Draft Environmental Assessment

Fort Morgan Proposed Solar Farm
Fort Morgan, Morgan County, Colorado

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United States Department of Agriculture
Rural Development Service

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List of Acronyms and Abbreviations

ACHP	Advisory Council on Historic Preservation
APE	Area of potential effects
APN	Assessor Parcel Number
ACS	American Community Survey
BGEPA	Bald and Golden Eagle Protection Act
BMP	Best Management Practices
CAA	Clean Air Act
CDPHE	Colorado Department of Public Health and Environment
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CNHP	Colorado Natural Heritage Program
CO	Carbon monoxide
CODEX	Colorado Conservation Data Explorer
CPW	Colorado Parks and Wildlife
CREC	controlled recognized environmental condition
dB	Decibels
DNL	Day-Night Average Sound Level
DOE	United States Department of Energy
EA	Environmental Assessment
EEC	Energy Efficiency and Conservation
EMF	Electromagnetic Fields and Interference
EO	Executive Order
EPA	United States Environmental Protection Agency
ESA	Endangered Species Act
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
FPPA	Farmland Protection Policy Act
GLO	General Land Office
IPaC	Information for Planning and Consultation
IPCC	Intergovernmental Panel on Climate Change
LEP	Limited English proficiency
MBTA	Migratory Bird Treaty Act
MEAN	Municipal Energy Agency of Nebraska
MW	Megawatt

NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NO_2	Nitrogen dioxide
NO_x	Nitrogen oxides
NOA	Notice of Availability
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
O_3	ozone
OAHP	Colorado Office of Archaeology and Historic Preservation
OSHA	Occupational Safety and Health Administration
PAD-US	Protected Lands Database of the U.S.
Pb	Lead
$PM_{2.5}$	Particulate matter under 2.5 microns
PM_{10}	Particulate matter under 10 microns
Proponent	SE Municipal Colorado, LLC
PV	Photovoltaic
REC	Recognized environmental condition
RUS	Rural Utilities Service
SCADA	Supervisor control and data acquisition
SHPO	State Historic Preservation Office
SIP	State Implementation Plan
SO_2	Sulfur dioxide
SWPPP	Stormwater Pollution Prevention Plan
T&E	Threatened and Endangered
THPO	Tribal Historic Preservation Office
TNW	Traditionally navigable waters
USACE	United States Army Corps of Engineers
U.S.C.	United States Code
USDA	United States Department of Agriculture
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
VOC	Volatile organic compounds
WOTUS	Waters of the United States

1.0 INTRODUCTION

This Environmental Assessment (EA) was prepared in accordance with Title 7 of the Code of Federal Regulations (CFR) Part 1970 (7 CFR 1970), which prescribes the policies and procedures of the U.S. Department of Agriculture (USDA) for implementing the National Environmental Policy Act (NEPA) of 1969, as amended, the regulations of the Council on Environmental Quality, 40 CFR parts 1500 through 1805, and the USDA Rural development guidance document 1970-C. Guidance document 1970-C serves as a guide for preparing EAs under NEPA. An EA is a concise public document used by the USDA to determine whether effects associated with a project justify a finding of no significant impact or if preparation of an Environmental Impact Statement is needed.

An applicant seeking financial assistance from the USDA must sufficiently describe its proposal so that the USDA can apply the appropriate environmental review procedures for the National Environmental Policy Act (NEPA) of 1969, as amended (42 United States Code [U.S.C] 4321, et seq.), related to review and approval. Serving as the lead federal agency, the RUS is responsible for compliance with NEPA, and as such, RUS must decide whether to provide financing assistance for this proposed project. Pursuant to Title 7 of the Code of Federal Regulations (CFR), the USDA must demonstrate that any decision complies with NEPA and requires that the environmental consequences of the proposed action and its alternatives be examined. This EA presents such an examination. The RUS's decision to approve financial assistance will be based on the analysis outlined in this EA in addition to subsequent detailed engineering and financial reviews.

The Municipal Energy Agency of Nebraska (MEAN) issued a request for proposals soliciting distributed solar electric generation for the City of Fort Morgan, Colorado. Distributed generation refers to electricity, usually from renewable sources, which is situated near the users as opposed to centralized generation from power plants where the electricity would have to be transmitted greater distances (thus increasing costs) to the consumer. SE Municipal Colorado, LLC (SE Municipal Colorado) prepared the winning bid to develop a solar facility and connect to the City of Fort Morgan's electric grid, as well as obtain all necessary permits.

Terracon, retained by the applicant, has prepared this assessment in accordance with 7 CFR 1970, Subparts A (Environmental Policies) and C (NEPA EAs) as well as 40 CFR 1500. As part of this process, RUS will complete an independent analysis of this document to concur with scope and content. Once this analysis is complete, RUS may adopt this assessment as its EA in accordance with 7 CFR 1794.41.

1.1 Project Description

The project site was selected by the City of Fort Morgan (Fort Morgan) based on factors such as avoidance of floodplains, appropriate slope for efficient solar generation, city ownership, proximity to consumers and consistency with local land use designations. The Fort Morgan municipal utility would be the host customer and is obligated by a power

purchase agreement with SE Municipal Colorado to buy 100 percent of the power generated by the proposed solar facility to provide up to five percent of its electricity demand. Fort Morgan will install the interconnection from the proposed arrays to the city grid; however, SE Municipal Colorado will own and pay for the interconnection facilities. SE Municipal Colorado will build and own the solar facility. The facility will be built on land owned by the City of Fort Morgan and leased to SE Municipal Colorado. The power generated by the facility will be for the benefit of the City of Fort Morgan and will not be exported.

The proposed project area consists of an approximately 21-acre tract of farmland located northeast of the intersection of Barlow Road and County Road R in Morgan County, Colorado (Morgan County Parcel Number 1229-040-14901). The project site is relatively level, with a gentle gradient toward the east and an approximate elevation of 4,300-feet above mean sea level. No surface water features are located within or near the site.

The 21-acre site will be developed with the solar facility, which includes the solar panels and associated support structures, including electrical inverters/transformers, buried electrical conduit, access apron, and security fencing. The solar generation facility will connect to Fort Morgan's municipal electric distribution system by way of a buried electric cable approximately 250 feet long, adjacent to the north side of County Road R to the substation west of the arrays.

The proposed solar facility will deliver its generation to a substation located 250 feet directly west of the proposed project site that is owned by Fort Morgan. Power will not be exported to other communities and is for the benefit of Fort Morgan. SE Municipal Colorado will be responsible for constructing the underground powerline from the arrays to the point of interconnection. Fort Morgan's municipal utility will be responsible for providing a transformer at the point of interconnection and connecting it to its distribution system.

The proposed Project area (purple) is shown in relation to the City of Fort Morgan municipal substation (pink) on in Figure 1.

All project facilities would be designed, constructed, and operated in accordance with applicable laws, ordinances, regulations, and standards. The project is anticipated to begin construction in the fall of 2024 and will take approximately 6 - 9 months to complete.

Properties adjacent to the project site include a Fort Morgan municipal electric substation (the project's point of interconnection) and a city-owned vacant property and a single-family residence to the east, an Amtrack railroad to the north, an agricultural field and substation to the west, and by County Road R to the south.

Figure 1. Proposed Project Area in Relation to Municipal Substation/Point of Interconnection (Project area shown in purple and municipal substation shown in pink, buried electric line to point of interconnection shown in green)

1.2 Purpose and Need

USDA Rural Development is a mission area that includes three federal agencies – Rural Business-Cooperative Service, Rural Housing Service, and Rural Utilities Service. The agencies have in excess of 50 programs that provide financial assistance and a variety of technical and educational assistance to eligible rural and tribal populations, eligible communities, individuals, cooperatives, and other entities with a goal of improving the quality of life, sustainability, infrastructure, economic opportunity, development, and security in rural America. Financial assistance can include direct loans, guaranteed loans, and grants in order to accomplish program objectives.

The Applicant, SE Municipal Colorado, LLC is seeking financial assistance from the USDA Rural Development (RD), Rural Utilities Service (RUS) under its Powering Affordable Clean Energy (PACE) program, as authorized by the Inflation Reduction Act (IRA).

The goal of the PACE program is to support clean, affordable energy across America. The purpose of the project is to construct a renewable distributed generation facility that will produce and supply Fort Morgan with up to five percent of its annual energy usage, per the existing power purchase agreement with SE Municipal Colorado. The project will enable Fort Morgan to lock in a competitive price for electricity over the next 25 years.

2.0 ALTERNATIVES EVALUATED INCLUDING THE PROPOSED ACTION

This section discusses the alternatives selection process and defines the alternatives that were considered. The implementing procedures for NEPA establish a number of policies for federal agencies to follow in order to avoid or minimize the adverse effects of their actions. Among these policies is the use of the NEPA process to identify and assess reasonable alternatives to the proposed project that would avoid or minimize adverse effects (40 CFR 1500.2(e)). Alternatives considered included: no action (maintaining the Status Quo) and construction and operation of a 4.9 MW solar energy power system on an approximately 21-acre agricultural plot.

2.1 Proposed Action and Preferred Alternative

The energy generation system (Proposed Action) will include the construction and operation of a 4.9 MW direct current PV solar energy power system. For purposes of this EA, the capacity of the facility will be indicated as 4.9 MW; however, system properties may change during project planning, may be rounded, or may be reported slightly differently when discussing different aspects of the system. The solar panels will be ground mounted on a single-axis tracker racking system. The racking system is installed by inserting posts into the ground, typically between 5 and 8 feet, dependent on the final racking design. The tracker utilizes a wide degree of rotation to maximize energy output with efficient use of available sunlight for electricity production.

The modules would be mounted on single-axis frames or "trackers" that rely on motors and actuators to rotate along a north-south axis with the sun's movement from the east in the morning to the west in the evening. The modules would be grouped together in solar arrays. The arrays would generally be installed linearly in rows approximately 7 meters apart, ensuring that each row of panels does not shade the row behind it. During periods of high winds or heavy snowfall, the trackers would move the arrays to a position in which those conditions would put a minimum strain on the system. The solar panels would reach a maximum height of 10 feet during rotation. The proposed project includes fencing around the project site. The solar modules would be connected to solar inverters that will convert the variable direct current output of the PV solar panels into a utility frequency alternating current that can be fed into Fort Morgan's municipal electrical grid.

Within the project site, a laydown yard would be constructed to support project construction. Project activities will consist of construction of driven piles for modules, inverters, and associated equipment. The site plan is found in Appendix B, Exhibits B-1 and B-2.

2.1.1 Construction

Construction is expected to take approximately 6 - 12 months, running from approximately Fall 2024 through Fall 2025. All construction and operations activities would be restricted to the 21-acre project area. During construction, the total number of personnel on-site may

range from 10 to 30 employees. The proponent would use local labor to the extent possible. When local labor is unavailable, the proponent would bring in employees from other areas. Personnel would include preconstruction survey crews, utility workers for local station power, supervisors, and engineers. Site preparation and fencing would commence first, and the workforce would increase as the project "ramps up."

Most of the construction is planned to occur in the fall, winter and spring. The project workforce during this period would peak at approximately 30 personnel. After principal construction, the workforce would be reduced to fewer than eight people and traffic disturbances would be reduced greatly. Work would then be contained within the areas fenced during project construction while inspectors and qualified personnel inspect and start up project operations. The proponent would use qualified contractors and subcontractors according to the equipment and personnel needs of the project. The proponent anticipates that a large percentage of the workforce would come from surrounding communities, although specialty workers from various parts of the country may be required.

The proponent would establish temporary areas within the project area for parking; staging; laydown; and material, equipment, and trailer storage to facilitate construction activities. To prepare the project for construction, the areas within the fenced boundary would be mowed to a height of no more than 3 inches. Grading would occur only in areas where the elevation would require alteration to accommodate tracker tolerances, site drainage, and laydown areas.

Support poles for the project trackers and other structures would consist of galvanized steel H-piles driven directly into native soil. The solar arrays would require no concrete foundations.

After construction, personnel would calibrate and test systems, controls, and safety equipment before putting them into service. Qualified technicians and mechanical and electrical experts and electricians would test and inspect solar components, transformers, communications systems, switchgear systems, and interconnection systems to ensure that they comply with required specifications and are working properly.

Workers may handle topsoil during project construction. For areas requiring topsoil removal, personnel would remove topsoil and stockpile it separately for use during reclamation. Prior to ground disturbance, a Stormwater Pollution Prevention Plan (SWPPP) will be prepared.

2.1.2 Operations and Maintenance

The site would feature no permanent on-site operations and maintenance facilities, only an area that would support temporary office facilities and parts storage. The monitoring facility would be environmentally conditioned for supervisory control and data acquisition (SCADA) and computer components. The SCADA would collect operating and performance data and allow remote operation of the facility.

2.1.3 Decommissioning

Within 6 months of ceasing operation, the proponent shall remove all solar facilities from the property, with the exception of electrical line buried at least 4 feet deep. Major pieces of equipment may be recyclable or reusable, and the galvanized steel and aluminum racks may be sold for scrap or recycled. Electrical equipment could either be salvaged for reuse or recycled. Components such as the cabling would have a high resale value due to copper and aluminum content. Concrete from footings could be crushed and recycled as granular fill material. As much of the facility would consist of reusable or recyclable materials, there would be a minimal residual waste for disposal as a result of decommissioning the facility. Registrable waste materials would be managed in accordance with state requirements or subsequent applicable legislation and residual non-hazardous wastes would be disposed of at a licensed landfill in operation at the time of decommissioning.

Subject to landowner preference, restoration should include a return to the same or functionally similar pre-construction drainage patterns, including farm drainage tiles, decompaction of soil, and seeding with an appropriate vegetative cover to stabilize soil, enhance soil structure, and increase soil fertility.

Beginning on the commercial operations date, a financial security in an amount equal to the expected net cost to complete the restoration will be maintained, with the amount updated every 5 years based on an estimate by a qualified third-party engineer.

2.2 Other Alternatives Evaluated and Not Carried Forward

For the proposed project to fulfill its purpose of supplying distributed power generation to the City of Fort Morgan, the site on which the solar energy power system would be constructed and operated had to meet the following requirements:

- Located in a relatively undeveloped area near Fort Morgan;
- Adjacent to existing grid connections;
- Accessible by existing roadways;
- Size, configuration, land use, and topography suitable to accommodate enough arrays to produce 4.9 MW;
- No structures to be demolished;
- Not in a floodplain;
- Not in wetlands;
- No effect on surface water;
- Attainable compliance with local ordinances and development permits;
- Availability for lease / development; and
- Reasonable land and development costs.

The proposed project site is surrounded by existing industrial facilities and is directly adjacent to a City of Fort Morgan municipal substation (the project's point of interconnection). The site was selected by the City of Fort Morgan based on meeting all of the selection criteria. Additional project sites in and near Fort Morgan were reviewed;

however, none met the selection criteria listed above and were therefore excluded from further review. This EA evaluates the proposed action and the no-action alternatives. [1]

Other means of electricity generation were considered, with the exception of wave energy, but it was determined that the only viable means of power generation would be from the construction and operation of a solar facility.

Wind: The project area is identified as a Class 2 area, which is considered marginal for utility-scale wind energy applications (National Renewable Laboratory 2018); therefore, the use of wind turbines to generate electricity is not reasonable at this time and the alternative was not considered. Areas designated Class 3 or greater are suitable for most utility-scale wind energy applications but may be suitable for rural applications.

Geothermal: There are currently no geothermal electrical power generating facilities in Colorado. Colorado's geothermal resources are all less than 212 degrees Fahrenheit at the surface. High temperatures exist at greater depth below most of the Colorado mountains. Geothermal power generation depends on higher temperature resources being available within reasonable depth, generally 248 degrees Fahrenheit within 13,123 feet, and adequate water flow (DOE 2005). This alternative was not considered.

Nuclear: Currently, Colorado does not have any nuclear power plants or any plans for future power plants. According to the Colorado Energy Office (2022), the state's only former nuclear generating facility, Fort St. Vrain, generated electricity from 1976 to 1989 (Denka 2021). Today the facility, which is located near Platteville, is used as a natural gas electricity generating plant. Due to recent events and regulatory requirements approvals of new nuclear power plants may be delayed and undergo additional reviews. If a new nuclear facility were to be constructed in Colorado, it would take at least three years to complete the required reviews before an early site permit issuance could be granted and then additional time would be required to obtain a construction permit. The process to obtain a permit can take over five years, not including the construction of the facility. With this timeline, the approval for a nuclear facility and construction of one would not provide the power generation that is needed currently and is not considered a viable alternative.

2.3 No Action Alternative (Status Quo)

Under the "No Action" alternative, the site would not be developed with a solar facility. Fort Morgan would not receive 4.9 MWs of power from this potential alternative energy/solar source and would require another means of providing renewable energy for its customers. The project area would continue to be available for agricultural production until such time as it is developed per its designated zoning which is industrial. The anticipated generation from this potential alternative energy/solar source would not be available, and Fort Morgan would then have to seek alternative electric generation sources to meet anticipated need to replace existing power supply contracts that will come to an end. The project area would

[1]The USDA's implementing procedures allow for the evaluation of a single-site scenario (RD Instructions 1970-C, Exhibit B, 2.3.2.2 and in accordance with 7 CFR § 1970.13(a)) in situations where there are no potential adverse effects to environmental resources.

continue as agricultural land. The no-action alternative does not achieve the project's purpose and need.

2.4 Environmental Resources Not Carried Forward for Detailed Analysis

The determination of environmental resources to be analyzed versus those not carried forward for detailed analysis is part of the EA scoping process. Council on Environmental Quality (CEQ) regulations (40 CFR §1500.4 (e and f) encourage project proponents to identify and eliminate from detailed study the resource areas that are not important or have no potential to be affected through implementation of their respective proposed actions. Some resource areas or some aspects of resource areas would not be affected by the proposed or alternative actions. Resource areas that have been eliminated from further study in this document and the rationale for eliminating them are presented below:

Coastal Resources – The project area is not located within a state identified in the Coastal Zone Management Act of 1972 or Coastal Barriers Resources Act; therefore, there are no effects to coastal resources. No further analysis is required.

Electromagnetic Fields and Interference (EMF) – No EMF transmitting objects such as overhead high-voltage electric transmission lines, substations, cell or microwave towers will be installed as part of the Proposed Action; therefore, detailed analysis of EMF is not required.

Corridor Analysis – A corridor analysis is not applicable for this project area as it does not follow a linear path nor have large electrical transmission lines, telecommunication cables, water or wastewater pipelines leading to or away from it; therefore, a detailed analysis is not required.

3.0 AFFECTED ENVIRONMENT, AND ENVIRONMENTAL CONSEQUENCES, AND MITIGATION MEASURES

This chapter describes the current conditions of the environmental resources, either manmade or natural, that would be affected by implementation of the Proposed Action. This chapter also describes the potential environmental consequences that are likely to occur as a result of implementation of the Proposed Action and any proposed mitigation measures. The No Action Alternative provides a baseline against which the effects of the Proposed Action can be compared.

3.1 Land Use

3.1.1 Affected Environment

Land use refers to the use of land for various activities, including commercial, industrial, recreational, agricultural, and residential. Adopted plans and development regulations

control the type of land use and the intensity of development or activities permitted. Changes in land use patterns that result from development can affect the character of an area and result in physical effects to the environment. This section describes the land use and ownership resources occurring in the project area and the potential effects to those resources due to project implementation.

3.1.1.1 General Land Use

The project area consists of an approximately 21-acre tract owned by the City of Fort Morgan. Based on a review of historic imagery, it appears that the project area has been used for the cultivation of crops since 1989. The project area is located within the City of Fort Morgan, Colorado and is generally located within the southeast portion of the city. As such, the project area falls within the jurisdiction of the City of Fort Morgan and is within Morgan County Assessor Parcel No. (APN) 1229-040-14-901 and zoned as Industrial. Allowable uses in the Industrial zoning designation include manufacturing, food product processing, warehouse facilities, auto service and repair, outdoor storage, and research and development facilities. As noted in the Fort Morgan Comprehensive Plan, industrial development should be located on sites where existing or planned utility service is available (City of Fort Morgan 2016).

The project area includes a mix of industrial and agricultural land uses (Morgan County Parcel Viewer 2022). The parcel to the north, which is separated from the project site by the Burlington Northern Railroad, is a cheese plant. The parcels to the east include an agricultural field and a single-family residence. The parcels to the south include an agricultural field, two single family residences, and vacant land. The parcels to the west include an agricultural field, a beef processing facility, and the City of Fort Morgan's municipal substation (the project's point of interconnection). No paved roads, structures or buildings are located on the project site.

3.1.1.2 Important Farmland

The Farmland Protection Policy Act (FPPA) and USDA Departmental Regulation No. 9500-3, Land Use Policy, provide protection for important farmland, prime forestland, and prime rangeland. The USDA regulation 7 CFR Part 658 implements the FPPA. The FPPA, 7 U.S.C. 4201, was enacted in 1981 in order to minimize the loss of prime farmland and unique farm, forest, and range lands as a result of federal actions by converting these lands to nonagricultural uses. As defined by FPPA, prime farmland is farmland that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops and is also available for these uses. A unique farmland is land other than prime farmland that is used for production of specific high-value food and fiber crops; it has the special combination of soil quality, location, growing season, and moisture supply needed to economically produce sustained high quality or high yields of specific crops.

The USDA Natural Resources Conservation Service (NRCS) soil survey contains information regarding USDA-identified prime farmland soils, which are required for a prime a farmland designation. Two soil types are present within the project area, Bresser clay loam and Heldt clay soils. Soils in the project site are comprised of approximately 5.9 acres of prime

agricultural soils, if irrigated, and 17 acres of non-prime soils as set forth below (NRCS 2022; see Table 1 and Figure 2:

- Bresser clay loam constitutes approximately 26 percent of the Project site. Bresser clay loam is considered prime farmland if irrigated.
- Heldt clay constitutes approximately 74 percent of the Project site. Heldt clay is not considered prime farmland by the NRCS.

Table 1. Natural Resource Conservation Service Soil Data for Project Site

Map Unit Symbol	Map Unit Name	Rating	Acres in Area of Interest	Percent of Area of Interest
BtA	Bresser clay loam, terrace, 0 to 1 percent slopes	Prime farmland if irrigated	6.0	26.1
HIA	Heldt clay, 0 to 1 percent slopes	Not prime farmland	16.9	73.9
Total for Area of Interest			**22.9**[1]	**100**

[1]The project area is approximately 21 acres. The discrepancy here is due to screen-drawing the project area polygon in the NRCS Web Soil Survey online search tool.

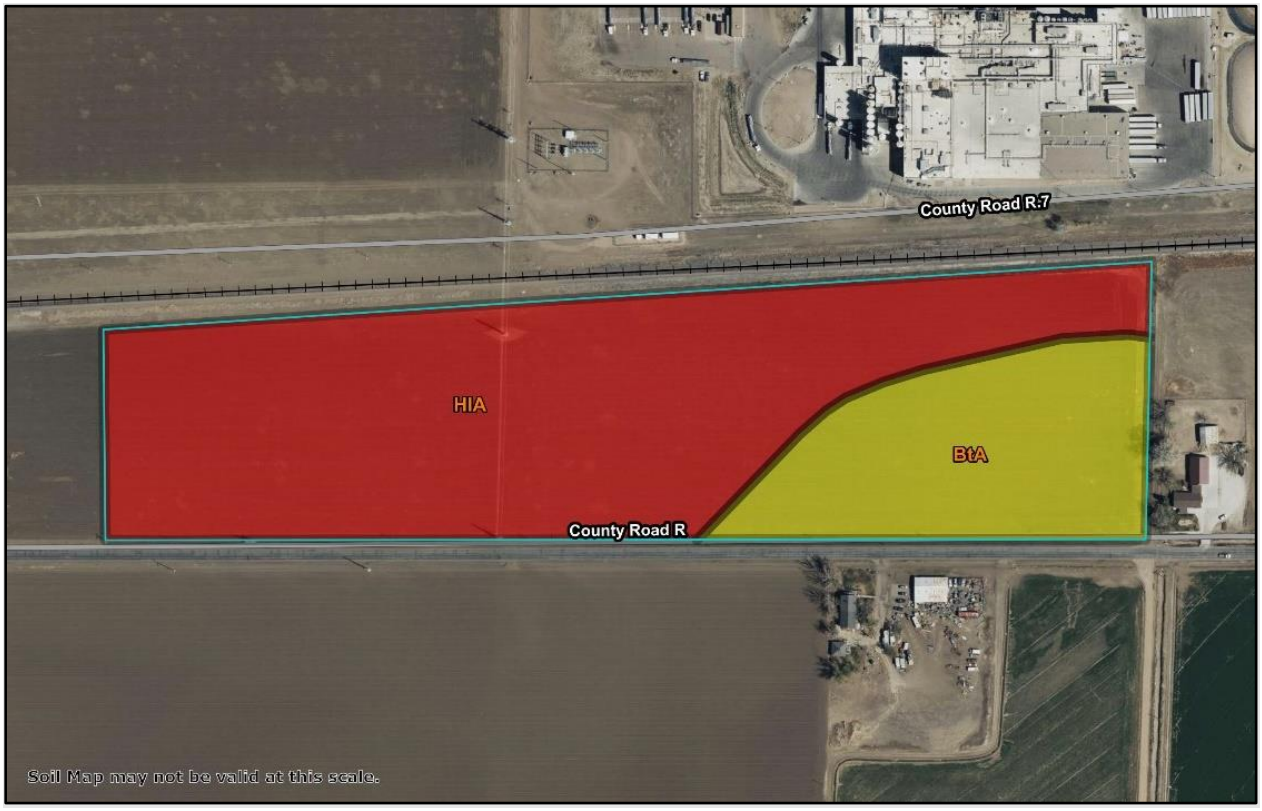

Figure 2. NRCS Soil Survey – Prime Farmland is not present within the project site.

3.1.1.3 Formally Classified Lands

Formally classified lands are areas that have received special protection through formal legislative designations and are administered by federal, state, or local agencies; Tribes; or private parties. Formally classified lands include national parks and monuments; national

forests and grasslands; national historic landmarks; national wildlife refuges; wilderness areas; wild, scenic, and recreational rivers; state parks; and Native American–owned lands. The United States Geological Survey (USGS) Protected Lands Database of the U.S. (PAD-US) combines a number of agency databases into a single source documenting lands with some level of federal, state, local, and private protection. Review of the PAD-US revealed that there are no known protected lands within the project area.

The nearest protected area documented in the PAD-US is a City owned park located approximately 1 mile west of the project area, which includes a pavilion, playground, tables, and a dog park. No Formally classified lands were identified within the adjacent or immediately adjacent to the project site during this review.

3.1.2 Environmental Consequences

3.1.2.1 No Action Alternative

Under the No Action Alternative, the undeveloped land would remain in its current state and use, and the agriculture area would not undergo further disturbance; therefore, there would be no change in land use and no effects would occur.

3.1.2.2 Proposed Alternative

Under the Proposed Action, the project site would be developed with ground-mounted solar panels and associated equipment, compatible with the site's industrial zoning designation. Since the proposed project is industrial in nature, is in close proximity to the City's municipal substation (the project's point of interconnection) and to manufacturing plants with high energy demands, and consistent with designated zoning, no effect to land use is anticipated. Under the Proposed Action, the project would result in a shift from the current agricultural use to solar energy production. Proposed projects are subject to the FPPA requirements if they may irreversibly convert farmland to noncropland. The NRCS, in correspondence dated September 30, 2022, stated that the solar arrays proposed for installation for this project are not considered to be permanent structures and therefore the Proposed Action is exempt from the FPPA (Appendix F).

3.1.3 Mitigation Measures

No mitigation measures are warranted as land use changes are expected to be consistent with designated zoning and compatible with surrounding land uses.

3.2 Floodplains

3.2.1 Affected Environment

Executive Order (EO) 11988, "Floodplain Management", requires Federal agencies to avoid actions, to the extent practicable, that will result in the location of facilities in floodplains and/or affect floodplain values. Facilities located in a floodplain may be damaged or destroyed by a flood or may change the flood handle capability of the floodplain, or the pattern, or magnitude of the flood flow. The relevant floodplain for most proponent projects is an area which has a 1-percent chance of a flood occurrence in a given year. The flood of this interval is referred to as the 100-year flood or the base flood. The floodplain

management guidelines require Federal agencies to apply the 0.2 percent or 500-year flood occurrence standard to the location of "critical facilities." Critical facilities include health care facilities, emergency service facilities, and areas used for the storage of hazardous materials. Critical action refers to an action for which even a slight chance of flooding is too great because such flooding might result in loss of life, injury to persons, or damage to property. The minimum floodplain of concern for critical actions is the 500-year floodplain, i.e., the critical action floodplain. Critical actions include but are not limited to actions that create, or extend the useful life of, structures or facilities such as: Utility systems vital to public health and safety, including potable water, wastewater, electric generation, communication systems and other principal utility infrastructure elements.

Authorized by Executive Orders (E.O.) 13690 and 14030, the Federal Flood Risk Management Standard (FFRMS) requires agencies to prepare for and protect federally funded projects from increasing flood risks posed by the effects of climate change. Agencies may select one of three approaches to estimate flood elevations and hazard areas to be used for project siting and development. The three approaches are as follows:

- Climate Informed Science Approach (CISA): flood hazard area and elevation estimated using the "best-available, actionable hydrologic and hydraulic data and methods that integrate current and future changes in flooding based on climate science" (FEMA 2023).
- Freeboard Value Approach (FVA): flood hazard area and elevation determined by "adding an additional 2 feet to the base flood elevation for non-critical actions and by adding an additional 3 feet to the base flood elevation for critical actions" (FEMA 2023).
- 500-year floodplain: the flood hazard area identified by FEMA with a 0.2% chance of flooding annually.

The 500-year floodplain approach was selected in this case to evaluate the FFRMS due to the freely available and readily accessible floodplain GIS data acquired through the FEMA Flood Map Service Center. An FFRMS worksheet is included in Appendix A.

As illustrated on Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) Panel No. 08087C0610D, the project site is in an area with minimal flood hazard (see Figure 3).

Figure 3. FEMA FIRM Map

3.2.2 Environmental Consequences

3.2.2.1 No Action Alternative

The site is not within a 100- or 500-year floodplain, and the closest special flood zone is approximately 1 mile north of the site. Under the "No Action" alternative, the site will remain undeveloped; no effects to floodplains are anticipated.

3.2.2.2 Proposed Action

The Proposed Action plans to avoid and minimize effects to floodplains. The proposed project would result in an increase in impervious surface associated with footings and electrical equipment. The site is not within a mapped 100- or 500-year flood zone and the closest special flood zone is approximately 1 mile north of the site, which is associated with the South Platte River. Therefore, the Prosed Action will not affect floodplains.

3.2.3 Mitigation Measures

No Mitigation Measures are warranted as the project is not proposed in or near a floodplain and no direct or indirect effects to floodplains are anticipated.

3.3 Wetlands

3.3.1 Affected Environment

The USACE and EPA define wetlands as follows: "Wetlands are areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas."

A desktop wetland/waters determination was conducted in August 2022 (Terracon 2022). No riverine or wetland features are mapped by the United States Fish and Wildlife Service's (USFWS) National Wetland Inventory (NWI) intersecting the project area (USFWS 2022). There appears to be one irrigation channel in the adjacent areas to the south. The surrounding area is dominated by agriculture fields and industrial developments. Based on a review of the Project area during a pedestrian survey and a review of the surrounding watershed from aerial imagery, the project site does not contain any type of wetland (Figure 4). Additionally, the NRCS Soil Report for the project area indicated that all map units within the project area are non-hydric. See Appendix A.

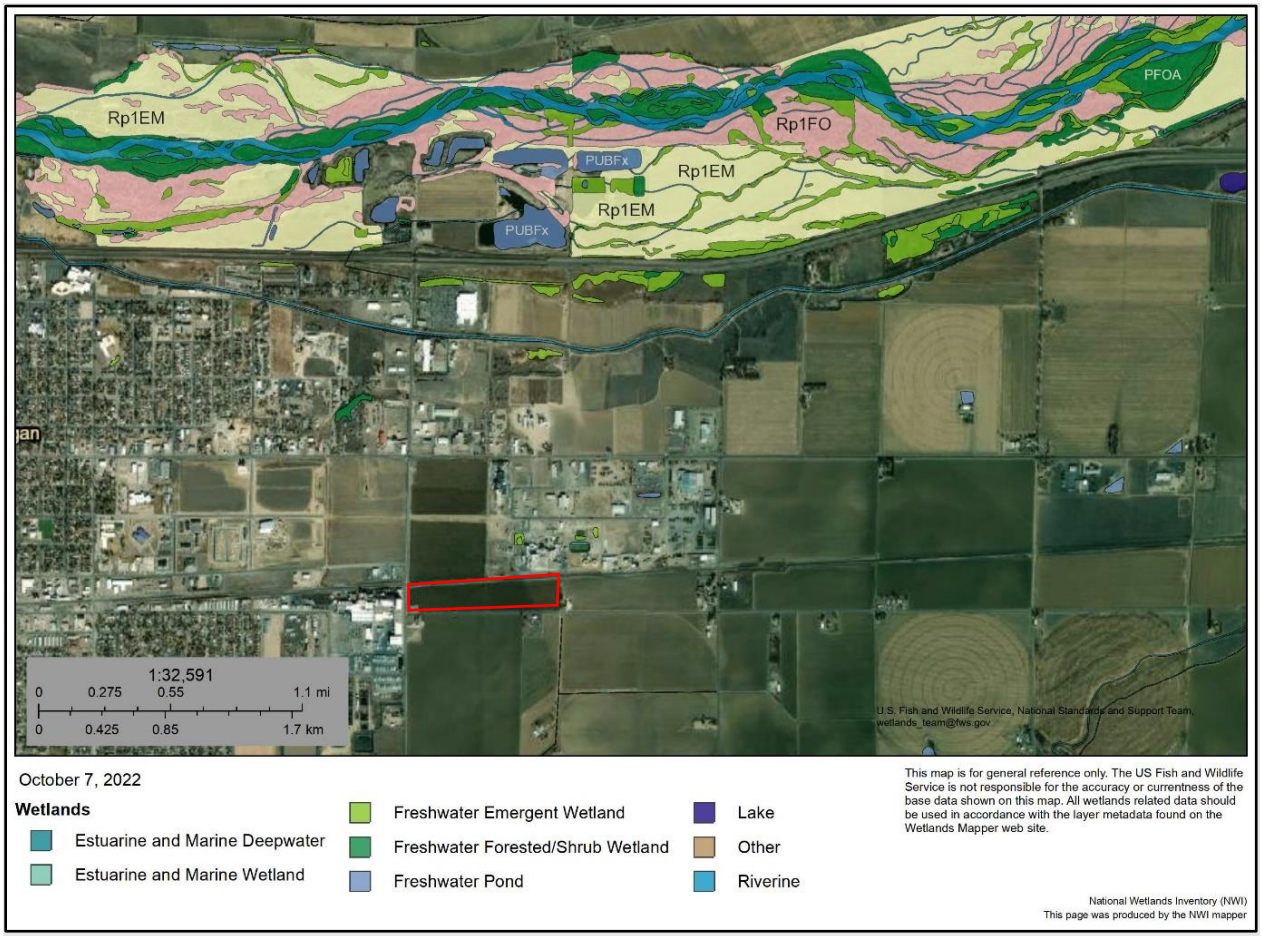

Figure 4. National Wetlands Inventory Map (Project Area Outlined in Red)

3.3.2 Environmental Consequences

3.3.2.1 No Action Alternative

Under the No Action Alternative, no effects to wetlands would occur as wetlands are not present within the project area.

3.3.2.2 Proposed Action

Implementation of the Proposed Action would result in no effects to wetlands as wetlands are not present within the project area.

3.3.3 Mitigation Measures

No mitigation measures are warranted.

3.4 Water Resources

3.4.1 Affected Environment

3.4.1.1 Surface Water

A desktop water resources review was conducted in August 2022 (Terracon 2022). Based on a review of the project area during a pedestrian survey conducted during the Phase 1 Environmental Site Assessment and a review of the surrounding watershed from aerial imagery, the project site does not contain any Waters of the United States (WOTUS) that would be subject to permitting authorities under Section 404 of the Clean Water Act. The results of the field observation documenting that there are no potentially jurisdictional waters on the project site are provided in a memorandum in Appendix A.

3.4.1.2 Groundwater

Fort Morgan and the project site are located within the South Platte alluvial aquifer, situated between the larger Denver and High Plains aquifer systems (USGS 1986). The South Platte alluvial aquifer is not a sole source aquifer (EPA, 2024). The NRCS's Web Soil Survey indicates depth to groundwater at the project site is greater than 6.5 feet (NRCS 2022). In August 2022, Terracon drilled four geotechnical borings to a depth of 20 feet below ground surface (bgs) within the project area. Groundwater was not discovered within any of the borings (Terracon 2022B). Fort Morgan and surrounding areas utilize groundwater for drinking water and agriculture.

3.4.2 Environmental Consequences

3.4.2.1 No Action Alternative

Under the No Action Alternative, the existing land and the unimproved areas, and associated pervious cover, would remain; therefore, the amount of runoff would not increase, groundwater infiltration would remain the same, and the potential for erosion due to disturbed soil would not be present. Additionally, the groundwater located under the site would not be affected. No effects would be anticipated.

3.4.2.2 Proposed Action

Implementation of the Proposed Action would result in no direct effects to surface waters associated with construction and operation of the facility, as no surface waters are within the project site. During construction at least ten acres of soil will be disturbed (including but not limited to inverter pads, laydown yard, office, parking, and mounting brackets), potentially increasing the opportunity for sediment to leave the construction site (via vehicle tracking or roadside ditches) and enter surface waters, increasing sediment load and decreasing water quality. Due to the quantity of soil disturbed, over five acres, the proposed action would require authorization under the Colorado Department of Public Health and Environment (CDPHE) COR400000 Construction Stormwater Discharge Permit. To obtain authorization under the permit, prior to any ground disturbance, a Notice of Intent must be

filed with the CDPHE and a SWPPP prepared and implemented that will manage and minimize pollutants entering surface waters due to stormwater runoff.

Compliance with COR400000 by implementation of the SWPPP and using appropriate best management practices (BMPs) will ensure effects to surface waters will not be significant.

After construction activities are completed, less than 10 percent of the project site will be disconnected impervious surfaces, resulting in a slight increase in the amount of runoff and slightly decreasing infiltration during rain-events. These measures will be addressed throughout the design of the project. The small increase in impervious surface along with proper drainage and revegetation will minimize effects to groundwater infiltration.

The proposed action will not require the use of groundwater from the Denver Basin Aquifer since the area will not be staffed or require potable water or sanitary facilities.

3.4.3 Mitigation Measures

The BMPs that could be implemented to decrease sedimentation associated with erosion include:

- Limit stockpiling of materials on-site,
- manage stockpiled materials to minimize the time between delivery and use,
- cover stockpiled materials with tarps,
- install sediment barriers around material stockpiles, storm water drainage routes, culverts, and drains, and
- control sediment tracking off site by construction vehicles.
- revegetate disturbed areas upon completion of construction.

3.5 Biological Resources

3.5.1 Affected Environment

3.5.1.1 General Fish, Wildlife, and Vegetation Resources

Native wildlife and vegetation in the project area are limited, as the site is currently farmed and surrounded by disturbed urban areas and farmland. Two invasive plants, field bindweed (*Convolvulus arvensis*) and kochia (*Bassia scoparia*), are the dominant plants across much of the project site. The site has been previously disturbed and is frequently tilled to stop invasive plants from growing, which also precludes native plant growth. Native wildlife would largely be limited to disturbance-tolerant species of small mammals and larger species tolerant of human activity, such as coyotes or whitetail deer that may occasionally be present in the project area.

Photo 1 and Photo 2 show an overview of the project area as of September 2022.

Photo 1. Overview of the project area looking north as of September 2022.

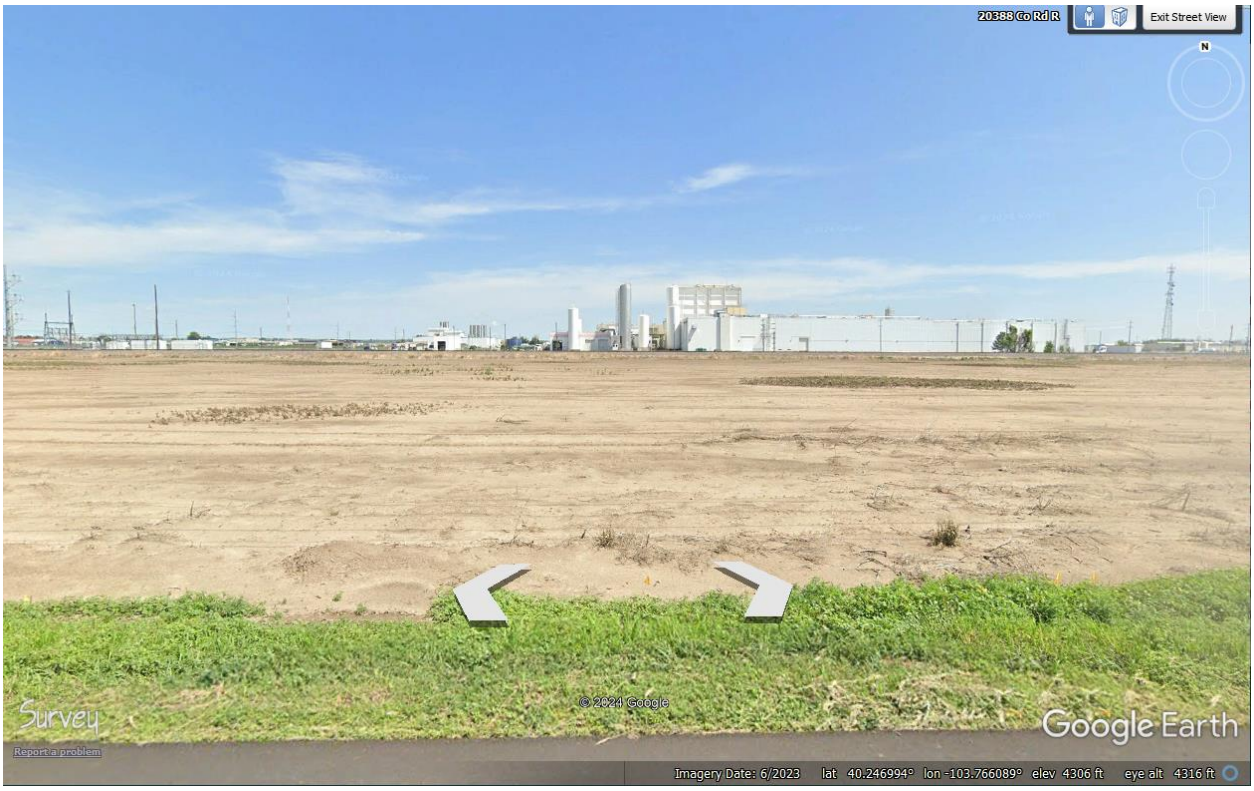

Photo 2. Google Earth Street View of project area as of June 2023, from Road R looking north.

3.5.1.2 ESA-Listed Threatened and Endangered Species

Section 7 of the Endangered Species Act (ESA) directs all Federal agencies to use their existing authorities to conserve threatened and endangered (T&E) species and, in consultation with the United States Fish and Wildlife Service (USFWS), to ensure that their actions (funded, authorized, or carried out) do not jeopardize listed species or destroy or adversely modify critical habitat. Lists of T&E species are published by the USFWS. Under the ESA, it is the responsibility of the Federal action agency or its designated representative to determine if a proposed action "may affect" endangered, threatened, or proposed species, or designated critical habitat, and if so, to consult with the USFWS further. Similarly, it is the responsibility of the Federal action agency or project proponent, not the USFWS, to determine if a proposed action will have "no effect" on ESA-listed or proposed species or their critical habitat. According to the USFWS, if a "no effect" determination has been made for a proposed project, it is not necessary to seek concurrence from the USFWS. However, if a "may affect" determination has been made for a proposed project, consultation with the USFWS will be necessary.

Federally listed threatened and endangered species are listed on the USFWS Information for Planning and Consultation online database (IPaC). Eight federally protected species were cited in the IPaC query report. No critical habitat or refuges are known to be present on or in the vicinity of the site (USFWS 2021) (see Appendix D for IPaC and state information). An effect finding is provided for each species based on observed habitat characteristics in relation to each species' suitable habitat and distribution.

Gray Wolf (*Canis lupus*) – Federally Endangered

The gray wolf is one of North America's keystone predators. The wolf is known to occupy a variety of habitats like temperate forests, grasslands, mountains, and tundra. Gray wolf territories can vary from 25 to 1,500 square miles per pack, with most territories occupied by a single pack. The wolves rely on a steady population of ungulates, either wild or domestic, but wolves are known to hunt smaller mammals, birds, and fish. Wolf packs generally avoid areas with frequent human presence.

The gray wolf has been extirpated from Colorado but planned reintroduction efforts and natural dispersal may result in the species reoccupying the state. The site is located close to the town of Fort Morgan, within an entirely human-modified agricultural landscape. Based on observed site characteristics, the site does not provide suitable habitat for the gray wolf.

Tricolored Bat (*Perimyotis subflavus*) – Federally Proposed Endangered

The tricolored bat roosts amongst living and dead leaves, particularly those of living or recently dead hardwoods, and hibernates in caves, mines, or buildings over winter. The tricolored bat is experiencing steep population declines due to the white-nose syndrome fungal disease which spreads in hibernacula (winter colonies). In colonies affected by the disease, colony abundance may decline by 90 percent or more.

The site is located in an industrial/agricultural area within Fort Morgan. The only trees present are adjacent to the southeast project area boundary associated with a residence.

Based on site characteristics, the project area does not provide suitable habitat for the tricolored bat.

Piping Plover (*Charadrius melodus*) – Federally Threatened
Piping plovers prefer sandy shores of lakes and oceans. In the Great Plains region, they are found along lakeshores, rivers, and alkali wetlands. They nest in sandy areas above the high waterline that are sparse on vegetation. Piping plovers scrape sand and other debris to create small depressions for their nests.

The site consists primarily of bare ground and weeds. No rivers or wetlands with sandy shores are found on or in the vicinity of the site. Based on observed site characteristics, the site does not provide suitable habitat for the piping plover.

Whooping Crane (*Grus americana*) – Federally Endangered
The whooping crane breeds in Alberta and the Northwest Territories of Canada during the summer and migrates across North America where it winters in the Gulf Coast of Texas. During migration, the crane visits stopovers in wetlands, marshes, estuaries, wet meadows, lakes, ponds, and agricultural fields. A population assisted by releasing individuals created through captive breeding was temporarily present in the Rocky Mountain region, but this reintroduction attempt failed and the project site is no longer within a flyway for the species.

Wetlands and/or freshwater marshes are not located on or in the vicinity of the site, however the site and surrounding area are made up of agricultural fields. Based on observed site characteristics, the site and the surrounding area do provide suitable habitat during migration for the whooping crane, but the project site is outside the current range of the species.

Pallid Sturgeon (*Scaphirhynchus albus*) – Federally Endangered
The pallid sturgeon is a bottom-dwelling fish that grows up to 6 feet in length. The sturgeon has a mostly grey body with a flat head and a series of ridges that run down its spine and sides. The pallid sturgeon occupies the Missouri and Mississippi Rivers as well as the tributaries of those rivers that lie between Montana and Louisiana. The sturgeon prefers sandy or fine material bottom rivers. The closest major tributary with a population of pallid sturgeon is the Platte River.

The site does not contain a water source and construction related activities will not affect the Platte River. Based on observed site characteristics, the site does not provide or affect suitable habitat for the pallid sturgeon.

Monarch Butterfly (*Danaus plexippus*) – Federal Candidate
The monarch butterfly is a migrating species of butterfly often found in the western and eastern portions of the United States. The butterfly is identified by its orange, black, and white pattern that indicates its toxicity to potential predators. The butterfly migrates from Central America, where it spends the winter months, and then migrates north to breed. The butterfly requires milkweed species (*Asclepias* spp.) for reproduction.

The site does not contain an adequate population of milkweed species. Based on observed site characteristics, the site does not contain suitable habitat for the monarch butterfly. However, due to the migratory nature of the butterfly, there is a chance the butterfly could migrate through the site.

Ute Ladies'-tresses (*Spiranthes diluvialis*) – Federally Threatened
The Ute ladies'-tresses is a perennial herb that grows up to 4 to 24 inches in height. The plant is known for its small, white flowers that spiral down its stem. The plant is found in wet meadows that are adjacent to wetlands, perennial streams, and oxbows. The plant is also found around 4,300-6,8500 feet in elevation. The plant has been spotted in or adjacent to irrigation channels, gravel pits, and roadside ditches but this is rare.

The site does not contain wetlands, water bodies, or a wet meadow habitat. Based on observed site characteristics, the site does not provide suitable habitat for the Ute ladies'-tresses.

Western Prairie Fringed Orchid (*Platanthera praeclara*) – Federally Threatened
The western prairie fringed orchid is a perennial orchid species that can grow up to 4-feet tall. The orchid has a spike shaped flowering stalk that has 24 white flowers that are made up of three-lobed petals that are fringed at the end. The orchid is found in tallgrass prairies and sedge meadows. The orchid prefers moist soils that are periodically disturbed by fires and grazing. They also need enough mycorrhizal fungi in the soil in order to help with seed germination. The orchid also relies on species of sphinx moths in order to pollinate the plant.

The site does not contain any tallgrass prairie or sedge meadow habitat. Based on observed site characteristics, the site does not provide suitable habitat for the western prairie fringed orchid.

Colorado Parks and Wildlife State Listed Species
The Colorado Natural Heritage Program (CNHP) Colorado Conservation Data Explorer (CODEX) tool was used to evaluate the project area for potential species of concern that could occur within a one-mile radius of the site (CNHP 2022). The burrowing owl *(Athene cunicularia*) is listed as "threatened" by the Colorado Parks and Wildlife and may be present in the project area during nesting season. Other species that may be present in the project area include several that are listed as "species of State or Special Concern."

- Ferruginous Hawk *(Buteo regalis)*
- Mountain Plover (Charadrius montanus)
- Long-billed Curlew (Numenius americanus)
- Black-tailed Prairie Dog *(Cynomys ludovicianus)*
- Common Garter Snake (Thamnophis sirtalis)

3.5.1.3 Migratory Bird Treaty Act and Bald and Golden Eagle Protection Act
Under the Migratory Bird Treaty Act (MBTA), it is illegal to "take, possess, import, export, transport, sell, purchase, barter, or offer for sale, purchase, or barter, any migratory bird, or the parts, nests, or eggs of such a bird except under the terms of a valid permit issued

pursuant to Federal regulations." Similarly, the Bald and Golden Eagle Protection Act (BGEPA) protects bald and golden eagles.

The project site currently does not provide substantial migratory bird nesting habitat. However, western burrowing owls and some ground-nesting birds may nest along field margins and the potential for some migratory bird nesting on the site cannot be discounted. The site does not provide habitat for bald eagles or golden eagles.

3.5.1.4 Invasive Species

Colorado Revised Statutes Title 35 (Invasive Species) was created to prevent the introduction of invasive species and to provide for their control. The Federal government cannot fund or authorize actions that may promote the introduction or spread of invasive species. The Colorado Department of Agriculture identifies three classes of noxious/invasive vegetation, Class A, Class B, and Class C. Class A vegetation is categorized as a species of plant that is not known to exist or of limited distribution in the State and is a high priority pest for quarantine, control, or mitigation. Class B are categorized as a species of plant that is known to occur, but of limited distribution in the State and may be a high priority pest for quarantine, control, or mitigation if a significant threat to a crop, commodity, or habitat is known to exist. Class C is categorized as a species of plant that is widespread but may be recommended for active control based on risk assessment. Field bindweed (*Convolvulus arvensis*), a Class C noxious weed, was observed during the 2022 field observation.

3.5.2 Environmental Consequences

3.5.2.1 No Action Alternative

Under the No Action Alternative, the proposed project site would remain in its current condition resulting in no effects to threatened and endangered species or critical habitat.

3.5.2.2 Proposed Action

Federally Threatened and Endangered Species

The Proposed Action would have no effect on federally listed threatened, endangered, or proposed species or critical habitat, as suitable habitat for listed species is not available within the project area. The current land use is cultivation and the ongoing disturbance resulting from annual planting and harvesting makes use by listed species unlikely. There is superior habitat along the South Platte River corridor approximately 1.5 miles north of the proposed project area.

Colorado Parks and Wildlife State Listed Species

Based on the proposed site plans, approximately 21 acres of ground disturbance are proposed. Development at the site will not impact the burrowing owl. It is unlikely that this species would utilize the area as it is currently cultivated and harvested annually.

Migratory Birds/Protect Bald and Golden Eagles

The site consists of previously disturbed farmland with no surface waters or wetlands, and sparse, low-lying vegetation used by few migratory bird species. If any ground nesting migratory birds are nesting on the site at the time of construction, those nests would be at

risk of disturbance or destruction as a result of construction activities. Section 3.5.3.1 provides mitigation measures addressing potential effects to nesting migratory birds.

According to policies developed to address the requirements of the BGEPA, development within 660 feet of a bald or golden eagle nest is subject to development restrictions and potential mitigation. No known bald eagle or golden eagle nests are within 660 feet of the project site, and potential development restrictions will not apply under the BGEPA. Furthermore, site development consists of the placement of solar panels which normally are no higher than 10 feet above the ground, mitigating the potential for panels to be used as vantage point structures for eagles. Therefore, effects to bald or golden eagles that may use the site area as a flight corridor are not likely.

Construction activities within site boundaries would generally be near ground level and not greater than 10 feet high. Therefore, if BMPs for minimizing effects to migratory birds are adopted and the facility is revegetated with pollinator-friendly species of grasses and forbs, the proposed project may have a long-term positive effect on migratory birds by increasing vegetative diversity and foraging opportunities.

Wildlife Resources and Vegetation
Implementation of the Proposed Action would result in the removal of the existing crop cover and displace any existing wildlife within the area as well as those species that use the project intermittently or seasonally for foraging. Because the site does not contain native vegetation and provides minimal wildlife habitat, this would result in a short-term, direct, and minor effect. Wildlife such as small mammals and birds inhabiting the parts of proposed project area that would be developed would be expected to relocate to other undisturbed areas to the north and south. Temporary effects from equipment noise and the presence of work crews would discourage some wildlife from utilizing the project site.

Invasive Species
Any disturbance of soil can contribute to the spread of invasive species throughout the project site and to surrounding areas. While the majority of the work will use on-site soils, soil, gravel, or other fill materials may be brought in from offsite to meet the needs of the project. These soils could also contain invasive plants and seeds which could contribute to the spread of invasive plants throughout the site. However, mitigation measures can be incorporated into project plans to prevent the spread of invasive plants in the region. Section 3.5.3.2 provides mitigation measures addressing invasive species.

3.5.3 Mitigation Measures

3.5.3.1 Migratory Birds/Protect Bald and Golden Eagles

Because the site is cultivated, the potential for ground nesting species to utilize the project area is low. However, surveys for active nests of migratory birds, including raptors and ground nesters, should take place before any construction activities for the proposed action. Seasonal recommendations for these surveys are in Table 2. Surveys for migratory birds and other listed species will be conducted within the project area prior to construction by a qualified biologist or environmental scientist during the nesting and breeding season.

Table 2. Recommended Survey Schedule

Scheduled Start of Construction Activity	Recommended Survey Timing
January 15–July 31	Eagles and raptor nest survey window: 21 days before construction related activities.
April 1–August 31	Migratory bird nest survey window: 7 days before construction activity.

If active nests are located within the project boundary during the pre-construction bird nesting surveys, no-disturbance buffer zones shall be established around nests with a buffer size established by a qualified biologist. Recommended buffer distances for non-raptor species likely to nest in developed and disturbed areas can vary between 50 feet and 250 feet, depending on the species. Nest buffers for raptors developed by Colorado Parks and Wildlife (CPW), vary between 0.12 and 0.5 miles, depending on species. However, many raptor species avoid nesting in human-modified landscapes. Buffered zones shall be avoided during construction-related activities until young have fledged or the nest is otherwise abandoned. During operation of the site, although conflicts with active bird nests may be unlikely, the same avoidance measures should be implemented.

If surveys determine burrowing owls and/or active burrows are present on site, further consultation with the CPW will be necessary for direction related to accommodation or mitigation for owls prior to development based on the conditions and constraints of the site. If it is determined the best option is to disturb and then mitigate for the disturbance of the owls, the proponent must obtain a permit from the USFWS. Mitigation may include excluding owls from disturbed burrows prior to construction, and/or providing artificial burrows on-site or in a different location and monitoring to determine the success of the actions taken.

3.5.3.2 Invasive Species

Temporary erosion control measures would be used during construction to mitigate soil erosion and spread of invasive species. In addition, construction work can make areas more susceptible to the spread of invasive species which could have adverse effects on vegetation within the proposed project area. Generally, soils used for site construction would be taken from the surrounding landscape where possible. Revegetation efforts should utilize species that are endemic to the area and are suitable for the soil type that exists at the site. Reseeding efforts should also be initiated as soon as practical after construction is completed, and should include, in addition to grasses, native forbs and pollinator species to occupy the niches that invasive weeds may otherwise colonize. Diverse vegetation cover is beneficial to all species, including pollinators, which depend on a diverse vegetation community. An increase in weed species is expected for the first one or two growing seasons after construction. A weed management plan will be developed by the applicant that specifies post-construction measures to be taken to identify and manage noxious weed species until the site is revegetated with the desirable species. These measures may include overseeding, controlled grazing or chemical treatments depending on the species identified and the desired measure of control.

3.6 Historic and Cultural Properties

3.6.1 Affected Environment

The cultural environment includes those aspects of the physical environment that relate to human culture and society, along with the social institutions that form and maintain communities and link them to their surroundings. Section 106 of the National Historic Preservation Act (NHPA) requires federal agencies to consider the effects of their "undertakings" on historic properties that are within the proposal's "area of potential effect" (APE) and to provide the Advisory Council on Historic Preservation (ACHP) with a reasonable opportunity to comment on such undertakings. The regulations implementing Section 106 establish the process through which federal agencies meet this statutory requirement. Notwithstanding the above statement, in most cases Agency actions will not be reviewed by the ACHP but rather by State Historic Preservation Officers (SHPO) and Tribal Historic Preservation Officers (THPO). Federal agencies must consider whether their activities could affect historic properties that are already listed, determined eligible, or not yet evaluated under the National Register of Historic Places (NRHP) criteria. Properties that are either listed in or eligible for listing in the NRHP are provided the same measure of consideration under Section 106.

Criteria have been established as guidance for evaluating potential entries to the NRHP. "Significance" in American history, architecture, archaeology, and culture is granted to districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and that meet at least one of the following criteria:

a) an association with events that have made a significant contribution to the broad patterns of history,

b) an association with the lives of persons significant in history embody the distinctive characteristics of a type, period, or method of construction,

c) represent the work of a master; possess high artistic value; or represent a significant and distinguished entity whose components may lack individual distinction, or

d) have yielded, or may likely yield, information important in prehistory or history.

In Colorado, cultural resources are protected under the federal NHPA of 1966, as amended. The NHPA of 1966, as amended (54 U.S.C. § 300101et seq.) and the ACHP's implementing regulations, 36 CFR Part 800, require Federal agencies to consider the effect their actions may have on historic properties prior to carrying out such actions. Terracon completed a Class I Records Search for the proposed project area in September 2022. A Class III Cultural Resource Inventory report was concluded in February 2023 (OAHP Doc. MR.LG.NR1). For both the Class I Records Search and Class III Cultural Resource Inventory, the APE was defined as the total area of potential ground disturbance (direct effects; 21-acre parcel, APN 1229-040-14-901) and a half-mile buffer (visual effects). Resources consulted for the Class I Records Search included a records review and site file check of COMPASS, Colorado's restricted online cultural resources database administered by the

Colorado Office of Archaeology and Historic Preservation (OAHP), General Land Office (GLO) plats, USGS topographic maps, historic aerials, and the NRHP database. These sources were consulted to identify previous cultural resources projects that intersect the APE as well as known precontact, contact, and post-contact Native American or EuroAmerican sites, and historic properties listed in, or eligible for listing in, the NRHP within one mile of the APE.

Based on the results of the background research, there are four previously recorded archaeological resources within a one-mile radius of the project area. Two of these were isolated historic finds, an isolated prehistoric find, and a historic trash dump. These resources were determined ineligible for listing in the NRHP. None of these resources are within the approximately 21-acre direct APE or the half-mile visual buffer. The proposed project area was not previously surveyed but five previous cultural resources surveys have been conducted within one mile of the APE (Table 3) (Metcalf 2023).

Table 3. Previous Cultural Resource Inventories within 0.5-miles of the Area of Potential Effects

Report Name	ID Number
Archaeological Investigations of a Sample of the Proposed Superconducting Super Collider Access Roads in Adams and Morgan Counties, CO (C-99-1000—12)	MR.CH.R110
Morgan Limited Results Cultural Resources Survey Form on Private Lands for Daniel L. Kauffman	MR.SC.NR48
An Intensive Archaeological Resource Inventory Along US Highway 34 from Fort Morgan to Brush, Morgan County, Colorado	MR.CH.NR10
A Cultural Resource Inventory of Two Proposed Locations for the Fort Morgan Substation, Fort Morgan, Colorado	MR.E.R1
Cultural Resource Inventory, Gateway Subdivision, Morgan County, Colorado	MR.FH.NR1

According to OAHP records, two NRHP-eligible properties, three ineligible properties, and two properties of unknown eligibility, exist within a one-mile radius of the APE. The two properties that were previously determined eligible for listing in the NRHP are both associated with Fiebig Farm and consist of a single-dwelling bungalow home built in 1918 (Criterion C) and a larger agricultural complex (Criterion A). The 1866 and 1867 GLO survey plat for Township 3 North, Range 57 West (6th Principal Meridian) do not depict cultural resources in the direct APE (GLO 2022). The 1954 Sterling, Colorado 7.5-minute topographic quadrangle and available historic aerial imagery also did not depict cultural resources with the direct APE; however, the Burlington Northern Railway (historically the Chicago, Burlington & Quincy Railroad [c.1848-1882]) runs adjacent to the northern boundary of the project area (ESRI 2022; Geo. A Ogle & Co. 1913).

The results of the Class I Records Search of the approximately 21-acre parcel for direct effects and the half-mile buffer for visual effects determined that no known or previously recorded historic properties are present in the direct effects APE (APN 1229-040-14-901). The Class I Records Review was forwarded to the Colorado SHPO for concurrence as part of the Section 106 process between the USDA and SHPO. The desktop cultural resources records search recommended a finding that the proposed solar development would have no

adverse effect on historic properties within the visual APE and a recommended finding of no historic properties present in the direct APE (approximately 21-acre parcel). A response was received via email from the SHPO on September 29, 2022. The response letter indicated that SHPO recommended intensive-level archaeological and architectural surveys of the direct effects APE (APN 1229-040-14-901) and that architectural properties near or adjacent to the southern boundary of the direct effects APE be documented.

In November 2022, a Class III Cultural Resource (Intensive Level) Inventory was conducted to identify and assess cultural resources within the direct APE as well as to consider known resources within the visual APE for NRHP-eligibility. No archaeological sites were identified within the direct APE and previously known historic resources located within the visual APE are no longer extant; therefore, no adverse effects are anticipated under Section 106. Dates and responses associated with Section 106 consultation are provided in Table 8.

The Class III Cultural Resource Inventory was submitted to Colorado SHPO for review and concurrence on April 14, 2024. On April 15, 2024, the Colorado SHPO concurred with the finding of "no historic properties affected."

The proponent, on behalf of RUS, sent initiation letters to 96 contacts of federally recognized tribes to inform them of the project and possible effects to cultural resources. Tribes who may have an interest in evaluating the project's effects to cultural and archaeological resources were requested to participate. Several tribes responded, indicating there were no objections or concerns, as well as requesting additional information. On June 26, 2024, the Crow Creek Sioux Tribe provided formal concurrence with RUS's determination of "no historic properties affected." The Northern Cheyenne Tribe also provided formal concurrence on August 2, 2024. An example tribal consultation letter sent by the applicant can be found in Appendix F.

3.6.2 Environmental Consequences

3.6.2.1 No Action Alternative

Under the No Action Alternative, no changes to cultural resources would be anticipated.

3.6.2.2 Proposed Action

Formal Government-to-Government Native American consultation was initiated by RUS on September 16, 2022, in accordance with requirements under NHPA and EO 13175. The tribes had 30 days to reply. The responses received are detailed below.

The Crow Creek Sioux Tribe (CCST) indicated in an email dated October 4, 2022, that the CCST has no issues or objections with the project.

The Paiute Indian Tribe of Utah (PITU) indicated in an email dated September 19, 2022, that the PITU would defer to the tribes closer to the project area and would support their recommendations.

On October 18, 2022, the Northern Cheyenne Tribe requested more information such as a Class I or III report before making a determination. The Class I report was sent to the Northern Cheyenne Tribe on October 25, 2022.

On January 31, 2023, the Northern Arapaho Tribe indicated in a letter that the THPO has determined that the project will have "No Adverse Effect on Historic Properties in the Direct or Visual APE."

On September 23, 2022, The Osage Nation requested Section 106 consultation be initiated by hardcopy letter. Ms. Teresa O'Neil with Terracon Consultants, Inc. sent the requested hardcopy letter on September 23, 2022.

On October 26, 2022, the Pawnee Nation indicated in a letter that the project [should] not affect the cultural landscape of the Pawnee Nation. He further requested that any undiscovered properties that may be encountered be immediately reported to the Pawnee Nation under both the National Historic Preservation Act and the Native American Graves Protection and Repatriation Act regulations.

On June 24, 2024, 61 THPOs were sent the completed Class III report along with a "finding letter" informing consulting parties of RUS's determination of No Historic Properties Affected for the Proposed Action with SHPO concurrence. The Crow Creek Sioux Tribe responded on June 26, 2024, with formal concurrence; and the Northern Cheyenne Tribe responded on August 2, 2024, indicating they also concur with the determination.

3.6.3 Mitigation Measures

Because no significant cultural resources were identified in the direct or indirect APE, no mitigation is anticipated. However, there is the potential for inadvertent discoveries of currently unidentified cultural resources during the site development process. If buried cultural resources are discovered during construction activities, construction activity should immediately cease within a 50-foot radius and the SHPO and RUS notified within 24 hours. All tribes will be notified of an inadvertent discovery. Construction within the 50-foot radius of the find will not continue until notification from RUS is received. An inadvertent discovery plan will be developed and kept on site during construction and maintenance activities. The construction and maintenance crews will be familiar with the plan and its contents, such that they can act if an inadvertent discovery is made.

Additionally, proposed development plans will not be modified if the proposed modification would result in ground disturbance outside of the 21-acre project area for which the Class I Records Search and Class III Archaeological Survey were conducted.

3.7 Aesthetics

3.7.1 Affected Environment

Visual and aesthetic resources include features of both the built and natural environment that together make the visual environment. Examples of these resources can include parks, natural areas, scenic features, open vistas, water bodies, and other landscape features. Historic or urban core districts can also be visual resources. All of these visual resources create aesthetic qualities that are valued by the public that is viewing or could view the resources. Viewers may include neighbors (who occupy land adjacent or visible to the

project), travelers (who may see the Proposed Action using existing transportation), and Native Americans and other consulting parties with an interest in the project area.

The visual quality of an area may be affected by the introduction of a new building/monitoring facility, solar panels, and supporting trackers structures. Visually sensitive viewers include residents, recreators, and travelers on local roads. Highly sensitive areas include regions of high scenic beauty, scenic overlooks, scenic highways, wilderness areas, integral vistas, parks, national forests, and wild and scenic, recreational, and/or national inventory rivers. The project area consists of an approximately 21-acre tract of farmland. The project area is relatively flat. Adjoining properties to the project site include industrial developments, undeveloped land, and sparse single-family residential developments.

The project area within Colorado Plateau section of the Great Plains province (Fenneman 1931), is characterized flat to rolling terrain with broad valleys cut by intermittent streams, river floodplains flanked by well-formed terrace levels, well-formed higher land surfaces/ remnants preserved between rivers and mountains, and layers of older sedimentary rock sharply upturned by a rise of the mountains. The project site is located south of the agriculturally rich South Platte River Valley. Topographically, the river defines the lowest portion of Morgan County and elevations increase to both the north and south. In addition to irrigated farming within the river valley, dry land farming is practiced in the north and south portions of the county. The landforms of the project area and its surroundings consist primarily of typical Great Plains uplands and the broad valley of the South Platte River. The project area can be seen from Barlow Lane looking to the east, County Road R looking to the north, and from single-family residence to the east and south. The project area is also observable by those working within the existing manufacturing plants to the north and to the southeast.

3.7.2 Environmental Consequences

3.7.2.1 No Action Alternative

Under the No Action Alternative, no effects to aesthetics would be anticipated. Since the site would remain undeveloped, the visual attributes of the area would remain unchanged.

3.7.2.2 Proposed Action

The terrain at the project area is relatively level. The overall height of the tallest structures associated with the proposed solar development is not anticipated to exceed 10 feet in height. The proposed solar panels will be much smaller in scale than the existing manufacturing development to the north and southeast. The entire project site will be developed. The project area is bounded by Barlow Road and County Road R, both rural roads that accommodate local traffic, and are not considered major thoroughfares or scenic routes.

The closest visually sensitive areas to the project area are residents and travelers on Barlow Road and County Road R. The proposed project will be viewed in the context of the industrial developments that surround it. The proposed solar development is unlikely to visually dominate the views from either the residences or the roads and would be consistent

with the character of the area's industrial zoning designation. The local views are likely to be less than significantly affected due to the context of the industrial setting and the relatively small scale and low-profile nature of the proposed project. Construction will cause a minor and temporary effect to aesthetics, but this effect is also considered not significant.

3.7.3 Mitigation Measures

The proposed solar development will have minimal effect to aesthetics with existing industrial developments immediately to north and southeast. An existing row of mature trees separates the residence near the southeast project boundary that will provide a natural visual screen between the residence and the project features. No mitigation measures are warranted.

3.8 Air Quality

3.8.1 Affected Environment

Air quality at the project area is regulated by the Air Pollution Control Division of the Colorado Department of Public Health & Environment, which administers federal and state air quality standards in Colorado. The EPA has set national ambient air quality standards (NAAQS) under the Clean Air Act (CAA) and its associated Amendments. The CAA was signed December 31, 1970, and amended August 7, 1977, and September 14, 1990. The CAA Amendments set emission limits for certain air pollutants from specific sources, set new source performance standards based on best demonstrated technologies, and established national emission standards for hazardous air pollutants. Federal air quality standards have been established for six criteria pollutants; ozone (O_3), particulate matter ($PM_{2.5}$ and PM_{10}), nitrogen dioxide (NO_2), carbon monoxide (CO), sulfur dioxide (SO_2), and lead (Pb). Although O_3 is considered a criteria pollutant and is measurable in the atmosphere, it is often not considered as a pollutant when reporting emissions from specific sources, because O_3 is not typically emitted directly from most emissions sources. Ozone is formed in the atmosphere from its precursors – nitrogen oxides (NO_x) and volatile organic compounds (VOCs) – that are directly emitted from various sources. Thus, emissions of NO_x and VOCs are commonly reported instead of O_3. Under these standards, a geographic location with pollutant levels below air quality standards is said to be in "attainment," while higher levels are in "non-attainment."

Table 4. National Ambient Air Quality Standards

Pollutant	Averaging Time	Primary/ Secondary	Value	Form
CO	1 hour		35 ppm	Not to be exceeded more than once per year
	8 hour	Primary	9 ppm	
NO_2	1 hour	Primary	100 ppb	Hourly - 98th percentile of 1-hour daily maximum concentrations, averaged over 3 years
	Annual	Primary and Secondary	53 ppb	Annual Average – Annual Mean

Table 4. National Ambient Air Quality Standards

Pollutant	Averaging Time	Primary/ Secondary	Value	Form
Ozone	8 hour (b)	Primary and Secondary	0.15 µg/m^3	Not to be exceeded more than one per year on average over 3 years
Lead		Primary and Secondary	0.15 µg/m^3	Rolling average
PM_{10}	24 hour	Primary and Secondary	150 µg/m^3	Not to be exceeded more than one per year on average over 3 years
$PM_{2.5}$	24 hour	Primary and Secondary	35 µg/m^3	98th Percentile, averaged over 3 years
	Annual	Primary	12.0 µg/m^3	Annual mean, averaged over 3 years
	Annual	Secondary	15.0 µg/m^3	Annual mean, averaged over 3 years
Sulfur Dioxide	1 hour	Primary	75 ppb	99th Percentile of 1-hr daily maximum concentrations, averaged over 3 years
	3 hour	Secondary	0.5 ppm	Not to be exceeded more than one per year

The CAA Amendments require federal actions to conform to any applicable State Implementation Plan (SIP). EPA has promulgated regulations implementing this requirement under 40 CFR Part 93. A SIP must be developed to achieve the NAAQS in non-attainment areas (i.e., areas not currently attaining the NAAQS for any pollutant) or to maintain attainment of the NAAQS in maintenance areas (i.e., areas that were non-attainment areas but are currently attaining that NAAQS). General conformity refers to federal actions other than those conducted according to specified transportation plans (which are subject to the Transportation Conformity Rule). Therefore, the General Conformity rule applies only to non-transportation actions in non-attainment or maintenance areas.

New construction and conversion activities which are located in "non-attainment" or "maintenance" areas, as determined by the EPA, may need to be modified or mitigation measures developed and implemented to conform to the SIP. The CAA (42 U.S.C. 7401 et seq.) prohibits federal assistance to projects that are not in conformance with the SIP. According to the EPA Green Book Nonattainment Areas for Criteria Pollutants, Morgan County, Colorado is not located within a non-attainment area for any major pollutants (EPA 2022).

3.8.2 Environmental Consequences

3.8.2.1 No Action Alternative

Under the No Action Alternative, the proposed project site would remain in its current condition and use. In the event this solar project is not developed, current agricultural practices will continue to generate airborne dust and emissions on a seasonal basis due to the operation of farming equipment.

3.8.2.2 Proposed Action

Ground disturbance will be minimal due to the proposed construction technique, which does not require grading for placement of the solar arrays or temporary construction roads. The

proposed project's solar arrays will be supported by H-piles driven directly into native soil and would not require grading beneath the solar arrays, therefore minimizing airborne dust.

Air pollutants would be minimized by dust suppression (watering) as needed and vehicle maintenance. The project area is currently in attainment and therefore no additional mitigation measures are required for development. Additionally, there would be no long-term air quality effects associated with routine operation of the solar project. Construction of a solar farm could alternatively reduce air emissions, as this is a renewable energy project that does not rely on sources of energy that emit greenhouse gases.

3.8.3 Mitigation Measures

Dust mitigation measures will be required during construction of the proposed solar farm. Measures may include watering of disturbed areas and sweeping or other methods to control tire track-out at intersections with construction and paved areas. Minor emissions from construction can be further reduced or mitigated through the use of BMPs. BMPs for dust control include:

- spraying water on exposed surfaces to minimize dust,
- limiting the area of uncovered soil to the minimum needed for each activity,
- siting of staging areas to minimize fugitive dust,
- using a soil stabilizer (chemical dust suppressor),
- mulching,
- using a temporary gravel cover,
- limiting the number and speed of vehicles on the site,
- and covering trucks transporting soil, sand, or other loose material off-site,
- limiting vehicle idling time,
- using low or ultra-low sulfur fuel (including biodiesel),
- conducting proper vehicle maintenance, and
- using electric-powered tools (instead of gas-powered tools).

It is anticipated that construction contractors will properly maintain their fleet of vehicles/equipment so that air emissions are kept to a minimum.

3.9 Socio-Economics andEnvironmental Justice

3.9.1 Affected Environment

The proposed project site is located in Fort Morgan, Morgan County, Colorado in an area surrounded by industrial development, agricultural/undeveloped land, and sparse single-family residences. EO 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations", provides that "each Federal agency shall make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations." The EO makes clear that its provisions apply fully to programs involving Native Americans.

According to CEQ environmental justice guidance (CEQ 1997), low-income populations should be identified with the annual statistical poverty thresholds from the Bureau of the Census' Current Population Reports, Series P-60 on Income and Poverty. In identifying low-income populations, agencies may consider as a community either a group of individuals living in geographic proximity to one another, or a set of individuals (such as migrant workers or Native Americans), where either type of group experiences common conditions of environmental exposure or effect.

The CEQ guidance identifies a minority as Individual(s) who are members of the following population groups: American Indian or Alaskan Natives; Asian or Pacific Islanders; Black, not of Hispanic origin; or Hispanic. Minority populations should be identified where either the minority population of the affected area exceeds 50 percent, or the minority population percentage of the affected area is meaningfully greater than the minority population percentage in the general population or other appropriate unit of geographic analysis. The selection of the appropriate unit of geographic analysis may be a governing body's jurisdiction, a neighborhood, census tract, or other similar unit that is to be chosen so as to not artificially dilute or inflate the affected minority population. A minority population also exists if there is more than one minority group present and the minority percentage, as calculated by aggregating all minority persons, meets one of the above-stated thresholds.

EO 12898 requires federal agencies to identify and address disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations. As defined by the EPA, environmental justice is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies.

The project site is within Census Block Group 080870006001. The population within this Census Block is approximately 1,107 with 21 percent identifying themselves as a minority and 31 percent low-income. An environmental justice community is not present (Appendix E).

EO 13166 requires agencies to examine the services they provide, identify need for services to those with limited English proficiency (LEP), and develop and implement a system to provide those services so that LEP persons can have meaningful access to them. The proposed project area is located in an area in which approximately four percent of the residents speak English less than very well (Appendix E).

According to 2015-2019 Census Data, the population of Morgan County, Colorado is 28,389 with a median household income of $57,535 and 12 percent of the population in poverty. The economy of Morgan County, Colorado employs 14,232 people. The largest industries in Morgan County, Colorado are Manufacturing (1,282 people), Health Care & Social Assistance (1,524 people), and Agriculture, Forestry, Fishing & Hunting (1,282 people), and the highest paying industries are Mining, Quarrying, & Oil & Gas Extraction ($64,306), Public Administration ($50,664), and Transportation & Warehousing ($45,787).

For economic demographic comparisons, Table 5 below compares the median household income, poverty rates, and unemployment rates between Fort Morgan, Morgan County, Colorado, and a 1-mile radius surrounding the proposed project area.

Table 5. Population, Economic, and Employment Demographics

Geographic Area	Total Population (2020 Census)	Median Household Income ($)	Poverty Rate (%)	Percent Minority Population (%)
Proposed Project Census Block Group 080870006001[1]	664	NA	N/A	24
City of Fort Morgan[2]	11,597	55,407	15.7	58.9
Morgan County[2]	29,111	70,471	11.5	44.5
Colorado[2]	5,773,714	87,598	9.4	33.5

[1]EPA EJScreen Report
[2]United States Census Bureau QuickFacts.

According to Data USA, the primary employment industry sector in Morgan County is manufacturing (Data USA n.d). Table 6 shows the number of employees by industry sector in Morgan County.

Table 6. Morgan County Industry Sector Employment

Industry Sector	Number of Employees in Morgan County	Percent of Employees by Industry Sector
Beef Processing	2,000	11.8
Cheese Processing	375	2.2
Hospital	361	2.1
Cellular Provider	300	1.8
Retail/Grocery	300	1.8
Nursing Home	379	2.2
Hospital	245	1.5
Sugar Processing	200	1.2
Oil & Gas	99	0.6
Equipment Manufacturer	95	0.6
Utility	83	0.5

NOTES: Morgan County Comprehensive Annual Financial Report For the fiscal year 2019
Table sources included in Appendix E.

3.9.2 Environmental Consequences

3.9.2.1 No Action Alternative

Under the No Action Alternative, there would be no change to current socioeconomic conditions, and no effects would occur.

3.9.2.2 Proposed Action

The Proposed Action could have a minor, short-term, temporary positive effect on the local economy as a result of construction activities via incidental spending by construction workers and the purchase of locally available construction materials. Temporary jobs would be created for construction workers during construction activities, as well as site

maintenance and groundskeeping activities. The operation of the Proposed Action could result in a social benefit to the residents of Morgan County by improving additional, reliable, energy to the area which could increase business opportunities that require such energy.

An environmental justice community is not present, and no negative socioeconomic effect is anticipated. Furthermore, the effect of stable utility rates for the 25-year life of the project may have positive long-term socioeconomic effects to the community the facility will serve. The area surrounding the site does not have a minority or low-income population even as compared to the total population of Fort Morgan, Morgan County, and the State of Colorado. As documented in other sections of this EA, the implementation of the Proposed Action would not likely lead to adverse human health or environmental effects to the general public as a whole or low income or minority populations specifically.

3.9.3 Mitigation Measures

No mitigation measures are warranted. It is expected that the project will have short-term positive effects to the community related to job creation, and long-term positive effects resulting from consistent prices for electricity.

3.10 Miscellaneous Issues

3.10.1 Noise

3.10.1.1 Affected Environment

Noise is generally defined as unwanted sound. Sound is most commonly measured in decibels (dB) on the A-weighted scale, which is the scale most similar to the range of sounds that the human ear can hear. The Day-Night Average Sound Level (DNL) is an average measure of sound. The DNL descriptor is accepted by federal agencies as a standard for estimating sound effects and establishing guidelines for compatible land uses. EPA guidelines, and those of many other federal agencies, state that outdoor sound levels in excess of 55 dB DNL are “normally unacceptable” for noise-sensitive land uses such as residences, schools, or hospitals.

The closest noise receptors to the site consist of the existing industrial food distribution center located north adjacent to the site, industrial meat packaging facility located west adjacent to the site and dispersed single-family residences surrounding the project site. The closest residences, both within 150 feet from the proposed project site, are located east adjacent to the site and south of the site.

The transmission line that connects the solar site to the existing municipal substation (the project’s point of interconnection) and electric inverters which connect the solar panels to the electric grid would likely create electrical humming, crackling or hissing noise generated by the corona effect, especially during storms or wet conditions. A corona discharge is an electrical discharge brought on by the ionization of a fluid surrounding a conductor that is electrically charged. Spontaneous corona discharges occur naturally in high-voltage systems unless care is taken to limit the electric field strength. This noise would likely be noticeable only at the solar site and existing substation property by electrical workers.

3.10.1.2 Environmental Consequences

No Action Alternative
Under the No Action Alternative, no changes to noise would be anticipated.

Proposed Action
Increases in noise levels would occur in the immediate vicinity of the proposed project site during the construction phase. However, adherence to appropriate Occupational Safety and Health Administration (OSHA) standards would protect the workforce from excessive noise (29 CFR 1926.52). Noise effects during construction of the proposed project would be short-term in duration and limited to daytime hours. Construction would involve clearing, grading, and excavating of the land. Grading would occur only in the areas where the elevation would require alteration to accommodate tracker tolerances, site drainage, and laydown areas. Equipment used would include dump trucks, bulldozers, and excavators. Construction-related noise effects are temporary in nature and would not expose people residing or working in the area to noise levels significantly above background.

Noise levels for heavy equipment used during construction are anticipated to be in the 115 dBA L_{max} decibel range at a distance of 50 feet. Noise levels reduce considerably based on distances from the source. Based on distance from receptors and the presence of applicable buffers, noise is not expected to be a concern except for workers present at the site. Electrical equipment associated with the solar farm and transmission line will be located in the existing substation, adjacent to the west boundary of the site. As such, no significant effects from noise generating activities or sources are expected as a result of the proposed solar farm operations.

3.10.1.3 Mitigation Measures
Construction will take place during normal business hours and equipment will meet all local, state, and federal noise regulations. Noise and light effects to receptors in the immediate vicinity are likely to be minimal and not distinguishable above the ambient levels. No mitigation or management measures are anticipated beyond OSHA mandated hearing protection for workers on site.

3.10.2 Transportation

3.10.2.1 Affected Environment
The analysis area consists of the immediate roadways surrounding the project area that workers would use to access the project area, the Burlington Northern Railroad to the north, an agricultural field, substation, and Barlow Road to the west, County Road R to the south, and a single-family residence to the east. Barlow Road is a paved north-south county road with a speed limit of 35 mph and County Road R is a paved east-west county road with a speed limit of 35 mph. Barlow Road intersects US Highway 34/East Platte Avenue approximately 1 mile north of the project site. US Highway 34 is a critical east-west transportation corridor in northern Colorado. County Road R intersects Colorado Highway 71 approximately 8.5 miles east of the project site. Colorado Highway 71 provides several important connections in eastern Colorado.

3.10.2.2 Environmental Consequences

No Action Alternative
The No Action Alternative would not affect transportation or associated facilities, as there would not be additional development or activities to generate additional traffic beyond current levels along Barlow Road or County Road R.

Proposed Action
Construction and operations/maintenance workers would access the project area from Barlow Road via US Highway 34 or County Road R via Colorado Highway 71. Effects to roads in the immediate vicinity, which are currently used by local workers, farmers, residents, and visitors, would result from project construction. A typical day during construction would include the transportation of workers, movement of heavy equipment, and transportation of materials. An increase in traffic would result from construction-related movement of people, materials, and equipment which would vary depending on the phase of construction. Under the Proposed Action, no street closures are anticipated and areas adjacent to the proposed project will remain accessible to property owners; therefore, no effect would be anticipated to property owners along Barlow Road and County Road R.

Travel by construction workers and transport of equipment and materials would add to the current traffic volumes on surrounding roads. Local traffic would likely be affected the most around the beginning and end of the workday. This temporary increase in traffic is expected to have a minor effect on the surrounding roadway network.

Operation of the solar facility is not expected to cause or create any long-term changes in traffic patterns; no new external roadways, intersections, upgrades, or traffic signals would be required. Traffic is likely to return to levels similar to existing conditions after project construction, as construction workers would not travel to the site during project operations. During the operations and maintenance phase, the facility will not be staffed, therefore no long-term effects to vehicle traffic would be anticipated.

3.10.2.3 Mitigation Measures
It is expected that the project will have short-term minor effects to travel in the form of increased traffic on County Road R or Barlow Road while materials and equipment are being brought to the site. Appropriate signage will be posted near the construction entrance cautioning drivers to watch for construction vehicles entering and exiting the site.

3.11 Human Health and Safety

3.11.1 Environmental Risk Management

3.11.1.1 Affected Environment
A Phase I Environmental Site Assessment was performed in accordance with ASTM E1527-13, *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*, in July 2022. The Phase I Environmental Site Assessment reviewed the site for the potential of contaminants of concern associated with current and historic use of the site and surrounding properties. The assessment included a site visit and review of government databases and historic images/maps. The assessment concluded that no

Recognized Environmental Conditions (REC) or Controlled RECs (CREC) were identified in connection with the site, by activities conducted on the site, or by adjacent properties/activities (Terracon 2022C).

3.11.1.2 Environmental Consequences

No Action Alternative
Under the No Action Alternative, no changes to human health and safety would be anticipated.

Proposed Action
No RECs or CRECs were documented on the site; therefore, risk is not anticipated.

The project does not propose adding new transmission lines or a distribution grid. Associated electrical equipment for the proposed solar facilities will be enclosed within security fencing. Since no new transmission lines are proposed, EMF is not considered a concern for this project. The greatest hazard for health and safety from high-voltage transmission lines and equipment is the risk of primary electrical shock from direct contact with equipment or conductors. Therefore, electrical lines and equipment are designed and built with safe electrical clearances, security fencing and controlled access.

Before decommissioning the project, a complete waste audit and waste reduction work plan will be completed in accordance with any applicable guidance or requirements of relevant regulations in effect at the time of decommissioning.

Typical waste material and modes of disposal, recycling or reuse are listed in Table 7. As much of the facility would consist of reusable or recyclable materials, there would be minimal residual waste for disposal due to the decommissioning of the facility. Small amounts of registrable waste materials would be managed in accordance with state requirements or subsequent applicable legislation. Residual non-hazardous wastes would be disposed of at a licensed landfill in operation at the time of decommissioning.

Table 7. Waste material and modes of disposal.

Material	Typical Mode of Disposal
Concrete foundations	Crush and recycle as granular material
Solar Panels	Reuse or recycle
Steel and aluminum racks and mounts	Salvage for reuse or recycle for scrap
Cabling Recycle	Recycle
Inverter step-up transformers, inverters and circuit breakers	Salvage for reuse or recycle for scrap
Granular material	Reuse or recycle as granular material
Oils/lubricants	Recycle
Geotextile material	Dispose in landfill
Miscellaneous non-recyclable materials	Dispose in landfill
Electrical major equipment. Main Transformer, Combiner box, Inverter Stations, Switch Gear, etc.	Salvage for reuse or recycle for scrap

3.11.2 Mitigation/Management Measures

No mitigation measures are warranted. Table 8 is a summary of environmental effects.

Table 8. Summary of Environmental Effects

Resource	Determination of Effect for Proposed Action
Land Use	Conversion from agricultural use to solar energy generation. No adverse effect
Farmland	No adverse effects. Conversion of 21 acres of farmland to energy generation. NRCS AD-1006 concluded the conversion is not permanent, therefore, is exempt from FPPA.
Formally Classified Lands	No effect. No FCLs in the project area.
Floodplains	No effect to floodplains as none occur within the project area.
Wetlands	No effects to wetlands as none occur within the project area.
Water Resources	No adverse effects to surface or groundwater. No streams within the site and no groundwater effects expected. A stormwater pollution prevention plan will be implemented.
Biological Resources (General)	No adverse effects. Limited effects, some benefit by revegetation.
Biological – T&E Species	No effects. The Proposed Action would have no effect on federally listed threatened, endangered, or proposed species or critical habitat, as suitable habitat for listed species is not available within the project area.
Biological – Migratory Birds	No effects. No nesting or foraging habitat is present within the project area.
Biological – Bald and Golden Eagles	No effects. No suitable habitat exists within or near the project area.
Biological – Invasive Species	Minimal impacts due to the spread of weed seeds. Can be controlled by mitigation measures.
Historic/Cultural Resources	No historic properties affected with SHPO concurrence.
Aesthetics	No adverse effects. Solar panels and ancillary facilities will be visible.
Air Quality	No adverse effects. The area will continue in attainment.
Socio-economic/Environmental Justice	Possibly beneficial. May create some construction jobs and will establish a stable rate for electricity for consumers.
Noise	No adverse effect. Short term and minor construction noise.
Transportation	No adverse effects. Some short term and minor effects at approaches during construction. Mitigation includes signage.
Human Health and Safety	No effects. Area will be fenced to prevent unauthorized access.

4.0 CUMULATIVE EFFECTS

The consideration of cumulative effects consists of an assessment of the total effect on a resource, ecosystem, or community from past, present, and future actions that have altered the quantity, quality, or context of those resources within a broad geographic scope. The CEQ regulations define cumulative effects as "… effects on the environment which results

from the incremental effects of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or nonfederal) or person undertakes such other actions. Cumulative effects can result from individually minor but collectively significant actions taking place over a period of time" (40 CFR 1508.7). The cumulative effects analysis considers the aggregate effects of direct and indirect effects from federal, nonfederal, public, and private actions on the quality or quantity of a resource.

The intent of the cumulative-effects analysis is to determine the magnitude and significance of cumulative effects, both beneficial and adverse, and to determine the contribution of the proposed action to those aggregate effects. In this assessment, the geographic area considered was the City of Fort Morgan and undeveloped adjacent areas. The activities considered include residential development and infrastructure improvements. The timeframe for the assessment is the next 10 years.

Past Projects
Fort Morgan has completed several projects in the past several years including a fiber optic broadband network, a fieldhouse, revitalization of Main Street, a new skatepark and an addition to the Twamore Trail system.

Present Projects
A housing development broke ground in April 2024. Riverside Homes and Gateway Park will provide single- and multi-family housing. Construction is ongoing.

Reasonably Foreseeable Projects
As of September 2024, the City of Fort Morgan is seeking bids for engineering services for an 84-acre development approximately one mile north of the project area, called the I-76 Progress Park. Design is planned for 2025. No construction schedule is available yet.

4.1 Environmental Consequences

4.1.1 No Action Alternative

Under the no action alternative, there would be cumulative effects related to the continued utilization of non-renewable sources of fuel for energy generation that emit greenhouse gases known to contribute to climate change.

4.1.1.1 Proposed Action

With the availability of additional renewable energy sources, the potential for additional commerce could occur within Fort Morgan, providing for a positive effect to the local economy without contributing to negative environmental effects. Overall, neither the No-Action Alternative nor Proposed Action would have long-term, negative cumulative effects on natural, cultural, or human resources within the project area and surrounding vicinity.

Cumulative effects which the project will contribute to include conversion of farmland to other uses that do not produce food or fiber crops. These effects are already occurring in rural areas in Colorado due to development unrelated to solar power development.

Limited information is available regarding anticipated development in Fort Morgan; however, not all planned projects are known at this time. Generally, the effects of

development include converting vegetated surfaces to hardscaped impermeable surfaces. This increases stormwater runoff and may contribute to erosion in some localized areas and an increase in pollutants entering waterways via increased runoff.

Other cumulative effects likely to occur related to development are the conversion of farmland to other uses that do not produce food or fiber products. It should be noted that this EA does not address all potential future development effects over time, but does acknowledge that

1) development in Fort Morgan will continue to occur due to increasing population (City of Fort Morgan, 2024), and
2) development will have an unquantifiable effect on biological and agricultural resources.

Wherever construction disturbs topsoil, the potential for colonization by noxious weeds exists. Noxious weed infestations reduce biodiversity, reduce crop yields, and have an adverse effect on ecosystems in general.

4.2 Mitigation Measures

Foreseeable future projects would be compatible with expanding capacities of existing industrial and commercial operations, including the construction of additional solar farms. These expansions in combination with the proposed project should not lead to increased cumulative effects on the environment provided this and future projects include mitigation measures associated with losses of farmland, minimizing soil erosion, and invasive weed management.

The increase in available renewable energy sources for the community is a beneficial cumulative impact. Renewable energy sources reduce a community's reliance on non-renewable energy sources that contribute to greenhouse gas emissions and climate change.

Community planning efforts described in Fort Morgan's Comprehensive Plan approved by the City in 2016 will help mitigate the cumulative effects of expected development.

Table 9 identifies potential cumulative effects.

Table 9. Summary of Cumulative Effects

Resource	Past and Current Uses	Proposed Action	Future Actions (10 years)	Anticipated Cumulative Effects
Land Use	Agriculture, currently vacant land	Conversion to solar energy generation	Solar power generation for the next ~25 years. Conversion from agriculture to residential and commercial development.	~20 acres converted from agriculture to energy generation. Reduction in acres of farmable land for ~25 years.

Table 9. Summary of Cumulative Effects

Resource	Past and Current Uses	Proposed Action	Future Actions (10 years)	Anticipated Cumulative Effects
Farmland	Farmland	Conversion to solar energy generation	Solar energy generation for ~25 years.	None, agricultural use can be re-established after decommissioning.
Formally Classified Lands	Not applicable	No effects	None	None
Floodplains	Not applicable	No effect to floodplains	None	None
Wetlands	None present	No effects	None	None
Water Resources	None present	No effects	Urban developments	Increase in impervious surfaces.
Biological Resources (General)	Agriculture, weeds	Limited effects, some benefit by revegetation	None	None
Biological – T&E Species	No habitat present	No effects	None	None
Biological – Migratory Birds	No habitat present	No effects	None	None
Biological – Bald and Golden Eagles	No habitat present	No effects	None	None
Biological – Invasive Species	Currently weed infested	Spead of weed seeds controlled by mitigation measures.	Beneficial after stable vegetation cover establishes	Unquantifiable but weeds will spread their seeds to other areas nearby until vegetation community becomes stable. Overall increase in potential for weed infestations due to soil disturbance.
Historic/Cultural Resources	None present	No effects	None	None
Aesthetics	Agriculture and weeds, undeveloped land	Solar panels and ancillary facilities	None	None

Table 9. Summary of Cumulative Effects

Resource	Past and Current Uses	Proposed Action	Future Actions (10 years)	Anticipated Cumulative Effects
Air Quality	In attainment	Will continue in attainment	Beneficial – current bare ground will be vegetated reducing airborne dust	Clean renewable energy benefits communities by reducing greenhouse gas emissions.
Socio-economic/ Environmental Justice	No EJ community present	Possibly beneficial. May create some construction jobs.	Will stabilize energy prices over the life of the facility	None
Noise	No noise – vacant land. Some short-term noise when land is being planted, harvested.	Short term and minor construction noise	Will not create noise. Solar panels are silent. Some low level noise from other equipment	None
Transportation	None in project area	Short term and minor effects at approaches during construction.	Traffic will not increase in the long term.	None
Human Health and Safety	No safety hazards present	None	None	None

5.0 SUMMARY OF MITIGATION

Mitigation measures will be implemented to the design, construction, and operation of this project to reduce potential negative environmental effects below the level of significance. Additionally, a number of common design and/or construction management measures will be implemented in accordance with best practices for the following resources.

5.1 Water Resources

BMPs to be implemented to protect water quality and decrease sedimentation associated with erosion include:

- Limit stockpiling of materials on-site,
- manage stockpiled materials to minimize the time between delivery and use,
- cover stockpiled materials with tarps,

- install sediment barriers around material stockpiles, storm water drainage routes, culverts, and drains,
- control sediment tracking off site by construction vehicles, and
- revegetate disturbed areas upon completion of construction.

5.2 Biological Resources

Surveys for active nests of migratory birds, including raptors, should take place before any construction activities for the proposed action. Seasonal recommendations for these surveys are listed in Table 2. If active nests are located during the pre-construction bird nesting surveys, no-disturbance buffer zones shall be established around nests with a buffer size established by a qualified biologist. Recommended buffer distances for non-raptor species likely to nest in developed and disturbed areas can vary between 50 feet and 250 feet, depending on the species. Nest buffers for raptors developed by Colorado Parks and Wildlife (CPW) vary between 0.12 and 0.5 miles, depending on species. However, many raptor species avoid nesting in human-modified landscapes. Buffer zones would be avoided during construction-related activities until young have fledged or the nest is otherwise abandoned. During operation of the site, although conflicts with active bird nests may be unlikely, the same avoidance measures should be implemented.

5.3 Historic and Cultural Properties

If buried cultural resources are discovered during construction activities, construction activity should immediately cease within a 50-foot radius and the SHPO and RUS notified within 24 hours. All twelve Tribes will be notified of an inadvertent discovery. Construction within the 50-foot radius of the find will not continue until notification from RUS is received. An inadvertent discovery plan should be developed and kept on site during construction and maintenance activities. The construction and maintenance crews will be familiar with the plan and its contents, such that they can act if an inadvertent discovery is made.

Additionally, proposed development plans must not be modified that result in ground-disturbance outside of the approximately 21-acre project area for which the Class I Records Search and Class III Archaeological Survey were conducted.

5.4 Aesthetics

No mitigation measures are warranted.

5.5 Air Quality

Dust mitigation measures will be required during construction of the proposed solar farm. Measures may include watering of disturbed areas and sweeping or other methods to control tire track-out at intersections with construction and paved areas. Minor emissions from construction can be further reduced or mitigated through the use of BMPs. BMPs for dust control include:

- Spraying water on exposed surfaces to minimize dust,
- limiting the area of uncovered soil to the minimum needed for each activity,
- siting of staging areas to minimize fugitive dust,

- using a soil stabilizer (chemical dust suppressor),
- mulching,
- using a temporary gravel cover,
- limiting the number and speed of vehicles on the site,
- covering trucks transporting soil, sand, or other loose material off-site,
- limiting vehicle idling time,
- using low or ultra-low sulfur fuel (including biodiesel),
- conducting proper vehicle maintenance, and
- using electric-powered tools (instead of gas-powered tools).

Construction contractors will properly maintain their fleet of vehicles/equipment so that air emissions are kept to a minimum.

5.6 Miscellaneous Issues

5.6.1 Noise

Construction will take place during normal business hours and equipment will meet all local, state, and federal noise regulations.

5.6.2 Transportation

It is expected that the project will have short-term minor effects to travel in the form of increased traffic on R Street while materials and equipment are being brought to the site. Appropriate signage will be posted near the construction entrance to the site.

6.0 COORDINATION, CONSULTATION, AND CORRESPONDENCE

A Request for Consultation to prepare this EA was provided to the agencies listed in Table 10.

Table 10. Consulting Agencies

Agency/Tribe	Letter Date	Response Date	Response
Environmental Protection Agency Office of Inspector General	September 16, 2022	Not applicable	No response provided
U.S. Army Corps of Engineers Omaha District	September 16, 2022	Not applicable	No response provided
Federal Emergency Management Agency	September 16, 2022	Not applicable	No response provided
Colorado Division of Water Resources	September 16, 2022	Not applicable	No response provided
U.S. Fish and Wildlife Service	September 16, 2022	Not applicable	No response provided

Table 10. Consulting Agencies

Agency/Tribe	Letter Date	Response Date	Response
Colorado Parks and Wildlife	September 16, 2022	October 3, 2022	With the small footprint of the project and its location, overall wildlife effects are expected to be negligible.
Air Pollution Control Division Colorado Department of Public Health and Environment	September 16, 2022	Not applicable	No response provided
Office of Economic Development and International Trade	September 16, 2022	Not applicable	No response provided
Morgan County Commissioner	September 16, 2022	Not applicable	No response provided
Mayor's Office, Fort Morgan	September 16, 2022	Not applicable	No response provided
Fort Morgan City Council	September 16, 2022	Not applicable	No response provided
Fort Morgan City Manager	September 30, 2022	October 13, 2022	Provided info regarding the growth of Fort Morgan.
Fort Morgan Planning and Zoning	September 29, 2022	October 3, 2022	Provided info regarding other projects in the area.
Colorado State Historic Preservation Office	September 16, 2022	September 29, 2022	SHPO recommends archaeological and architectural survey of direct and visual effects APE.
	April 14, 2024	April 15, 2024	Concurrence with "no historic properties affected."
Fort Morgan Historic Preservation Board	September 16, 2022	Not applicable	No response provided
Colorado Commission of Indian Affairs	September 16, 2022	Not applicable	No response provided
Apache Tribe of Oklahoma	September 16, 2022	Not applicable	No response provided
Arizona Governor's Office on Tribal Relations	September 16, 2022	Not applicable	No response provided
Cheyenne & Arapaho Tribes of Oklahoma	September 16, 2022	Not applicable	No response provided
Cheyenne River Sioux Tribe	September 16, 2022	Not applicable	No response provided

Table 10. Consulting Agencies

Agency/Tribe	Letter Date	Response Date	Response
Comanche Nation, Oklahoma	September 16, 2022	Not applicable	No response provided
Crow Creek Sioux Tribe	September 16, 2022	October 4, 2022	No issues or objections with the project.
Crow Tribe	September 16, 2022	Not applicable	No response provided
Eastern Shoshone Tribe (Wind River Reservation)	September 16, 2022	Not applicable	No response provided
Fort Sill Apache Tribe	September 16, 2022	Not applicable	No response provided
Hopi Tribe of Arizona	September 16, 2022	Not applicable	No response provided
Jicarilla Apache Tribe	September 16, 2022	Not applicable	No response provided
Kansas Native American Affairs Office	September 16, 2022	Not applicable	No response provided
Kewa Pueblo	September 16, 2022	Not applicable	No response provided
Kiowa Tribe of Oklahoma	September 16, 2022	Not applicable	No response provided
Mescalero Apache Tribe	September 16, 2022	Not applicable	No response provided
Montana Governor's Office of Indian Affairs	September 16, 2022	Not applicable	No response provided
New Mexico Indian Affairs Department	September 16, 2022	September 20, 2022	No comments on the project. However, requested that information on the proposed project be shared with northern New Mexico tribes.
Navajo Nation	September 16, 2022	Not applicable	No response provided
Northern Arapaho Tribe	September 16, 2022	January 31, 2023	No adverse effect on historic properties in the direct and visual APE.
Northern Cheyenne Tribe	September 16, 2022	October 18, 2022	Requested more information, such as a Class I and/or a Class III report before a determination is made.
Oglala Sioux Tribal Council	September 16, 2022	Not applicable	No response provided
Ohkay Owingeh (Pueblo of San Juan)	September 16, 2022	Not applicable	No response provided
Osage Nation	September 16, 2022 September 23, 2022 (hard copy)	Not applicable	No response provided

Table 10. Consulting Agencies

Agency/Tribe	Letter Date	Response Date	Response
Paiute Indian Tribe of Utah	September 16, 2022	September 19, 2022	We defer to the tribes closer to the project area and support the decisions they make.
Pawnee Nation of Oklahoma	September 16, 2022	October 26, 2022	The proposed project does not affect the cultural landscape of the Pawnee Nation. If additional undiscovered properties are encountered, they must be reported to us.
Pueblo of Acoma	September 16, 2022	Not applicable	No response provided
Pueblo de Cochiti	September 16, 2022	Not applicable	No response provided
Pueblo of Isleta	September 16, 2022	Not applicable	No response provided
Pueblo of Jemz	September 16, 2022	Not applicable	No response provided
Pueblo of Laguna	September 16, 2022	Not applicable	No response provided
Pueblo of Nambe	September 16, 2022	Not applicable	No response provided
Pueblo of Picuris	September 16, 2022	Not applicable	No response provided
Pueblo of Pojoaque	September 16, 2022	Not applicable	No response provided
Pueblo of San Felipe	September 16, 2022	Not applicable	No response provided
Pueblo of San Ildefonso	September 16, 2022	Not applicable	No response provided
Pueblo of Sandia	September 16, 2022	Not applicable	No response provided
Pueblo of Santa Ana	September 16, 2022	Not applicable	No response provided
Pueblo of Santa Clara	September 16, 2022	Not applicable	No response provided
Pueblo of Taos	September 16, 2022	Not applicable	No response provided
Pueblo of Tesuque	September 16, 2022	Not applicable	No response provided
Pueblo of Zia	September 16, 2022	Not applicable	No response provided
Rosebud Sioux Tribe	September 16, 2022	Not applicable	No response provided
San Juan Southern Paiute Tribe	September 16, 2022	Not applicable	No response provided
Shoshone-Bannock Tribes	September 16, 2022	Not applicable	No response provided
Southern Ute Indian	September 16, 2022	Not applicable	No response provided
Utah Division of Indian Affairs	September 16, 2022	October 10, 2022	State agency that is not applicable to this project.

Table 10. Consulting Agencies

Agency/Tribe	Letter Date	Response Date	Response
Standing Rock Sioux	September 16, 2022	Not applicable	No response provided
Ute Indian Tribe (Uintah & Ouray Reservation)	September 16, 2022	Not applicable	No response provided
Ute Mountain Ute Tribe	September 16, 2022	Not applicable	No response provided
Wichita & Affiliated Tribes	September 16, 2022	Not applicable	No response provided
Ysleta Del Sur Pueblo	September 16, 2022	Not applicable	No response provided
Zuni Tribe of Zuni Reservation	September 16, 2022	Not applicable	No response provided
Three Affiliate Tribes	September 16, 2022	Not applicable	No response provided
Nebraska Commission on Indian Affairs	September 16, 2022	Not applicable	No response provided
North Dakota Indian Affairs Commission	September 16, 2022	Not applicable	No response provided

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8.0 LIST OF PREPARERS

Table 11 lists the Terracon preparers of this EA.

Table 11. Preparers of the Environmental Assessment

Name	Title	Responsibilities
Jennifer Peters	Group Manager, Senior Associate	Senior Technical Report Review, Project Management
Jean Ramer	Senior Scientist	Project Management, Report Preparation and Review
Teresa O'Neil	Environmental Planner	Report Preparation
Reece Allen	Field Scientist	Report Preparation
Louise Brown	Technical Editor	Quality Assurance, Technical Review
Catherine Jalbert, RPA	Archaeologist	Cultural Resource Records Review
John Hall, RPA	Senior Archaeologist	Cultural Resources Quality Assurance
David Kahrs	Senior Biologist	Project Review
Trever Hartwig	Biologist and Wetland Scientist	Wetland Delineation and Threatened and Endangered Species Report Preparation
Christina L. Ruble	Environmental Professional	Phase 1 Environmental Site Assessment