the Project area.

The Applicant is not aware of a code requirement for site design to be influenced by culturally sensitive resources and the UDC does not contain a definition for culturally sensitive resources. However, the Applicant has undergone voluntary coordination with the State Historic Preservation Office regarding the Project. The State Historic Preservation Office indicated that archaeological resources of historical significance including properties listed or accepted by the

State Register of Historic Properties will not be adversely affected by the subject action (i.e., the Project), and a letter indicating this is provided in Attachment B.

8. Existing conditions plan needs to show existing vegetative cover.

Applicant Response:

8. A vegetation survey of the Project area was completed in October 2023 that documented existing vegetative cover in the Project area. The results of that survey are provided in Appendix A of the Vegetation Plan and include percent cover, a list of species observed, and photographs of the existing vegetation on-site.

9. Please see the attached letter from Northwest Colorado Council of Governments Water Quality and Quantity Committee (“QQ”). Please note that some of the comments/issues addressed in QQ’s letter are mentioned in this letter as well.

Applicant Response:

9. Received; thank you.

10. Please see the attached letter from Colorado Parks and Wildlife.

Applicant Response:

10. Received; thank you.

11. Please see the attached letter from Cirrus Environmental Solutions. Please note that some of the comments/issues addressed in Cirrus’ letter are mentioned in this letter as well.

Applicant Response:

11. Received; thank you.

12. In the Housing plan, what type of campgrounds were included in this study? State Park and NF campgrounds cannot be used because of a 14-day limit on stays.

Applicant Response:

12. The campgrounds included were the KOA Journey in Craig, which does allow extended stays, and Yampa River State Park. It is understood that the State Park has a 14-day limit within any 28-day period.

13. Please develop and provide a more refined estimates of how many units/rooms will be needed and during what time periods, accounting for roommates and single-person living.

Applicant Response:

13. This is ultimately up to the engineering, procurement, and construction (EPC) contractor and not up to RWE; however, it is generally expected that roughly one-third of workers will be hired locally. Generally, the EPC handles the housing, and an EPC will not be hired until closer to construction. The Applicant requests that this information be provided prior and closer to construction start and as a condition of approval of the SUP for the Project.

14. Staff spoke with Moffat County who indicated that they have several large construction projects anticipated around the same time period of the construction of this project. There are only four or five lodging operators in Craig and Steamboat that can accommodate the number of employees

anticipated for this project. More information needs to be provided detailing actual availability of rooms and whether certain lodging operators can accommodate the anticipated amount of workers. Correspondence from lodging operators must be submitted to support this.

**Applicant Response:**

14. As stated on page 4 of the memorandum from Brian Duffany with EPS to Alan Goldich with Routt County, “In EPS’ opinion, there should be enough hotel and other rental property in the region to absorb 275 workers.” Additionally, the Applicant understands that temporary worker housing in Moffat County may be an option to house Project construction workers, if needed. The Applicant’s EPC contractor is responsible for housing Project construction workers and would obtain the required permits, if necessary, for temporary worker housing, if needed. The Applicant is not aware of a code requirement to take into consideration other potential construction projects or timing that could occur in the area in the future.

15. Where (within 20 miles) will the cement stabilized and aggregate materials be taken?

**Applicant Response:**

15. The Applicant is not sure what this question is asking. If it is asking where the Applicant intends to use aggregate and cement stabilization, they plan to use it for access roads, public roads, and other civil construction. If it is asking where they intend to source aggregate and cement powder, they are still exploring different sources with their contractors and ultimately leave it to the contractor as means and methods. There are several concrete, rock, and cement companies in Craig and Steamboat that could support the Project. If it is asking where cement and aggregate materials will be disposed of, this will be coordinated by the EPC and will align with all applicable local, state and federal rules for waste material.

16. Proposed haul route notes improvements at some odd spots. Please provide information on why those locations are proposed for improvements.

**Applicant Response:**

16. Improvements on the haul road would help facilitate the turning radius of oversized trucks to clear the turns without damaging the existing shoulders of the road.

17. Please indicate when the traffic impact study will be done. Upgrades to the roads used as haul routes should be expected. Those improvements will be determined and constructed in accordance with section 3.23.D.3. Road improvements will have impacts to water quality which may be cause for additional review for impacts to water quality.

**Applicant Response:**

17. The Applicant provided the Project plan that includes the haul route, type of traffic, and amount of traffic created by the development on May 10, 2024, via email to Mike Mordi, Public Works Director, and Zach Schaffner with Routt County Road and Bridge. A copy of that email is included in Attachment C. Per Section 3.23.D.3 of the UDC, the Applicant understands that the county will contract with a consulting engineer of the county’s choosing for the completion of a road improvement study. The Applicant is not aware that additional action or items are required from them at this time. The Applicant requests that road improvements and associated water quality concerns be addressed further along in engineering design as a condition of approval of the SUP and be provided closer to construction of the Project following completion of final design. The Applicant is amenable to discussing the inclusion of road improvements language in the development agreement or a separate road use agreement.



18. The plans indicated that both CR 59 and 61 are paved. Neither are paved. CR 61 is native soil only and has no gravel on it.

Applicant Response:

18. Noted, thank you.

19. Construction details and elevations for the substation and BESS were not able to be located. Please point them out. If they have not been submitted, please do so.

Applicant Response:

19. The Applicant requests that these items be provided as a condition of approval of the SUP. These details will be available closer to construction of the Project following completion of final design. Additionally, these items are not required by the UDC. The solar energy system application checklist provided to the Applicant by the county asks for “floor plans and elevation drawings of proposed buildings, drawn to scale.” The UDC defines a building as “Any structure having a roof, supported by columns or walls, used or intended for supporting or sheltering any use or occupancy.” The substation and BESS will not be occupied structures, and therefore do not meet the county’s definition of a building. Thus, floor plans and elevation drawings for the substation and BESS are not required by the UDC nor the application checklist.

20. How will the racking be anchored in the ground?

Applicant Response:

20. The racking will be attached to piles that will be driven between 6 and 10 feet into the ground.

21. Floor plan and elevation drawings of the maintenance building reference the Timberland Solar Project in Carlton, GA. Please submit plans for the Trapper Solar Project in Routt County.

Applicant Response:

21. During our preliminary application meeting with Routt County on December 18, 2023, the County indicated that typical drawings from a different project would be acceptable. Additionally, the drawings provided represent the currently planned design for the Project.

22. The detail of the Safety Fence was unable to be located. Please indicate where it is located or provide one.

Applicant Response:

22. Fencing is detailed in Section 2.2.1.10 of the SUP narrative (page 10), in Section 5.4 of the wildlife mitigation plan (page 17), and on PDF page 24 (Sheet 4.2) of the site plan.

23. How much cut and fill is required? Please provide a grading plan that indicates whether the disturbed area is a fill or cut area, the area of the disturbance and the cut and fill volumes. Also, please indicate how much of the cut area is topsoil and how much are subsoils.

Applicant Response:

23. The Applicant has provided a grading plan that does not show infrastructure via the CityView portal on October 7, 2024. The cut-and-fill numbers at this stage are unknown and are not finalized until after geotechnical field studies and final engineering design prior to construction. Final site design will be completed by an EPC contractor that will help with final determinations

for project grading and design based on things like final materials, equipment, components, and technology availability and selection and the budget constraints at the time of construction. These details will be available closer to construction of the Project following completion of final design.

24. Please provide a detailed construction phasing plan and timeframe for each phase which shows how the amount of disturbance will be limited and that incorporates the surface use restrictions for elk and greater sage grouse. Please also explain how phased construction will reduce cumulative noise impacts.

**Applicant Response:**

24. As stated in Section 1.1.1 of the SUP application narrative, Project construction would occur in one phase for approximately 18 months. Construction is estimated to begin in July 2026 and end in December 2027. Additional construction timing details will be known once an EPC contractor is hired for the Project. As stated in the noise technical report for the Project, to reduce construction noise impacts, the following general mitigation strategies will be implemented: first, scheduling and timing will be crucial; pile driving and other noisy operations will be conducted during daytime hours, typically between 7:00 a.m. and 7:00 p.m., to minimize disturbances. Additionally, the noisiest operations will be scheduled to avoid peak times when noise may cause more disruption. Regular maintenance of construction equipment is essential to minimize noise emissions. This involves ensuring machinery is regularly serviced, lubricated, tightened, and fitted with modern noise-reducing technologies. Preference will be given to quieter, modern equipment and, where feasible, electric or hydraulic alternatives over diesel-powered machinery due to their quieter operation. These details will be available closer to construction of the Project following completion of final design. The Applicant is amenable to providing this level of detail prior to start of construction.

25. All waterbodies have a minimum 50' setback. All unnamed waterbodies have a potential additional outer setback of an additional 50'. All named waterbodies have a potential additional outer setback of an additional 150'. The outer setback is determined using the site-specific criteria found in section 3.31.D.2.b.ii. Please provide information on whether any of these criteria have been met. Alternatively, all disturbance can be 100' or more from unnamed waterbodies and 200' from named waterbodies and the site-specific criteria will not have to be analyzed. Please provide additional information on this setback.

**Applicant Response:**

25. As indicated in Section 2.2.1.6 (PDF page 17) of the Project's SUP application narrative, Project infrastructure will be set back at least 150 feet total from Dry Creek and at least 50 feet total from all other water bodies. The Applicant has met the 50 feet interior setback requirement and has applied an additional 100 feet setback to meet the variable outer setback requirement to Dry Creek and in consideration of the criteria for the outer setbacks in Section 3.31.D.2.b. of the UDC. The Applicant coordinated with CPW and CPW agreed to this approach for the 150 feet total setback to Dry Creek. The 150 feet total setback from the field-delineated ordinary high water mark (OHWM) for Dry Creek is sufficient to achieve habitat and water quality protection objectives. In addition, in coordination with CPW, the Applicant agreed to enhance areas within the interior setback by applying native seed to enhance habitat quality.

The interior setback of 50 feet was applied to all other waterbodies as defined by the UDC within the Project area. The Applicant reviewed the waterbodies against the criteria for the outer setbacks in Section 3.31.D.2.b of the UDC. The Project applied a variable outer setback of 0 feet



to these lowest quality habitat features including the gulches. These features have been buffered by a total of 50 feet from their respective OHWMs. CPW approved of this approach.

The Applicant team subject matter experts believe the 50 feet total setback from all waterbodies within the Project area that are not Dry Creek is generous, and more than sufficient to achieve habitat and water quality protection objectives for these features. The aquatic survey results are discussed in the biological and aquatic resources inventory report for the Trapper Solar Project, prepared by SWCA in September 2022.

In the case that the county deems it as required for the Project, the Applicant is prepared to submit a waterbody setback permit application separately from this response document.

26. It is unclear how much crop and grazing land is impacted by this project. On the Existing Conditions plan, the amount of dry cropland production, irrigated cropland production, and grazing land needs to be indicated.

Applicant Response:

26. The Applicant is not aware of a UDC code requirement to include this information in the application. However, as indicated in Section 2 of the wildlife mitigation plan submitted for the Project, land cover data from the U.S. Geological Survey (USGS 2024) indicates that most of the land within the Project area is composed of shrub/scrub (71.7%; 2,176 acres) and hay/pastureland (18.4%; 559 acres) land cover types, with 250 acres (8.2%) of the Project area composed of cultivated crops. Approximately 89 acres of the Project area appear to be irrigated by a pivot irrigation system based on aerial imagery from Google Earth dated September 2024.

27. How will you ensure that the facility does not have significant adverse impacts on agricultural lands and agricultural operations?

Applicant Response:

27. RWE has addressed this in Section 3.1 of their decommissioning and reclamation plan, stating: “Areas previously used for agriculture within the Project area will be restored to their preconstruction condition, aligning with landowner lease agreements. Restoration efforts will be guided by consultations with current landowners and compliance with applicable regulations at the time of decommissioning.” Significant adverse impact is not defined in the UDC. The Project will not have significant adverse impacts on agricultural lands and agricultural operations in the region or in Colorado.

28. Solar Fields G and H are proposed to be located on irrigated pasture. It is assumed that the landowner possesses water rights for the irrigation. How will the landowner put this right to beneficial use so that the landowner does not lose the right?

Applicant Response:

28. The Applicant does not have purview to disclose private information. The Applicant is leasing the land and does not have influence over landowner decisions for water use. If water rights are obtained by RWE, they will be used temporarily during construction only.

29. In section 4.2 of the noise report states, “The noise-sensitive receptor closest to the Project area is a house approximately 204 feet northeast of the Project boundary. In section 7.1 of the noise report states, “Noise levels from construction activities at the nearest property line of an adjacent non-participating lot, 145 feet from the proposed solar array construction site, were estimated at

approximately 86.8 dBA.” These two statements are conflicting and needs to be corrected. Also, where is this location?

**Applicant Response:**

29. The residence located 204 feet northeast of the Project boundary mentioned in Section 4.2 is identified as the nearest noise-sensitive receptor. The reference in Section 7.1 to a 145-foot distance relates to the nearest property line of a non-participating lot, not the nearest residence (shown on sheet 3.3 [PDF page 16] of the Project’s site plan). These are separate locations. This area contains two existing transmission lines and no nearby residences or receptors, such as occupied buildings.

30. The report states that, “pile driving....impacts are going to be very temporary and will not result in prolonged noise exposure” and that it takes less than 15 minutes per section of pile. How long does it take to set up for the next pile? Assuming that it takes 15 minutes, the pile driver will be used half of every hour. Staff does not consider this amount of time to be “very temporary.”

**Applicant Response:**

30. Pile driving is an intermittent activity characterized by short bursts of noise at maximum sound levels. Based on prior personal observations, the actual driving of each pile typically takes less than a minute, while the setup for the next pile generally takes a few minutes. These setup periods are significantly quieter compared to the brief bursts of noise generated during active pile driving. For this analysis, we have assumed conservatively a 15-minute cycle per pile, accounting for potential variability in pile-driving time due to soil conditions, equipment performance, and operational practices.

The term “very temporary” is used to describe the nature of pile-driving activities, as each operation generates maximum noise levels for only a very brief period (a couple of minutes) at any given location. Furthermore, the duration of the pile-driving phase is expected to be short, typically lasting only a few weeks in total at a specific project location. As with all construction projects, actual timing of activities are ultimately weather dependent.

31. Report states, “the neighboring property is agricultural, and there are no actual noise-sensitive receptors (such as residences, hospitals, schools, etc.) within close proximity to the pile driving operations.” This is contradictory to the statement that the nearest residence is 204’. At this distance, pile driving activities are not in compliance with state statute.

**Applicant Response:**

31. The statement referring to the nearest residence is referring to the noise-sensitive receptor closest to the Project area boundary. The noise-sensitive receptor closest to the Project area is a house, which is the house at 37350 County Road 53, Hayden, Colorado, approximately 204 feet northeast of the Project boundary. The shortest distance between proposed panels and a noise-sensitive receptor outside the Project area is approximately 581 feet, which is referring to that same house at 37350 County Road 53, Hayden, Colorado. The statement that “the neighboring property is agricultural . . .” is incorrect because the property includes a residence, and this statement has been removed from the report and the revised version is provided herein as Attachment K.

The Project anticipates compliance with the Project-related construction noise level thresholds for Maximum Permissible Noise Levels in the Colorado Noise Statute.

32. Section 7.2.2 of the Noise report lists sound levels of equipment. At what distance were these readings taken from?

Applicant Response:

32. The equipment sound levels listed in Section 7.2.2 represent sound power levels (L<sub>pw</sub>), not sound pressure levels. Sound power levels describe the total acoustic energy emitted by a source, independent of distance, and are used as inputs in noise modeling.

33. The applicant proposes several options for mitigating noise from the BESS. Please provide details of the proposed wall (location, length, material, finish, etc.)

Applicant Response:

33. The Applicant will provide a more refined noise study prior to construction. Design for the Project is still preliminary. We request that the study be provided prior to construction.

34. There are several assumptions (listed below) stated in the Glare Report that seem to qualify the conclusions of it. How were these limitations accounted for in the final report?

- Several calculations use the PV array centroid rather than the actual glare-spot location due to algorithm limitations. This may affect results for large PV footprints. Additional analyses of array subsections can provide additional information on expected glare.
- The subtended source angle (glare-spot size) is constrained by the PV array footprint size. Partitioning large arrays into smaller sections will reduce the maximum potential subtended angle, potentially impacting results if actual glare spots are larger than the sub-array size.
- Additional analyses of the combined area of adjacent sub-arrays can provide more information on potential glare hazards.

Applicant Response:

34. Several V1 calculations use the photovoltaic (PV) array centroid, rather than the actual glare spot location, due to algorithm limitations. This may affect results for large PV footprints. Additional analyses of array subsections can provide additional information on expected glare. This primarily affects V1 analyses of path receptors.

The analysis is designed to be a worst-case scenario from viewer to panel, and we split this into 11 PV array sections to reduce footprint size while maintaining accuracy for the analysis.

The analysis used industry standard best practices to assess potential glare. In addition, it is standard manufacturing practice today to create solar panels with anti-glare coating to reduce the potential for glare. There will be no adverse impact from potential glare.

35. Please provide a map of the observation points used in the Glare Report.

Applicant Response:

35. A map of the observation points used in the glare and glint assessment has been added as PDF page 5 of the glint and glare assessment provided in Attachment D.

36. In the Glare Report, there is a statement stating, “The analysis does not automatically consider obstacles (either man-made or natural) between the observation points and the prescribed solar installation that may obstruct observed glare, such as trees, hills, buildings, etc.” The project area is comprised of nothing but hills. This is illustrated by the results of OP at Yampa River State

Park. Even with the large cottonwoods removed from the landscape, this site would not be able to be seen from the State Park, however the study states that the site is, “likely to experience green ocular impact for 97 minutes per year.” If the project area is not visible, how is the site experiencing impacts from it?

*Applicant Response:*

36. This result is due to limitations and design by the program to create worst-case scenario results. The Applicant agrees that the State Park would likely not be visible, and the site would not experience green ocular impact from the Project.

37. This report was prepared using a 15’ panel height. The narrative states that the panels will not exceed 25’. Are there areas where the full 25’ panel height will be used? If so, where will these be?

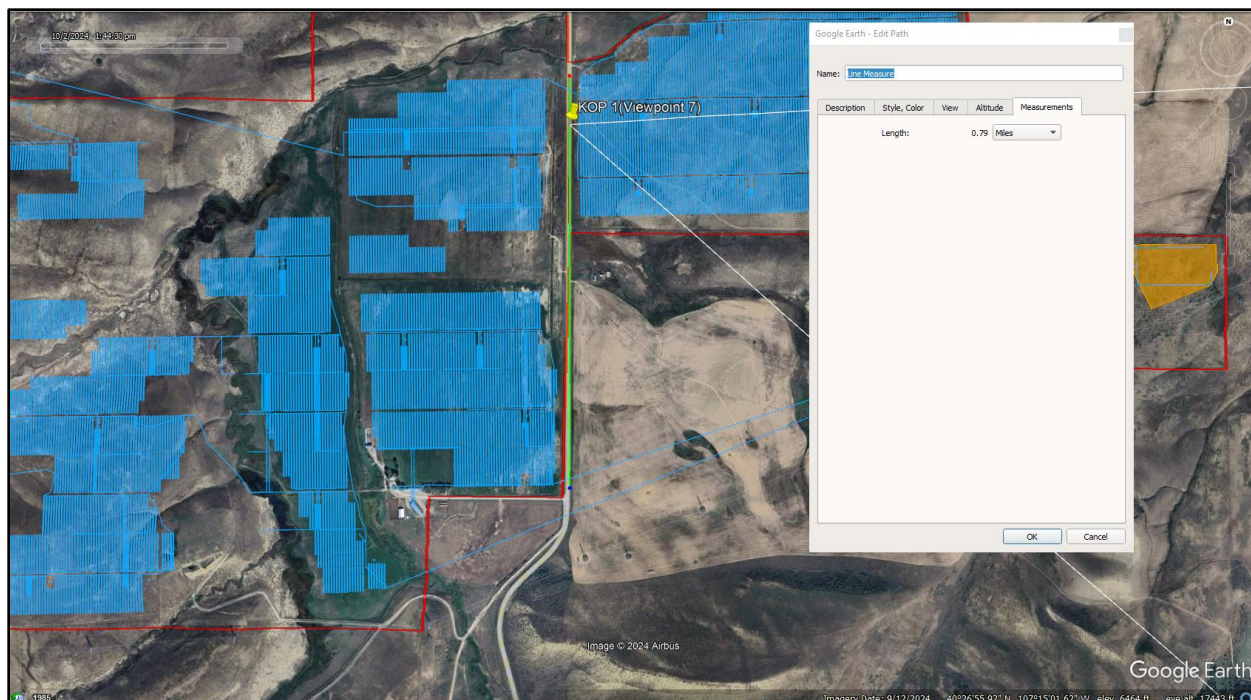
*Applicant Response:*

37. While further design is needed, the Project final design is not anticipated to have panels as high as 25 feet. The maximum height would be 15 feet due to the need to keep panels above the snow, but at this point, the Applicant does not have that level of detail since design is still under way and the Project has not yet received local approval.

38. The report states that it takes 1 minute to drive through the project. The speed limit on CR 53 is 35 mph and the distance is 1.25 miles. Based on this it would take a little more than 2 minutes to drive through the project. This needs to be revised and to ensure all data is accurate.

*Applicant Response:*

38. The effects being described here (page 13) refer to the arrays being directly adjacent to CR 53, a distance of less than 0.79 mile (as shown on the screen shot below), equating to a travel time of 1 minute 21 seconds at the posted speed.



39. Staff disagrees with the assessment that the magnitude of impact at KOPs 1 and 2 are moderate. The landscape from the viewpoints will be heavily altered and will introduce form, line, and texture that would be visually dominant and is out of character with the existing landscape. Please provide additional information on how you made this determination.

**Applicant Response:**

39. Table 3 in the report shows the level of impact at KOP 1 would be “Moderate-high” with strong visual contrast. KOP 2 is listed as having a Moderate level of impact and strong visual contrast, driven primarily by the fact that CR 59 is an unpaved rural road through and leading to private lands, with a very small estimated number of viewers affected. The visual analysis used industry best practice methodology and level of impact indicators.

40. Based on the racking drawings provided, it appears that the panels will track with the sun throughout the day. Will the panels track the changing angle of the sun based on the seasons?

**Applicant Response:**

40. Yes, they will.

41. The photo simulations don’t seem to represent an accurate view based on the location and direction of view.
- KOP1 – The direction of view on vicinity map is east/southeast. The photo simulations looks directly at the back of the panels. Based on the vicinity map, it should mainly be the side with some of the back will be seen.
  - KOP2 – The direction of view on vicinity map is west/northwest. The photo simulations shows an almost head on view of the panels. Based on the vicinity map, mainly the sides, with some of the front, of the panel will be seen.



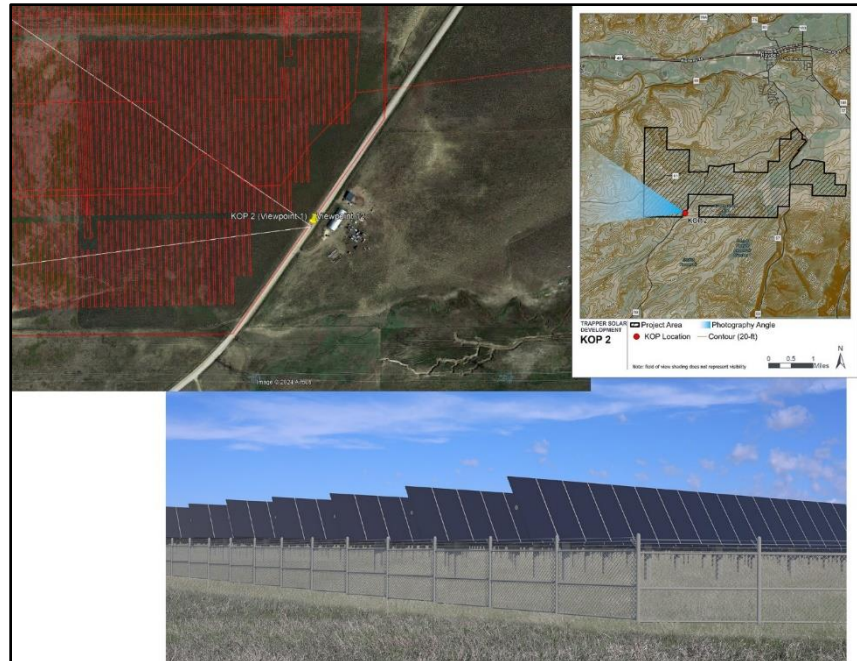
- c. KOP4 – The direction of view on vicinity map is southwest. The photo simulations shows an almost head on view of the panels. Based on the vicinity map, mainly the side/back, with some of the front, of the panel will be seen.

Applicant Response:

41. Based on the comment, we cannot tell or replicate what the reviewer is describing “based on the vicinity map;” however, the 3D modeling is based on the design layout received and is photographed matched based on the field photo points, existing terrain and known landmark features. Moreover, the PV strings are oriented north-south, so most views looking toward the project from roadways where there is direct adjacency would be dominated by the broadside of the components, whether at the back side or panel side, depending on time of day as displayed in the simulations. See screen shots from KOP 1 and KOP 2 (below) showing the orientation of the strings compared to the highway corridors provided herein.







42. Will lighting be installed? If so, where?

**Applicant Response:**

42. Lighting will be at the operations and maintenance (O&M) building, and the location is indicated in the site plan.

43. The Dust Plan states, “The amount of dust generated will be a function of construction activity, soil type, soil moisture content, wind speed, precipitation, vehicle traffic, vehicle types, and roadway characteristics.” The worksheets provided in Appendix A doesn’t mention any of these environmental factors. How do the dust emission totals take these environmental factors into account?

**Applicant Response:**

43. The dust emission totals provided in Appendix A account for the various factors discussed in the dust plan.

Earthmoving activities for construction operations are based on the total disturbed acres, the total months of construction, the  $PM_{10}$  emission factor (determined using WRAP Fugitive Dust Handbook, Table 3-2 for Level 2), and an assumed control efficiency (based on WRAP Fugitive Dust Handbook, Table 3-6, for applying water at 3.2-hour watering intervals).

The amount of dust generated during each construction activity is linked directly to the construction equipment and duration for each phase, which were calculated based on the different planned activities. Emission factors were obtained from U.S. Environmental Protection Agency’s (EPA’s) MOVES3 National Average Emission Factors for 2022. The equipment type was represented to the appropriate MOVES3 equipment category to determine the most accurate factor for calculating emissions.

The on-road vehicle traffic and vehicle types were considered with projections based on the vehicles expected during each phase, such as passenger trucks for worker commuting and heavier

vehicles for material transport. The dust generation from these vehicles was calculated in accordance with the respective volume and phase durations. Emission factors were obtained from EPA's MOVES3 National Average Emission Factors for 2022 based on gasoline and diesel emission factors (assuming that worker commuting vehicles are gasoline trucks and all other on-road vehicles are considered diesel).

Roadway characteristics were addressed using emission factors tailored to the conditions of the roads in the project area, whether they are paved or unpaved. These emission factors were incorporated to adjust the dust generation estimates accordingly. Unpaved emission factors were determined using AP-42 Section 13.2.1 for paved roads and AP-42, Section 13.2.2 for unpaved roads. Total emissions are calculated based on those emission factors and the total commuting miles during the project duration. Precipitation also was accounted for following the guidelines in AP-42 Section 13.2.1 for paved roads and Section 13.2.2 for unpaved roads, where a minimum assumption of 0.01 inch of precipitation was used to reflect the natural dust suppression from rainfall.

Soil characteristics, particularly the silt content, were also factored into the calculations, as they play a significant role in determining dust emissions from roads. A road surface silt loading of 0.2 g/m<sup>2</sup> at industrial sites was obtained from AP-42 Section 13.2.1, Table 13.2.1-3 for paved roads. A surface material silt content of 8.5% for unpaved roads for construction sites from AP-42, Section 13.2.2, Table 13.2.2-1 for unpaved roads. An average vehicle traveling weight on paved surfaces was assumed to range between 2 tons for light-duty trucks and 30 tons for concrete trucks for both paved and unpaved surfaces.

Finally, to manage dust emissions during construction, we assumed that water would be applied at various stages, increasing soil moisture content to control dust generation throughout each project phase.

44. Dust mitigation will have to take place within 500' of mapped waterways. The Dust Mitigation Plan does not mention this. The Wildlife Plan simply states that you will consult with CPW. Please provide evidence of this consultation and what your plan is.

**Applicant Response:**

44. Evidence of consultation with CPW is provided in Appendix P of the SUP application package submitted on June 7, 2024. The following fugitive dust mitigation measures has been added to Section 2.2 of the dust mitigation plan: "Implement enhanced dust control measures (e.g., frequent watering, use of non-toxic suppressants, erosion control, and physical barriers) within 500 feet of mapped waterways to minimize fugitive dust emissions and protect water quality." Additionally, as indicated in Section 5.3 of the wildlife mitigation plan for the Project, as requested by CPW and pursuant to the discussions between CPW and the Applicant in 2023 regarding the Project, RWE will seed up to 25 feet and no less than 15 feet within the interior setback 50-foot buffer surrounding the CPW-mapped Aquatic Native Species Conservation Waters crossing through the Project area (e.g. Dry Creek) in locations where the buffer is within 500 feet of Project infrastructure.

45. Section 4.2.2.1 of the Vegetation Establishment and Management Plan states that woody brush will be cleared and chipped and should remain with topsoil during stripping. It then goes on to say that the mulch from the woody material should be applied to stockpiles for temporary stabilization. How is this done if it stays with the topsoil during stripping?

*Applicant Response:*

45. The Project will strip topsoil only in areas of grading that will be limited, but everywhere else the soil will be stabilized per the Colorado Stormwater Manual. The EPC will make sure to follow all requirements of the Manual. This includes the use of best management practices (BMPs) for erosion control and soil stabilization such as using mulch tackifier, a liquid substance sprayed onto topsoil (and wood chip) piles, which then dries, providing stabilization and resistance to erosion due to wind and water.

46. Please provide examples of “low ground pressure vehicles”?

*Applicant Response:*

46. Low ground pressure vehicles are vehicles designed to spread their weight over a larger surface area, allowing them to move across terrain while applying less pressure on the ground to reduce impact. An example is a low ground pressure excavator or a low ground pressure bulldozer.

47. Provide specifics on how the site will be operated that minimizes fire risk caused by vegetation.

*Applicant Response:*

47. Section 3.1 (PDF page 18) of the emergency response plan provided for the Project addresses how the site will be operated to minimize fire risk caused by vegetation.

The Applicant will provide an updated revised emergency response plan to Routt County.

48. The Emergency Response Plan mentions dynamite/blasting. When will it be determined if this is required?

*Applicant Response:*

48. Blasting is not currently anticipated as needed for the Project, and language regarding blasting will be removed from the emergency response plan.

The Applicant will submit an updated revised emergency response plan to Routt County.

49. What chemicals/hazardous materials will be stored onsite during construction, operation, and decommissioning?

*Applicant Response:*

49. Nothing is confirmed at this time, but chemicals/hazardous materials potentially include general cleaning agents in the O&M building and gasoline or oil for work trucks. Any other chemicals on-site will be listed in the Safety Data Sheets in the O&M office.

50. West Routt Fire stated that if a battery were to catch on fire, they would only protect surrounding equipment and the area around it to prevent fire spread. If a battery were to catch of fire, how long would it burn for?

Applicant Response:

50. RWE also recommends the “let it burn” strategy while protecting exposures. In the unlikely event of fire, the duration of fire will depend on battery product and failure type. The large-scale fire tests of some battery products used by RWE suggest approximately 6 to 7 hours of fire. The Applicant could provide more information when finalizing the battery product closer to construction. The ESRP defines a “Defensive Approach” by the Fire Department. In the unlikely occurrence of a Thermal Runaway event, the goal is to contain a fire to one container. Water will not be applied to the effected container. During testing, the goal was to cause the BESS Container to sustain a thermal event (fire), the container burned 4-8 hours depending on the battery make-up and rack configuration.

51. Please provide more information on the management systems for the BESS.
- Fire detection and suppression system – How will this system work considering it will not be connected to a municipal water source?
  - How does the thermal management system work?
  - How does the battery management system work?

Applicant Response:

51. Fire detection relies on gas/smoke/heat detectors inside battery containers or multi-spectrum infrared flame detectors installed across the site. Those detectors are connected to a fire alarm and control panel, which then can be connected to a 24/7 monitoring facility. For BESS fire suppression, the industry best practice is the defensive “let it burn” strategy while protecting exposures.

Most (if not all) latest BESS products use liquid cooling as the thermal management system. The liquid cooling based thermal management system includes cooling plates inside of battery modules and chiller(s) mounted on battery enclosure. The chiller circulates the coolant to the battery rack in the enclosure. The cold coolant passes through the battery module to cool the batteries.

The battery management system (BMS) is an electronic system that serves as the brain of the battery system and has multiple functions. For example, the BMS continuously monitors the battery cell voltage, current, and temperature, and sends alarm signals to the site-level system controller if abnormal voltage/current/temperature is detected. It also protects batteries against potential hazards like overcharging, overheating, or short circuits by stopping the battery charging or discharging or disconnecting batteries. The BMS monitors the battery’s state of charge and balance the energy between cells. It also collects data on battery performance and transmits it to the system controller for analysis. The BMS shuts down the charge/discharge sequence and opens up circuits if/when any anomalies are detected well before a battery reaches a point of thermal runaway.

52. The Flash Flood section of the ERP only mentions rain fall events. It does not address flooding from snowmelt events. This area has recently experienced snowmelt events that resulted in significant flooding that could affect the layout of the project. Please indicate in this plan how this will be addressed.

Applicant Response:

52. Mention of flooding from snowmelt events has been added to the emergency response plan, and the safety procedures mentioned in the emergency response plan apply to flooding, both from snowmelt and rain.

The Applicant will submit an updated revised emergency response plan to Routt County.

53. Under 'Fire Suppression' it states, "Unknown until regulations are created." What does this mean?

Applicant Response:

53. The Applicant is not finding this language mentioned from the reviewer in the emergency response plan. Please provide the page number.

54. Table 2. Some of the observation dates are outside of the observation period indicated in introduction.

Applicant Response:

54. The two observations in April 2022 were made by a local citizen and shared with SWCA via direct communication.

55. "RWE is working in coordination with CPW on a mitigation plan for both grouse species as of the writing of this wildlife mitigation plan..." What is the status of these discussions and where were the outcomes? How could this affect the project?

Applicant Response:

55. The results of these discussions were that, as stated in the "CPW question response 10.17.24 (1)" PDF on the Project's CityView portal, CPW recommended that perch deterrents be incorporated into the Project's design and that the Applicant is to donate to the Colorado Cattlemen's association. As indicated in the Project's wildlife mitigation plan, RWE will use perch deterrents on poles and transmission lines constructed as part of the Project. Additionally, RWE plans to make a donation to the Colorado Cattlemen's Association prior to construction of the Project.

56. Section 5.4 - Are "structures...that allow trapped animals to escape" proposed? If so, where?

Applicant Response:

56. As stated in Section 5.4 of the wildlife mitigation plan, RWE will avoid entrapping wildlife within the Project area and, if wildlife is trapped within the Project area, RWE will make efforts to allow wildlife to escape to the extent practicable.

57. Raptor nests have an avoidance buffer of .5 mile from an active nest. According to the wildlife plan, all surveys were performed within the Project area. CPW stated that raptor nest surveys are typically done within a 0.5-mile radius of the disturbance area. It does not appear that this

occurred. Please conduct a survey of raptor nests within .5 miles of the project and include the results in the wildlife plan.

**Applicant Response:**

57. As stated in the biological and aquatic resources inventory report for the Project (submitted via the CityView portal on October 7, 2024), binoculars were used to survey for migratory bird (including raptors) during the August 23 through 25, 2022, field survey. One inactive raptor nest was observed along the south-central portion of the Project area during the field survey. No other raptor or migratory bird nests were observed within or adjacent to the Project area during the field survey. Additionally, another preconstruction raptor survey is planned for closer to construction since raptors move around and a survey closer to construction would be more relevant and useful to inform measures to avoid impacts to active nests.

58. You state that perch deterrents will be installed on project infrastructure. What infrastructure were proposing to place this on?

**Applicant Response:**

58. As stated in the Project's wildlife mitigation plan, RWE will place perch deterrents on poles and transmission lines constructed as part of the Project.

59. CPW stated that it's anticipated that this project will results in a nearly complete loss of habitat for wildlife. As currently drafted, the plan does not completely disclose the degree of impacts/habitat loss and certainly does not provide any details for how that loss will be accounted for or off-set. This must be addressed.

**Applicant Response:**

59. The Applicant has incorporated wildlife corridors in the Project's design to reduce potential impacts on migration patterns, if any, and in response to comments received from CPW.

The Applicant has addressed and meets the code requirements relevant to wildlife and habitat. The Applicant is not aware of code requirements for or defining "the degree of impacts/habitat loss" or "...details for how that loss will be accounted for or off-set" or county metrics or assumptions guiding the details of such an assessment.

60. The Plan does not speak much about impacts to big game in general, except for fencing and movement corridors. There is a mule deer migration corridor through the entire site that the Wildlife Plan does not address at all. The reality is that all fenced areas will be a complete loss of habitat for big game. CPW stated that they expressed to you that the only way to address this loss is through compensatory mitigation to "off-set" that loss of habitat. The Plan does not address any mitigation measures that you are pursuing to off-set this large loss of habitat for big game. Additionally, CPW has concerns about potential impacts to big game migrations, even with the incorporation of the movement corridors in the project design. Please provide an explanation of how you intend to off-set the loss of habitat that will occur with this project.

**Applicant Response:**

60. Per the recommendations from CPW, the Applicant has mitigated impacts through planned donations prior to construction of the Project to local organizations, including the Colorado Cattlemen Association to conserve wildlife habitat in the Yampa Valley and a donation to the Colorado Crane Coalition.



Pursuant to 2.77.D.23, the Project has mitigated potential impact on local wildlife and overall wildlife patterns through: 1) working with CPW to identify High Priority Habitat and design the site to avoid, minimize and mitigate potential impacts to wildlife and their habitats, 2) maintaining landscape connectivity of habitats and providing wildlife movement corridors through and around Project area, 3) completed biological and aquatic resources surveys, 4) coordinated with CPW on wildlife friendly fencing.

61. CPW recommends catch basins, man-made channels, swales, and ditches surround the project's perimeter or each project area, and a periodic. These BMPs do not limit wildlife movement and reduce the potential for wildlife entanglement. Silt fence is not recommended as a primary means of erosion control because it is highly likely to entangle wildlife and requires continual maintenance. Please revise the erosion control plan to include these measures. A maintenance plan for these measures needs to be included as well. The use of silt fence around wetlands and waterbodies where contouring is not feasible or where a potential for direct sediment input is present is acceptable.

**Applicant Response:**

61. Wildlife movement will be restricted within the 8-foot perimeter fenced areas. Compost silt socks can be used instead of silt fences to reduce potential for wildlife entanglement, and the erosion control plan can be updated with those changes. A simple maintenance plan can be included with the updated erosion control plan. The Applicant requests that the erosion control plan be updated as a condition of approval of the Project's SUP application.

62. CPW has requested that an animal tracking system utilizing cameras be installed to gather data on how animals use the movement corridors and adapt this type of development. Please provide a detailed camera monitoring plan that includes the below. Such plan shall be approved by CPW.
- Locations of cameras
  - Direction of view
  - Plan must be active for at least 4 years following construction
  - All data to be provided to CPW

**Applicant Response:**

62. As previously indicated to CPW in an August 5, 2024, meeting, the applicant is open to collaboration with CPW regarding monitoring cameras; however, any plans for the monitoring as well as the resources will come from CPW.

63. The Wildlife Plan mentions measures that are proposed to mitigate the impact to wildlife, however the County does not believe that these measures fully mitigate the impact to wildlife. Additional measures will need to be employed to further mitigate impacts to wildlife.

**Applicant Response:**

63. Per the recommendations from CPW, the Applicant has mitigated impacts through planned donations to local organizations prior to construction of the Project, including the Colorado Cattlemen Association to conserve wildlife habitat in the Yampa Valley and a donation to the Colorado Crane Coalition.

## Public Works Comments via Submission Portal

No Traffic Impact Study or Road Improvement Plan received Permits will be required for all accesses from county roads, grading and excavating, utilities or any work within a county ROW Site plans incorrectly label CR 59 and CR 61 as paved

### Applicant Response:

This information was provided as requested to Zach Schaffner via email on May 10, 2024:

Project name is the Trapper Solar Project. The applicant is RWE Solar Development, LLC. The Project area is approximately 3,030 acres of land owned by the Colorado State Land Board as well as privately owned land in Sections 19 to 22 and 26 to 30 in Township 6 North, Range 88 West. The applicant has lease agreements for the Project parcels, which we will submit with our Special Use Permit application for the Project. Please see our proposed haul route map attached (included herein in Attachment C). Our trips and vehicle information are below, including vehicle type, number of trips, and gross weight, during both the construction and operations phase of the Project.

### Construction

Duration: 18 months

Max Load: 85k lbs

Estimated Frequency of Vehicles: Maximum of 600 passenger vehicle trips per day; 12 semi-tractor/trailer trips per day; 20 water truck trips per day; and 12 grading equipment trips per day

### Operations

Duration: 35 years

Max Load: 85k

Estimated Frequency of Vehicles: 12 passenger vehicle trips per a day; one semi-tractor trip per month

## CDOT Comments vis Submission Portal

Colorado Department of Transportation - brian.killian@state.co.us

Since the Poplar St and Hwy 40 intersection has a left and right turn deceleration lane, CDOT is okay with the solar farm moving forward without a CDOT access permit, especially since the heavy traffic will only be a temporary condition. However, if traffic operational and safety issues arise, CDOT will require a CDOT access permit, possibly a traffic study and a mitigation plan. CDOT will send out an observer for the first month or so of the project to review the traffic operations.

### Applicant Response:

Understood—thank you for your comment.

## Building Department Comments via Submission Portal

The Building Department has provided comments that are informational for future Solar Permitting, and these comments have been added to the conditions under this Planning Application so the applicant can view them. The applicant will want to apply for a Solar Permit in the future, the Solar permit will cover

all structural work associated with the ground mount system, and all Electrical work associated with the solar farm project under a single application. We will need the Electrical Contractor of record to be a contact on this future solar permit, and also the General Contractor of record to be listed as a contact on the permit, along with associated designers. All plans shall be uploaded to this future Solar Permit application, which will be a detailed site plan, structural plans with a soils report information on the structural plans, point of interconnection and electrical load calculations, and all construction specification sheets or manuals as well. It is important this is designed in accordance with the 2021 IBC as adopted by Routt County, and in accordance with the 2023 NEC as adopted by the State of Colorado. Also if the Fence installed around the perimeter exceeds 6 feet in height, then you will have to apply for a separate Fence Permit as well, this would required a site plan submittal, and structural details shown how the fence will be constructed. If this project were to also include any new buildings or other structures outside of the solar panels and ground mount systems, then a separate building permit is required to be submitted for each building. Structures could be retaining walls if any are being built, would be a separate permit as well.

**Applicant Response:**

Required building permits for the Project will be secured prior to the start of construction.

**Cirrus Ecological Solutions, LC Comments**

**Appendix C – Dust Mitigation Plan**

**2.77.D.9.b**

Adequacy: Consultation with CPW on dust suppression measures that occur within 500’ of a mapped waterway is not discussed in the application.

Request: Please provide additional information on consultation with CPW on this issue.

**Applicant Response:**

Evidence of consultation with CPW is provided in Appendix P of the SUP application package submitted on June 7, 2024. The following fugitive dust mitigation measures has been added to Section 2.2 of the dust mitigation plan: “Implement enhanced dust control measures (e.g., frequent watering, use of non-toxic suppressants, erosion control, and physical barriers) within 500 feet of mapped waterways to minimize fugitive dust emissions and protect water quality.” The updated dust mitigation plan is attached herein in Attachment E. Additionally, as indicated in Section 5.3 of the wildlife mitigation plan for the Project, as requested by CPW and pursuant to the discussions between CPW and RWE in 2023 regarding the Project, RWE will seed up to 25 feet and no less than 15 feet within the 50-foot buffer surrounding the CPW-mapped Aquatic Native Species Conservation Waters crossing through the Project area in locations where the buffer is within 500 feet of Project infrastructure.

**3.35.C.5**

Adequacy: The standards included in UDC section 3.9.D are not included.

Request: Please provide information on how the application will comply with section 3.9.D.

**Applicant Response:**

The Applicant has submitted a robust Vegetation Plan as Appendix D with the SUP application that details the plans for reseeding disturbed areas. Landscaping, as referenced in this section of the

regulations, is not currently planned for the Project and, therefore, the standards in Section 3.9.D are not applicable to the Project.

3.35.C.7

Compliance: Air quality may be required dependent upon the sequence of construction and how much land is disturbed at one time.

*Applicant Response:*

Thank you for the comment.

3.35.C.12

Adequacy: Information addressing this requirement is not included.

Request: Please provide information that indicates whether an air pollution permit is required from the Air Pollution Control Division of the Colorado Department of Public Health and Environment.

*Applicant Response:*

The Applicant anticipates that an air pollution permit will be required from the Air Pollution Control Division of the Colorado Department of Public Health and Environment (CDPHE) as the Project is anticipated to disturb more than 25 acres of land and construction of the Project is expected to last longer than 6 months. The Applicant will obtain the required air permit from the Air Pollution Control Division of the CDPHE prior to construction of the Project, as applicable.

3.35.C.13

Adequacy: The application does not state whether or not this regulation would be applicable to the Project.

Request: See section 3.35.C.12.

*Applicant Response:*

The Applicant anticipates that an air pollution permit will be required from the Air Pollution Control Division of the CDPHE as the Project is anticipated to disturb more than 25 acres of land and construction of the Project is expected to last longer than 6 months. The Applicant will obtain the required air permit from the Air Pollution Control Division of the CDPHE prior to construction of the Project, as applicable.

Appendix D – Vegetation Management Plan

2.77.D.11.a

Adequacy: Construction and grading plans are not specified. There is insufficient information to assess compliance with preservation of pre-construction vegetation.

Request: Please provide information on how much total land will be disturbed as well as a statement as to why the land must be disturbed.

Applicant Response:

Land disturbance is necessary to feasibly construct and install the Project. As stated in Section 1.1 of the Project's SUP application narrative, the geographic area that would be developed or altered directly during the estimated 18 months of Project construction but reclaimed following Project construction is approximately 17 acres. The geographic area that would be developed or altered directly during the estimated 35 years of Project operation is approximately 1,536 acres.

2.77.D.11.b

Compliance: This section requires compliance with section 3.9.D.2.d of the UDC. The Temporary Cover Crop Seeding plan in section 4.3.4 primarily specifies use of non-native grass species.

Request: The temporary cover crop seed mix must be revised to exclude non-native species and include native species.

Applicant Response:

The Applicant requests that an updated temporary cover crop seed mix be provided as a condition of permit approval and prior to construction of the Project.

2.77.D.11.c

Adequacy: Revegetation seed mix is comprised of grass and forb species that have a shallower roots system.

Request: The seed mix must be revised to include deep rooting species.

Applicant Response:

The Applicant requests that an updated seed mix be a condition of permit approval and provided prior to and closer to construction start after final design is complete.

2.77.D.11.d.ii

Compliance: The application does not include a compatible cover crop mix (native species) to bridge the time between the end of construction and establishment of final vegetative cover

Request: See section 2.77.D.11.b

Applicant Response:

The plan has a recommendation to pre-seed prior to construction with a native, perennial seed mix, and a cover crop mix can be added or developed as needed. If an updated mix is required, the Applicant requests that an updated seed mix be a condition of permit approval and provided prior to and closer to construction start.

3.9.D.2.d

Compliance: This section requires compliance with section 3.9.D.2.d of the UDC. The Temporary Cover Crop Seeding plan in section 4.3.4 primarily specifies use of non-native grass species.

Request: See section 2.77.D.11.b

Applicant Response:

The Applicant has reviewed section 2.77.D.11.b and the Vegetation Plan has a recommendation to pre-seed prior to construction with a native, perennial seed mix, and a cover crop mix can be added or developed as needed. If an updated mix is required, the Applicant requests that an updated seed mix be a condition of permit approval and provided prior to and closer to construction start.

Appendix E – Erosion and Sediment Control Plan

3.5

Adequacy: The Stormwater Quality Plan does not specifically address compliance with Section 3.5. In the Plan, the third paragraph of Section 1 Introduction mentions Routt County code Section 3: Use Regulations Standards for Community-and Utility-Scale Solar Energy Systems. The UDC doesn't include a section with that name. The first paragraph of the Plan also mentions UDC Section 13 Stormwater and Water Quality. It makes no mention of UDC Section 3.5 Stormwater Management.

Request: See requests below for section 3.5.

Applicant Response:

The Applicant anticipates the need for a stormwater discharge permit because the Project includes construction activity that will disturb more than 1 acre. This permit will be obtained prior to construction. The Applicant will comply with all CDPHE requirements for general discharge permit during construction activities and associated required CDPHE reviewed and approved stormwater pollution prevention plan as part of that permit.

3.5.C.1

Compliance: Based on the disturbance acreage of the proposed development (>3,000 ac), the project meets permitting requirements from the Colorado Water Quality Control Division. The Stormwater Quality Plan does not mention whether the project will discharge stormwater. It appears likely that stormwater discharge will occur from some of the proposed solar fields, based on contributing area and HSG class. This presents a water quality concern for solar fields near streams, wetlands, etc. Some of these water features include Dry Creek and Temple Creek. Colorado's 2024 Integrated Report shows that Dry Creek, including Temple Creek and all tributaries from the mainstem of Dry Creek just above the confluence with Temple Gulch to headwaters are impaired (Category 5). Pollutants of concern include Total Recoverable (Trec) Iron and Dissolved Selenium.

Adequacy: Based on the extent of disturbance proposed by the project, applicant will need a stormwater discharge permit from the Colorado Water Quality Control Division that includes a drainage report documenting the location and volume of stormwater discharge.

Request: Please provide information on whether a stormwater discharge permit from the Colorado Water Quality Control Division is required. If one is not required, please state why.

Applicant Response:

The Applicant anticipates the need for a stormwater discharge permit because the Project includes construction activity that will disturb more than 1 acre. This permit will be obtained prior to construction. The Applicant will comply with all CDPHE requirements for general discharge permit during construction activities and associated required CDPHE reviewed and approved stormwater pollution prevention plan as part of that permit.



### 3.5.C.3

**Adequacy:** Without information on where and how much runoff would occur from the project area, it is difficult to determine if county, state, and federal standards for water quality and water pollution control will be met. As mentioned previously, substantial grading will occur in most solar fields, including some that are located near stream channels and wetlands. More information on drainage patterns and amounts is needed to determine if stormwater BMPs in Appendix E are sufficient to prevent pollutant loading to streams and wetlands in support of UDC 3.5.C and state water quality standards for impaired streams in the watershed including Temple Gulch and Dry Creek.

**Request:** Please identify locations of stormwater discharge and quantify runoff volumes (annual total and storm event) from each solar field. Please also provide loads from each solar field of sediment, Dissolved Selenium, and Total Recoverable Iron carried by the runoff volumes.

#### Applicant Response:

The Applicant will ensure compliance with state and federal regulations in accordance with Section 3.5.C.3 of the UDC. The regulations do not require the Applicant to provide stormwater discharge locations and sediment loads in the application, these are items that can be calculated after the final design is confirmed and prior to construction. Additionally, the Applicant has provided a stormwater quality plan as Appendix F of their SUP application submittal.

The Applicant will comply with all CDPHE requirements for general discharge permit during construction activities and associated required CDPHE reviewed and approved stormwater pollution prevention plan as part of that permit.

### 3.31.D.1 a-b

**Adequacy:** No information is provided in Appendix E that indicate qualifications for the individual that mapped the Ordinary Highwater Mark of a stream or delineated wetlands in the Project area.

**Request:** Provide documentation that all mapping of regulated waters was completed by an approved and qualified professional (UDC 3.31.D.1.a).

#### Applicant Response:

All mapping of regulated waters was completed by SWCA Environmental Consultants whose qualifications are provided herein as Attachment H.

### 3.31.D.2 a-b

**Adequacy:** There is insufficient information to determine how the OHWM or wetland resources were defined along with the applicable setback. More information is needed to determine if the Project is compliant with Section 3.31.D.2 a-b of the UDC.

**Request:** Please provide a written description of how and when the OHWM and wetlands were surveyed in the project area as well as information to determine if the variable outer setback in section 3.31.D.2.b.ii is applicable.

#### Applicant Response:

A description of how and when the OHWM and wetlands were surveyed in the Project area is provided in the Biological and Aquatic Resources Inventory Report for the Trapper Solar Project submitted to Routt County via the CityView portal on October 7, 2024. Project infrastructure is set back at least 150 feet total

from Dry Creek and at least 50 feet from other waterbodies pursuant to Section 3.31.D.2.b. These setbacks are the maximum setbacks allowed by the regulations. Section 3.31.D.2.b.i states that “In no circumstance shall the variable setback be required to extend more than the following dimensions for specific waterbodies: (1) Yampa River and Elk River: 250 feet (2) Named Creeks (Soda Creek, Morrison Creek, Oak Creek, Trout Creek, Fish Creek, etc.): 150 feet (3) For all other waterbodies: 50 feet.” Dry Creek is the only named creek within the Project area according to industry standard data sources.

### 3.31.E.2

Compliance: All solar fields appear to be located outside of waterbody setbacks (The 50’ inner setback is all that was identified. See comments under 3.31.D.2 a-b concerning the variable outer setback.) although the field edge is adjacent to the setback at many locations. This leads us to believe that construction disturbance will occur within the setback.

Request: Quantify impacts (ac) to streams and wetlands created by any project disturbance that would occur inside of waterbody setbacks. Describe in writing any short or long-term impacts on streams and wetlands that are anticipated to occur inside setbacks resulting from construction of solar fields and why they are unavoidable based on UDC 3.31.E.2. If no impacts on streams/wetlands are proposed with this project (including direct and indirect impacts during construction or long-term impacts resulting from construction), please indicate this.

#### Applicant Response:

The Project is not anticipated to impact streams or wetlands. No short or long-term impacts on streams and wetlands are anticipated to occur. The site layout has been designed to avoid these resources entirely.

### 3.31.F.2

Adequacy: It is uncertain from the information in Appendix E if impacts on wetlands, stream channels, or areas inside setbacks would occur. If they would occur, there is no discussion of their unavoidability or measures that would be used to mitigate construction impacts.

Request: See request in response to UDC 3.31.D.2 a-b and 3.31.E.2 above.

#### Applicant Response:

The Project is not anticipated to impact streams or wetlands. The site layout avoids these features.

### 3.31.G.2

Adequacy: Access roads to solar fields F, G, and H are used to cross existing stream channels and wetlands (Appendix E, sheet 3.6). It appears the access road between solar field G and H is existing. Some evidence of a road between solar fields F and G exists but the road would likely need more development. There is insufficient information in Appendix E to determine if upgrades to existing roads are needed and any corresponding impacts on stream channels and wetlands. Additional information is needed about the design of road crossings to ensure standards in UDC 3.31.g.2 are met. In addition to this request, more information is needed on how highly erosive soils marked in sheets 3.1 - 3.7 were determined.

Request: Please indicate if improvements will be made to existing roads at stream and wetland crossings. If no improvements will be made, please describe how stream channel and wetland resources will be protected at crossing locations. Also, please provide information on how highly erosive soils were

determined in sheets 3.1 - 3.7. Please also provide the acreage of highly erosive soil in each solar field according to the SSURGO soil map units presented in Appendix F, Table 1.

**Applicant Response:**

This information will be provided in the stormwater management plan (SWMP) required as part of the CDPHE general construction activities stormwater discharge permit and can be provided prior to construction start.

**3.38.A**

Adequacy: Without information on where and how much runoff would occur from the project area, it is difficult to determine if water quality and quantity is adequately protected. More than 3,000 acres are included in the project area. Based on the proposed contour lines that appear on sheets 3.1 - 3.7, more than 50 percent of the surface area in five of the solar fields would be disturbed by grading. Several of these fields are adjacent to stream channels and wetlands.

Request: More information on drainage patterns and amounts is needed to determine if the application is in compliance with UDC 3.38.A.

**Applicant Response:**

This information will be provided in the SWMP required as part of the CDPHE general construction activities stormwater discharge permit and can be provided prior to construction start.

**3.38.C.1**

Adequacy: Clarification is needed on fueling of construction equipment storage, containment to comply with 3.38.C.1. A review of UDC 4.4 states: "...hazardous material if used, shall be stored according to County, State, and Federal laws." See request below for adequacy in meeting UDC 3.38.C.2.

Request: Please provide a written description of any liquid or solid waste (including sewage and any other hazardous material) that would be generated or stored during construction and how this will be managed to prevent discharge.

**Applicant Response:**

This will be part of the spill prevention, control, and countermeasure plan usually created and provided by the EPC contractor. This can be provided prior to construction start.

**3.38.C.2**

Adequacy: No information is provided in Appendix E that describes installation of secondary containment measures to prevent release of stored fuel.

Request: Provide a map showing where temporary storage of fuel and all vehicle fluids would occur during the life of the project. Provide a description of where and how vehicle refueling, and maintenance would occur.

**Applicant Response:**

This can be provided closer to construction and provided by the EPC contractor.

3.38.C.3

Adequacy: Estimates of runoff amounts and location of flow paths are needed to determine if stormwater BMPs are the appropriate size and in the right location to protect streams and wetlands.

Request: Please provide additional information to support use of check dams recommended in Appendix E including results that quantify reductions in runoff and sediment transport at levels that will maintain and protect existing water quality in receiving streams and wetlands.

**Applicant Response:**

This is part of what CDPHE looks at in their permit application and is part of the SWMP that can be provided prior to construction start.

3.38.C.5.a-c

Adequacy: No information is provided regarding distance to groundwater. Construction disturbance for some solar fields will occur near named streams and wetlands where shallow groundwater could occur. The potential for contamination is uncertain because no information was provided in the plan regarding temporary storage of liquid waste (see UDC 3.38.C.1). No information is provided on the quality of water or materials being disposed of, assuming that no groundwater discharge will occur from this project. Potential for groundwater contamination by leaking batteries or material used in electrical infrastructure could exist if development appears in areas with shallow groundwater.

Request: Please identify depth to groundwater inside the boundary defining the proposed project limits on sheets 3.1 - 3.7.

**Applicant Response:**

The Project is not anticipated to contaminate groundwater. If storage of oil onsite is necessary as part of construction or operation of the Project, the Applicant or their EPC contractor would develop a spill prevention, control, and countermeasure plan, as required by the EPA. The Applicant is not aware of depth to groundwater data for the Project area. The Applicant would prepare and submit a SWMP as required as part of the CDPHE general construction activities stormwater discharge permit and that can be provided prior to construction start. Research compiled by Eisenson et al. (2024) addresses the fact that all materials in solar panels don't mix with water or vaporize into air. Eisenson et al. (2024) discusses how even the unlikely event of solar panels breaking does not pose a concern for releases of chemicals as the materials are insoluble and non-volatile at ambient conditions. Renewable energy sources do not release toxic chemicals into the air or water, unlike fossil fuels. Less air pollution can reduce the rate of stroke, heart disease, lung cancer, asthma and other diseases (World Health Organization 2025). Energy storage is an important part of how we can contribute to a cleaner grid for a safer environment (Melville 2022). Because batteries are used throughout our daily lives, the technology is well understood, well vetted and highly regulated. The Applicant uses third-party tested components that are internationally certified, and conducts rigorous pre-installation testing to ensure safety of the facilities at all times.

3.38.C.8

Adequacy: The information submitted has changed and the new water source has not yet been identified.

Request: Please identify the source of water used for all construction purposes, with pertinent Division of Water Resources data.

Applicant Response:

The water will be sourced from a private landowner, and the required permits will be obtained for use during the project.

3.38.C.9

Adequacy: High slope areas as well as areas adjacent to setback areas and the three road crossings noted in response to UDC 3.31.D.2 would present the highest probability for pollution.

Request: Please provide additional information on how the high slope areas as well as areas adjacent to waterbody setbacks would not present a high probability of surface or ground water pollution.

Applicant Response:

The Project is not anticipated to result in surface or ground water pollution. The Applicant would prepare and submit a SWMP as required as part of the CDPHE general construction activities stormwater discharge permit and can be provided prior to construction start.

Appendix F – Stormwater Water Quality Plan

2.77.D.13.a.vii

Adequacy: A description of how the soil will be decompacted was not included in Appendix F

Request: Provide a description of how soil will be decompacted in areas where bulk density that exceeds the 1.5 g/cm<sup>3</sup> threshold in County regulations and meet the target bulk density of 1.3 g/cm<sup>3</sup> described in the Stormwater Quality report.

Applicant Response:

Typical construction decompaction and soil measurement methods will be used. Typical mechanical methods may include plowing or discing. If necessary, further biological methods may be used such as amending the soil with mulch or compost. Reclamation details can be provided prior to and closer to construction.

2.77.D.13.a.viii

Adequacy: The way the plan reads, grading would/could occur at any areas up to 12 percent slope. There is no estimate in the plan on total disturbed area. This is important to quantify short-term construction impacts and subsequent longer-term impacts on bulk density, infiltration, and stormwater runoff quantity/quality.

Request: Please provide the estimated maximum area disturbed during construction by type (i.e., roads, solar array, buildings, etc.) and solar field.

Applicant Response:

The estimated maximum area of disturbance during construction by type and solar field is provided in Table 1 below.

**Table 1. Estimated Maximum Disturbance During Construction by Type and Solar Field**

Solar Field	Equipment Type	Estimated Maximum Disturbance (square feet)	Estimated Maximum Disturbance (acres)
A	Solar Field	4,274,994	98.14
A	Solar Arrays	3,671,638	84.29
A	Buildings	0	0.00
A	Inverters	800	0.02
A	Roads	84,686	1.94
A	Laydown Areas	0	0.00
B	Solar Field	1,762,542	40.46
B	Solar Arrays	1,452,794	33.35
B	Buildings	0	0.00
B	Inverters	400	0.01
B	Roads	36,507	0.84
B	Laydown Areas	0	0.00
C	Solar Field	9,942,473	228.25
C	Solar Arrays	8,630,076	198.12
C	Buildings	0	0.00
C	Inverters	2,000	0.05
C	Roads	158,817	3.65
C	Laydown Areas	396,623	9.11
D	Solar Field	10,985,569	252.19
D	Solar Arrays	9,955,694	228.55
D	Buildings	0	0.00
D	Inverters	2,400	0.06
D	Roads	222,206	5.10
D	Laydown Areas	0	0.00
E	Solar Field	11,418,227	262.13
E	Solar Arrays	9,081,106	208.47
E	Buildings	0	0.00
E	Inverters	2,400	0.06
E	Roads	216,676	4.97
E	Laydown Areas	0	0.00
F	Solar Field	4,680,971	107.46
F	Solar Arrays	4,093,273	93.97
F	Buildings	0	0.00
F	Inverters	1,200	0.03
F	Roads	88,060	2.02
F	Road between solar fields F and G	28,320	0.65
F	Laydown Areas	0	0.00



Solar Field	Equipment Type	Estimated Maximum Disturbance (square feet)	Estimated Maximum Disturbance (acres)
G	Solar Field	2,829,003	64.94
G	Solar Arrays	2,293,923	52.66
G	Buildings	0	0.00
G	Inverters	1,000	0.02
G	Roads	72,469	1.66
G	Road between solar fields G and H	5,124	0.12
G	Laydown Areas	0	0.00
H	Solar Field	3,293,996	75.62
H	Solar Arrays	2,903,714	66.66
H	Buildings	2,764	0.06
H	Inverters	800	0.02
H	Roads	66,969	1.54
H	Road between solar fields H and I	3,414	0.08
H	Laydown Areas	347,223	7.97
I	Solar Field	3,214,432	73.79
I	Solar Arrays	2,420,373	55.56
I	Buildings	0	0.00
I	Inverters	800	0.02
I	Roads	62,306	1.43
I	Laydown Areas	0	0.00
J	Solar Field	13,998,168	321.35
J	Solar Arrays	11,699,059	268.57
J	Buildings	0	0.00
J	Inverters	2,800	0.06
J	Roads	308,307	7.08
J	Laydown Areas	0	0.00
J	Battery Storage	464,682	10.67
J	Substation	438,033	10.06

2.77.D.13.a.ix

Adequacy: No discussion or mention is made in the plan about limiting heavy equipment use to specific areas to minimize soil compaction.

Request: Please provide a description of the limitations on the use of heavy equipment that will minimize soil compaction.

Applicant Response:

The EPC will designate areas where heavy equipment will be used. The EPC has not yet been selected for this Project; therefore, these determinations have not yet been made. The Applicant requests that these

limitations be provided as a condition of approval of the Project's SUP application. This information can be provided prior to and closer to start of construction.

## Appendix I – Wildlife Mitigation Plan

### 2.77.D.23.a.i

Adequacy: Maps for mule deer summer range and pronghorn concentration areas are not shown. Additionally, the applicant states that Columbian sharp-tailed grouse have been observed within and around the Project area, and that they can tolerate a moderate degree of habitat disturbance. While this may be true, the Project represents more than a "Moderate degree of habitat disturbance" and would also include visual and noise disturbance on Columbian sharp-tailed grouse. Additionally, it is unknown what extent the mapping was performed at. Several wildlife species require or are recommended to have buffers around breeding areas up to 1 mile. The application does not state if it took into account the buffer requirements/recommendations during the mapping process.

Request: Please include the maps for mule deer summer range and pronghorn concentration areas. Additionally, there is a mule deer migration corridor that intersects the entire project area. There is no mention of this corridor which must be addressed.

#### Applicant Response:

The requested maps are included herein as Attachment F. As indicated in the Wildlife Mitigation Plan for the Project, the Project will include wildlife movement corridors through and around the Project area to allow big game, such as mule deer (and other wildlife) to move through and around the Project area. No CPW or USFWS designated breeding areas are within or adjacent to the Project area. A field biological resources survey for the project area and 0.5-mile buffer was completed using public access roads and binoculars. The Applicant coordinated with CPW on the survey results.

### 2.77.D.23.a.ii

Adequacy: Few details are provided on how the project would provide wildlife movement corridors through the Project area. Because the Project area contains elk winter concentration areas and a mule deer migration corridor, the Project could impede big game migration. Additionally, during the meeting between RWE and CPW on August 10, 2023, CPW noted that "the east to west expanse of the Project could potentially limit north to south big game migration."

Request: Please provide details on how wildlife movement will be maintained and how the applicant determined that the proposed corridors are adequate to ensure wildlife movement is maintained.

#### Applicant Response:

Wildlife movement will be maintained through the Project's incorporation of wildlife movement corridors as shown on the Wildlife Corridor Map on sheet 5.0 (PDF page 27) of the Project's Site Plan submitted with the Project's SUP application. The Applicant has designed the Project's wildlife corridors in coordination with CPW, the agency with jurisdiction for managing Colorado wildlife.

### 2.77.D.23.a.iii

Adequacy: Several wildlife species require or are recommended to have buffers around breeding areas up to 1 mile according to CPW's Recommendations to Avoid and Minimize Impacts to Wildlife from Land Use Development in Colorado. Because the surveys were performed within the Project area, it is

unknown if breeding areas occur outside the Project area but within the buffer requirements/recommendations.

Request: See response to UDC 3.34.E.2 for more detail.

**Applicant Response:**

The applicant only had landowner permission to survey land within the Project area. The applicant cannot access private land they do not own or lease. No CPW or USFWS designated breeding areas are within or adjacent to the Project area. A field biological resources survey for the project area and 0.5-mile buffer was completed using public access roads and binoculars. The Applicant coordinated with CPW on the survey results.

**2.77.D.23.a.iv**

Compliance: There is no discussion of a post-development wildlife and habitat survey in the application.

Request: Please provide additional information on the post-development wildlife and habitat survey.

**Applicant Response:**

A post-development wildlife and habitat survey can be conducted in compliance with Routt County's solar regulations and as a SUP condition of approval.

**2.77.D.23.a.v**

Compliance: Pursuant to Colorado Public Utilities Commission Rule 3668, a pre-development wildlife and habitat survey of the Project area was completed in August 2022 that included an aquatic resource inventory and a raptor nest survey. This survey determined that there was no habitat for federally listed or state-listed threatened or endangered species in the Project area and also concludes that no federally listed or state-listed threatened or endangered species are known to occur or likely to occur within the Project area (SWCA Environmental Consultants 2022). Five state species of special concern are known to occur or have potential to occur in the Project area: bald eagle (*Haliaeetus leucocephalus*), greater sandhill crane (*Antigone canadensis tabida*), greater sage-grouse (*Centrocercus urophasianus*), Columbian sharp-tailed grouse (*Tympanuchus phasianellus columbianus*), and northern leopard frog (*Lithobates pipiens*).

Request: Please provide information on the post-construction wildlife study and comments from CPW stating that the study methods are acceptable.

**Applicant Response:**

The Colorado PUC Rule 3668 applies to public utilities and projects requiring a certificate of public convenience and necessity (CPCN) and this does not apply to the Project. Regardless, a post-construction wildlife and habitat survey can be conducted in compliance with Routt County's solar regulations. The Applicant requests this as a condition of approval for the SUP.

**2.77.D.23.a.vi**

Adequacy: There is no discussion of screening techniques in the application. While it is discussed in section 2.2.1.8 of the Special Use Permit Application, there is no discussion of how screening techniques would provide pathways that enable wildlife movement.

Request: Please provide additional information on how the proposed screening techniques will provide pathways that enable wildlife movement.

**Applicant Response:**

The Project has been sited to minimize the need for screening (see the Visual Impact Statement submitted for the Project). As indicated in the Wildlife Mitigation Plan, wildlife movement corridors have been incorporated into the Project's design. The Applicant has designed the Project's wildlife corridors in coordination with CPW, the agency with jurisdiction for managing Colorado wildlife.

**3.34.D.1**

**Adequacy:** Several wildlife species require or are recommended to have buffers around breeding areas up to 1 mile according to CPW's Recommendations to Avoid and Minimize Impacts to Wildlife from Land Use Development in Colorado. Because the surveys were performed within the Project area, it is unknown if breeding areas occur outside the Project area but within the buffer requirements/recommendations.

**Request:** See response to UDC 3.34.E.2 for more detail.

**Applicant Response:**

The applicant had landowner permission to survey land only within the Project area. The applicant cannot access private land they do not own or lease. The Applicant plans to adhere to CPW recommendations to the extent practical. The Applicant has coordinated with CPW and designed the Project's wildlife corridors in coordination with CPW, the agency with jurisdiction for managing Colorado wildlife. Pre-construction nesting bird surveys can be completed and are industry best practice to comply with the MBTA and BGEPA.

**3.34.E.1.a**

**Request:** Please provide information on how the avoidance strategy was employed that will leave wildlife habitat functionally intact with no direct, indirect, or cumulative adverse impacts to wildlife resources. If this was not able to be achieved, please provide explanation of why.

**Applicant Response:**

The installation of the racking for the solar panels would create a temporary minor impact to the movement of some terrestrial wildlife in the area and result in minor temporary impact to habitat for the life of the Project. The setbacks from waterbodies will still allow for large game movement through the area, and the fencing design will allow for small terrestrial wildlife movement within the Project boundaries. The Decommissioning Plan will restore the habitat in the area to its pre-Project state, thus leaving the habitat functionally intact after the life of the Project. The Applicant has coordinated with CPW and designed the Project's wildlife corridors in coordination with CPW, the agency with jurisdiction for managing Colorado wildlife, and meets the requirements of the UDC that are applicable to this location and use.

**3.34.E.1.c**

**Adequacy:** The applicant states that Columbian sharp-tailed grouse have been observed within the Project area, and that they can tolerate a moderate degree of habitat disturbance. While this may be true, the Project represents more than a "Moderate degree of habitat disturbance" and would also include visual and noise disturbance on Columbian sharp-tailed grouse. Because the Project would cause habitat loss and fragmentation and visual and noise disturbance for the Columbian sharp-tailed grouse, which has been observed within and around the Project area, mitigation for this species is necessary.

Request: Please provide additional information on how the applicant will mitigate long term impacts to greater sage-grouse and Colombian sharp-tailed grouse and big game species.

Applicant Response:

Per the recommendations from CPW, the Applicant has mitigated impacts through planned donations prior to construction of the Project to local organizations, including the Colorado Cattlemen Association to conserve wildlife habitat in the Yampa Valley and a donation to the Colorado Crane Coalition. As stated in the “CPW question response 10.17.24 (1)” PDF on the Project’s CityView portal, CPW recommended that perch deterrents be incorporated into the Project’s design and that the applicant plans to donate to the Colorado Cattlemen’s association prior to construction. As indicated in the Project’s wildlife mitigation plan, RWE will use perch deterrents on poles and transmission lines constructed as part of the Project. Additionally, RWE has planned donations to the Colorado Cattlemen’s association prior to construction. The Applicant has worked with CPW to mitigate potential impacts to greater sage-grouse, Colombian sharp-tailed grouse, and big game species and will continue to coordinate with CPW. The Applicant has coordinated with CPW, the agency with jurisdiction for managing Colorado wildlife, and meets the requirements of the UDC that are applicable to this location and use.

3.34.E.1.d

Adequacy: While the application states that the primary goal of this wildlife mitigation plan is to reduce the Project’s potential impacts to USFWS and CPW-protected species, it does not explain the design process detailing how the mitigation hierarchy was used in the design of the project. Additionally, no alternatives were included in Appendix I.

Request: Please provide information on how the design process took into account the mitigation hierarchy and alternatives that were considered.

Applicant Response:

Pursuant to Section 2.77.D.23 of the Code, the Applicant worked with CPW to identify High Priority Habitat and designed the Project to avoid, minimize, and mitigate the potential impacts to wildlife and their habitat in the Project area. The Project maintains landscape connectivity by providing corridors between fenced areas for wildlife to move through the Project area. Pre-development surveys were completed in 2022 by a qualified wildlife biologist documenting wildlife and habitat present within the Project Area. That report was submitted to Routt County via the CityView portal on October 7, 2024. A post-development wildlife and habitat survey can be conducted. The Applicant requests this as a SUR condition of approval. The exclusionary fencing design is in compliance with the standards found in Section 2.77.D.10 of the Code. Alternatives to the Project location were considered based on proximity to existing transmission lines, least impact to resources, and landowner participation. The desktop review and then field survey of resources informed the site layout that was created to avoid impacts to resources resulting in the proposed site layout submitted for review. The Applicant has coordinated with CPW, the agency with jurisdiction for managing Colorado wildlife, and meets the requirements of the UDC that are applicable to this location and use.

3.34.E.2

Adequacy: CPW’s Recommendations to Avoid and Minimize Impacts to Wildlife from Land Use Development in Colorado recommends avoiding development in big game winter range, which does occur within the Project area. Additionally, this document contains the following recommendations, which are not addressed in the applications: - Columbian sharp-tailed grouse winter range - Timing limitation - No permitted or authorized human activities within known Columbian sharp-tailed grouse wintering areas from November 15 to March 15. - Columbian sharp-tailed grouse production area -

Timing limitation - No permitted or authorized human activities from March 15 to July 30 within a Production Area; limit noise to not exceed 49 dB as measured 30 feet from the source. - Greater sage-grouse priority habitat management area - No surface occupancy and no ground disturbance (year-round); If exceptions, waivers, or modifications are granted, Timing limitation - No permitted or authorized human activities from March 1 to July 15; Limit noise to not exceed 49dB as measured 30 feet from the source. - Greater sage-grouse lek site - No surface occupancy and no ground disturbance (year-round) within 1.0- mile of a lek site. - Bald eagle active nest site - No surface occupancy and no ground disturbance (year-round) within 0.25- mile of active nest. - Bald winter night roost or communal roost site - Timing limitation - No permitted or authorized human activities within 0.50-mile of winter night roost or communal roost site from November 15 to March 15 if there is direct line of sight to the activity; No permitted or authorized human activities within 0.25-mile of winter night roost or communal roost site from November 15 to March 15 if there is no direct line of sight to the activity. - Golden eagle active nest site - No surface occupancy and no ground disturbance (year-round) within 0.25-mile of nest; Timing limitation - No permitted or authorized human activities with 0.5-mile of nest from December 15 to July 15. - Peregrine falcon active nest site - No surface occupancy and no ground disturbance (year-round) within 0.5-mile of a nest; Timing limitation - No permitted or authorized human activities within 0.5-mile of a nest from March 15 to July 31. A review of this document also shows several recommendations that were not addressed for the wildlife habitat areas overlapping the Project area and the wildlife species that could occur in the Project area (Appendix I, Table 2). There is no discussion of the nearest greater sage-grouse leks, which require a 1- mile buffer of no surface occupancy and no ground disturbance. There is also no discussion of golden eagle nest sites, despite a comment from CPW in the meeting notes that there is golden eagle nesting activity within the Project vicinity, which would require a 0.25-mile buffer of no surface occupancy and no ground disturbance. Species listed as unlikely to occur, may occur, or known to occur from Table 2 in Appendix I and species with overlapping habitat addressed in section 3.1 were considered in this review; however, it is unknown if the pre-development wildlife survey considered a buffer around the Project, which many wildlife species require. For example, peregrine falcons are labeled as “unlikely to occur” based on habitat, but it is unknown if they are referring to the habitat within the Project area, or habitat within 0.5 miles of the Project area, which would be the minimum nest buffer recommended by CPW.

Request: Please provide more detailed maps, additional details on the methods for the surveys, and how the additional restrictions listed above are applicable or not.

#### [Applicant Response:](#)

[Additional details on the survey methods and more detailed maps are in the Biological and Aquatic Resources Inventory Report for the Trapper Solar Project submitted to Routt County via the CityView portal on October 7, 2024. The Applicant has shared survey results and met with CPW and has designed the Project in consideration of the applicable restrictions. Preconstruction nest surveys in the Project area and 0.5 mile buffer will be conducted prior to construction start. The Applicant has coordinated with CPW, the agency with jurisdiction for managing Colorado wildlife, and meets the requirements of the UDC that are applicable to this location and use.](#)

#### 3.34.E.5

Adequacy: Few details are provided on how the project would provide wildlife movement corridors through the Project area. Because the Project area contains elk winter concentration areas, pronghorn concentration areas, and a mule deer migration corridor, it is likely that the Project will impede big game migration. Additionally, during the meeting between RWE and CPW on August 10, 2023, CPW noted that “the east to west expanse of the Project could potentially limit north to south big game migration.” Fencing around the Project, while wildlife-friendly, would create an impediment to habitat connectivity and wildlife corridors.



Request: See comments pertaining to section 2.77.D.23.a.ii.

**Applicant Response:**

The Applicant has worked with CPW to redesign and remove sections of fencing that were of concern to big game movement. Those revisions are incorporated into the site plan for the Project that was submitted with the Project's SUP application on June 7, 2024. The Applicant will continue to coordinate with CPW. The Project meets the requirements of the UDC that are applicable to wildlife and this location and use.

3.34.E.7.a-c

Compliance: The Project likely impacts big game movement through the area; therefore, it is difficult to say that the application is compliant with the UDC statement "Fencing shall not obstruct historical movement patterns". Alteration of big game movement could have an array of adverse effects on big game. Due to the elk winter concentration area, pronghorn concentration area, and a mule deer migration corridor that overlaps with the Project area, historic movement patterns for big game exist in the Project area and would be partially obstructed due to the development and the fencing used.

Request: See comments pertaining to section 2.77.D.23.a.ii.

**Applicant Response:**

Wildlife movement corridors have been incorporated into the Project's design and are identified on the submitted site plan. See reply to comment on 3.34.E.5 above. The Applicant has and will continue to coordinate with CPW, the agency with jurisdiction for managing Colorado wildlife.

3.34.E.10

Compliance: Applicant proposes several strategies to avoid impacts to wildlife, including a timing limitation of no permitted or authorized human activities between December 1 and April 30 for elk winter concentration areas, limited ground disturbance during migratory bird breeding season of April 1 to August 31 (construction during this window would require active nest surveys beforehand), avoidance of sage-grouse and Columbian sharp-tailed grouse habitat to the extent possible, surveys for raptor nests before construction (if any are found, RWE will coordinate with USFWS to avoid impacts), avoidance of bear encounters, speed limits based on CPW's recommendations, and a 50-foot buffer from water bodies.

Request: See comments pertaining to section 3.34.E.2.

**Applicant Response:**

Noted, see response to comments pertaining to 3.34.E.2.

3.34.E.12

Adequacy: Because mitigation is not finalized, it is unknown whether or not more mitigation/compensatory offsets will be put in place. We suggest that due to the amount of habitat for big game, greater sage-grouse, and Columbian sharp-tailed grouse that would be lost due to the Project, that areas nearby of equal or greater size be established to replace the habitat that is lost from this Project. Additionally, the loss of raptor hunting grounds is not discussed in the application, but CPW notes that there is golden eagle nesting activity in the vicinity of the Project area. Considering the large decline in golden eagle nesting success over the past five years, this Project could represent a threat to the species.

Request: Please provide more information on how the applicant proposes to offset the impacts to wildlife species in the project area.

**Applicant Response:**

The Applicant is not aware of UDC requirements stipulating a 1:1 mitigation ratio for potential impacts to resources nor would this be practically feasible. The Applicant has incorporated wildlife corridors in the Project's design to reduce potential impacts on migration patterns, if any. The Applicant has and will continue to work with CPW and their wildlife subject matter experts. Potential impacts to wildlife species in the Project area have been evaluated and are one aspect of analysis in land use decision making processes. The Project will benefit long-term energy supply and resiliency in Routt County and Colorado and if approved, potentially help mitigate climate change. Additionally, the Applicant has mitigated impacts through planned donations prior to construction to local organizations, including the Colorado Cattlemen Association to conserve wildlife habitat in the Yampa Valley and a donation to the Colorado Crane Coalition, as recommended by CPW. The Applicant will continue to coordinate with CPW. The Project meets the requirements of the UDC that are applicable to wildlife and this location and use.

**Appendix J – Decommissioning/Reclamation Plan**

**2.77.D.26.a.i**

**Adequacy:** There is a large area that is currently irrigated cropland. If water rights are not put to a beneficial use, they are lost. There is no mention of how the water rights will be protected while the facility is in operation.

**Request:** Please provide information on how the irrigation water associated with the agricultural use will be put to a beneficial use so that the water rights are not abandoned by the Division of Water Resources.

**Applicant Response:**

The applicant is leasing the land for the Project and is not responsible for how the water rights owner uses their water. If water rights are obtained by RWE, they will be used temporarily during construction only.

**2.77.D.26.a.vi-vii**

**Request:** Please provide a statement the developer or future owner will be responsible for insurance and surety of decommissioning.

**Applicant Response:**

As indicated in Section 1.2 of the Project's decommissioning plan submitted with the Project's SUP application, RWE assumes responsibility for decommissioning the Project. The developer or future owner will be responsible for insurance and surety of decommissioning the Project.

**Hazard Review**

**3.33.F**

**Adequacy:** An Environmental Report was not included in the application materials.

**Request:** Please provide an Environmental Report that addresses section 3.33.F.2.

**Applicant Response:**

The Applicant team put significant effort into assessing the environment including assessing environmental hazards associated with the Project area. Several environmental reports addressing the Project's potential environmental impacts were included in the SUP application submittal package. Those

reports were completed by qualified professionals, licensed as required, in the state of Colorado, and they include measures to avoid, minimize, and mitigate potential environmental impacts of the Project, to the extent practicable, and based on industry best practices. Subject matter expert resumes can be provided upon request. The SUP application includes the following materials listed below, which adequately address the intent of code section 3.33.F of the UDC thus meeting this requirement.

- Wildlife Mitigation Plan and consultation comments from Colorado Parks and Wildlife
  - *Section 4: Potential Impacts to wildlife and their habitats*
  - *Section 5: Measures to avoid, minimize, and mitigate potential impacts to wildlife and their habitats*
- Vegetation Establishment and Management Plan
  - *Section 4.2: Soil Handling and storage*
  - *Section 4.3: Revegetation*
  - *Section 4.4: Straw mulching and erosion control*
  - *Section 4.5: Weed management*
  - *Section 4.6: Revegetation schedule*
- Erosion and Sediment Control Plan
  - *Seeding specifications and site restoration notes on page 26*
- Stormwater and Water Quality Plan
  - *Addresses mitigation measures to preserve water quality*
- Emergency Response Plan
  - *Section 2: Identifications of potential hazards on the site*
  - *Section 3: Risk reduction measures*
- Dust Mitigation Plan
  - *Section 2.1: Potential impacts from construction and operation*
  - *Section 2.2: Fugitive dust mitigation measures*
- Decommissioning/Reclamation Plan
  - *Section 1.1: Triggering events and expected lifetime of the project*
  - *Section 3: Land use and environment*
- Appendix A. Site Plan
  - *Section 7.1: Construction noise*
  - *Section 7.2: Operational noise*
  - *Section 7.2.4: Optional mitigation strategies*

#### 3.33.H.1.a

Adequacy: The application materials do not label areas that exceed 30% slope.

Request: Please indicate slopes that exceed 30% on the existing conditions plan.

Applicant Response:

These are labeled on sheets 2.1 through 2.8 of the site plan submitted with the Project's SUP application.

3.33.H.1.b

Adequacy: Unstable slopes are not discussed in detail in the application. A text box on Sheet 1 Appendix E mentions local soils formed in Lewis Shale and local residuum are particularly prone to land sliding.

Request: Please provide information on the mapped unstable slopes and how the project layout responds to this hazard.

**Applicant Response:**

Unstable slopes will be graded to a more stable slope, if needed to accommodate Project infrastructure. The amount of grading proposed is based on preliminary design of the Project. Final grading amounts will be determined with final design of the Project prior to construction.

3.33.H.1.c

Adequacy: Limiting cut and fill and other grading to the area of development is not discussed in the application.

Request: Please provide information on why the amount of grading that is proposed is necessary for this project.

**Applicant Response:**

The amount of grading proposed is based on preliminary design of the Project. Final grading amounts will be determined with final design of the Project prior to construction.

3.33.H.1.e

Adequacy: Few details provided on how the project would blend with the topography of the site and how roads would be contoured.

Request: Please provide information on how the project would blend with the natural topography of the site.

**Applicant Response:**

The Project will be designed to minimize grading to the extent practicable, blending with the natural topography of the site.

3.33.H.1.g

Adequacy: Unstable slopes are not discussed in the application.

Request: See comments pertaining to section 3.33.H.1.b.

**Applicant Response:**

Mapped slopes that are greater than 30% will be graded to a more stable, less than 30%, slope, if needed to accommodate Project infrastructure.

3.33.M.3.b

Adequacy: The Project may be compliant, considering that construction, operation, and decommissioning of the development are estimated to be at a low to moderate fire risk, and the Project area is rated at the lowest burn probability. However, no fire protection plan was submitted.

Request: Additional information is needed to fully evaluate the fire mitigation measures. See Corrections letter

**Applicant Response:**

See responses to Corrections letter.

The Applicant will provide an updated Emergency Response Plan.

**Colorado Parks and Wildlife Letter**

**Applicant Response:**

The Applicant has received the letter from CPW and has incorporated their recommendations into the Project's design to the extent practicable.

**Northwest Colorado Council of Governments Water Quality/Quantity Committee Letter**

Recommendation A.i. Applicant should provide a description of the wetlands and waterbodies added to the project area since the Biological and Aquatic Resources Inventory Report was completed in September 2022.

**Applicant Response:**

On May 2, 2024, SWCA delineated approximately 0.28 acre of freshwater emergent wetlands, 2.53 acres of freshwater emergent/scrub-shrub wetlands, 0.01 acre of ditch with no OHWM, 3.48 acres of ephemeral waterbodies with an OHWM, and 11.44 acres of intermittent waterbodies with OHWMs. Those are the only aquatic resources delineated within the Project area since the biological and aquatic resources inventory report was completed in September 2022. Wetlands and waterbodies within the Project area, including those delineated since September 2022, are displayed on the site plan submitted with the Project's SUP application on June 7, 2024, and were incorporated into the Project's design and associated documents submitted with the Project's SUP application on June 7, 2024.

Recommendation A.ii. The Applicant should provide a description of all existing water quality conditions (referred to as "baseline conditions") in Dry Creek and its tributaries and the Yampa River downstream from the confluence with Dry Creek. This information should be readily available from the Water Quality Control Division and existing studies such as the Yampa Integrated Water Management Plan, Upper Yampa River Watershed Plan, and other state, federal, and local studies. However, in some instances the applicant may find it most appropriate to conduct pre-application monitoring. The analysis of existing water quality conditions may include, for example:

- A characterization of the current concentration of the pollutant(s) in surface water bodies for any pollutants that may be introduced by Project.
- Stream segments and water bodies that have been recommended by any local, state, or federal agency or watershed organization for restoration or improvements.
- Stream segments and waterbodies that are impaired, including any segments listed on the Colorado Water Quality Control Division's List of Impaired Waters or Monitoring and Evaluation List (5 CCR 1002-93).

The Applicant should then discuss projected water quality impacts from the Project including whether the Project will exacerbate existing water quality problems

**Applicant Response:**

According to the Upper Yampa River Watershed Plan (Halliday 2016), one segment of Dry Creek exceeds agricultural and aquatic life standards. The mainstem of Dry Creek, including all tributaries and wetlands, to just above the confluence with Temple Gulch is listed as impaired due to iron levels (Halliday 2016). The Project is not expected to add to the iron levels in the tributaries of Dry Creek. Dry Creek including all tributaries from Temple Gulch to the Yampa River is listed as impaired due to selenium levels (Halliday 2016). The Project is not expected to add selenium to the waterways in and near the Project area. The main stem of the Yampa River is on CDPHE's monitoring and evaluation list for temperature exceedances (Halliday 2016). Other water quality concerns in the sub-basin including the Yampa River and Dry Creek include elevated phosphorus levels and excess sediment loading (Halliday 2016). The Project is not anticipated to introduce additional pollutants into surface waterbodies nor exacerbate existing water quality problems. For sediment control, stormwater best management practices will be used to prevent sediment into any waterways as required by the state. Stormwater will be managed according to the SWMP required as part of the CDPHE general construction activities stormwater discharge permit and can be provided prior to construction start. Water monitoring stations at downstream locations in the Yampa River (USGS monitoring site numbers 402840107004200, 09240020, and 09239500) can be used to monitor water quality during and after construction.

Recommendation A.iii. The Application should analyze whether and to what extent the Project will impact designated uses and water quality standards for waterbodies and riparian areas both in the Project area and downstream of the Project boundary. The Colorado Water Quality Control Commission designates uses and assigns both narrative and numeric water quality standards to waterbodies in the Yampa River Basin in Regulations 33 and 31. Existing and potential water quality impairments are identified in Regulation 93.

**Applicant Response:**

The Project will not impact designated uses and water quality standards for waterbodies and riparian areas in the Project area or downstream of the Project boundary as the Project has been sited to avoid impacts to wetlands and waterbodies. Additionally, the Applicant will manage stormwater according to the SWMP required as part of the CDPHE general construction activities stormwater discharge permit that will be obtained for the Project and can be provided prior to construction start. USGS National Water Information System monitoring stations at downstream locations can be used to monitor and track water quality before, during, and after construction to verify no excess pollutants are introduced to the system from the Project.

Recommendation A.iv. The Applicant should provide mitigation measures to address the projected water quality impacts. The mitigation measures must be sufficient to demonstrate no significant degradation of water quality to demonstrate compliance with the 208 Plan and with Section 2.77.D.13.a. of the County UDC.

**Applicant Response:**

The Project is not anticipated to impact water quality as the Project has been sited to avoid impacts to wetlands and waterbodies. Additionally, the Applicant will manage stormwater according to the SMP required as part of the CDPHE general construction activities stormwater discharge permit that will be obtained for the Project. The Project will comply with all state regulations for water quality.

Recommendation A.v. The Application should recommend appropriate locations, frequencies, and durations for water quality monitoring, including regularly reporting results to the County. The monitoring plan should include actions the Applicant will take if monitoring results indicate proposed mitigation is not working as predicted to ensure regional water quality is not degraded.



**Applicant Response:**

The Project is not anticipated to impact water quality as the Project has been sited to avoid impacts to wetlands and waterbodies. Additionally, the Applicant will manage stormwater according to the SWMP required as part of the CDPHE general construction activities stormwater discharge permit that will be obtained for the Project. Therefore, locations, frequencies, and durations for water quality monitoring are not provided. The Project will comply with all state regulations for water quality.

Recommendation B.i. Appendix C of the Stormwater and Water Quality Plan computes the runoff curve number (RCN) based upon a panel spacing of 25 feet. The Solar Structure Detail Drawings that the Applicant recently submitted to the County reports a panel spacing of 21'6". The Applicant should incorporate the new information into the Application.

**Applicant Response:**

The new information has been incorporated into the revised Stormwater and Water Quality Plan provided herein as Attachment I.

Recommendation B.ii. The Applicant should more fully describe the current condition of the vegetation on-site and how the proposed post-project vegetation type is the best option for revegetation. The Applicant should also describe how the Decommissioning Plan will be responsive to changing conditions that might necessitate changes in the Plan, including how the county will review and approve of such changes.

**Applicant Response:**

The current condition of the vegetation on-site is described in the Vegetation Establishment and Management Plan (the Plan) submitted with the Project's SUP application on June 7, 2024. Seed mix species for revegetation are based upon prairie grasses and forbs native to Colorado, selected with the support of CPW's Colorado Seed Tool (CPW 2024) and were based on their known occurrence or likelihood of occurrence in the Project area using the vegetation assessment and ecological sites, tolerance of clay soils, rooting depth, erosion-control capabilities, growth height, and commercial availability. Areas previously used for agriculture within the Project area will be restored to their preconstruction condition, aligning with landowner lease agreements. Restoration efforts will be guided by consultations with current landowners and compliance with applicable regulations at the time of decommissioning. Disturbed land will be rejuvenated to facilitate use resembling its original agricultural purpose prior to Project construction. Soil exposed during decommissioning will be stabilized in accordance with the Project's Vegetation Establishment and Management Plan, provided with the Project's Special Use Permit application under a separate cover. Work will adhere to conditions agreed upon by RWE and as dictated by prevailing regulations at the time of decommissioning.

Recommendation B.iii. Appendix D of the Stormwater and Water Quality Plan helpfully provides the RCN by solar field. Appendix D appears to indicate that additional erosion control measures could be most beneficial in solar fields F, H, and I. The Applicant should address whether and to what extent there is a need for additional erosion control measures during construction, operation, and decommissioning of the project.

**Applicant Response:**

Additionally, the Applicant will manage stormwater according to the SWMP required as part of the CDPHE general construction activities stormwater discharge permit that will be obtained for the Project and can be provided prior to construction start. In the updated stormwater plan, the overall stormwater discharge from all the solar fields will be reduced based on the updated calculation. The solar fields F, G, and H would show higher curve number values in post-construction condition than pre-development

condition. Additional stormwater and erosion control measures, for example, stormwater retention pond and rock apron at discharge outlet, will be developed in those fields as design is progressed.

Recommendation B.iv. The Applicant should address whether additional erosion control measures may be necessary due to shallow soil depths, in particular soil unit 5a, 4e, and 4F which account for approximately 20.5 percent of the project area.

**Applicant Response:**

Appropriate measures such as erosion prevention blankets and topsoil retention mentioned in the Erosion and Sediment Control Plan submitted with the SUP apply to shallow soil types such as 5a, 4e, and 4f. Erosion inspections will occur daily during active construction and site-specific repairs will be made as necessary. The Vegetation Establishment and Management Plan submitted with the SUP application provides provisions for amending soil if needed. The revegetation contractor for the Project will be responsible for implementing these measures.

Recommendation B.v. The Application should address whether additional erosion control measures may be necessary due to soil chemical characteristics (e.g., saline, saline-sodic).

**Applicant Response:**

The revegetation contractor will be responsible for successful revegetation following Project construction and will use the necessary erosion control measures to reestablish vegetation. Per the Erosion and Sediment Control Plan submitted with the Project's SUP application, appropriate fertilizer and lime shall be incorporated into the top 4 to 6 inches of soil. The Vegetation Establishment and Management Plan submitted with the SUP application also provides provisions for amending soil if needed.

Recommendation B.vi. The Applicant should develop a monitoring plan that includes monitoring locations, frequencies, and duration for pre-project, construction, operation, decommissioning, and post-project. The monitoring program should include soil bulk density measurements, at a minimum, to demonstrate consistency with Routt UDC at Section 2.77.D.13.a. It may also be necessary to include soil chemistry metrics to ensure successful revegetation and prevent the accumulation of excess salts within the soil profile. Finally, a monitoring program should include reporting to the County and benchmarks that trigger additional mitigation if desired benchmarks are not attained.

**Applicant Response:**

Bulk density will be measured both before and after construction, both between arrays and under arrays in compliance with Section 2.77.D.13.a. of the UDC. If post-construction, bulk density is high, significantly greater than pre-construction levels, the areas between arrays with high bulk density can be decompacted to a minimum of 6 inches and the areas under arrays with high bulk density can be decompacted to a minimum of 4 inches in compliance with Section 2.77.D.13.a. of the UDC to the extent practical while also maintaining engineering safety standards for structures. The revegetation contractor will be responsible for successful revegetation following Project construction and will use the necessary erosion control measures to reestablish vegetation. Per the Erosion and Sediment Control Plan submitted with the Project's SUP application, appropriate fertilizer and lime shall be incorporated into the top 4 to 6 inches of soil at the time of seeding. Additional soil testing may include soil salinity, measured as saturated paste electrical conductivity, to verify soil salinity is suitable for site conditions and native vegetation establishment and will not impair revegetation efforts. Proper decompaction can allow adequate infiltration and leaching of soil salts beyond the plant root zone.

Recommendation B.vii. Should the County approve the project, it should consider requiring the Applicant to conduct a monitoring program and identify specific benchmarks to trigger adaptive management responses as conditions of approval.

**Applicant Response:**

Bulk density will be measured both before and after construction, both between arrays and under arrays in compliance with Section 2.77.D.13.a. of the UDC. If post-construction bulk density is high, significantly greater than pre-construction levels, the areas between arrays with high bulk density shall be decompacted to a minimum of six inches and areas under arrays with high bulk density shall be decompacted to a minimum of four inches in compliance with Section 2.77.D.13.a. of the UDC to the extent practical while also maintaining engineering safety standards for structures. The revegetation contractor will be responsible for successful revegetation following Project construction and will use the necessary erosion control measures to reestablish vegetation.

Recommendation C.i. Applicant should provide a description of how erosion control measures will prevent stormwater from entering waterbodies. The Application proposes silt fences, super silt fences, and some classic “BMPs.” However, there is little to no project-specific information on predicted stormwater runoff quantity and whether the proposed erosion control measures are adequate for projected flows from storm events.

**Applicant Response:**

RWE has provided the Project’s Stormwater and Water Quality Plan as Appendix F of the submitted SUP application in compliance with Section 3.1.D.13 of the Code. RWE evaluated the 100-year floodplain to determine proper elevations for electrical equipment. There is no Federal Emergency Management Agency 100-year floodplain in the Project area. Pre-development site hydrology was analyzed as a benchmark for post-development design. The Project would adequately maintain water quality throughout the life of the solar energy system by following the guidance laid out in the Stormwater and Water Quality Plan. In addition, the CDPHE requires development and compliance with a stormwater pollution prevention plan during construction activities for the required general construction stormwater discharge permit COR400000. This stormwater pollution prevention plan will be developed prior to obtaining a general construction stormwater discharge permit from CDPHE. Detailed erosion control quantity calculations and measures will be provided as design is progressed. The Project will comply with all state regulations for water quality.

Recommendation C.ii. The Erosion Control Plan generally includes erosion control measures on the perimeter of the project area. The plan lacks erosion control measures to prevent runoff and erosion from disturbed areas from entering undisturbed areas within the project area. Appropriate erosion control measures should be added to the plan.

**Applicant Response:**

The Erosion and Sediment Control Plan clearly includes erosion control measures to prevent runoff and erosion from disturbed areas from entering undisturbed areas within the Project area, which is shown on the Erosion and Sediment Control Plan as “Proposed Project Limit.” See for example, Sheet 3.7, which includes erosion control measures to prevent runoff and erosion from disturbed areas from entering undisturbed areas within the Project area (i.e., Proposed Project Limit). Further, the Erosion and Sediment Control Plan specifically states erosion control measures such as, for example, stabilize permit access road surfaces, parking areas, and equipment storage and laydown areas with matting, crushed stone, or gravel subbase as necessary. The reviewer may be confused about how the Project area is represented on the Erosion and Sediment Control Plan. The Project area is shown on the Erosion and Sediment Control Plan as “Proposed Project Limit.” Additionally, the CDPHE requires development and compliance with a

stormwater pollution prevention plan during construction activities for the required general construction stormwater discharge permit COR400000. This stormwater pollution prevention plan will be developed prior to obtaining a general construction stormwater discharge permit from CDPHE.

Recommendation C.iii. The Erosion Control Plan should be consistent with the requirements of the State's construction stormwater permit, except where additional more stringent requirements are established by the County. For example, the State's construction stormwater permit typically requires temporary stabilization to occur where "ground disturbing construction activity has.... temporarily ceased for more than 14 calendar days" unless a specific exemption applies. In contrast, the Erosion Control Plan includes the following directive "Apply temporary seed and mulch to exposed areas where activity is not anticipated for 30-days." The Application should match the State permit requirements or provide a rationale for why exemptions might apply.

**Applicant Response:**

The Project will comply with all state regulations for water quality. The Erosion and Sediment Control Plan will be consistent with the requirements of the State's construction stormwater permit. Additionally, the Erosion and Sediment Control Plan has been updated to change the statement indicated from "Apply temporary seed and mulch to exposed areas where activity is not anticipated for 30-days" to "Apply temporary seed and mulch to exposed areas where activity is not anticipated for 14-days" (see Attachment J).

Recommendation C.iv. Applicant should describe proposed stormwater management from both haul roads and newly constructed on-site access roads including a discussion of energy dissipation or flow management in the roadside ditches. The description should include any anticipated stormwater upgrades necessary on haul roads due to increased usage and/or required road improvements and/or why such upgrades are not necessary based on projections of stormwater movement on the haul roads. The Applicant should also identify a reporting process and provide reports to the County at least annually. If this information will be provided later or through other plans, the County should consider a condition requiring sufficiency of future plans in addressing stormwater runoff from roadways.

**Applicant Response:**

The Project will comply with all state regulations for water quality. The plans provided are preliminary design plans and details of stormwater management with regards to haul roads and roadside ditches will be designed as plans progress after approval of the SUP for the Project and selection of and EPC and design firm. The Applicant will prepare a SWMP required as part of the CDPHE general construction activities stormwater discharge permit and that plan can be provided prior to construction start. The SWMP will be followed as detailed in the state permit.

Recommendation C.v. The Applicant to identify a process for inspecting and monitoring erosion and sediment control measures at specified times. The CDPHE Stormwater Management Plan may be sufficient to meet this requirement. At minimum, the Applicant should deliver inspection/monitoring results to the County no less than annually.

**Applicant Response:**

The Applicant will inspect and monitor stormwater control measures for permit compliance at the required frequencies as indicated in the SWMP required as part of the CDPHE general construction activities stormwater discharge permit that will be obtained for the Project and can be provided prior to construction start. The Applicant can provide these annually to the county until final stabilization is reached. Erosion control measures will be inspected daily in areas of active construction, and otherwise weekly and after a rainfall event of more than 0.5 inch within a 24-hour period.

Recommendation C.vi. The County should require the Applicant to provide the Planning Director with a copy of the Project's certification under the CDPHE stormwater construction discharge permit and the Project's Stormwater Management Plan before any surface disturbance occurs on the site before construction and decommissioning.

Applicant Response:

Comment received.

Recommendation D.i. The Application should describe whether any of the criteria for the outer waterbody setback contained within section 3.31.D.2.b.ii of the UDC occur within 100' of unnamed waterbodies and within 200' of Dry Creek, Stokes Gulch, Dill Gulch, and Temple Gulch.

Applicant Response:

As indicated in Section 2.2.1.6 (PDF page 17) of the Project's SUP application narrative, Project infrastructure will be set back at least 150 feet total from Dry Creek and at least 50 feet total from all other water bodies. The Applicant has met the 50 feet interior setback requirement and has applied an additional 100 feet setback to meet the variable outer setback requirement to Dry Creek and in consideration of the criteria for the outer setbacks in Section 3.31.D.2.b. of the UDC. The Applicant coordinated with CPW and CPW agreed to this approach for the 150 feet total setback to Dry Creek. The 150 feet total setback from the field delineated OHWM for Dry Creek is sufficient to achieve habitat and water quality protection objectives. In addition, in coordination with CPW, the Applicant agreed to enhance areas within the interior setback by applying native seed to enhance habitat quality.

The interior setback of 50 feet was applied to all other waterbodies as defined by the UDC within the Project area. The Applicant reviewed the waterbodies against the criteria for the outer setbacks in Section 3.31.D.2.b of the UDC. The Project applied a variable outer setback of zero feet to these lowest quality habitat features including the gulches. These features have been buffered by a total of 50 feet from their respective OHWMs. CPW approved of this approach.

The Applicant team subject matter experts believe the 50 feet total setback from all waterbodies within the Project area that are not Dry Creek is generous, and more than sufficient to achieve habitat and water quality protection objectives for these features. The aquatic survey results are discussed in the Biological and Aquatic Resources Inventory Report for the Trapper Solar Project, prepared by SWCA in September 2022.

In the case that the county deems it as required for the Project, the Applicant is prepared to submit a waterbody setback permit application separately from this response document.

Recommendation D.ii. The Application should describe any instances where the 50- foot setback from unnamed waterbodies and wetlands or the 150-foot setback from Dry Creek may degrade the quality of the riparian area or wetlands and any mitigation that will be conducted to address the identified impacts to those riparian areas and wetlands.

Applicant Response:

The Applicant team subject matter experts believe the 50 feet total setback from all waterbodies within the Project area that are not Dry Creek is generous, and more than sufficient to achieve habitat and water quality protection objectives for these features. The aquatic survey results are discussed in the Biological and Aquatic Resources Inventory Report for the Trapper Solar Project, prepared by SWCA in September 2022. The Stormwater and Water Quality Plan states that areas of high slopes will be graded to a maximum of 8% slope to reduce erosion and runoff potential to waterbodies and riparian areas. In

addition, soils are proposed to be decompacted during construction to achieve lower bulk densities than existing conditions and promote infiltration as a method of managing runoff, water quality, and vegetation. In addition, during construction, the use of heavy equipment shall be limited to specific areas to reduce soil compaction, especially within the 50-foot and 150-foot setbacks.

Recommendation D.iii. The Applicant should address the site design and water quality impacts of the two stream crossings including:

- how the waterbody crossings were chosen in the Site Plan,
- what upgrades will be necessary for the existing stream crossing,
- whether any alternative locations of the crossings would be less impactful on waterbodies,
- why those alternatives were not feasible, and
- proposed mitigation measures to protect the quality of the waterbodies.

The Applicant should also address the operation and maintenance for the stream crossings, including:

- estimates of how often the stream crossings will be utilized,
- measures to avoid utilizing the stream crossings during the operation of the project, and
- any proposed mitigation to reduce impacts of the stream crossings during Project operation and maintenance.

#### **Applicant Response:**

The only waterbody crossings planned for the Project are two uses of existing active two-track roads that cross waterbodies. Alternative locations were considered and not chosen, as they would involve constructing new waterbody crossings. These proposed locations were chosen as they do not involve constructing new waterbody crossings, but instead utilize existing crossings and would have the least additional impact to waterbodies. Both crossings have existing culverts that would be protected in place. The culverts at the crossings are under active roads. As shown on the Project's site plan, silt fence and/or supersilt fence is proposed to be used at both sides of the crossings to mitigate and reduce impacts of the stream crossing during Project construction. The roads crossing the waterbodies would be maintained during Project construction and operations and maintenance. The water body crossings would only be utilized as needed during construction and operations and maintenance. Aerial photographs from Google Earth of the proposed crossings are provided in the screenshots below.







Recommendation D.v. The Applicant should explain how haul routes will be constructed, improved, maintained, or reclaimed in a manner protective of water quality, riparian habitat, wetlands, and other waterbodies. The Applicant should explain the projected impacts to these resources and identify any mitigation measures undertaken to minimize water quality impacts.

**Applicant Response:**

The proposed haul route utilizes existing public roads to and from the Project Area. No new haul routes are proposed to be constructed. The Dust Mitigation Plan states several mitigation measures that will ultimately protect water quality, riparian habitat, wetlands, and waterbodies within the Project area. Dust created from construction traffic on unpaved roads within the Project area will be mitigated with dust suppressants such as gravel, water, or chemical stabilizers. Low speed limits will be posted and followed to reduce impacts on roads, and to reduce fugitive dust. Trackout pads will be installed onto paved surfaces to reduce soil trackout and potential for runoff.

Recommendation E.i. The Applicant should describe fugitive dust generated during project decommissioning and mitigation measures to be undertaken.



**Applicant Response:**

The Dust Mitigation Plan states several mitigation measures to address fugitive dust generated by the Project that will also be applied to the decommissioning of the Project. Dust created from traffic on unpaved roads will be mitigated with dust suppressants such as gravel, water, or chemical stabilizers. Silt fence and hay bales will be installed to prevent these suppressants from potentially flowing into nearby waterbodies. Low speed limits will be posted and followed to reduce impacts on roads, and to reduce fugitive dust. Trackout pads will be installed onto paved surfaces to reduce soil trackout and potential for runoff. The Decommissioning and Restoration Plan also addresses enriching disturbed areas with topsoil and seeded with appropriate vegetation, will reduce fugitive dust emissions. The plan also states that work will adhere to conditions agreed upon by the Applicant and as dictated by the prevailing regulations at the time of decommissioning.

Recommendation E.ii. The Applicant should further quantify the rate and volume of water necessary to accomplish dust suppression for the project during construction, operation, and decommissioning. The Water Supply Plan (Appendix R) reports that approximately 125 acre-feet of water will be required for project construction. If the water is used entirely for dust suppression, it equates to just under 1 inch of water per acre. Given the duration of the project, 18 months, the volume of water available for dust suppression appears inadequate.

**Applicant Response:**

Dust suppression will be the responsibility of the EPC contractor for the Project. The EPC contractor will be selected for the Project following approval of the Project's SUP and prior to construction. Dust suppression methods are variable depending on weather conditions. The Applicant is not concerned about adequate water supply during construction activities for dust suppression.

Recommendation E.iii. In the Stormwater Water Quality Plan (Appendix F) the Applicant proposes to reduce soil density as a technique to reduce runoff and erosion during construction and operation of the project. Given the fine-grained texture, salinity, and in some cases sodicity of the soils in the project area, how will ongoing dust suppression affect soil physical characteristics?

**Applicant Response:**

The contractor for the Project will be responsible for meeting soil physical and chemical requirements for each soil unit as specified in the Stormwater Water Quality Plan.

Recommendation E.iv. The Applicant should further explain its calculations for the Dust Mitigation Plan. For example, why did the Applicant elect to use cut/fill rates from the Yellow Pine Solar Project EIS? Given the proposed grading provided in the site plan (i.e., Sheets 3.1 to 3.8), the Applicant should compute the cut/fill rates based on this project.

**Applicant Response:**

The cut and fill information used in the Dust Mitigation Plan was based on assumptions due to the preliminary nature of the Project's design. The final grading plan is expected to be determined following the approval of the SUP. Given the lack of definitive data, reasonable assumptions were made using information from a similar project, which was scaled to reflect the scope of the Project.

Recommendation E.v. The Applicant should describe water quality impacts predicted both from fugitive dust emissions and from any mitigation efforts that could create additional discharges into waterways, such as water applied for dust suppression along haul routes. The Applicant should describe how water quality impacts will be mitigated.

**Applicant Response:**

Water stabilization for dust emissions will be minimized to the extent possible. Silt fences along routes near waterbodies, check dams and sediment filters at a later design phase will be installed to mitigate runoff from road use and water applied for dust suppression along those roadways. Additionally, the CDPHE general construction activities stormwater discharge permit that will be obtained prior to Project construction will contain limits to establish discharge, monitoring, and reporting requirements, along with other provisions, to ensure that the discharge does not negatively impact water quality or public health.

Recommendation E.vi. The County should consider requiring reporting on the efficacy of dust control measures no less than annually.

**Applicant Response:**

Response received.

Recommendation F.i. Revise the site restoration cost estimate to more accurately estimate the costs.

**Applicant Response:**

As stated in the decommissioning and restoration plan, expenses associated with decommissioning and restoring the site will be largely dependent on costs of labor and disposal or salvage costs at the time of decommissioning. Additionally, per Section 2.77.D.26.a.viii., cost estimates will be updated every 5 years from establishment and submittal of the surety.

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