APPENDIX H Workforce Housing Plan



Trapper Solar Project DRAFT Workforce Housing Plan

MAY 2024

PREPARED FOR

RWE Solar Development, LLC

PREPARED BY

SWCA Environmental Consultants

TRAPPER SOLAR PROJECT DRAFT WORKFORCE HOUSING PLAN

Prepared for

RWE Solar Development, LLC 701 Brazos Street, Suite 1400 Austin, Texas 78701

Prepared by

SWCA Environmental Consultants 295 Interlocken Boulevard, #300 Broomfield, Colorado 80021 www.swca.com

May 2024

CONTENTS

1	Executive Summary	I
2	Introduction	1
3	Projected Workforce	1
4	Housing	2
	4.1 Regional Conditions	
	4.2 Local Conditions	
5	Housing Plan	4
6	Transportation Plan	
7	Conclusion	
8	Literature Cited	
	Figure	
Fig	gure 1. Possible worker travel routes	5
	Tables	
Те	blo 1. Housing Characteristics in the Study Area	า
	ble 1. Housing Characteristics in the Study Areable 2. Temporary Lodging Characteristics in the Study Area	
	ble 3. Detailed Housing Options in Craig and Hayden, Colorado	

Trapper Solar Project DRAFT Workforce Housing Plan				
This page intentionally left blank.				
This page internative test orange.				

1 EXECUTIVE SUMMARY

RWE Solar Development, LLC (RWE) is proposing to develop the Trapper Solar Project (Project) in Routt County, Colorado. Construction of the Project would require an estimated 275 workers. The specialized nature of many of the construction jobs and the limited size of the local construction industry would mean that some workers would come from outside the area and require temporary housing accommodations. The number of workers required on-site would fluctuate throughout the Project, and the peak workforce may exceed 275 workers. RWE is evaluating different Project schedules and phasing to reduce peak manpower in light of local concerns over a shortage of available housing. In addition to the local lodging options in Hayden and Craig, Colorado, the nearby town of Steamboat Springs has a large number of hotel and motel rooms that are heavily used during the winter ski season but have relatively lower occupancy rates during other times of the year. Peak construction periods would typically occur during the summer months, which would potentially conflict with the summer tourism season. The Steamboat Springs Chamber's 2023 Annual Report (2023) shows that in recent years, monthly hotel occupancy rates have been below 50% during the summer, which should allow for sufficient housing for the construction workforce. If a larger peak construction workforce is required, potential mitigation could include adjustments to the Project schedule to time the peak construction activities for off-tourism season periods in the spring or fall.

2 INTRODUCTION

The Trapper Solar Project would consist of an up to 250-megawatt (MW) alternating current utility-scale solar energy system, an up to 125-MW (4-MW/hour storage energy capacity) battery energy storage system, and ancillary facilities. The Project would sit on approximately 3,030 acres of private and stateowned land in Routt County, Colorado, approximately 1.5 miles south of the town of Hayden (Project area). Construction of the Project is estimated to occur in either one phase for 18 months or two phases over 24 months and would require some workers to temporarily relocate to the area. RWE is aware of the recent population growth in the area and the limited available housing and is working to avoid exacerbating the current situation through Project scheduling and phasing. This housing plan outlines our approach to estimating Project driven demand for housing, as well as identifying and evaluating available housing accommodations within a reasonable commuting distance from the Project area. Our analysis includes estimates of the construction workforce that would be needed using information reported by the National Renewable Energy Laboratory, a description of available housing as reported by the U.S. Census Bureau (USCB), along with a review of the availability of hotels, motels, and campgrounds in the areas surrounding the Project area. We aim to provide a range of viable housing solutions that meet the diverse needs and preferences of the workers while considering factors such as proximity, cost, and availability fluctuations due to seasonal variations in tourist activity.

3 PROJECTED WORKFORCE

Estimating the workforce required during the construction phase of the Project is crucial for assessing housing and logistical needs. To accurately estimate the workforce, we reviewed currently reported job multipliers for solar photovoltaic (PV) installation. This metric is frequently used in economic analyses of utility-scale solar projects, because it provides a standardized measure of labor demand per unit of production capacity—specifically, the number of workers directly employed on a project per MW. The National Renewable Energy Laboratory reported an estimated 1.5 construction jobs per MW of installed solar PV in 2020 (Truitt et al. 2022). Further, they estimated that due to increased PV deployment and efficiency gains, the projected number of construction jobs per MW would decrease to 1.1 by 2025. Using this metric, we assume the number of construction workers required for the Project to be approximately

275, although the number of workers required on-site would fluctuate and the peak workforce may exceed 275 workers. RWE is evaluating different Project schedules and phasing to reduce peak manpower. It is likely that local workers would be preferred, when possible, due to the need to house non-local workers; however, the specialized nature of the installation would require many workers to be hired from outside the Project area. Our analysis conservatively estimates that all 275 construction workers would need temporary housing.

4 HOUSING

4.1 Regional Conditions

The study area for this analysis encompasses Routt and Moffatt Counties, which includes most population centers within a reasonable commuting distance (less than 60 miles) to the Project area. This includes Routt County, where the Project sits, and the nearest town of Hayden, Colorado, which sits in Routt County. Additionally, the Project is near the Moffat County border and the town of Craig, Colorado, which sits in Moffat County. Housing and lodging information has also been reported for the town of Steamboat Springs, which is further away from the Project area than Hayden or Craig, but still within a reasonable commuting distance and offers a wider variety of housing options.

Table 1 summarizes housing characteristics in the study area. Although Routt County has the highest number of available temporary housing units, the median gross rent (\$1,721) is approximately twice that of rental units in Moffat County \$974 (USCB 2022). Additionally, it is likely that the availability of temporary housing units reported by the USCB for the study area, specifically for Routt County and Steamboat Springs, does not fully reflect seasonal trends driven by winter and summer tourism. This is partially indicated in the high number of vacant units for seasonal, recreational, or occasional use. Therefore, due to the prevalence of tourism in the area, it is reasonable to assume that the actual number of temporary housing units available to rent is significantly reduced during peak visitation seasons, which occur between June and August during the summer and from December to March for ski season.

Table 1. Housing Characteristics in the Study Area

Geographical Area	Total Housing Units, 2022	Vacant Units	Vacancy Rate (%)*	Vacant Units for Rent	Rental Vacancy Rate (%)*	Vacant Units for Seasonal, Recreational, or Occasional Use
Colorado	2,500,095	222,051	8.9%	42,035	5.2%	104,985
Routt County	16,642	6,363	38.2%	974	28.7%	4,829
Hayden	890	111	12.5%	23	11.7%	15
Steamboat Springs	10,202	4,464	43.8%	936	35.8%	3,339
Moffat County	6,096	909	14.9%	165	8.8%	268
Craig	4,271	465	10.9%	147	8.6%	70

Sources: Google Maps (2024); USCB (2022).

Information on hotels, motels, campgrounds, and recreational vehicle (RV) parks is included, because construction-related employees often prefer these areas for accommodations (Table 2). Hotels, motels, RV parks, and campgrounds are concentrated in the cities and towns, most notably in Steamboat Springs and Craig.

^{*} Calculated values; calculations performed prior to rounding.

Table 2. Temporary Lodging Characteristics in the Study Area

Geographical Area	Number of Hotels or Motels	Number of RV Parks or Campgrounds
Routt County	103	28
Hayden	0	2
Steamboat Springs	90	4
Moffat County	14	10
Craig	12	1

Source: Google Maps (2024).

4.2 Local Conditions

Table 3 provides a more detailed look at the hotels, motels, and campgrounds nearest to the Project area. This information is intended to provide further context to the likely lodging locations of the temporary workers.

Table 3. Detailed Housing Options in Craig and Hayden, Colorado

Municipality	Name	Accommodation Type	Average cost per night*	Capacity	Distance from Project area (mile)
Craig	Best Western Plus	Hotel	\$122	41	20.4
Craig	Candlewood Suites	Hotel	\$89	76	20.2
Craig	Hampton Inn & Suites	Hotel	\$116	89	20.6
Craig	Golden Antler Motel	Motel	\$77	14	18.2
Craig	Quality Inn & Suites	Hotel	\$81	7	20.3
Craig	Super 8	Hotel	\$70	60	20.5
Craig	Trav-O-Tel Motel	Motel	\$70	20	18.4
Craig	Travelers Inn & Suites	Hotel	\$65	41	20.4
Craig	KOA Journey	Campground	\$35 (tent site) \$55 (RV) \$65 (cabin)	24 cabins 73 RV sites 10 tent sites	16.7
Hayden	Yampa River State Park	Campground	\$14–\$35 (campsite) \$36 (RV) \$80 annual pass to enter the park	35 RV sites 14 campsites	4.6
Total				348 rooms	
				108 RV sites	
				24 camp/tent sites	

Sources: Google Hotels. 2024; Google Maps. 2024. Hotels.com. 2024.

*Note: The 'Average Cost per Night' is a dynamic figure based on projected averages for the next 90 days, as calculated by Google. Prices are subject to change and may vary. For the most accurate and current pricing, rates should be verified closer to the booking date. The provided averages should offer a reliable estimate of the expected price range.

5 HOUSING PLAN

The three tables above outline the available housing units for purchase or rent, as well as the availability of hotels and campgrounds. Tables 1 and 2 summarize the housing units and accommodations in the region, whereas Table 3 provides specific details on options in Craig and Hayden, the municipalities closest to the Project area.

Our findings indicate that a variety of housing options are available across different price ranges, ensuring ample choices to suit diverse needs and budgets. Craig and Hayden provide reasonably priced rental options, making them particularly attractive due to their proximity and cost-effectiveness.

Workforce numbers may be higher during peak periods of construction, which could mean a peak workforce number exceeding the 275 estimated workers. Although Steamboat Springs (approximately 27 miles from the Project area) is farther away from the Project area than Craig (approximately 19 miles from the Project area), it is within a reasonable commuting distance to the Project area and has a significantly larger number of housing options, with 90 hotels or motels and four campgrounds, and would offer alternative housing options for excess workers. However, the availability of these accommodations can fluctuate greatly due to the area's heavy dependence on tourism and recreation, particularly during peak seasons. The Steamboat Springs Chamber's 2023 Annual Report (2023) shows that in recent years, monthly hotel occupancy rates have been below 50% during the summer months, which should allow for sufficient housing for the construction workforce during the months that are typically the peak construction months. Should the number of workers requiring housing significantly exceed our estimated total workforce during peak construction periods, relying on spillover options in Steamboat Springs might become necessary, requiring proactive planning to secure accommodations during these high-demand periods.

6 TRANSPORTATION PLAN

Public transportation does not run from Craig, Hayden, and Steamboat Springs (the municipalities in which workers will likely stay during construction of the Project) to the Project area (approximately 1.5 miles south of Hayden). Workers would likely access the Project area in personal vehicles. The primary routes to the Project area would be via U.S. Highway 40 from Craig and Steamboat Springs to Hayden and south from Hayden to the Project area via Poplar Street (Figure 1). The Project includes two large parking areas and laydown yards: one in the southeast and one in the west-central portion of the Project area. Each laydown and parking area is over 9 acres in size (i.e., total parking and laydown area is approximately 18 acres). Between 80 and 100 automobiles can typically be parked on 1 acre of land (University of Tennessee Institute of Agriculture 2014). Given this, there should be ample space for Project construction workers to park in the Project area's designated parking areas, even if each worker drove a vehicle to and from the Project area during construction of the Project. However, it is expected that some workers will carpool to and from the Project area.

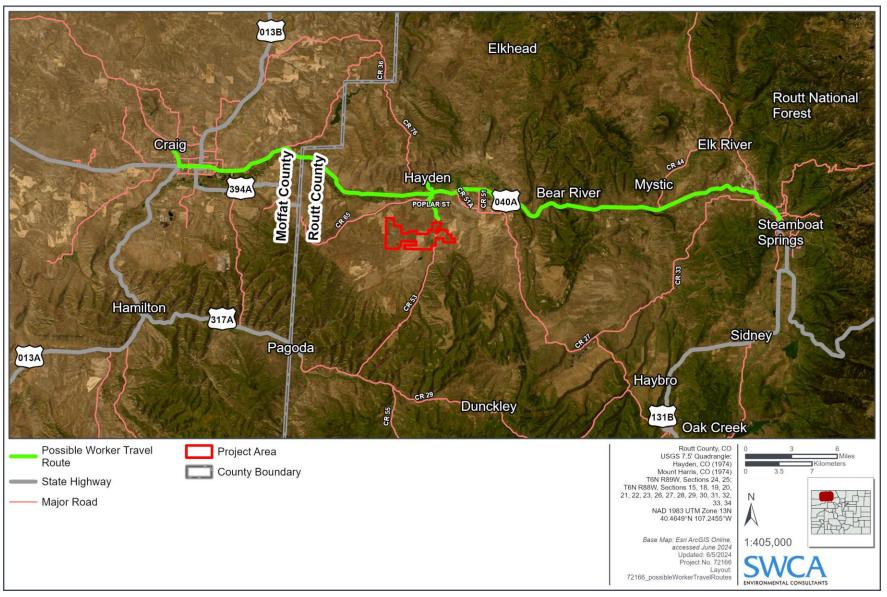


Figure 1. Possible worker travel routes.

7 CONCLUSION

Construction of the Project would require an estimated 275 workers. The specialized nature of many of the construction jobs and the limited size of the local construction industry would mean that some of the workers would come from outside the area and require temporary housing accommodations. The number of workers required on-site would fluctuate throughout the Project, and the peak workforce may exceed 275 workers. RWE is evaluating different Project schedules and phasing to reduce peak manpower in light of local concerns over a shortage of available housing. USCB data show a relatively high number of vacant housing units in Routt County and Steamboat Springs in particular; however, the vacancy rates are driven by the seasonal nature of the local tourism industry, which has a large surge of visitation during winter skiing months and a second smaller surge during the summer. Additionally, workers tend to prefer temporary accommodations such as hotels, motels, RV parks, or campgrounds. The nearby towns of Craig and Hayden offer an estimated 348 hotel or motel rooms, 108 RV sites, and 24 campsites. Sightly farther from the Project area, Steamboat Springs has an estimated 90 hotels/motels. Peak construction periods would typically fall during the summer, which would potentially conflict with the summer tourism season. The Steamboat Springs Chamber's 2023 Annual Report (2023) shows that in recent years, monthly hotel occupancy rates have been below 50% during summer months, which should allow for sufficient housing for the construction workforce. If a larger peak construction workforce is required, potential mitigation could include adjustments to the Project schedule to time peak construction activities during off-tourism season periods in the spring or fall.

8 LITERATURE CITED

- Google Hotels. 2024. Craig, CO. Available at: https://www.google.com/hotels. Accessed April 2024.
- Google Maps. 2024. Hayden, CO. Available at: https://www.google.com/maps. Accessed April 2024.
- Hotels.com. 2024. Craig, CO. Available at: https://www.hotels.com. Accessed April 2024.
- Steamboat Springs Chamber. 2023. 2023 Annual Report. Available at: https://assets.simpleviewinc.com/simpleview/image/upload/v1/clients/steamboat/2023_Annual_Report_5836688c-b2b0-4504-93ef-8fd21e41ec73.pdf. Accessed May 2024.
- Truitt, S., J. Elsworth, J. Williams, D. Keyser, A. Moe, J. Sullivan, and K. Wu. 2022. *State-Level Employment Projections for Four Clean Energy Technologies in 2025 and 2030*. Golden, Colorado: National Renewable Energy Laboratory. NREL/TP-5500-81486. Available at: https://www.nrel.gov/docs/fy22osti/81486.pdf. Accessed May 2, 2024.
- U.S. Census Bureau (USCB). 2022. American Community Survey 5 year estimates. Table DP04: Selected Housing Characteristics. GEO IDs: Colorado, Moffat County, Routt County, City of Craig, City of Hayden, City of Steamboat Springs. Available at: https://data.census.gov/table/ACSDP5Y2022.DP04?q=DP04&g=040XX00US08_050XX00US081,08107_160XX00US0817760,0835070. Accessed April 2024.
- University of Tennessee Institute of Agriculture. 2014. *Estimating the Number of Parking Spaces Per Acre*. Available at: https://utia.tennessee.edu/cpa/wp-content/uploads/sites/106/2020/10/CPA-222.pdf. Accessed April 2024.

Trapper Solar Project DRAFT Housing Plan					
This page intentionally left blank.					