File # _____

UTAH COUNTY COMMUNITY DEVELOPMENT

APPLICATION FOR A CONDITIONAL USE

Meeting Date: _____Date Received: _____

Received By: _____

Fee Paid *(Application Fee is Non-refundable):*_____Receipt #_____

Applicant's Name: Quicksilver Solar, LLC
[redacted]
Phone: 801-455-1045
Mailing Address: P.O. Box 71810, Cottonwood Heights, UT 84171
E-Mail Address:[redacted]

Subject Parcel ID:

See Tables 1 and 2 below for a list of tax parcels comprising the Project Area.

Property Owner's Name *(if different from the applicant's a written owner consent must be provided with this application):*

Myrna B Carter Properties LLC
Merrel D. Call & Marion M. Call

Subject Property Address:

None – The Project is located on vacant land located in unincorporated Utah County

Table 1. Legal descriptions, tax parcel numbers, and zone information for the Project.

Legal Description	**Tax Parcel No.(s)**	**Zone***
LOTS 2, 3, & 4; ALSO E 1/2 OF SW 1/4 OF SEC 30, T7S, R1W	59:102:0002	Mining and Grazing I
COM. AT CEN OF SEC 30, T 7 S, R 1 W, SLM; E 80 RODS; N 100 RODS; W 160 RODS; S 100 RODS; E 80 RODS TO BEG	59:102:0001	Mining and Grazing I
LOTS 1 & 2; ALSO E 1/2 OF NW 1/4 OF SEC 31, T 7 S, R 1 W	59:103:0001	Mining and Grazing I

THE NW 1/4 OF THE NW 1/4; & THE NORTHERNMOST 297 FT OF THE SW 1/4 OF NW 1/4; ALL IN SEC 2, T8S, R2W	60:026:0013	Mining and Grazing I
NE1/4 OF SEC 3, T8S, R2W	60:027:0003	Mining and Grazing I
E 1/2 OF SE 1/4 OF SEC 13, T 7 S, R 2 W	59:121:0003	Mining and Grazing I

*Source: Utah County Zoning Map

Table 2. Property owner for each tax parcel.

Tax Parcel No(s).	**Property Owner**
59:102:0001 59:102:0002 59:103:0001 60:026:0013 60:027:0003	Myrna B Carter Properties LLC, by Correction Special Warranty Deed executed on March 4, 2023, by Myrna B Carter & the Myrna B Carter Family Trust 05-20-1997
59:121:0003	Merrell D. Call and Marion M. Call, by Special Warranty Deed executed on August 4, 2021, by Merrell D. Call.

As part of the application, applicant is required to submit:

An application fee, a site plan which includes: (property boundaries, a legal description of the property, location and dimensions of all existing and proposed improvements, the uses within those boundaries, parking and on-site traffic circulation, access point(s) from the public right-of-way to the site, buildings on adjoining lots which are within 200 feet of the applicant's property line), A Letter of Intent: (a document which details the proposed use(s) and effects on the surrounding area), a list of names and addresses of all abutting property owners, and any additional information as required by law or as requested by staff

See Exhibit A attached: Quicksilver (170 MWac at a 1.265 DC:AC ratio) Site Plan (the "Site Plan")

See Exhibit B attached: Quicksilver Solar Abutting Property Owners

See Exhibit C attached: Value Impact of Commercial Scale Solar Facilities on Adjacent Properties

See Exhibit D attached: Quicksilver Phase VI Environmental Assessment

Letter of Intent and Project Overview

Quicksilver Solar, LLC ("Quicksilver" or "Applicant") requests a conditional use permit for the development and operation of an unmanned, utility-scale solar energy system as an electrical power generation plant, including electric power transmission lines, located in unincorporated portions of Utah County, Utah, referred to generally throughout this application as the Quicksilver Solar VI project (the "Project"), all in accordance with §§ 8.44(4), 12.28(C)(3) and 16.94 of the Utah County Land Use Ordinances (the "Land Ordinances"). Quicksilver is a wholly owned subsidiary of Enyo Renewable Energy, LLC ("Enyo"). Enyo is a Utah-based company whose purpose is to develop a portfolio of utility-scale solar, storage and wind power generation projects in the Intermountain West. In accordance with § 16.84(C) and (D) of the Land Ordinances and to accomplish the purposes of the Project, Applicant requests that the approval of this conditional use permit extend for at least five (5) years from the date of approval, unless the Applicant submits a building permit application prior to such date, with an option to further extend the approval expiration date for an additional twelve (12) months by providing written notice to the Planning Department prior to the expiration of the initial 5-year period.

The Project Site consists of approximately 750 acres of privately owned, open, and largely undeveloped land in remote portions of unincorporated Utah County, located approximately 4.2 miles west of Utah Lake (the "Project Site"). The northeast Project Site boundary is approximately 0.9 miles southeast of the Fairfield Town boundary and is approximately 1.5 miles south of Eagle Mountain City's southern boundary. The nearest residence is located approximately 1.0 miles north of the Project Site in unincorporated Utah County. The Project Site is currently located in a Mining and Grazing Zone ("MG-1 Zone").

The Project will consist of the following components: photovoltaic solar panels and all accessory uses and facilities incidental thereto, such as steel racking and single-axis tracking system, electrical inverters and transformers; underground and above ground wires and cables for the transmission of electrical energy or for communication purposes, together with foundations, towers, footings, cross arms and other appliances and fixtures; one or more substations, interconnection and/or switching facilities; energy storage facilities; and access roads, fences, and gates, as generally shown on the Site Plan. The Site Plan is intended to be conceptual and to show the general location of the proposed facilities. The Applicant will prepare a more detailed Site Plan as part of a building permit application that is consistent with the requirements of the approved conditional use permit. The solar facilities (other than facilities located adjacent to any Quicksilver Project (as defined below) facilities) will be surrounded by a 6-foot- high chain-link fence with 3 strands of barbed wire at the top, which will be angled outward to discourage climbing and to protect the Project Site against unauthorized access and animals. The Project will also have a 20-foot-wide access road around the perimeter of the Project Site, just inside the fence line, except where the Project Site abuts an adjacent Quicksilver Project parcel, as noted below.

The Project may be developed on the Project Site as one project or in phases as separate projects, depending on the needs and requirements of the power offtaker. Regardless of the number or size of each phase, a phased Project layout is not expected to materially differ from the Site Plan, but certain Project facilities, collector line routes, and access roads, would be used in common to support all phases of Project development. Additionally, key Project facilities that are required for all phases, such as the access road to Soldiers Pass Road, will be constructed as part of the first phase.

The Applicant, through an affiliate, has purchase contract- with the property owners to acquire the Project Site. The Project Site is accessible to Lake Mountain Road (a Class B road – Recorded Road File 250011) by

means of access routes across adjacent parcels for which Applicant has previously obtained a conditional use permit for a solar energy system as an electrical generation plant on adjacent parcels (see Appeal No. 1616 for the conditional use permit issued to Applicant on May 4, 2023, recorded on May 10, 2023 as Entry No. 29653:2023 and Appeal No. CU2024-01, recorded on May 23 2024 as Entry No. 34121:2024 (collectively, the "Quicksilver Project"). This Project is intended to be developed and operated as an integrated facility with the Quicksilver Project. As such, any requirements set forth in this Application or any conditions of approval applicable to a shared boundary with a non-Project parcel or Project perimeter shall not apply to any boundary between a Project parcel and a Quicksilver Project parcel. Following completion of construction, the Project will be unmanned and accessed by maintenance employees two to three times per week for regular routine inspections and maintenance. As an unmanned facility, the Project is therefore not subject to the requirements of §§ 4.44 and 4.48 of the Land Ordinances.

The Project is consistent with the purposes of an MG-1 Zone, which is to, among other things, promote the conservation of water, land, mineral, and other resources, and to provide a location for certain types of uses that are not compatible with urban development. Specifically, the Project will not require water to operate and does not generate any waste by-products, toxic emissions, or air pollution. Rather, the Project will serve as a reliable source of renewable energy for the state of Utah. Moreover, given the nature of the Project, existing public facilities have adequate capacity to serve the Project. The Project design incorporates reasonable fire protection measures that enhance the Project's safety and minimize the risk of harm to firefighters and other public safety officers. Given the Site's isolated location and other characteristics, the Project is not reasonably anticipated to generate any detrimental effects on adjacent property or land uses.

Accordingly, approving this conditional use permit is in the best interest of the County and would meet the standards of approval as found in § 16.94 of the Land Ordinances, each as addressed in the following questions:

a. The applicant shall have submitted a properly completed application form signed by the property owner.

Yes, this form has been properly completed and has been properly signed by the property owner.

b. The land use ordinance specifically identifies the conditional use in question as one which the Planning Commission is empowered to approve.

Applicant requests a conditional use permit for a utility-scale solar energy system as an electrical power generation plant. The Project Site is located in an MG-1 Zone. An electrical power generation plant is a conditional use within a MG-1 Zone if approved by the Planning Commission. Under the Land Ordinances, a utility-scale solar energy system is classified as an electrical power generation plant.

The Planning Commission has the authority to grant this conditional use permit in accordance with §§ 12.28(C)(3) and 16.94 of the Land Ordinances.

c. The use shall comply with all of the terms and requirements of the land use ordinance, including but not limited to UCLUO 4, UCLUO 6, UCLUO 8, and UCLUO 12.

Yes. The Project will comply with all applicable regulations of the Land Ordinances, as stated in Section 3 hereunder:

1. State the conditional use desired:

As set forth in this Application, the proposed use of the Project Site is for an unmanned, utility-scale solar energy system. The Project Site consists of approximately 750.46 acres.

The primary components of the solar energy system are the solar arrays. Solar PV arrays consist of individual modules that convert solar energy into electricity. This electricity is then transmitted to inverters that change the electrical output of the modules from direct current (DC) to alternating current (AC). From the inverters, the electricity is transmitted to the Quicksilver Project Substation, located in North half of Section 25 Township 7 South Range 2 West, via an underground collection line network. At the Project Substation, the voltage will be stepped up from 34.5 kV to 138 kV or 345 kV. Based on current PV technology, the Project is expected to include 358,425 Q. Peak Duo XL-G11.3 or equivalent crystalline silicon (monofacial or bifacial) modules with an individual name plate capacity of 595 watts (W) each. It should be noted that the manufacturer, type, number, and capacity of modules may change depending on the PV technology available at the time of procurement.

The solar modules will be mounted on north-south-oriented, single-axis tracker racking systems that will allow the modules to track the sun from east to west throughout the day, maximizing power generation efficiency. The height of the solar arrays will vary from approximately 4 feet above ground when the panels are horizontal to a maximum of approximately 10-12 feet above ground at maximum tilt. Other components of the Project include, without limitation, transmission and distribution lines, interconnection facilities, access roads, gates, and a perimeter fence with 3 strands of barbed wire at the top, which will be angled outward to discourage climbing.

The output for this Project is estimated to be approximately 170 MWac and the estimated value of the Project is approximately $236,000,000.

2. State the Section in the ordinance which allows the Planning Commission to approve the conditional use applied for and, state how the land is being used at the present time and what changes are proposed by this appeal:

The Project Site currently consists of privately owned, open, and undeveloped land in a remote section of unincorporated Utah County, Utah. As stated above, the Commission has the authority to grant this conditional use permit in accordance with §§ 12.28(C)(3) and 16.94 of the Land Ordinances.

The Project is compatible with the public interest and characteristics of the surrounding area. The Project Site is in a remote location within the MG-1 Zone, approximately 5 - 7 miles from the nearest residential area. With the exception of a single residence approximately 1.0 miles north of the Project Site, the surrounding area is mostly undeveloped and vacant or is otherwise used for non-irrigated open range and grazing purposes. The Project Site will not remove high-value agricultural land from production, as none of the areas designated as Prime Farmland if Irrigated or Farmland of Statewide Importance are currently irrigated, nor are they reasonably expected to be irrigated in the foreseeable future (*see* **Exhibit D** – Quicksilver Phase VI Environmental Assessment). Much of the Project Site has already been disturbed via past cultivation and/or degraded by overgrazing, ORV use, dumping, target shooting, wildfires, as well as the introduction and spread of cheatgrass. The Project Site will revert to its original open state at the end of the Project's life cycle. As noted elsewhere in this Application, the Project will redevelop underutilized property for

productive use and will generate many benefits to Utah County by significantly expanding the County's tax base.

Further, the Project conforms to the characteristics and purposes of an MG-1 Zone. The specific characteristics and purposes of an MG-1 Zone are found in § 12.28 of the Land Ordinances and are as follows: Zoning District: "(1) To take advantage of and more fully implement the basic purposes for planning and zoning as set forth in Utah Code, as amended; (2) To promote the conservation of water, land, mineral, and other resources; (3) To foster livestock grazing and mining industries within the county; (4) To provide a location for certain types of uses which, due to odor, noise, danger, etc., are not compatible with urban development; [and] (5) To ensure the development of adequate public facilities to match private development."

The Project is consistent with the characteristics and purposes of an MG-1 Zone. The Project does not require water to operate and will not generate any waste by-products, and therefore, will function to conserve water and other resources. The Project promotes the efficient use of natural resources and supports the growth and development of clean energy production. Due to the overall size of the Project, the Project cannot be located near or within urban areas of the Utah County. Through the transformation of currently underutilized property, the Project will expand and diversify Utah County's industrial tax base and provide significant benefits to Utah County's taxing entities through the increase in both real and personal property taxes. Moreover, the Project will generate many new jobs for Utah County during the construction phase.

In addition, the Project conforms to the goals and objectives of the Utah County Master (General) Plan (the "General Plan"). The goal of the General Plan is set forth in §2.02 of the General Plan, which provides as follows: "It is the desire of Utah County citizens, the Utah County Legislative Body, and the Utah County Planning Commission to have a pleasant and progressive county in which people can live and work, without sacrificing the traditional rural atmosphere inherent in the unincorporated areas of the county while protecting the quality of life in the incorporated municipalities and respecting the rights of private property owners."

To support the General Plan's stated goal, the Project complies with and is consistent with the following objectives:

- §2.12 Objective 5: Maintain prime and other agricultural land in active production and retain the traditional rural nature of the unincorporated county - The Project is not on prime or other agricultural lands and will not impact agricultural production located on prime agricultural land in the County.
- § 2.14 Objection 6: Support a variety of methods to preserve agricultural land - The Project itself is not located on prime agricultural land. As noted in this Application, the construction of the Project will likely have minimal short- and long-term impacts on the surrounding area and agricultural uses. Additionally, during the Project's lifecycle, the Project will prevent the area from being developed for other uses such as residential, commercial, industrial, or other non-agricultural uses. Moreover, at the conclusion of the life cycle of the Project, the land will revert to its original state as open space.
- §2.28 Objective 13: Preserve and protect natural resources and open space – The Project promotes the efficient use of natural resources and supports the growth and development of clean energy production, with minimal resources required for operations. Moreover, the general characteristics of the Project and the minimal height of any of the Project's facilities will preserve open space and protect open sight lines throughout the Project Site.

- §2.30 Objective 14: Adopt policies for careful use of water and other natural resources - The Project does not require water to operate and does not generate any waste by-products. The Project Site is not irrigated and will not impact any existing irrigation or sewer systems. Solar energy generation facilities do not generate toxic emissions, air pollution and do not affect the viewshed. The lighting on site will be minimal. The remoteness of the Project Site also aids in minimizing any impacts to the County's water and other natural resources.

3. Are all the standards stated in the Land Ordinances, including but not limited to those found in §§ 4, 6, 8, and 12 of the Land Ordinances, met by this appeal?

Yes. The Project will comply with all applicable regulations of the Land Ordinances, as described below:

- §4.08 Yards to be Unobstructed – The Project layout will promote the efficient use of the Project Site and will comply with all yard and setback requirements.
- §4.12 Storage of Junk, Debris and Obsolete Vehicles in Yards Prohibited – No structure, accessory structure, yard, field or open space will be used for the placement of junk, debris, or obsolete vehicles.
- §4.16 Rendering Plants – The Project or the Project Site will not be used for livestock or as a rendering plant.
- §§ 4.20 through 4.28 Yards and Setbacks - The Project will comply with all yard and setback requirements.
- §§ 4.32 through 4.40 Dwellings – No dwellings will be on the Project Site. As such, these regulations do not apply to the Project.
- §4.44 Frontage on an Approved Public Street Required, Exceptions – This section does not apply because the Project will have no dwellings, manned industrial plants, or other facilities or structures occupied by humans on the Project Site. The Project will be an unmanned facility.
- § 4.48 Motor Vehicle Access – This regulation does not apply because the Project will not have frontage on an official county road, city street, or state road or highway. Moreover, the Project will have no dwellings, commercial establishments, manned industrial plants, or other facilities or structures occupied by humans on the Project Site. The Project will be an unmanned facility.
- § 4.56 Storage of Trucks in Certain Zones Prohibited - The Project will not be used for the storage of trucks.
- § 4.60 Off-Street Parking and Loading - No parking is required on the Project because there are no dwellings or other structures requiring a minimum number of parking spaces on the Project Site. Parking on the Project Site will be minimal and limited to operations and maintenance vehicles to accommodate personnel expected to visit the Project Site for routine inspections and maintenance.
- § 4.64 Off-Street Loading Space Required – The Project will have no buildings that receive or distribute goods, merchandise or supplies by vehicle.
- §§ 4.68, 4.72 Setbacks – The location of all Project facilities comply with the setback requirements.
- § 4.76 Fences and Walls – The Project will have a fence and gates, approved by the County Engineer and County Fire Marshall, that comply with all setback and height requirements.
- § 6.04 Health Department Approval, Water and Sewer – The Project will be unmanned

and does not require a potable water supply facility and/or a sanitary sewage disposal facility.

- § 6.08 Drainage - Any drainage occurring on or from the Project is naturally occurring and not from manmade structures, which will be unaffected by the Project.
- § 6.12 Flood Protection – No structure will be constructed within 100 feet from the banks of a stream, gully, or other flood channel, and the Project will not interfere with the flow of water.
- § 6.16 Flood Protection in Special Flood Hazard Areas – The Project Site is classified as an area of minimal flood hazard Zone X and is unlikely to be affected by flooding.
- § 6.20 Avalanche Hazard Mitigation – The Project Site is not located in a known avalanche path.
- § 6.24 Exposed Slopes to be Less Than the Critical Angle of Response – There will be no cut or fill shape in a final slope that exceeds the critical angle of response.
- § 6.28 Open Pit Extraction of Earth Products – There will be no sand, gravel, topsoil, rocks or minerals that will be extracted by an open pit method.
- § 8 Uses With Special Review Provisions – Supplementary Requirements and Procedures Applicable Within Zones – There are no special review provisions, supplementary requirements or procedures for solar energy systems.
- § 16.28 Utility Installation Unlawful Without Permit – The Project will obtain all necessary permits to install any electrical utility lines on the Project Site.

4. Will granting this request result in a situation which has a disproportionate demand for government services on any of the following essential services: roads and access for emergency vehicles and residents; fire protection; police protection; schools and school busing; water, sewer, and storm water facilities, and garbage removal?

No. Due to the nature of the Project, there will be minimal to no impacts to the provision of essential services. A general assessment of Project-related impacts to essential services is provided below.

1. Traffic / Roads and Access for Emergency Vehicles and Residents

The lifecycle of the proposed Project consists of three phases: (1) construction, (2) operations and maintenance, and (3) decommissioning and reclamation. Traffic levels will vary within and across each of these phases. Peak project-related traffic occurs during construction when construction workers would be commuting to/from the Project Site and solar modules, steel racking materials, inverters, substation components, fencing, and other project materials will be delivered. Pre-construction improvements to county roads and post-construction road repairs will be addressed, if and as needed, through a county road use agreement. The road use agreement would be negotiated with Utah County following approval of this conditional use permit. Construction parking will be provided on a gravel pad located on the Project Site. It is expected that heavy equipment and other machinery would be stored onsite to limit interference with daily travel patterns.

During operation and maintenance phases, four or five workers are expected to make visits to the Project Site. At the end of the Project's life cycle, which is anticipated to occur 30-plus years following commencement of operations, the Project will be decommissioned and removed from the Project Site in accordance with the decommissioning plan. Solar facilities are typically dismantled, and the materials reused and recycled or sold as scrap. Project decommissioning and reclamation will necessitate a short period of increased vehicle traffic to and from the Project Site. Overall existing traffic volumes on area roads would remain low.

As discussed below, the Project will contain a 20-foot-wide perimeter fire access road to provide a defensible space around the solar energy generating equipment (provided that this requirement shall not apply to any portions of the Project that are integrated with the Quicksilver Project on adjacent parcels,

in which event the perimeter fire access road may be located on the Quicksilver Project parcels where applicable). Additionally, the Project will have 12- foot-wide internal access roads, spaced 600 feet apart (i.e., a 300-foot hose pull distance to all site features) and passable by the anticipated fire protection vehicles that would be responding to an emergency event at the Project Site.

2. Fire Protection and Police Protection

Given the low level of activity on the Project Site once the Project is operational, the Project is not anticipated to significantly impact or strain the County's fire and police services. As noted elsewhere in this application, the Project Site, together with the Quicksilver Project site, will be fenced and secured by locked gates and will not be accessible to the public. In the unexpected event of an emergency, the site layout provides for adequate spacing between banks of solar panels and fencing to accommodate emergency vehicles and firefighting equipment. Upon installation of locked gates, a key to the secured locked gates will be provided to the fire department. Additionally, the Project will implement the following fire protection measures:

- Proper storage of flammable and hazardous material during construction and operation of the facility.
- A 20-foot wide, perimeter fire access road to provide a defensible space around the facility (provided that this requirement shall not apply to any portions of the Project that are integrated with the Quicksilver Project on adjacent parcels, in which event the perimeter fire access road may be located on the Quicksilver Project parcels where applicable).
- Internal access roads with a width of at least 12 feet, spaced 600 feet apart (i.e., a 300-foot hose pull distance to all site features) and passable by the anticipated fire engines that would be responding to the facility.
- Site roads designed as looped access throughout the Project.
- A 12-foot-wide buffer area devoid of vegetation (either treated with placement of rock material or provided with ongoing maintenance to prevent vegetation growth) established outside the perimeter fence.
- Herbaceous vegetation maintained at low levels around panels and the perimeter fences.
- Site completely fenced with chain-link and barbed-wire fencing material.
- Gravel base with no vegetation in the substation and equipment laydown areas.
- Multiple 26-foot-wide chain-link and barbed-wire gates with fire-accessible padlocks, located at regular intervals around the perimeter of the Project (which gates may be located on the Quicksilver Project Site if the emergency access point is for the Project Site is located on the Quicksilver Project Site).
- Regular inspections of electrical equipment.
- First responders able to put the trackers in the horizontal stow "safe" position by flipping a switch/switches to allow for the greatest clearance from ground level to the tracker assembly. Back-up power to be provided to ensure this feature works when needed.
- First responders able to de-energize the entire Project Site.
- Portable carbon dioxide (CO_2) fire extinguishers provided at all inverters and medium-voltage transformer units.
- Consistent and clear labeling and warning placards provided on all electrical equipment.
- Contact information provided for reliably available key personnel who can assist responding firefighters with technical aspects of the Project.

With the above design features, the Project is not anticipated to adversely affect or impact the County's provision of essential fire and public safety services to the surrounding community. Consequently, no adverse impacts to public safety are reasonably anticipated.

3. Schools and School Busing / Population Density

There are no residential uses as part of the Project. Thus, significant Project-related changes to population density are not anticipated. During Project construction, there may be a temporary increase in construction workers coming from outside the local community, but such increases are unlikely to have any impact on the local schools or population density. Rather, the Project will generate significant new real and personal property tax revenues for the benefit of Utah County schools without increasing demand any such services.

4. Water, Sewer, Storm Water Facilities and Garbage Removal

Solid waste generated during construction will be recycled where commercially feasible or stored in closed dumpsters. Portable toilets will be available on-site during construction. A third-party contractor will empty dumpsters and portable toilets on a periodic basis.

Water required for construction (e.g., dust control, mixing concrete for inverter pads, fence posts and other structure foundations) will be procured from an existing, permitted source.

Following the start of commercial operations, the Project will be an unstaffed facility. Consequently, during the operation and maintenance phase of the Project there will be no need for potable water, sewer, and solid waste removal.

5. Please identify any mitigation measures or conditions of approval you are proposing which will lessen the impacts of this conditional use to the surrounding area (*please identify all which would apply including those not included in this list with an explanation: parking, traffic improvements, on-site stormwater retention facilities, site security improvements, fire protection, facilities, water, sewer, and/or garbage facilities, landscape screening to protect neighboring properties, requirement for the management and maintenance of the facilities, limited hours of operation, limited use of equipment emanating offensive noise, light, dust, or traffic, structure modifications, light pollution mitigation, other measures).*

The applicable mitigation measures for the reasonably anticipated impacts of the Project noted in this Application include the following:

a) Implementation of fire suppression and safety measures as more particularly described in Section 4 of this Application; requiring that only authorized personnel with the proper training be allowed to access the Project Site; and ensuring routine maintenance and inspections of the Project in accordance with industry best practices, as well as other measures set forth in this Application, all of which mitigate potential injury, loss of life and property damage to firefighting and emergency medical service agencies (see §16.94(c)(1) of the Land Ordinance);

b) Securing the Project Site with locked gates and a six-foot-tall chain-linked fence with barbed wire angled outward to discourage unauthorized access to the Project Site, which mitigates potential injury, loss of life, and property damage and the need for added peace keeping activities (see §16.94(c)(2) of the Land Ordinance);

c) Implementing a fugitive dust abatement plan as further discussed in Section 6 of this Application and a lighting plan that minimizes light pollution to the surrounding area during Project construction (although glare is not expected to cause a nuisance as the Project Site is located 1.6 miles east from the nearest residence and contains a low profile), which together mitigate potential nuisance factors (see §16.94(c)(18) of the Land Ordinance);

d) Entering into a road use agreement with the County to manage impacts of Project construction traffic on County roads as well as further mitigation measures described in Section 4 of this Application, which mitigates potential creation of traffic hazards and the potential degradation of level of service of area roadways (see §16.94(c)(6) and (12) of the Land Ordinance);

e) Appropriately disposing of waste material during construction and operations and following all related county codes and ordinances, which together mitigate potential determinantal effects on the natural environment of the site and surrounding area (see §16.94(c)(13), (14) of the Land Ordinance);

f) Identifying and avoiding all wetlands and waters of the US during the construction and operation of the Project; implementing the construction mitigation measures for avian species noted in Section 6 of this Application; complying with all applicable water and air quality regulations and codes; and preparing and submitting a stormwater drainage plan prior to the issuance of a building permit that will adequately provide for stormwater drainage from the Project Site and limit potential detrimental effects on the natural features of the site and the surround area (see §16.94(c)(8), (13) and (14) of the Land Ordinance);

g) Providing the Project Site with all necessary telecommunication and electric services (see §16.94(c)(11) of the Land Ordinance);

h) Implementing a decommissioning plan that will return the Project Site to its original open state at the end of the Project's useful life, which mitigates potential detrimental effects on the natural features and environment of the site and surrounding area (see §16.94(c)(13) and (14) of the Land Ordinance) and will restore the site as the use terminates in order to mitigate aesthetics (see §16.94(c)(17) of the Land Ordinance);

i) Providing a setback of 50 feet for all Project generation facilities from any shared boundary with a non-Project parcel (excluding any shared boundary with a Quicksilver Project parcel) and surrounding the Project Site with a six-foot tall chain-linked fence, all of which, is consistent with other permitted uses adjacent to the Project Site, which provides buffering and screening from adjacent land uses (see §16.94(c)(15) of the Land Ordinance); and

j) Complying with all applicable standards found in the Land Ordinances as well as all applicable federal, state, and local regulations.

No additional mitigation measures are proposed where there are no reasonably anticipated detrimental effects, as discussed below:

a) Portable toilets will be provided and regularly maintained by a third party during the construction phase of the project; no sanitary sewer services will be provided at the Project Site during the operation phase due to the unmanned nature of the project; therefore, no additional mitigation measures are proposed regarding sanitary sewer service or facilities (see §16.94(c)(10) of the Land Ordinance);

b) The Project Site is not located in an area that has been identified as having a one percent chance

of flooding or a known geologic hazard; therefore, no additional mitigation is proposed (see §16.94(c)(4) of the Land Ordinance);

c) Due to the unmanned nature of the Project, minimal onsite parking will be needed at the Project Site during the operation of the Project; during construction, parking will be provided on a gravel lot within the Project Site; no additional mitigation is proposed (see §16.94(c)(7) of the Land Ordinance); and

d) The project does not require culinary, secondary, or irrigation water or facilities nor does it affect irrigation facilities or infrastructure thus, there is no anticipated detrimental effect and no proposed mitigation (see §16.94(c)(9) of the Land Ordinance);

6. State any other details about this appeal which you want the Commission to be aware of.

a) Local Tax Benefits

The Project is consistent with both the General Plan and the objectives of an MG-1 Zone and will provide significant public benefits to the County in terms of new construction jobs and increases to the County's tax base without increasing demand for any County services. As shown below, the Project Site yielded only $2,185.55 in tax revenues to Utah County in 2024. Over the life of the Project, the Project is anticipated to generate approximately $22,440,000.00 in tax revenues over 30 years for Utah County's taxing entities.

Parcel ID	Taxes 2024	Taxes 2023	Taxes 2022
59:102:0001	$4.21	$3.93	$4.03
59:102:0002	$8.43	$7.85	$8.07
59:103:0001	$6.74	$6.28	$6.45
60:026:0013	$2.12	$1.98	$2.03
60:027:0003	$6.74	$6.28	$6.45
59:121:0003	$2,157.31	$2,003.30	$2,194.22

b) Property Values

The applicant previously obtained and submitted to the Board of Adjustment a report prepared by J Philip Cook titled "Value Impact of Commercial-Scale Solar Facilities on Adjacent Properties," dated October 7, 2021, in connection with Applicant's conditional use permit for the Quicksilver Solar project (*see* Action by the Board of Adjustment, Appeal No. 1595, Conditional Use, recorded on October 13, 2021 as Entry No. 175090:2021), which is adjacent to the Quicksilver Solar VI project. A copy of this report is attached as **Exhibit C**. The authors of the report concluded that proximity to a utility-scale solar energy generating facility does not impact property values based on the information and studies that were addressed in the report.

Given that the site characteristics and surrounding land uses are very similar between Quicksilver Solar and Quicksilver Solar VI projects, the finding in the report also applies to the Quicksilver Solar III project.

Additionally, given the Project's remote location, low profile, and lack of development within its vicinity, it is unlikely to affect neighboring properties by casting a shadow, generating glare, or otherwise materially affecting viewsheds. Therefore, no adverse effects to local property values are reasonably anticipated.

c) Impacts to Public Health, Safety and Welfare

As noted above, the Project will not produce any effluents, toxins, air emissions, or solid wastes in the process of generating electricity and, as a result, is anticipated to have no impact on public health, safety, and welfare. Rather, the Project will serve as a reliable source of renewable energy for the state. Moreover, Project operations and maintenance activities will generate minimal dust, and no fumes, unsightly conditions, or pollution. Night lighting may be required on occasion for maintenance and repair operations, but such instances will be temporary, short-term disturbances and unlikely to affect public health, safety, and welfare given the distance between the Project Site and existing residences.

The Project will not introduce invasive species, does not contribute additional noise to the area, and there will be little traffic to and from the Project. While the Project Site is approximately 1.0 miles south of the nearest residence, it is approximately 5 - 7 miles from the nearest business or residential area in Eagle Mountain City and Fairfield Town, UT.

During construction, impacts to air quality due to the generation of fugitive dust will be minimized by implementing a fugitive dust abatement plan including the use of water trucks or other soil stabilizers during construction to minimize any detrimental effect to public welfare. Such dust control measures will be used in compliance with applicable county and state laws. Project access roads, temporary parking, staging, and laydown areas, and Project substations will have gravel surfaces to limit dust generation during all phases of the Project's lifecycle.

d) Impacts to Wildlife and the Environment

The Applicant obtained an Environmental Assessment, which is attached to this Application as **Exhibit D**, which concludes that the Project will have minimal environmental impact. Additionally, the Applicant intends to engage in a similar consultation process with Utah Division of Wildlife Resources ("UDWR") that the Applicant undertook as part of the permitting process for the Applicant's Quicksilver Solar I and II projects that are adjacent to the Project. Following such consultation, the Applicant will implement the mitigation measures proposed by UDWR to mitigate any reasonably anticipated detrimental effects of the Project on area wildlife, in particular, avian species as noted in the Environmental Assessment, and the environment.

To prevent environmental contamination, standard best management practices will be followed for the storage, handling, spill prevention, clean-up, and disposal of motor fuels, oil, compressed gas, etc., used during construction and operation of the Project.

e) Decommissioning Plan

The Applicant will submit a decommissioning plan prior to the issuance of any building permit for the Project, which will include provisions for the removal of all Project structures and foundations (to a depth of three (3) feet), electrical equipment, internal access roads and the restoration of any soils or vegetation disturbed by the reclamation activities (the "Decommissioning Plan"). Additionally, along with the Decommissioning Plan, the Applicant will submit a decommissioning bond for the estimated costs to remove the Project facilities in accordance with the Decommissioning Plan in a form approved by the Utah County Attorney's Office.

In addition to the information provided in the previous sections of this Application, the Project will also be subject to the following conditions:

1. That building permits or other applicable land use permits for all applicable proposed structures and uses be obtained that meet all applicable zoning, building, health, and fire-safety requirements, including applicable setback requirements.

2. That construction and use of the solar energy system comply with all applicable local, state, and federal regulatory standards, including the National Electric Code, as amended. This includes, but is not limited to, regulations related to any applicable threatened or endangered species, along with any impacts to historic, cultural, and archaeological resources.

3. That the solar energy system be constructed and operated in compliance with all applicable requirements of the Federal Aviation Administration (FAA), particularly as it relates to potential solar glare impacts.

4. That the applicant submits and receive approval from the Utah County Engineer of any applicable Storm Water Pollution Protection Plan (SWPPP) and land disturbance permit prior to the issuance of any permits for the establishment of the solar energy system.

5. That the applicant submits evidence of site control of the Project Site and access agreements prior to the issuance of any permits for the establishment of the solar energy system that authorizes the Applicant to use the Project Site as a solar energy system and provides for site access and maintenance across any parcels not adjacent to a public road.

7. To the best of my knowledge, the above information is accurate and complete.

Applicant:

Quicksilver Solar, LLC,
a Delaware limited liability
company

By: _____
[redacted]

This Application for a Conditional Use is acknowledged and consented to by:

Landowner:
Myrna B. Carter Family Trust

[redacted]

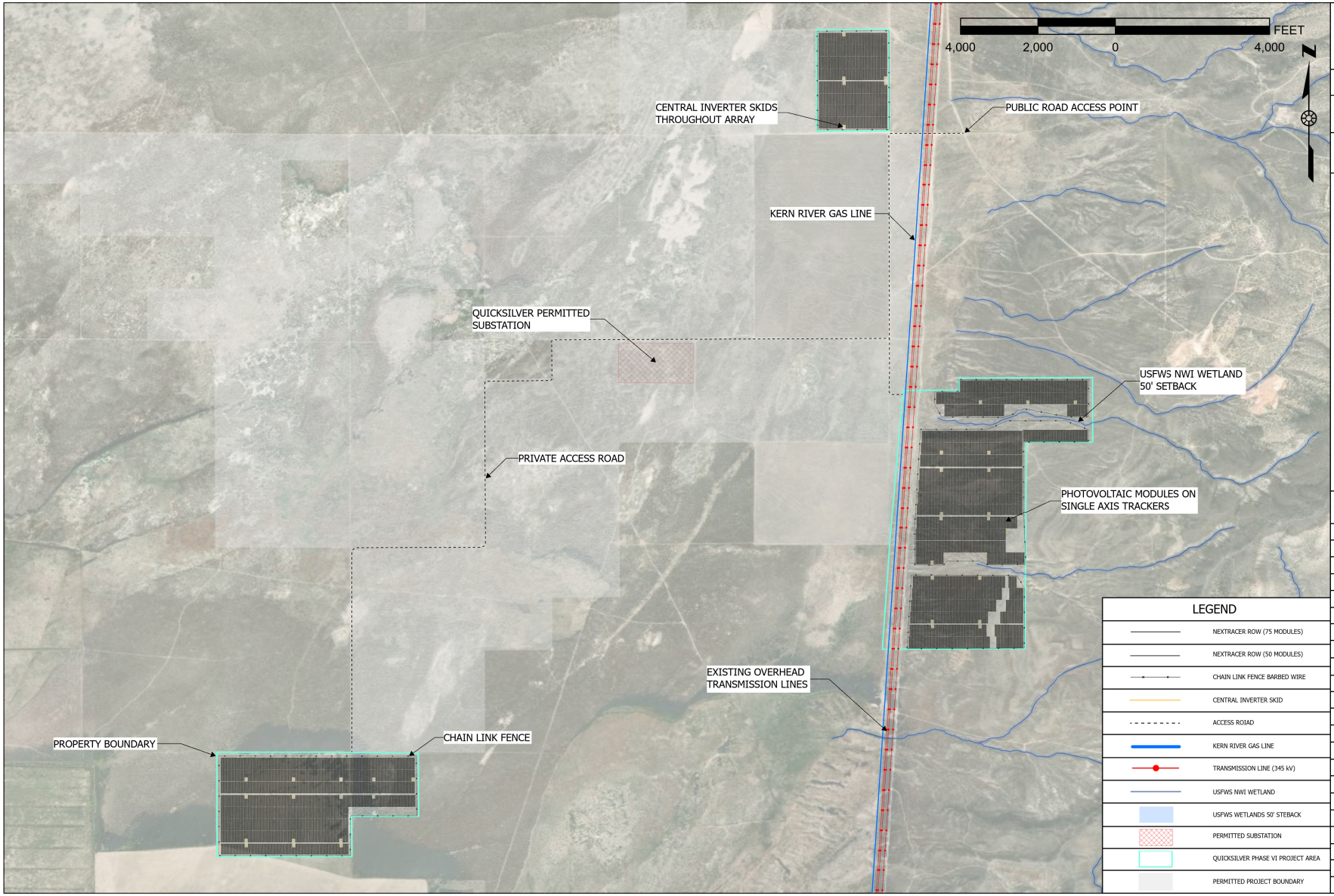
This Application for a Conditional Use is acknowledged and consented to by:

Landowner:
Merrell D. Call

[redacted]

Exhibit A:

Quicksilver (170 MWac at a 1.265 DC:AC ratio) Site Plan (the "Site Plan")



ENYO

PROJECT NUMBER: UT-2025-0006

SHEET TITLE: SITE PLAN

NOT FOR CONSTRUCTION

QUICKSILVER VI (170 MW)

UTAH COUNTY, UT

#	REVISION	DATE	ID
2	LIDAR DATA COLLECTED, ARRAY UPDATED BASED ON REFINED SUITABILITY MASKS	7/08/2025	RE
3	ADDED WETLANDS, ACCESS ROADS, AND PERIMETER FENCE	7/10/2025	RE
4	ADDED ACCESS ROAD, SUBSTATION, AND PERMITTED PROJECT BOUNDARY	7/11/2025	RE

PROJECT DETAILS

LATITUDE	112.0249961°W
LONGITUDE	40.1916116°N
INTERCON. VOLTAGE	345 kV
LEASED AREA	750.46 ACRES
FENCED AREA	628 ACRES
FENCE LENGTH	9.95 MILES
WIND LOAD	105 MPH ASCE 7-10
SNOW LOAD	CUSTOM STUDY REGION
DC CAPACITY	211,775.4 KW
AC CAPACITY	170,000.0 KW
DC:AC RATIO	1.265
STRUCTURE	NEXTRACKER (75 & 50 MODS/ROW)
TRACKER ROWS	(4,583 X 75); (244 X 50)
AZIMUTH	180 DEGREES
GCR	50%
MODULE	Q.PEAK DUO XL-G11.3
MODULE CAPACITY	595W
MODULE QUANTITY	358,425
STRING SIZE	25
INVERTER	POWER ELECTRONICS FS3430MU
INVERTER CAPACITY	4,200 KVA
INVERTER QUANTITY	40

Exhibit B:

Quicksilver Solar Abutting Property Owners

Exhibit B: Quicksilver Solar VI Abutting Property Owners

AMERICAN REALTY CORPORATION
2105 W 4700 S TAYLORSVILLE, UT 84118

ORTEGA, ESTEVEN A & XIAOLI
1314 E 11400 S SANDY, UT 84092

D AND V PROPERTIES
2045 E 6060 S SALT LAKE CITY, UT 84121

WELCH, JEFFREY RAY & JOLENE T
10681 S 540 E SANDY, UT 84070

WENZEL, ANTHONY M & DEBRA A (ET AL)
6667 S 3235 W WEST JORDAN, UT 84084

HOYT, RICHARD VON & DEBORAH LEE BARNWELL (ET AL)
814 E GREEN VALLEY DR MURRAY, UT 84107

BOLINDER, DAVID
2045 E 6060 S HOLLADAY, UT 84121

LAKE MOUNTAIN LAND CO LLC
PO BOX 71810 COTTONWOOD HEIGHTS, UT 84171

CARSON, VERN REED & CARLENE K
212 N SR 73 FAIRFIELD, UT 84013

PECK, CAMMY C & TYLER H (ET AL)
1119 N 1710 E LEHI, UT 84043

UTAH STATE DEPT OF NATURAL RESOURCES
675 E 500 S STE 500 SALT LAKE CITY, UT 84102

MONTE VISTA RANCH LC
PO BOX 33009 INDIALANTIC, FL 32903

BOWLES FAMILY HOLDINGS LLC
2105 W 4700 S SALT LAKE CITY, UT 84118

BTRUE LLC (ET AL)
1143 W CENTER ST BLACKFOOT, ID 83221

HOLDBROOK, BRYAN & VALERIE
149 E HEPPLER LN SARATOGA SPRINGS, UT 84045

MYRNA B CARTER PROPERTIES LLC
13218 S 6200 W HERRIMAN, UT 84096

Abutting at Corner Only

B-BAR RANCH LC
650 N CENTER ST LEHI, UT 84043

ROJAS, CARLOS REYES (ET AL)
981 N 2020 W LEHI, UT 84043

HICKCOX, BRENT R & BETHNE
9206 SOLENA WY SANDY, UT 84093

BOLINDER, DAVID V
2045 E 6060 S HOLLADAY, UT 84121

Exhibit C:

Value Impact of Commercial Scale Solar Facilities on Adjacent Properties

J Philip Cook LLC

EXPERT REPORT

VALUE IMPACT OF COMMERCIAL-SCALE SOLAR FACILITIES ON ADJACENT PROPERTIES

LOCATED IN SECTIONS 19 & 30, TOWNSHIP 7 SOUTH RANGE 1 WEST AND SECTIONS 24, 25, 26 & 35, TOWNSHIP 7 SOUTH, RANGE 2 WEST UNINCORPORATED UTAH COUNTY, UTAH

PREPARED FOR:
HOLLAND & HART
Ms. Adrienne Bell
222 S Main Street, Suite 2200
Salt Lake City, Utah 84101

Submitted by:
J. Philip Cook, MAI, CRE
Richard C. Sloan, MAI
J Philip Cook, LLC
3115 E Lion Lane, Suite 310
Salt Lake City, UT 84121

FILE NUMBER: 21-10-13PC
Case Code: hrere-21240

DATE OF REPORT:
October 7, 2021

TABLE OF CONTENTS

I. INTRODUCTION

At your request, we have analyzed the market value impact on properties proximate to a commercial scale solar farm proposed to be developed by Quicksilver Solar, LLC ("Quicksilver"), located south of Fairfield and Eagle Mountain in Sections 19 & 30, Township 7 South, Range 1 West, and Sections 24, 25, 26 & 35, Township 7 South, Range 2 West, Unincorporated Utah County.

This report describes our work and summarizes our opinions and the foundation of those opinions. Our opinions set forth herein are stated within a reasonable degree of professional certainty. The opinions and findings expressed herein are based on our knowledge, skill, experience, training, education, and work to date, and the facts as we understand them. This report has been prepared solely in connection with a Utah County Board of Adjustment matter involving the Quicksilver site and is intended for no other use.

II. QUALIFICATIONS

J. Philip Cook is the principal of J Philip Cook, LLC, a real estate appraisal and consulting firm doing business throughout the United States. Mr. Cook has 41 years full-time appraising and consulting experience and holds a BS degree in finance with a real estate emphasis and an MBA from the University of Utah. He holds certified general appraiser status in multiple states on full-time and temporary bases. Mr. Cook has taught real estate principles and appraisal and investment courses as an assistant professor adjunct for the University of Utah, and the Uniform Standards of Professional Appraisal Practice update course and Appraisal Principles for the Appraisal Institute. He has served in elected office and board appointments for national, regional, and state organizations, and has served as a member and chairman of the Utah State Appraiser Board, a governor-appointed position.

Mr. Cook's primary focus is complex assignments. Such matters include value impact studies, unitary (state) and local property tax disputes, real estate damages resulting from construction defects, environmental contamination, delay, breach of contract, and negligence claims, eminent domain, inverse condemnation, class action certification, bankruptcy, foreclosure, trespass, and appraiser liability claims. He also provides services in closely scrutinized matters such as property right donations (e.g., conservation easements and income/inheritance tax matters), as well as services for a variety of other purposes. His experience covers all real estate markets including single-family homes, land, multifamily residential and commercial properties, large golf- and ski-oriented master planned communities and other land development projects, special-purpose and recreational properties, and a variety of other income producing assets.

Mr. Cook has provided appraisal, consulting, and expert witness services to city, county, state and federal government, financial institutions and mortgage companies, insurance and pension funds, professional firms, public and private corporations, and individuals. Mr. Cook has given testimony in over 150 matters.

III. SCOPE OF WORK

We have been engaged to evaluate the value impact, if any, on lands proximate to a commercial-scale solar farm ("Project"), proposed for development on 1,614.17 acres located within Sections 19 & 30, Township 7 South, Range 1 West, and Sections 24, 25, 26 & 35, Township 7 South, Range 2 West, unincorporated Utah County.

Whether a property use (generically, "*project*") has a positive, negative, or neutral impact on adjacent and other nearby properties ("proximate lands") depends on the nature of the land use and its compatibility with the highest and best use of the proximate lands. Every project is locationally specific and requires focused study given characteristics unique to the study area.

Various techniques have been developed within the appraisal industry to address value impacts of specific land uses on adjacent and nearby properties. These include direct sales comparison, paired data analysis, income shortfall,[1] and consideration of secondary studies. Because the Project is proposed, and because the impacts of solar farms generally have not been widely studied as yet, the most applicable methodology is paired data analysis, which is defined as:

> "A quantitative technique used to identify and measure adjustments to the sale prices or rents of comparable properties. To apply this technique, sales or rental data on nearly identical properties, or adjusted data, is compared to isolate and estimate a single characteristic's effect on value or rent."[2]

A few secondary studies addressing value impacts of commercial-scale solar farms have been published. Most of these address the value impact on proximate residential properties, and thus have more limited comparability to the Project, which is not in an area likely to be developed residentially in the short to mid-term. However, an overview of secondary studies is completed.

To address the value impact of the Project, the following work has been completed.

- Identify the locational and Project characteristics;
- Analysis of highest and best use of proximate lands;
- Development of paired data analysis;
- Overview of secondary studies with Project-applicability.

III. BASIS OF THIS EXPERT REPORT

The purpose of this expert report is to develop an opinion regarding the value impact on the fee simple interest in proximate lands of Quicksilver's solar farm Project as if complete. The effective date of our analysis and this report is October 7, 2021. The client is Ms. Adrienne Bell with Holland & Hart, counsel for Quicksilver. The intended users are the client, Quicksilver, and the Utah County Board of Adjustment. The intended use is to assist in Quicksilver's request for conditional use approval of the Project.

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1 See, e.g., Real Estate Valuation in Litigation, pp. 295-296.
2 The Dictionary of Real Estate Appraisal, 6th ed., 2015, The Appraisal Institute, p. 167.

Because this report communicates the results of our analysis of value impacts, it is prepared as an Appraisal Report pursuant to Standards 1 and 2 of the Uniform Standards of Professional Appraisal Practice ("USPAP") 2020-2021 Edition.

IV. SUMMARY OF EXPERT OPINION

As supported herein, our primary finding, based on the remote location of Quicksilver's Project, current Utah County zoning and potential future zoning from either Fairfield or Eagle Mountain, based on the existing zoning and the Eagle Mountain General Plan for the area, and development pressures in the Cedar Valley/Soldiers Pass Road area generally, that the Project has a neutral impact on land values, with one caveat.

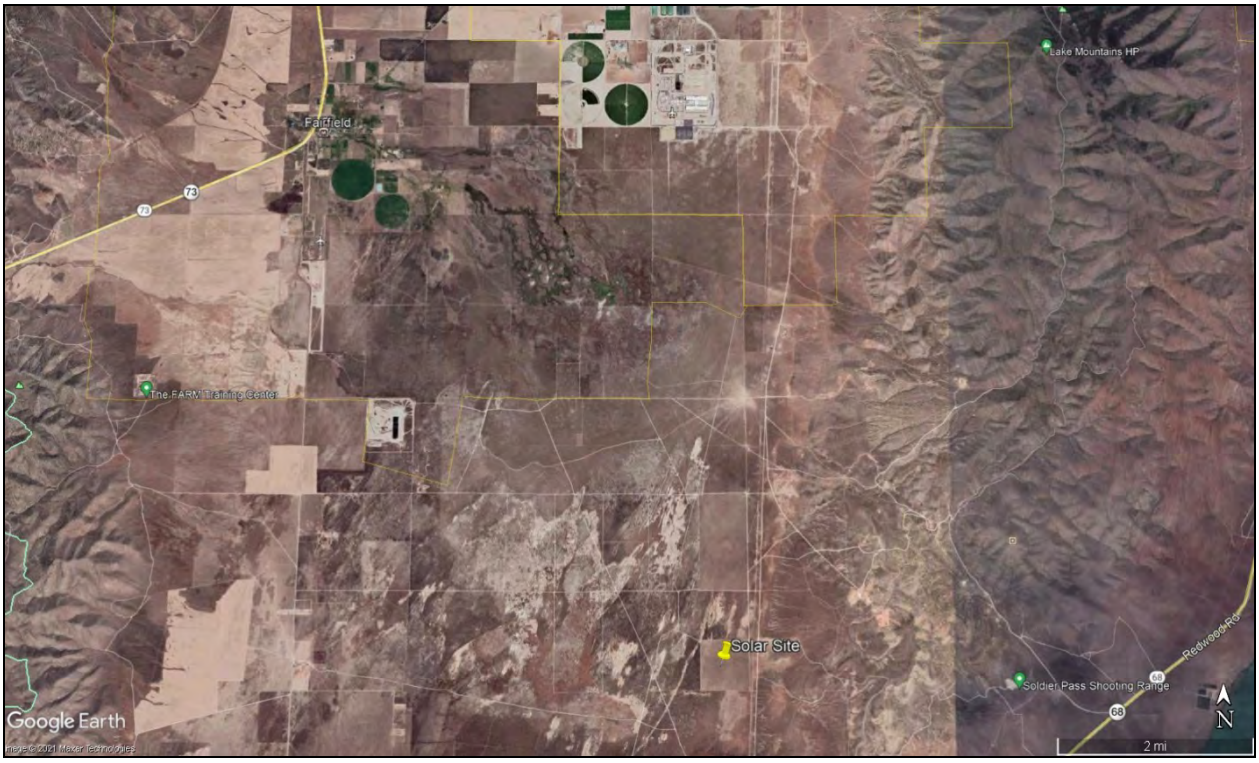
The caveat is that Quicksilver paid premium prices to assemble the land necessary for the Project, which is likely to reset base land values in the area to a higher level than would otherwise exist. The Project therefore has a one-time positive impact on property values.

V. AREA AND PROJECT DESCRIPTION

Location Description

Please see the neighborhood aerial maps below on which the Project site is shown.


Rush Valley
Flat Top Mountain
Cedar Fort
West Mercur
Fairfield
Saratoga Springs
Lehi
American Fork
Pleasant Grove
Orem
Provo
Provo Peak
Utah Lake
Solar Site
Springville
Spanish Fork
Vernon
West Mountain
Payson
Salem
Elk Ridge
Spring Lake
Genola
Elberta
Santaquin
Eureka
W 5200 S Goshen
Google Earth
10 mi
N


Lake Mountains HP
Fairfield
The FARM Training Center
Solar Site
Soldier Pass Shooting Range
Redwood Rd
Google Earth
2 mi
N

The Project is located in the south half of the Cedar Valley in unincorporated Utah County, west of Utah Lake and south of Fairfield and Eagle Mountain. The Salt Lake International Airport is located approximately 41 miles north, while the Salt Lake City CBD is roughly 40 miles northeast. Provo, which is the Utah County seat, is located roughly 18 miles to the east, although no direct route is available due to Utah Lake.

The corporate jurisdictions of Fairfield and Eagle Mountain are located 1.15 and two miles to the north, respectively. Fairfield is primarily an agricultural town with a very low population base and limited commercial base. Inversely, Eagle Mountain is a master planned community focusing on residential and recreational uses. While significant residential growth has occurred over the recent years, both single and multi-family, vacant land and agricultural uses still abound.

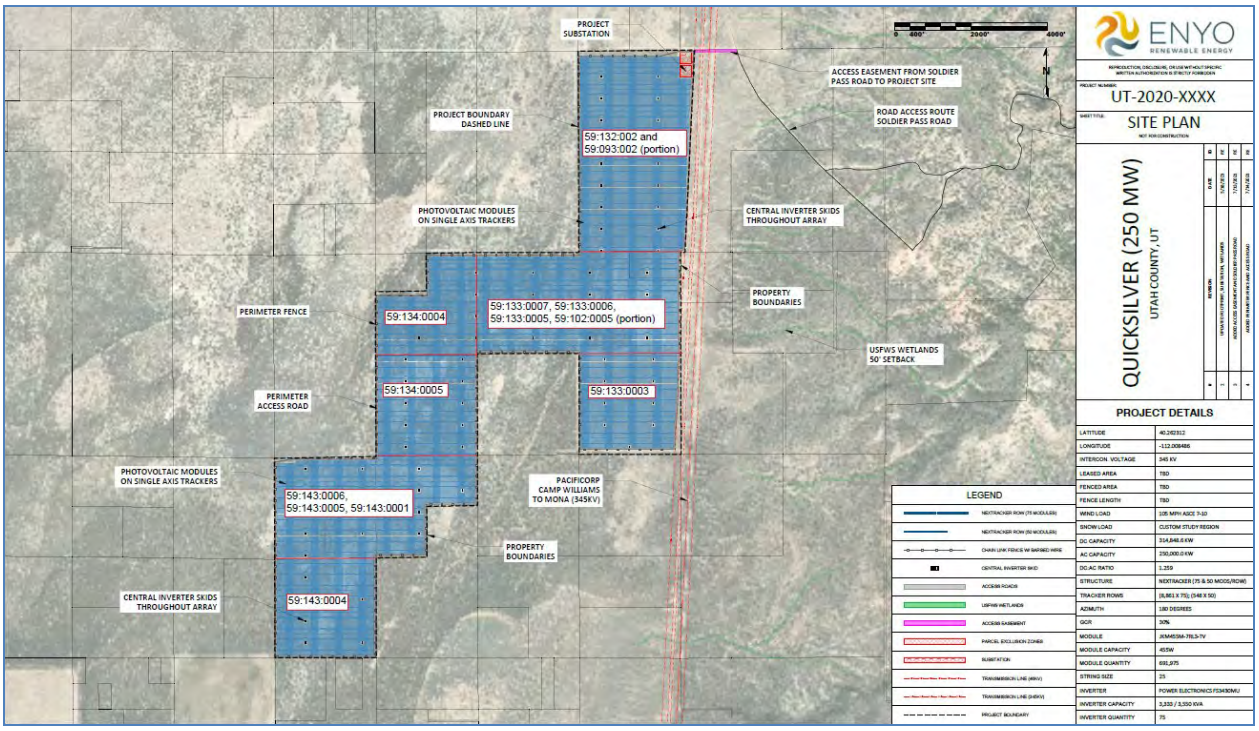
The Project is located in a rural area used primarily for agricultural purposes, mainly grazing with some crop production, and recreational uses, with almost no development within a four-mile radius of the Project site. The only non-agricultural or recreational use in the area is the Intermountain Regional landfill, located 2.75 miles northwest of the Project site, and a gravel extraction operation one mile east of the Project along Soldier Pass Road. It is unknown if the gravel pit is still operational, but the BLM reportedly just approved another gravel pit in the general vicinity. A 345kV electrical transmission line also extends north/south through the valley, adjacent to the Project site.

In 2018, Facebook announced plans to build a large data center campus on the south end of Eagle Mountain. It includes two buildings totaling 970,000 square feet that are under construction, with a third building totaling 500,000 square feet announced in 2020. The three buildings represent more than $1 billion in capital investment. Additionally, Tyson Foods is constructing a beef and pork processing plant east of Highway 73 on the south side of 4000 North. The plant represents a $300 million investment and will employ an estimated 1,200 people when it opens in the latter half of 2021. A large amount of infrastructure was installed to accommodate the plant. The Facebook and Tyson Foods facilities are located 4.0 miles east and 7.5 miles northwest of the Project, respectively. The nearest residential development in Eagle Mountain is roughly 6.60 miles to the north.

Major roads in the area include Highway 73/Cedar Fort Road, Pony Express Parkway, and Eagle Mountain Boulevard, none of which are within five miles of the Project. Highway 68 (West Lake Road/Redwood Road) is located roughly 3.5 miles to the east on the east side of West Lake Mountain, with access via Soldier Pass Road.

Site Description

The Project site contains an estimated 1,614.17-acre site located in Sections 19 & 30, Township 7 South, Range 1 West, and Sections 25, 26 & 35, Township 7 South, Range 2 West. The site is irregular in shape with near level topography. There are no utilities in the area. Access to the Project is via an easement over private land from Soldier Pass Road. Surrounding land uses are primarily agricultural or recreational in nature with almost no development in the surrounding area. The area is bisected by a 345 kV electrical transmission line which extends north/south through the Cedar Valley adjacent to the Project area. The Project is shown in the following site plan.



Zoning in the area is M&G-1 (mining and grazing) under the jurisdiction of Utah County. Per the zoning code, "The M&G-1 Mining and Grazing Zone covers the dry mountain and desert areas of the county. Limitations imposed by climate, topography, soil capability, inadequate water supply, and the presence of economically significant mineral deposits has identified this zone as a place for the grazing of livestock on the open range, the mining of earth products, and the location of activities and industrial operations which are not appropriate near urban centers." Additionally, two of the specific purposes of the zone, as stated within the code, are to, "…foster livestock grazing and mining industries within the county," and to, "…provide a location for certain types of uses which, due to odor, noise, danger, etc., are not compatible with urban development."

Uses permitted by zoning include, but are not limited to, mines, both underground and open pit; sand and gravel pits; concrete and asphalt batch plants; mineral reduction or processing plants; oil, gas and water wells; dairy and mink farms; fish hatcheries; plant and tree nurseries; one-family dwellings and manufactured homes with a minimum lot size of 50 acres; public parks, minor campgrounds, and marinas; hunting preserves and shooting ranges; equine facilities, and windmills. Conditional uses include race tracks for automobiles and motorcycles; correctional institutions; electrical power generation plant, which would include solar farms; fairgrounds, rodeo arenas, and horse race tracks; livestock auction yards; and sanitary landfills.

Highest and Best Use – Before the Project

The following analysis of highest and best use is for properties in the Project area on a generalized basis. Please see the maps presented previously on which location of the Project site is shown along with the general area.

Highest and best use is defined as, "...the reasonably probable and legal use of vacant land or an improved property that is physically possible, appropriately supported, financially feasible, and that results in the highest value."[3]

There are four tests of highest and best use implicit within the foregoing definitions. These include: (1) physically possible, (2) legally permitted, (3) financially feasible, and (4) that use which having met the foregoing tests results in the highest present land value.

■ Physically Suitable. Tracts in the general area are typically large acreage properties ranging in size from about 30 to over 600 acres, although there are a few small lots with less than 10 acres in the general area. The area is located in the Cedar Valley west of Utah Lake and West Mountain. Topography is generally level, with more sloping terrain on the benches and foothills of the valley.

Access to the area is by county dirt roads extending easterly from Highway 73, which is located over five miles northwest of the Project site. No utilities are available. Homes within the area not located within a city jurisdiction generally have septic systems, propane tanks, and either have water wells or haul in water. The nearest residential development in Eagle Mountain is 6.30 miles to the north.

Access and availability of utilities are significant physical limitations to development.

■ Legally Permitted. The subject is zoned MG-1 under the jurisdiction of Utah County. This zone is oriented towards agricultural uses as well as mining and other types of more heavy industrial type uses. Single-family residential development requires a minimum of 50 acres per residential lot. The intent of the zone is to support agricultural and mining uses, as well as to, "…provide a location for certain types of uses which, due to odor, noise, danger, etc., are not compatible with urban development." Permitted and conditional uses were outlined previously. Based on zoning, continued agricultural use is likely, with the potential for mining and other industrial type uses.

There is also the likelihood that land in the area will eventually be annexed into Eagle Mountain or potentially Fairfield. To determine what type of development may occur in the Project area in the future, the Annexation Area, Future Land Use, and Transportation Map for Eagle Mountain was reviewed, along with the current Fairfield Permitted Land Use map. A copy of these maps is presented in the addenda of this report. While neither map covers the southern portion of the Cedar Valley extensively, the maps do provide some indication of future land uses.

The Eagle Mountain annexation plan includes land south of the city up to the northern border of the Project site, excluding land already located within Fairfield. With the construction of the Facebook facility near the south border of Eagle Mountain, land around the new facility is designated as Tech Campus with a future land use of Business Park/Light Industry. Zones that fall under the Business Park designation include Light Manufacturing/Distribution, Medical/Educational Campus, and Office Professional. As shown on the annexation map, this land use covers the future annexation area south of Eagle Mountain west of the 345kV line, up to the northern boundary of the Project site. This area is also covered by the Regional Technology and Industry Overlay Zone under which the Facebook

[3] Appraisal Institute, *The Appraisal of Real Estate*, 15th Edition, Chicago, Illinois, Appraisal Institute, 2020, p. 306.

facility was developed. Based on this, the uses extending southward from Eagle Mountain are business park type uses, including light industrial.

As to land uses within Fairfield, the most easterly section of land adjacent to Eagle Mountain and the Facebook facility is zoned for light industrial uses, while the most southerly section of Fairfield is zoned for heavy industrial uses, having been developed as a landfill. Apart from these two industrial sections, the majority of the east half of Fairfield is zoned A-40, requiring a minimum of 40 acres per lot. The higher density residential land in Fairfield is located near the town center along Highway 73. Based on the Fairfield zoning map, uses most proximate to the Project area is industrial or agricultural/very low density residential in nature.

Overall, in considering the foregoing, land uses around the proposed Project site are already slated for, or trending to, industrial/business park type uses and/or very low density rural residential development, even before consideration of the Project. While land use can certainly change in the future, current land use planning in the area does not suggest single-family development. This is consistent with the current M&G-1 zoning in the area which allows for agricultural and industrial type uses.

- Economically Feasible. Economic feasibility relates to supply and demand factors for any given use. Buyers of this type of property typically purchase land for agricultural and recreational uses and investment speculation. The lack of road and utility infrastructure poses significant limitations as it would not prove feasible to extend this infrastructure into the area for development purposes. This is evidenced by the fact that virtually no development has occurred in the area. Given the area's zoning and remote location, investment speculation with continued agricultural and recreational uses maximizes value.

- Maximally Productive. Highest and best use for properties in the general area of the Project is concluded to be for investment speculation for future industrial uses, with a continuation of agricultural and recreational uses in the interim.

Project Description

Quicksilver is proposing to develop a 200 to 400 MW solar farm on the site, either in phases or all at once, depending upon demand. Quicksilver is requesting a conditional use permit from Utah County for the Project.

The Project is described as follows in the Utah County Board of Adjustment Application for a Conditional Use ("Application").

"The Project will consist of the following components: photovoltaic solar panels and all accessory uses and facilities incidental thereto, such as steel racking and single-axis tracking system, electrical inverters and transformers; underground and above ground wires and cables for the transmission of electrical energy or for communication purposes, together with foundations, towers, footings, cross arms and other appliances and fixtures; one or more substations or interconnection or switching facilities; energy

storage facilities; and access roads, fences, and gates, as more fully described and shown on the Site Plan. The solar facilities will be surrounded by a 6-foot high chain-link fence with 3 strands of barbed wire at the top, which will be angled outward to discourage climbing and to protect the Project Site against unauthorized access and animals. The Project will also have a 20-foot-wide access road around the perimeter of the Project Site, just inside the fence line."

"The solar modules will be mounted on north-south oriented single-axis tracker racking systems that will allow the modules to follow the sun from east to west, tracking the sun to maximize efficiency. The height of the solar arrays will vary from approximately 4 feet above ground when the panels are horizontal to a maximum height of approximately 15 feet above ground at maximum tilt. Project substation components will be shorter than the transmission towers. Other components of the Project include substation facilities, energy storage facilities, access roads, transmission facilities, and a perimeter fence with 3 strands of barbed wire at the top, which will be angled outward to discourage climbing. No transmission towers that exceed 40 feet in height for the Project's gen-tie lines are proposed as part of this application….The minimum and maximum output for this Project is estimated to be between 200-400 MW and the estimated value of the project is between $220 million - $450 million.."

Additional Project details and claims within the Application include:

- The life-cycle of the Project is estimated to be around 30 years,
- [A]t the conclusion of the life cycle of the Project, the land will revert to its original state as open space,
- The Project does not require water to operate and will not generate any waste byproducts,
- The Project will not produce any effluents, toxins, air emissions, or solid wastes in the process of generating electricity,
- The Project is anticipated to have no impact on public health, safety, and welfare,
- [D]uring the Project's lifecycle, the Project will prevent the area from being developed for other uses such as residential, commercial, industrial, or other non-agricultural uses,
- Given the Site's isolated location and other characteristics, the Project is not reasonably anticipated to generate any detrimental effects on adjacent property or land uses,
- Given the Project's remote location and lack of development within its vicinity, the Project is unlikely to affect neighboring properties by casting a shadow, generating glare, or otherwise materially affecting viewsheds,
- [T]he Project is not anticipated to have any adverse effect on local property values.

Project Impact

The issue at hand is what is the impact of the Project on the surrounding neighborhood, both immediate and long-term. While the Project developer, Quicksilver, asserts that there is no negative

impact from the Project on neighboring properties, property owners in the area opine that the proposed Project is detrimental to the surrounding properties.

Per a letter from Mr. Troy Smith and Mr. Greg Jackson, which was distributed to property owners in the area, several of the neighboring property owners are concerned about the impact of the proposed Project on their properties. As written in the letter, these neighbors expressed concern that, "*once this solar facility is built, it is unlikely that our properties will develop into residential neighborhoods. If development is allowed, it will likely be zoned as light industrial, which is significantly less valuable than residential or commercial.*" Additionally, "[e]*ven if houses are permitted to be built near the facility, academic research indicates that they will be worth less than similar houses not near such a facility. Depending on what the future path of development would have been without the facility, this could cost some of us hundreds of thousands or millions of dollars*." Not discussed in the letter is to what distance from the proposed Project these potential damages extend.

In considering these concerns, it is appropriate to remember that the Project area is miles away from any significant development, improved road access, and utilities. There is a significant amount of more developable residential land to the north in the Eagle Mountain/Cedar Fort, Saratoga Springs area that will likely develop first, and the necessary infrastructure is not in place to support development in the area at this time. Development of the Project area is a long-term prospect.

While land use can certainly change in the future, existing zoning and current land use planning in the area does not suggest single-family residential development. The current M&G-1 zoning allows for agricultural use along with more industrial type uses, including mining, sand and gravel extraction, cement and asphalt batch plants, mineral reduction and processing plants, and dairy and mink farms, among other uses. As stated in the zoning code, one of the reasons for the M&G-1 zone is to, "…provide a location for certain types of uses which, due to odor, noise, danger, etc., are not compatible with urban development." This suggests more industrial type uses and/or continued agricultural use.

Additionally, as discussed previously under highest and best use, land uses emanating from Fairfield and Eagle Mountain are industrial or Business Park in nature, consistent with the Facebook facility and existing landfill, as well as continued agricultural use and very low-density residential development. Highest and best use for properties in the general area of the Project was previously concluded to be for investment speculation for future industrial development, with a continuation of agricultural and recreational uses in the interim.

Based on the foregoing, land uses in the Project area are already slated for, or trending to, industrial/business park type uses and/or very low density rural residential development, even before considering development of the Project, and not the residential neighborhoods suggested in the letter. Regardless, any development in the area will not be in the short or mid-term.

To determine if there is any support within the market for a diminution in value resulting from proximity to commercial-scale solar facilities, we have researched potential paired sales and reviewed secondary studies. This information is presented in the following sections below. It is noted that the paired sales analyses and studies reviewed are all from the current time period and reflect current thought patterns, whereas development of the Project area is a long-term prospect and any damages

resulting from the Project, if any, will not be incurred until development occurs. As such, it is unknown if market views towards solar farms will change in the intervening period with the growth in renewable energies and the continued decommissioning of carbon-based power plants.

VI. PAIRED DATA ANALYSIS

In the absence of sales that are directly comparable to the subject that have been similarly impacted by a detrimental event, paired sales analysis is typically used. This involves comparing two or more properties that are alike in all or most respects except for the detrimental impact on one of the properties. If the difference between two sales can be isolated to an impact of a detrimental event, an adjustment to the before condition value can be measured, thus leading to an after value of the property and to an estimate of damages.

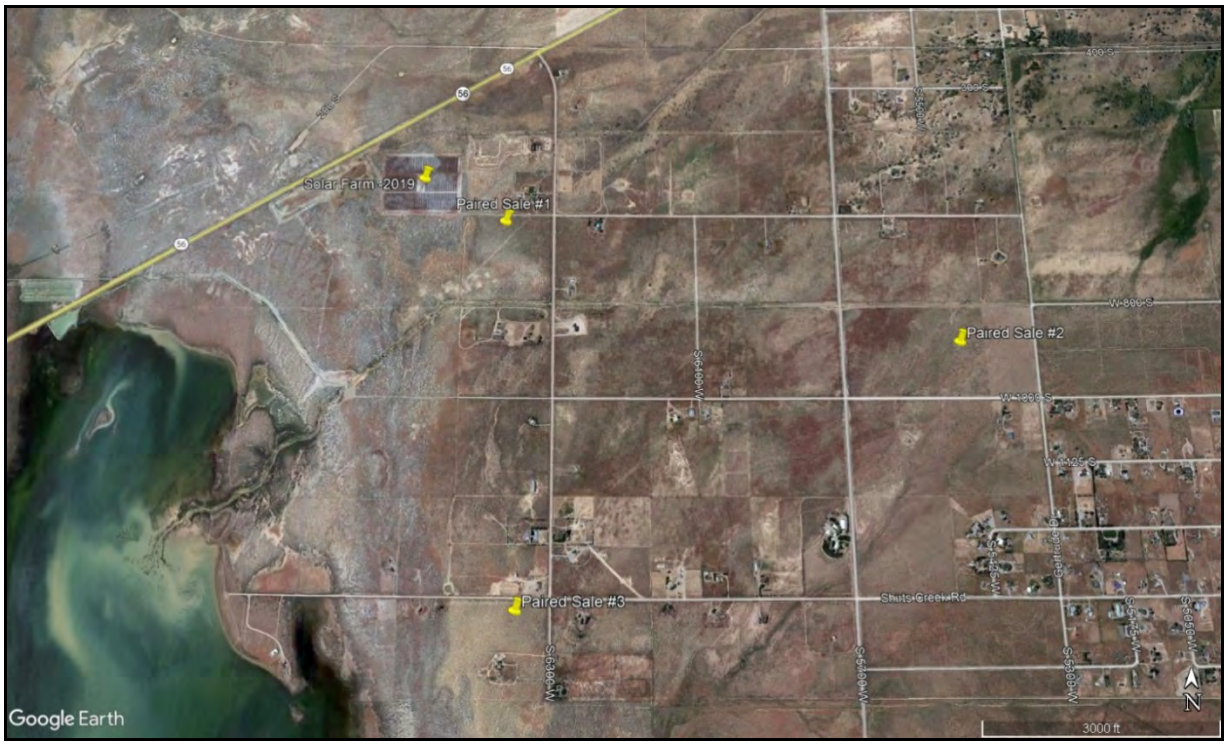
Paired sales analysis is particularly useful in damages cases where the impact on value of one variable, such as a fire, can be isolated and measured. Specifically, sales of properties that are quite similar except for the variable studied are compared to ascertain the value impact of the variable studied, which in this case would be proximity to a solar farm.

Ideally, the sales selected for paired analysis will have few differences. Real estate is unique, however, and finding sales that are exactly alike other than the variable studied is unlikely. Accordingly, it is often necessary to equate the data to each other by applying adjustments for differences other than the variable studied, with any remaining variance attributed to the studied variable.

Generally, the unimpaired sale is adjusted for applicable variances in order to equate it to the impaired sale. The remaining difference between the unimpaired sale and the impaired sale is the indicated value diminution or damage. For land pairings, price variances are typically attributed to eight factors: property rights conveyed, financing terms, conditions of sale, expenditures made after purchase, market conditions (date of sale), location, physical factors, and use (density).

Sales of land with proximity to solar facilities are limited. However, we were able to find three sales in the Cedar City area in the Meadows Ranch subdivision, all of which are just under 20 acres in size. One of the sales, Paired Sale #1, is adjacent to a 24-acre solar facility, while the other two sales were over one mile away. With the exception of proximity to a solar facility, and a minor adjustment for market conditions, the comparables are fairly similar. An adjustment for connection fees to Paired Sale #2 was also made. The paired sales are shown in the adjustment grid below, followed by an aerial map.

With minimal adjustments, Paired Sale #1 indicates a price per acre higher than the two paired sales, although all are within a reasonable range. This data suggests that there is no price diminution resulting from proximity to a solar farm. While the adjacent solar farm is not as large as the proposed Project, it is still around a 5mw facility on roughly 24 acres.



	Pairing #1				Pairing #2			
Features	**Sale #1**		**Sale #2**		**Sale #1**		**Sale #3**	
Address	754 South 6300 West, Cedar City		5454 West 1000 South, Cedar City		754 South 6300 West, Cedar City		1452 South 6300 West, Cedar City	
Sale Price		$ 122,000		$ 105,000		$ 122,000		$ 120,000
Sale Price/Per Acre	$ 6,298		$ 5,290		$ 6,298		$ 6,214	
Data Source(s)	MLS Closed Sale		MLS Closed Sale		MLS Closed Sale		MLS Closed Sale	
Verification Source(s)	#1646878		#1642708		#1646878		#1675185	
VALUE ADJUSTMENTS	**DESCRIPTION**	**ADJ**	**DESCRIPTION**	**ADJ**	**DESCRIPTION**	**ADJ**	**DESCRIPTION**	**ADJ**
Subdivision	Meadows Ranch		Meadows Ranch	0%	Meadows Ranch		Meadows Ranch	0%
Lot No.	12		18A	0%	12		48	0%
Distance From Solar	**Adjacent**		**1.30 miles**		**Adjacent**		**1.13 miles**	
Sales or Financing Concessions	Conventional		Conventional	0%	Conventional		Conventional	0%
Sale Conditions	Arm's Length		Arm's Length	0%	Arm's Length		Arm's Length	0%
Date of Sale/Time	Apr-20		Feb-20	1%	Apr-20		Aug-20	-2%
Leasehold/Fee Simple	Fee		Fee	0%	Fee		Fee	0%
Site (Acres)	19.37		19.85	0%	19.37		19.31	0%
Access	Dirt Road		Dirt Road	0%	Dirt Road		Dirt Road	0%
Utilities	Available		Connection Fees	5%	Available		Available	0%
Topography	Near Level		Near Level	0%	Near Level		Near Level	0%
Functional Utility	Adequate		Adequate	0%	Adequate		Adequate	0%
Water Rights	Yes		Yes	0%	Yes		Yes	0%
Zoning	RA-20		RA-20	0%	RA-20		RA-20	0%
Net Adjustment Total		0%		6%		0%		-2%
Adjusted Price per Acre		$ 6,298		$ 5,607		$ 6,298		$ 6,090
Percentage Diminution	**12.33%**				**3.42%**			

Anecdotally, we spoke with a real estate agent who sold a 1.25-acre recreational lot located within a mile of the 807 acre Three Peaks Solar facility west of Cedar City. The agent reported that proximity to the solar facility was not an issue.

Based on the foregoing information, proximity to a solar farm does not impact property values.

VII. SECONDARY STUDIES

We have reviewed several secondary studies, most of which are statistically based, which are discussed below. The first two studies were also provided by the property owners in the Project area.

1) Study #1 – Gaur, Vasundhar and Lange, Corey, "Property Value Impacts of Commercial-Scale Solar Energy in Massachusetts and Rhode Island," Department of Environmental and Natural Resource Economics, University of Rhode Island, September 2020

This study uses a hedonic model[4] to analyze price impacts to residential property from proximity to solar farms, by comparing "…changes in housing prices after construction for nearby properties with those further away." The study identifies 208 solar installations size 1 MW and larger in Rhode Island and Massachusetts. It compares 71,337 housing transactions (test group), located within one mile of the solar installations, of which 18,000 are within a half mile, to 347,921 housing transactions (control group) located a distance of one to three miles from the solar facilities. The authors of the study extensively analyzed the primary value-driving characteristics of the properties, including locale, whether rural or suburban, physical characteristics of the sales, and general market conditions during the study timeframe (January 2005 and June 2019). The authors also consider the prior land use of each solar facility, whether a "greenfield" (i.e., farm or forest land) or "non-greenfield" (i.e., commercial, industrial, or landfill) to measure loss of green or open space.

Key Findings:

The study addressed value diminution of properties resulting from proximity to solar facilities by comparing prices of homes within one mile of a solar farm to those one to three miles away. The study reports a decline of 1.7 percent to residential homes located within one mile of a solar facility. A larger value decline of 7 percent was observed for "…properties within 0.10 miles and properties surrounding solar sites built on farm and forest lands in non-rural areas." The study also found that, "[s]olar developments on landfills and industrial areas or in rural areas have smaller and statistically insignificant effects on prices. We posit that solar arrays on farm and forest lands cause greater externalities, given the dual loss of open space amenities and gain of industrial disamenities, and that this effect hinges on the scarcity of open space typical in non-rural areas."

4 *Hedonic pricing model*: "A statistical model used to identify factors or influences on the price of goods based on the notion that price is based on both intrinsic characteristics and external factors. The hedonic pricing model is most commonly used in the housing market in which the price of housing is based on the physical characteristics of the house (size, appearance, features) and the surrounding neighborhood (accessibility to schools and shopping, quality of other houses, availability of public services). Estimating hedonic prices makes it possible to identify the extent to which specific factors affect the price." (http://glossary.econguru.com/economic-term/hedonic+pricing+model).

Application/Comments:

The study has limited applicability to the Project site as the focus of the study is on home values in a more suburban setting in two of the more densely populated states in the nation. The damages observed come primarily from a change in use of farmland and/or forest land to solar facilities, which is more of an industrial use. In essence, the study is either evaluating loss of existing open space on residential homes with conversion to of greenspace to solar, or the value difference resulting from proximity to industrial development. If the concluded damage was from solar specifically, then there would be a more consistent value diminution regardless of surrounding land use. As the study states, in residential areas already with proximity to industrial areas, there is no statistically significant value impact observed resulting from solar facilities. In the Project area, while land use is primarily agricultural, the zoning already allows for industrial type uses. Overall, applicability of this study to the Project is limited.

2) Study #2 – Koster, Hans and Droës, Martijn, "Wind Turbines and Solar Farms Drive Down House Prices," Voxeu.org, September 2020

This study uses a hedonic model to analyze price impacts to residential property from proximity to wind farms and solar farms. The dataset included all housing transactions in the Netherlands since 1985. The authors report that damages to residential properties result from "…ground-mounted solar panels, as they reflect ambient sound, sunlight, create a buzzing sound, and are not so great to look at." Only limited details of the study were included in the article reporting the findings, as the article was primarily focused on the impact of wind farms.

Key Findings:

The study reports a decline in housing prices of around 2 to 3 percent due to proximity to solar farms. The negative impact is more confined and limited to a distance of one kilometer or 0.62 mile. The study reports that, "[f]or solar farms the results are less convincing because the number of solar farms is much lower, making the estimated coefficients less precise."

Application/Comments:

The study has limited applicability to the Project site as the focus of the study is again on home values in primarily a more suburban setting in the Netherlands. The study also mentions that location is important as most of the damage noted came from just a few of the project. However, no further details were provided as to what siting differences created the negative impact. Given the very limited details provided, it is difficult to further review the study.

3) Study #3 – Andrew Lines, MAI and Patricia L. McGArr, MAI, CRE, FRICS, "Property Value Impact Study: Adjacent Property Values Solar Impact Study - A Study of Eight Existing Solar Facilities," CohnReznick, June 2020

This study uses paired sales analyses in which properties proximate to a solar facility are compared to similar properties not influenced by solar facilities. After adjusting for all other differences besides the solar facility, any difference remaining reflects the impact of the solar facility. The study includes both agricultural land and single-family homes situated around eight different solar facilities located in Michigan, Minnesota, Indiana, Illinois, North Carolina, and Virginia. The solar farms range in size from 19 to 100 MW. The authors performed paired sales analysis on 24 test sales with proximity to solar facilities which are compared to 81 comparable control sales. In addition, the authors reviewed other similar type studies on the impact of solar farms and interviewed market participants.

Key Findings:

The study reports that "…there is no measurable and consistent difference in property values for properties adjacent to solar farms when compared to similar properties locationally removed from their influence." This includes no negative influence on both residential development and farmland. Further, interviews with market participants and reviews of other similar type studies found, "…little to no measurable difference in value…attributed to the proximity to solar farms."

Application/Comments:

The study has some applicability as it includes farmland.

4) Study #4 – David Maddison, Reece Ogier, and Allan Beltran, "The Disamenity Impact of Solar Farms: A Hedonic Analysis," London School of Economics, March 2018

This study uses a hedonic model to analyze price impacts to residential property from proximity to solar farms as well as sales and resales of the same properties both before and after construction of a solar farm. The dataset included ~600 solar farms and ~5,000 residential properties in England and Wales between January 1995 and September 2017. The authors report that damages to residential properties result from waste, electromagnetic radiation and noise, glint and glare, potential for negative interactions between various taxa and panels, and visual impacts generally ignored in surveys of the impacts.

Key Findings:

The study reports that, "…there is a significant impact on property prices and that solar farms are not environmentally benign." It also reports that, "[d]evelopments with a higher capacity impose a larger disamenity impact but not significantly so." A 4 to 6 percent value diminution, depending on the model used, is concluded to properties within the same postcode as a solar farm.

Application/Comments:

The study has limited applicability as the focus is on residential development in a more densely populated area. Further, based on the map included, the number of solar facilities is so great it would appear difficult to find any real control properties.

Secondary Study Summary

The secondary studies reviewed are summarized in the following table.

SECONDARY STUDY SUMMARY

Location	Nature of	Findings % Diminution
Study #1 - Vasundhar Gaur and Corey Lang, "Property Value Impacts of Commercial-Scale Solar Energy in Massachusetts and Rhode Island" University of Rhode Island, September 2020		
Massachusetts & Rhode Island - Non rural areas losing farm and forest land	SFR Homes - within 0.10 mile	-7.00%
	SFR Homes - 0.10 to 1.0 mile	-1.70%
Massachusetts/Rhode Island - Solar on landfills, industrial or rural locations	SFR Homes	Statistically insignificant
Comment: In essence, Study is either evaluating loss of existing open space on SFR with conversion to solar, or difference in SFR values with proximity to industrial. If damage was from solar specifically, then would be consistent regardless of surrounding land use.		
Study #2 - Hans Koster and Martijn Droes, "Wind Trumbines and Solar Farms Drive Down House Prices," Voxeu.org, September 2020		
Netherlands	SFR Homes - within 1 km (0.62 mile)	Decrease of 2 to 3 percent
Study #3 - Andrew Lines and Patricia McGarr, "Adjacent Property Values Solar Impact Study Solar Iimpact Study - A Study of Eight Existing Solar Facilities," CohnReznick, June 2020		
Michigan, Minnesota, Indiana, Illinois, North Carolina, and Virginia	SFR Homes	No Impact
Rockford, Illinois*	Farmland	No Impact
Study #4 - David Maddison, Reece Ogier & Allan Beltran, "The Disamenity Impact of Solar Farms: A Hedonic Analysis," London School of Economics, March 2018		
England and Wales	SFR Homes	Decrease between 4 to 6 percent

***Discussed in Stantec Article, Economic Benefit and Property Value Study, October 2020**

VIII. CONCLUSIONS

Based on the foregoing paired sales analysis and review of secondary studies, we find no support for any value diminution resulting from proximity to solar facilities.

The foregoing is made subject to assumptions and limiting conditions contained in the report. We trust this report is sufficient in detail to accomplish its intended function. Please call if we can be of further assistance.

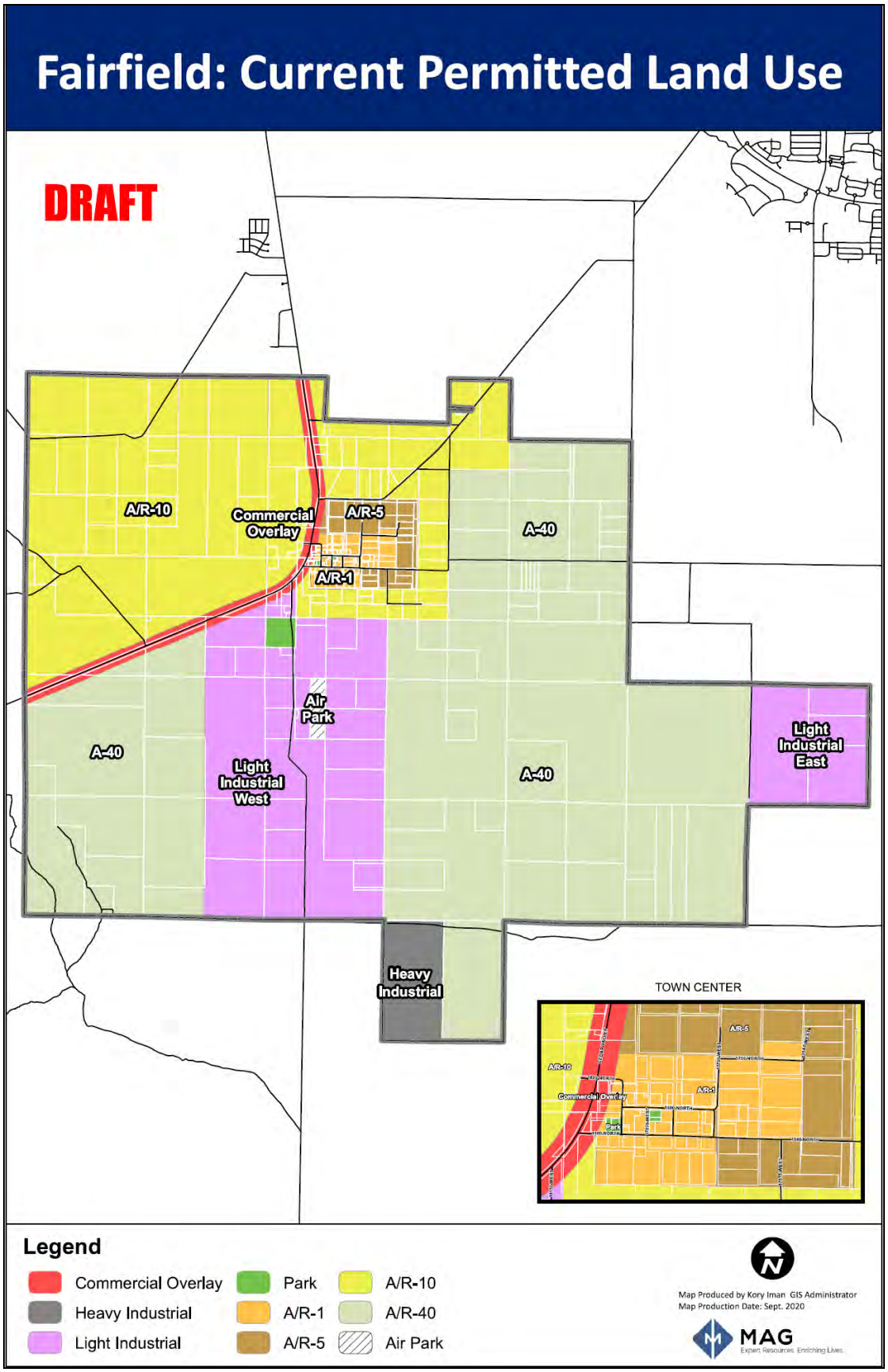
Respectfully submitted,

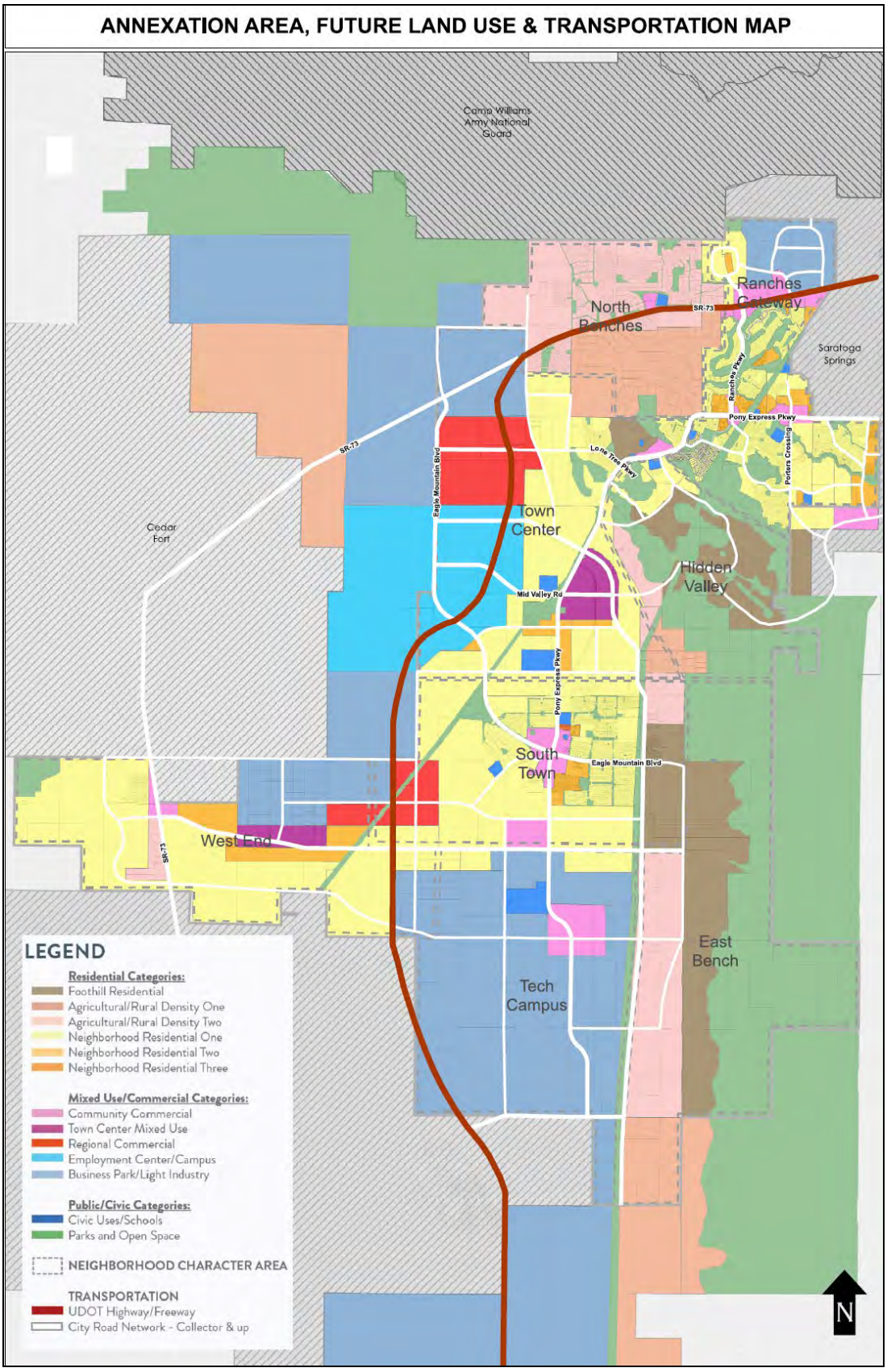
[redacted]

J. Philip Cook | MAI CRE
J Philip Cook, LLC
Utah State - Certified General Appraiser
Certificate 5451057-CG00 Expires 06-30-23

Richard Sloan | MAI
J Philip Cook, LLC
Utah State - Certified General Appraiser
Certificate 5707759-CG00 Expires 11-30-21

MAPS


Fairfield: Current Permitted Land Use
DRAFT
A/R-10
Commercial Overlay
A/R-5
A-40
A/R-1
Air Park
A-40
Light Industrial West
A-40
Light Industrial East
Heavy Industrial
TOWN CENTER
A/R-5
A/R-10
A/R-1
Commercial Overlay
Legend
Commercial Overlay
Heavy Industrial
Light Industrial
Park
A/R-1
A/R-5
A/R-10
A/R-40
Air Park
Map Produced by Kory Iman GIS Administrator
Map Production Date: Sept. 2020
MAG
Expert Resources. Enriching Lives.


ANNEXATION AREA, FUTURE LAND USE & TRANSPORTATION MAP
Camp Williams Army National Guard
North Ranches
Ranches Gateway
SR-73
Saratoga Springs
Ranches Pkwy
Pony Express Pkwy
Lone Tree Pkwy
Porters Crossing
Eagle Mountain Blvd
Town Center
Cedar Fort
Hidden Valley
Mid Valley Rd
South Town
West End
East Bench
Tech Campus
N
LEGEND
Residential Categories:
Foothill Residential
Agricultural/Rural Density One
Agricultural/Rural Density Two
Neighborhood Residential One
Neighborhood Residential Two
Neighborhood Residential Three
Mixed Use/Commercial Categories:
Community Commercial
Town Center Mixed Use
Regional Commercial
Employment Center/Campus
Business Park/Light Industry
Public/Civic Categories:
Civic Uses/Schools
Parks and Open Space
NEIGHBORHOOD CHARACTER AREA
TRANSPORTATION
UDOT Highway/Freeway
City Road Network - Collector & up

QUALIFICATIONS

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www.jphilipcook.com

SUMMARY

J. Philip Cook is a principal of J Philip Cook, LLC, a real estate appraisal and consulting firm doing business throughout the United States. His primary focus is complex assignments. These often involve legal matters that could lead to or are in litigation. Such matters include unitary (state) and local property tax disputes, eminent domain, inverse condemnation, real estate damages including wildfires, environmental contamination and construction defects, delay, breach of contract, and negligence claims, class action certification, bankruptcy, foreclosure, trespass, and appraiser liability claims. Mr. Cook also provides services in closely scrutinized matters such as property right donations (e.g., conservation easements and income/inheritance tax matters), as well as services for a variety of other purposes.

In the unitary and local property tax arena, Mr. Cook has provided appraisal expertise in coal-powered generation, oil and gas production and gathering, midstream oil and refined products pipelines, telecommunications, airlines, mines, and special purpose properties (e.g., titanium sponge and solid rocket motor manufacturing, ship repair, food processing, auto raceways, golf courses, and ski resorts).

In eminent domain, appraisal expertise has been provided in high profile matters such as the Flight 93 crash site in Somerset County, PA, and rails-to-trails related inverse condemnation cases in New York, Georgia, Oregon, Colorado, Arizona, and Utah. Mr. Cook has completed thousands of eminent domain assignments for such matters as road construction/widening, restrictive use easements, airport expansions, transmission lines (including lines crossing active gravel mines), and pipelines.

Other notable matters include wildfire damages cases involving Tribal and private lands, class certification involving alleged mortgage fraud associated with residential appraisals throughout the United States; concessionaire values for marinas at the Lake Mead Recreational Area; bankruptcies of master planned golf and ski resort communities in the Intermountain region, gas fueled power plants, and film studio; real estate damages resulting from a leaking crude oil pipeline contaminating Red Butte Creek in Utah, and numerous other environmental matters; construction defects matters involving high-value single-family homes, townhome/condominium projects, and commercial buildings; trespass claims resulting in damaged real estate, deficiency actions involving land, commercial, and residential developments; and breach of contract claims.

Mr. Cook has 41 years full-time appraising and consulting experience and holds a BS degree in finance with a real estate emphasis and an MBA from the University of Utah. He holds certified general appraiser status in multiple states on full-time and temporary bases. Mr. Cook has taught real estate principles and appraisal and investment courses as an assistant professor adjunct for the University of Utah, and the Uniform Standards of Professional Appraisal Practice update course and Appraisal Principles for the Appraisal Institute. He has served elected office and board appointments for national, regional, and state organizations, and has served as a member and chairman of the Utah State Appraiser Board, a governor-appointed position. His experience covers all real estate markets including single-family homes, land, multifamily residential and commercial properties, large golf- and ski-oriented master planned communities and other land development projects, special-purpose and recreational properties, and a variety of other income producing assets.

Mr. Cook has provided appraisal, consulting and expert witness services to individuals, city, county, state, and federal government, financial institutions and mortgage companies, insurance and pension funds, professional firms, public and private corporations, and individuals, and has given testimony in over 150 matters.

J. Philip Cook | MAI, CRE (Continued)

PROFESSIONAL MEMBERSHIPS & LICENSES

- Member Appraisal Institute (MAI), #7000
- Member Society of Real Estate Counselors (CRE)
- Certified General Appraiser, State of Utah, #5451057-CG00
- Certified General Appraiser, State of Idaho, #CG111
- Certified General Appraiser on full-time or temporary bases in other states
- Member International Right-of-Way Association

EMPLOYMENT HISTORY

- 2011 to Present - Principal of J Philip Cook, LLC.
- 2005 to 2011 – Director, LECG, LLC (acquired of J. Philip Cook & Associates in March 2005)
- 1993 to 2005 – Founder J Philip Cook & Associates, Inc.
- 1980 to 1993 – Appraiser and Partner (1984) with Appraisal Associates, Inc.

PROFESSIONAL COMMITTEES

2017-Current Board Member Utah Foundation
2006-Current Board Member; Ivory Boyer Real Estate Center
2005-2006 Chairman - Utah State Appraiser Board
2002-2006 Board Member - Utah State Appraiser Board
2004-2005 Chair - Utah Chapter Counselors of Real Estate
2001 Board Member; Appraisal Institute Education Trust
2001 National Education Committee - Counselors of Real Estate
1999 National Nominating Committee
1996-1998 National Board of Directors, Appraisal Institute
1997-1998 National Finance Committee, Appraisal Institute
1995 Regional Representative from Utah, Region II Appraisal Institute
1993 President, Utah Chapter of the Appraisal Institute
1992 Vice President and President-Elect, Utah Chapter of the Appraisal Institute
1992 Board Member Utah Association of Appraisers
1991-1992 Regional Representative from Utah, Region II Appraisal Institute
1991 Second Vice President, Utah Chapter of the Appraisal Institute
1990 Chapter Secretary/Treasurer, American Institute of Real Estate Appraisers
1990 Unification Committee for the Merger of the Society of Real Estate Appraisers and the American Institute of Real Estate Appraisers (Chapter level)
1987-1989 Chapter Director, American Institute of Real Estate Appraisers

DEPOSITIONS/COURT TESTIMONY (Since 1998)

1998 – 2009

- Utah Department of Transportation v. Green Street Associates
- Utah Department of Transportation v. Mark Steel/H & K Truck
- Utah Department of Transportation v. Evans
- State of Utah v. HAFB
- Davis County v. Zion's First National Bank, Trustee
- Intermountain Power Agency v. Millard County
- Foster v. Foster
- Town of Alta v. MSI, Inc.
- Utah Department of Transportation v. Envirotech-Baker Hughes)
- Utah Department of Transportation v. Wildwood Resort Company
- Draper City v. Draper Irrigation Company

J. Philip Cook | MAI, CRE (Continued)

- RAS v. Town of Alta
- Utah Department of Transportation v. Diamond Bar X Ranch
- DCED v. Clarence Birt, et al
- Charles Ross Heely, et al v. Lend Lease Agricultural Business, Inc.
- Summit County v. American Skiing Company
- USA v. Thomas Peterson, et al
- Utah Department of Transportation v. JP Realty Utah Department of Transportation v. Harrison Family Loving Trust
- Utah Department of Transportation v. Savage Industries
- Draper City v. Don McCormick
- USA Capital Diversified Trust Deed Fund, LLC v. Sheraton Hotel
- West Jordan City v. Abbott Utah Department of Transportation v. Lemar, Inc.
- Stonegate v. Psomas Associates Corporation
- Utah Department of Transportation v. Branch
- Utah Department of Transportation v. Anderson
- Gallegos v. Lloyd
- Salt Lake County v. Alliant Techsystems
- LoveSac v. G & G, Wilmington, DE
- Cedar City, UT v. Fiddler's Canyon Development, et al, Cedar City, UT
- Edgewater Medical Center v. Edgewater Property Company, Chicago, IL
- Butters v. Marriott, Ogden, UT
- Butters v. Harrisville City, Harrisville, UT
- U.S.A. v. Ronnie W.A. Case
- U.S.A. v. Guaranteed Roofing
- U.S.A. v. Wayne A. Pflueger
- UDOT v. Hunter
- North Salt Lake v. Salt Lake City Corporation
- Uintah County v. Westport Gas
- Utah Department of Transportation v. Berman
- LDS Church v. J. M. Mechanical
- Suncrest v. Micron
- UDOT v. David Williams
- Albright, et al. v. Attorneys' Title Insurance Fund, et al.
- Utah County v. Ivie, et al
- Amcal Multi-Housing, Inc. v. City of Los Angeles
- Mt. Olivet v. Salt Lake County
- Salt Lake County v. LC Canyon Estates
- Doctorman v. Golub
- T-Mobile v. Salt Lake County
- South Valley Sewer v. Michael Carlson
- The Canyons School District v. The Remaining Jordan District Transition Team
- Skywest Airlines, Inc. v. Property Tax Division of the Utah State Tax Commission, Iron County, Salt Lake County, Washington County, and Weber County
- Highlands @ SouthPointe, LLC v. DJ Investment Group, LLC, Dan Simons and Arden Bodell
- Wilburgene, LLC Bankruptcy
- USA v. 29,122.5 Square Feet of Land in Salt Lake City et al (Shubrick Building, LLC)
- Tooele City v. Tooele Associates
- EMJA v. Utah Transit Authority

J. Philip Cook | MAI, CRE (Continued)

2010
- UNEV Pipeline v. Matthew Arbshay
- James T. Markus, Chapter 11 Trustee v. Albert Fried, Jr., Albert Fried & Co., LLC, and Steelman, Inc., et al
- Clearfield City v. Jenkins
- Rocky Mountain Power v. Donald Evans
- UDOT v. Wintergreen Group, LLC
- UDOT v. Ivers
- Tri-Valley Distributing, Inc. v. Western United Life Assurance Company

2011
- UTA v. Sandra Plaza
- T. L. Crowther v. Rocky Mountain Pipeline
- Credit Suisse, a Swiss Bank v. Tamarack Resort, LLC, et al
- Rocky Mountain Power v. Fred Barker
- Rocky Mountain Power v. Clark Hillam
- BB&T v. Vernal Towne Center
- Rocky Mountain Power v. Private Capital Group
- UDOT v. FC Holding 5050, LLC
- Kevin Jensen and Karla Taylor v. Celtic Bank Corporation
- Confidential v. State of Utah
- Robert G. Wing v. Apex Holding Company, LLC, et al
- Dixie Deer Water Conservancy District v. Madre Mesa, LLC
- David Day and Shanna Day v. Park City Title, et al
- Rocky Mountain Power v. L. Greg & Susan L. Woodard
- UDOT v. Curtis McDougal & GKM Family, LLC
- ARCUS Private Capital Solutions, LLC v. Grantsville Holdings, LLC & Ronald H. Thorne
- Utah State Tax Commission v. Sunnyside Cogeneration

2012
- Advanced Fluid Containment, LLC v. Little Mountain Rabbit Patch, LLC, and Sun River Developing, Inc. (Proffered)
- Bear River Flats, LLC v. Miller Funding Group, LLC
- Pacificorp, dba Rocky Mountain Power v. DeNece P. Barker, Fred Barker, and Melda B. Mund, Trustee
- SLC Pipeline, LLC v. Utah State Tax Commission
- Transwestern Petroleum, Inc. v. United States Gypsum Company

2013
- Stichting Mayflower Mountain Fonds and Stichting Mayflower Recreational Fonds v. UDOT
- Bank of the West v. David Sabey and South Harrison Plaza
- UDOT v. TBT Properties
- Pacificorp v. Vineyard Properties of Utah, LLC, Zions First National Bank, Pioneer Steel & Tube Corporation, LLC, and Western Pipe Coaters & Engineers, Inc. (Deposition)
- Salt Lake City v. Evans Development Group, LLC
- Wells Fargo Bank, N.A. v. Heber City Commercial II, LLC
- BMA v Windygates
- UDOT v. Admiral Beverage Corporation
- Willey v. Layton City
- Oakridge Country Club v. Davis County Assessor
- UDOT v. Fort Lane Village, LC; Zions Bancorporation

J. Philip Cook | MAI, CRE (Continued)

2014
- UDOT v. Target, et al
- UDOT v. Miller Weingarten
- UDOT v. Coalt, Inc.
- UTA v. D&S North Temple
- McGillis Investment Company, LLC v. Callister, Nebeker & McCullough
- Dunham et al v. Green River Farms, LLC and Mitchell Excavation
- First Utah Bank v. Cottonwood Professional Plaza
- UTA v. Grow, et al
- Cedar Townhomes v. G&J Construction v. B&W Construction
- Park City Mountain Resort v. Talisker (Proffered)
- Seven Resorts, Inc. v. Department of Interior of the US National Park Service and Echo Bay Marina
- ASCU v. Wolf Mountain
- Stewart Title Guaranty Company v. Credit Suisse AG, Cayman Islands Branch

2015
- Williamson v. Farrell
- Utah Department of Transportation v. FPA (deposition)
- The Maughan Family Partnership v. VanCott, Bagley, Cornwall & McCarthy, Timothy W. Blackburn, Richard R. Reeve
- Highland Marketplace v. SA Group
- Handy v. Siegfried & Jensen
- PacifiCorp v. Vineyard Properties of Utah, LLC (Trial)
- Verizon Wireless v. Property Tax Division of the Utah State Tax Commission
- Utah Department of Transportation v. Target Corporation and Weingarten/Miller/American Fork
- Three Rivers Gathering, LLC v. Property Tax Division of the Utah State Tax Commission
- Utah Department of Transportation v. FPA West Point, LC, et al (Trial)
- Utah Department of Transportation v. Frontage 114th, LLC

2016
- Utah Property Management Associates, Inc. v. Property Tax Division of the Utah State Tax Commission
- The Estate of D.A. Osguthorpe v. CSU Foundation, et al.
- Jemez Pueblo, et al. v. Tri-State Generation and Transmission Association, Inc.
- Intermountain Power Agency v Property Tax Division of the Utah State Tax Commission
- Private Capital Group, Inc., et al. v AFCC Limited, et al.
- Triumph Mixed Use Investment III v. Internal Revenue Service

2017
- H. Candi Wadsworth v Guy L. Wadsworth
- William C. Hardy & Bertie Ann Hardy, et al. v The United States of America
- Utah State Tax Commission v SLC Pipeline LLC
- Sunnyside Properties, LLC v Carbon County BOE
- USA v Talmage (Deposition)
- UDOT v Loafer
- Waldrup et al. v Countrywide Financial Corporation
- Daybreak Eastlake Village Condominium Owners' Association v Kennecott Land Company, et al.

J. Philip Cook | MAI, CRE (Continued)

2018
- UDOT v Boggess-Draper Company, LLC; Draper City; South Jordan City
- CTI-SSI v Canyon County Idaho Tax Commission
- Shree Ganesh, LLC v Weston Logan Inn, Matthew M. Weston
- Michael Cody Mueller and Martha Chilton Mueller v On Site Management, Inc., OSM Wyoming, Salt River Roofing (deposition)
- Mid America Pipeline Company, LLC v Property Tax Division of the Utah State Tax Commission (deposition)
- Partrero, LLC v Miller Herriman RG Associates, LLC
- Michael Cody Mueller and Martha Chilton Mueller v On Site Management, Inc., OSM Wyoming, Salt River Roofing (trial)
- Confidential Mining Company v. Utah State Tax Commission, et al.
- Mid America Pipeline Company, LLC v Property Tax Division of the Utah State Tax Commission (trial)
- Bank of the West v Sugarloaf Holdings, LLC

2019
- Jensen v Cannon
- Granite Construction v Greyhawk Development
- USA v Talmage (Trial)
- Wells Fargo Rail v Black Iron
- UDOT v Arthur Grant Investments
- Waldrup et al. v Countrywide Financial Corporation
- Landau v 160 White Pine LLC
- Graymont Western US, Inc. v Property Tax Division of The Utah State Commission
- Ansley Walk Condominium Association, Inc., et al v The United States

2020
- Walmart Real Estate Business Trust and Walmart Stores, Inc. v Salt Lake Board of Equalization
- Reagan Sign v Salt Lake City (deposition)
- Walmart Stores East LV v Tooele County Board of Equalization
- Carl Nolet v Vincent and Marie Mascatello, et al
- Intermountain Power Agency v Property Tax Division of the Utah State Tax Commission (deposition)
- Corporation of the Presiding Bishop (Joseph Smith Memorial Building) v Utah State Tax Commission

2021
- Chick-fil-A v Salt Lake County Hearing Commission
- Kohl's v Salt Lake County Board of Equalization
- Sunnyside Properties, LLC v Board of Equalization of Carbon County, State of Utah
- UDOT v Lowe Land TK, LLC et al
- ISA Brittain et al v The United States of America
- MPLD Husky, LLC (Amazon.com Services, Inc.) v Salt Lake County Board of Equalization
- Dennis Gay et al v Donald Keith Mecham et al

Richard Sloan | MAI

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USA

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Direct: 801 321-0065
E-mail: rsloan@jpclc.com
www.jphilipcook.com

EDUCATION
- MBA, Westminster College, May 2003
- Bachelor of Arts, Accounting, University of Utah, May 1998

PROFESSIONAL DESIGNATIONS/LICENSES/AFFILIATIONS
- Designated Member of the Appraisal Institute (MAI)
- Certified General Appraiser, State of Utah, #5707759-CG00
- Member, International Right-of-Way Association

APPRAISAL EXPERIENCE
- January 1999 - Present: Appraiser and Consultant of commercial real estate, J Philip Cook, LLC (acquired by LECG, March 2005 – February 2011), Salt Lake City, Utah

PROFESSIONAL BOARDS/COMMITTEES
- March 2017 - Present: Board Member, Utah State Appraisal Licensing and Certification Board
- 2013 – 2017: Board Member, International Right-of-Way Association Utah Chapter - Nomination and Election Committee Chair

CLIENTS SERVED (Partial list)

FINANCIAL INSTITUTION/MORTGAGE/
US Bancorp
Bonneville Mortgage
Key Bank
Washington Mutual Bank
Zions Bank
GE Capital
Intervest Mortgage
Merrill Lynch Mortgage Capital
Security Church Finance
Morgan Stanley Dean Witter
Sentry Financial Corp
Bentall Kennedy (US), LP
IMPAC Multi-family Corp
America First Credit Union
Wells Fargo Bank
Fidelity National Title Group

CORPORATE/OTHER COMPANIES
The Nature Conservancy
Actium Partners, LLC
Union Pacific Railroad
Marion Energy, Inc.
The Boyer Company
Bonz/REA, Inc.
Cohne, Rappaport & Segal, PC
Holme, Roberts & Owens, LLP
Anderson & Karrenberg
Sidley Austin, LLP
The Rouse Company
Associated Foods
Deseret News Corporation
Crosson Dannis, Inc.
Questar
LDS Church
Kipp & Christian
Variable Annuity Life Insurance Company
AIG Global Investment Group
Clyde Snow & Sessions
Snow Christensen & Martineau
Electrical Consultants, Inc.
Traverse Mountain
HDR Engineering
Les Schwab Tires
Bill Barrett Corporation
Peterson Land Development Group
Kennecott Land
Lone Peak Valuation
Fabian & Clendenin, PC
Parr Brown Gee & Loveless
Van Cott Bagley Cornwall & McCarthy, P.C.
Stoel Rives, LLP
Rocky Mountain Power/Pacificorp
Woodbury Corporation
Snell & Wilmer, LLP

INSURANCE/PENSION FUNDS
Prudential Insurance Company

Richard Sloan | MAI, (Continued)

GOVERNMENT

Draper City
Salt Lake City
West Jordan City
Sandy City
South Jordan City
Salt Lake County
Utah County
State of Utah
Salt Lake Airport Authority
Utah Department of Transportation
US Department of Justice
Utah Attorney General
Bureau of Reclamation
Bureau of Land Management
Federal Deposit Insurance Corporation
Utah Transit Authority
Utah Local Government Trust
Utah Office of the Property Rights Ombudsman
More available upon request

SPECIALIZED COURSES COMPLETED

- National USPAP Update Course, Appraisal Institute, November 2017
- Business Practices & Ethics, November 2017
- Understanding Environmental Contamination (IRWA Course 603), November 2017
- The Thermal Shell, McKissock, December 2015
- Easement Valuation (IRWA Course 403), September 2014
- Reviewing Appraisals in Eminent Domain (IRWA Course 410), March 2014
- Eminent Domain 2012: How to Determine Just Compensation, February 2012
- Eminent Domain and Condemnation, December 2009
- Marshall & Swift Commercial Cost Training, November 2009
- Advanced Applications (Course 550), Appraisal Institute, July 2006
- Report Writing & Valuation Analysis (Course 550), Appraisal Institute, March 2005
- Advanced Sales Comparison & Cost Approaches (Course 530), Appraisal Institute, May 2003
- Highest and Best Uses (Course 520), Appraisal Institute, February 2002
- Advanced Income Capitalization (Course 510), Appraisal Institute, March 2001
- Utah State Law (USPAP, Part A), Appraisal Institute, April 2000
- Real Estate Principles (Finance 4770), University of Utah, September 2099
- The Appraisal of Real Estate (Finance 5770), University of Utah, June 1999

SPECIALIZED SEMINARS ATTENDED

- Yellow Book Changes –Overview for Appraisers, Appraisal Institute, January 2017
- The Appraiser as an Expert Witness: Preparation & Testimony, Appraisal Institute, February 2011
- Successful Real Estate Investing
- Real Estate Damages: The Disclosure and Analysis of Detrimental Conditions
- Private Property and the Public Good

APPRAISAL/CONSULTING ASSIGNMENTS (sample)

Eminent Domain
Damage Studies
Large Master Planned Communities
Residential Subdivisions
Light Industrial
Research & Development
General Office
Medical Office
Regional Malls
Grocery Stores/Supermarkets
Convenience Stores/Gas Stations
Raw and Entitled Land
Ranches
Agriculture
Conservation Easements
Multi-use Properties
General Retail
Water Rights
Automobile Dealerships
Market and Feasibility Analysis
Tax Appeals

DEPOSITIONS/TESTIMONY

Pacificorp v. Andalex Resources, Inc., and John Does 1-20, January 2017

CERTIFICATION

CERTIFICATION

We certify that we have made an investigation and analysis of the following property:

VALUE IMPACT OF COMMERCIAL-SCALE SOLAR FACILITIES ON ADJACENT PROPERTIES LOCATED IN SECTIONS 19 & 30, TOWNSHIP 7 SOUTH RANGE 1 WEST AND SECTIONS 24, 25, 26 & 35, TOWNSHIP 7 SOUTH, RANGE 2 WEST UNINCORPORATED UTAH COUNTY, UTAH

We certify that to the best of our knowledge and belief:

1. The statements of fact contained in this report are true and correct.
2. The reported analyses, opinions, and conclusions are limited only by the reported assumptions and limiting conditions and are our personal, impartial, and unbiased professional analyses, opinions, and conclusions.
3. We have no present or prospective interest in the properties that are the subject of this report and no personal interest with respect to the parties involved.
4. We have not performed services, as an appraiser regarding the properties that are the subject of this report within the three-year period immediately preceding acceptance of this assignment.
5. We have no bias with respect to the properties that are the subject of this report or to the parties involved with this assignment.
6. Our engagement in this assignment was not contingent upon developing or reporting predetermined results.
7. Our compensation for completing this assignment is not contingent upon the development or reporting of a predetermined value or direction in value that favors the cause of the client, the amount of the value opinion, the attainment of a stipulated result, or the occurrence of a subsequent event directly related to the intended use of this appraisal.
8. Our analyses, opinions, and conclusions were developed, and this report has been prepared, in conformity with the *Uniform Standards of Professional Appraisal Practice*.
9. . J Philip Cook inspected the property that is the subject of this report. Richard Sloan did not inspect the property
10. The reported analyses, opinions, and conclusions were developed, and this report has been prepared, in conformity with the Code of Professional Ethics and Standards of Professional Appraisal Practice of the Appraisal Institute.
11. The use of this report is subject to the requirements of the Appraisal Institute relating to review by its duly authorized representatives.
12. As of the date of this report, J. Philip Cook and Corey A. Cook have completed the continuing education program for Designated Members of the Appraisal Institute.
13. J. Philip Cook is currently a Certified General Appraiser in the State of Utah #5451057-CG00.
14. Richard Sloan is currently a Certified General Appraiser in the State of Utah #5707759-CG00.

Date: October 8, 2021

[redacted]

J. Philip Cook | MAI CRE
J Philip Cook, LLC
Utah State - Certified General Appraiser
Certificate 5451057-CG00 Expires 06-30-23

Richard Sloan | MAI
J Philip Cook, LLC
Utah State - Certified General Appraiser
Certificate 5707759-CG00 Expires 11-30-21

DEFINITIONS/STATEMENT OF ASSUMPTIONS AND LIMITING CONDITIONS

■ Fee Simple Estate. Fee simple ownership is defined as, "absolute ownership unencumbered by any other interest or estate, subject only to the limitations imposed by the governmental powers of taxation, eminent domain, police power, and escheat."[5]

■ Leased Fee Estate. Leased fee estate is defined as, "the ownership interest held by the lessor, which includes the right to receive the contract rent specified in the lease plus the reversionary right when the lease expires."[6]

■ Leasehold Interest. Leasehold interest is defined as, "the right held by the lessee to use and occupy real estate for a stated term and under the conditions specified in the lease."[7]

■ Market Value (FIRREA). The most probable price which a property should bring in a competitive and open market under all condition's requisite to a fair sale, the buyer and seller each acting prudently, knowledgeably and assuming the price is not affected by undue stimulus. Implicit in this definition is consummation of a sale as of a specified date and passing of title from seller to buyer under conditions whereby:

1. Buyer and seller are typically motivated;
2. Both parties are well-informed or well-advised and each acting in what they consider their own best interest;
3. A reasonable time is allowed for exposure in the open market;
4. Payment is made in terms of cash in U.S. dollars or in terms of financial arrangement comparable thereto;
5. The price represents the normal consideration for the property sold unaffected by special or creative financing or sales concessions granted by anyone associated with the sale.[8]

The foregoing definition stipulates that value reflect cash or cash equivalent terms. The following elaborates on the concept of cash equivalency.

In applying this definition of market value, adjustments to the comparables must be made for special or creative financing or sales concessions. No adjustments are necessary for those costs that are normally paid by sellers as a result of tradition or law in a market area; these costs are readily identifiable since the seller pays these costs in virtually all sales transactions. Special or creative financing adjustments can be made to the comparable property by comparison to financing terms offered by a third-party financial institution that is not already involved in the property or transaction. Any adjustment should not be calculated on a mechanical dollar for dollar cost of the financing or concession, but the dollar amount of any adjustment should approximate the market's reaction to the financing or concessions based on the appraiser's judgment.[9]

■ Use Value. The value of a property assuming a specific use, which may or may not be the property's highest and best use on the effective date of the appraisal. Use value may or may not be equal to market value but is different conceptually.[10]

■ Appraisal. "(Noun) The act or process of developing an opinion of value; an opinion of value. (Adjective) of or pertaining to appraising and related functions such as appraisal practice or appraisal services."[11]

■ Restricted Appraisal Report. A written report prepared under Standards Rule 2-2(b) or 8-2(b) of the Uniform Standards of Appraisal Practice, 2014-2015 Edition.[12]

■ Extraordinary Assumption. "An assumption, directly related to a specific assignment, as of the effective date of the assignment results, which, if found to be false, could alter the appraiser's opinions or conclusions."[13]

■ Hypothetical Condition. "A condition, directly related to a specific assignment, which is contrary to what is known by the appraiser to exist on the effective date of the assignment results, but is used for the purpose of analysis."[14]

■ Insurable Value. The estimated cost, at current prices as of the effective date of valuation, of a substitute for the building being valued, using modern materials and current standards, design, and layout for insurance coverage purposes guaranteeing that damaged property is replaced with new property (i.e., depreciation is not deducted). [15]

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5 The Dictionary of Real Estate, 6th Edition, 2015, The Appraisal Institute, Chicago, Illinois, p. 90.

6 Ibid, p. 128.

7 Ibid.

8 This definition of market value is taken from the final rule issued by the Department of Treasury, Office of the Comptroller of the Currency (12CFR Part 34, August 24, 1990), which are the implementing regulations for Title XI of FIRREA. The definition is also supported by most regulatory agencies as follows: Board of Governors of Federal Reserve System (CFR Parts 208 and 225, July 25, 1991); National Credit Union Administration (CFR Parts 701, 722, and 741, July 25, 1990); Federal Deposit Insurance Corporation (12 CFR Part 323, August 20, 1990); Resolution Trust Corporation (12CFR Part 1608, August 22, 1990); Office of Thrift Supervision, Treasury (12CFR Parts 506, 545, 563, 564, and 571, August 23, 1990). This definition has been adopted by the Appraisal Institute in their Standards of Professional Appraisal Practice, and the Appraisal Foundation in the Uniform Standard of Professional Appraisal Practice (June 30, 1989, amended April 20, 1990 and June 5, 1990).

9 Federal National Mortgage Association (FNMA) and the Federal Home Loan Mortgage Corporation (FHLMC).

10 The Dictionary of Real Estate, 6th Edition, 2015, The Appraisal Institute, Chicago, Illinois, p. 241.

11 The Appraisal Foundation, Uniform Standards of Professional Appraisal Practice, 2016-2017 ed, (Washington, D.C.: The Appraisal Foundation), p. 1.

12 Ibid.

13 The Dictionary of Real Estate, 6th Edition, 2015, The Appraisal Institute, Chicago, Illinois, pp. 83, 84.

14 Ibid, p. 113.

15 Ibid, p. 197.

■ Easement. "The right to use another's land for a stated purpose."[16]

■ "As Is" Value Premise. "Market Value 'as is' on appraisal date means an estimate of the market value of a property in the condition observed upon inspection and as it physically and legally exists without hypothetical conditions, assumptions, or qualifications as of the date the appraisal is prepared."[17]

■ Prospective Market Value Upon Completion of Construction Premise. "Prospective value upon completion of construction means the prospective value of a property on the date that construction is completed, based upon market conditions forecast to exist as of that completion date."[18]

■ Prospective Market Value Upon Reaching Stabilized Occupancy Premise. "Prospective value upon reaching stabilized occupancy means the prospective value of a property at a point in time when all improvements have been physically constructed and the property has been leased to its optimum level of long-term occupancy.[19]

■ Surplus Land. "Land that is not currently needed to support the existing use but cannot be separated from the property and sold off for another use. Surplus land does not have an independent highest and best use and may or may not contribute value to the improved parcel."[20]

■ Excess Land. "Land that is not needed to serve or support the existing use. The highest and best use of the excess land may or may not be the same as the highest and best use of the improved parcel. Excess land has the potential to be sold separately and is valued separately."[21]

■ Larger Parcel. "A portion of land that is not a complete parcel, but is the greater part of a bigger tract, entitling the owner to damages both for the parcel and for its severance from the larger tract. To grant both kinds of damages, a court generally requires the owner to show unity of ownership, unity of use, and contiguity of the land. But some states and the federal courts do not require contiguity when there is strong evidence of unity of use."[22]

■ Highest and Best Use (Code of Federal Regulations). An appraiser's supported opinion of the most probable and legal use of a property, based on market evidence, as of the date of valuation.[23]

■ Highest and Best Use. "...the reasonably probable and legal use of vacant land or improved property that is physically possible, appropriately supported, financially feasible, and that results in the highest value.[24]

16 Ibid, p. 71.

17 Appraisal Policies and Practices of Insured Institutions and Service Corporations, Federal Home Loan Bank Board, "Final Rule", 12 CFR Parts 563 and 571, December 21, 1987.

18 Appraisal Policies and Practices of Insured Institutions and Service Corporations, Federal Home Loan Bank Board, "Final Rule", 12 CFR Parts 563 and 571, December 21, 1987.

19 Ibid.

20 Appraisal Institute, The Dictionary of Real Estate Appraisal, 6th Edition, Chicago, Illinois. Appraisal Institute, 2015), pp. 227, 228.

21 Ibid, pp. 80, 81.

22 Black's Law Dictionary, 9h ed. (1891-2009), p. 959.

23 36 CFR 245.2.

24 Appraisal Institute, The Appraisal of Real Estate, 15th ed. (Chicago, Illinois: Appraisal Institute, 2020), p. 306.

STATEMENT OF ASSUMPTIONS AND LIMITING CONDITIONS

This appraisal has been based on the following limiting conditions:

1. For purposes of this appraisal, any marketing program for the sale of the property would assume cash or its equivalent.

2. No detailed soil studies covering the subject property were available for this appraisal. It is therefore assumed that soil conditions are adequate to support standard construction associated with highest and best use.

3. The dates of value to which the conclusions and opinions expressed in this report apply, are set forth in the body of the report. Further, the dollar amount of any opinion rendered in this report is based upon the purchasing power of the American dollar existing on that date.

4. The appraisers assume no responsibility for economic or physical factors which may affect the opinions in this report which occur after the valuation date.

5. The appraisers reserve the right to make such adjustments to the analyses, opinions and conclusions set forth in this report as may be required by consideration of additional data or more reliable data that may become available.

6. No opinion as to title is rendered. Data relating to ownership and legal description was obtained from the client or public records and is considered reliable. Title is assumed to be marketable and free and clear of all liens, encumbrances, easements and restrictions except those specifically discussed in the report. The property is appraised assuming it to be under responsible ownership and competent management, and available for its highest and best use.

7. If no title policy was made available to the appraisers, they assume no responsibility for such items of records not disclosed by their customary investigation.

8. The appraisers assume no responsibility for hidden or unapparent conditions of the property, subsoil, or structures that render it more or less valuable. No responsibility is assumed for arranging for engineering studies that may be required to discover them.

9. The property is appraised assuming it to be in full compliance with all applicable federal, state, and local environmental regulations and laws, unless otherwise stated.

10. The property is appraised assuming that all applicable zoning and use regulations and restrictions have been complied with, unless otherwise stated.

11. The property is appraised assuming that all required licenses, certificates of occupancy, consents, or other legislative or administrative authority from any local, state, or national government or private entity or organization have been or can be obtained or renewed for any use on which the value estimate contained in this report is based, unless otherwise stated.

12. No engineering survey has been made by the appraiser. Except as specifically stated, data relative to size and area was taken from sources considered reliable and no encroachment of real property improvements is considered to exist.

13. No opinion is expressed as to the value of subsurface oil, gas or mineral rights or whether the property is subject to surface entry for the exploration or removal of such materials except as is expressly stated.

14. Maps, plats and exhibits included in this report are for illustration only as an aid in visualizing matters discussed within the report. They would not be considered as surveys or relied upon for any other purpose, nor should they be removed from, reproduced, or used apart from the report.

15. No opinion is intended to be expressed for matters which require legal expertise or specialized investigation or knowledge beyond that customarily employed by real estate appraisers.

16. Possession of this report, or copy of it, does not carry with it the rights of publication. It may not be used for any purpose by any person other than the party to whom it is addressed without the written consent of the appraiser, and in any event only with properly written qualification and only in its entirety.

17. Testimony or attendance in court or at any other hearing is not required by reason of rendering this appraisal, unless such arrangements are made a reasonable time in advance.

18. The appraisers have personally inspected the subject property and find no obvious evidence of structural deficiencies, except as may be stated in this report; however, no responsibility for hidden defects or conformity to specific governmental requirements, such as fire, building and safety, earthquake or occupancy codes can be assumed without provision of specific professional or government inspections.

19. Unless otherwise noted, no consideration has been given in this appraisal to the value of the property located on the premises which is considered by the appraisers to be personal property, nor has consideration been given to the cost of moving or relocating such personal property; only the real property has been considered.

20. Information obtained for use in this appraisal is believed to be true and correct to the best of our ability; however, no responsibility is assumed for errors or omissions, or for information not disclosed which might otherwise affect the valuation estimate.

21. Disclosure of the contents of this appraisal report is governed by the Bylaws and Regulations of the Appraisal Institute.

    Neither all nor any part of the contents of this report (especially any conclusions as to value, the identity of the appraiser or the firm with which he is connected, or any reference to the Appraisal Institute or to the MAI designation) shall be disseminated to the public through advertising media, public relations media, news media, sales media, or any other public means of communication without the prior written consent and approval of the appraiser.

22. This Expert Report is intended to comply with the reporting requirements set forth under Standard Rule 2-2(a) of the Uniform Standards of Professional Appraisal Practice for an Expert Report. As such, it might not include full discussions of the data, reasoning, and analyses that were used in the appraisal process to develop the appraiser's opinion of value. Supporting documentation concerning the data, reasoning, and analyses is retained in the appraiser's file. The information contained in this report is specific to the needs of the client and for the intended use stated in this report. The appraiser is not responsible for unauthorized use of this report.

23. Unless otherwise stated in this report, the existence of hazardous substances, including without limitation asbestos, polychlorinated biphenyl, petroleum leakage, or agricultural chemicals, which may or may not be present on the property, or other environmental conditions, were not called to the attention of nor did the

appraisers become aware of such during the appraiser's inspection. The appraisers have no knowledge of the existence of such materials on or in the property unless otherwise stated. The appraisers, however, are not qualified to test such substances or conditions. If the presence of such substances, such as asbestos, urea formaldehyde foam insulation, or other hazardous substances or environmental conditions, may affect the value the property, the value estimated is predicated on the assumption that there is no such condition on or in the property or in such proximity thereto that it would cause a loss in value. No responsibility is assumed for any such conditions, nor for any expertise or engineering knowledge required to discover them.

24. The Americans with Disabilities Act ("ADA") became effective January 26, 1992. We have not made a specific compliance survey and analysis of this property to determine whether or not it is in conformity with the various detailed requirements of the ADA. It is possible that a compliance survey of the property, together with a detailed analysis of the requirements of the ADA, could reveal that the property is not in compliance with one or more of the requirements of the Act. If so, this fact could have a negative effect upon the value of the property. Since we have no direct evidence relating to this issue, we did not consider possible noncompliance with the requirements of ADA in estimating the value of the Property.

Exhibit D:

Quicksilver Phase VI Environmental Assessment

Environmental Analysis

Quicksilver Solar Phase VI

Utah County, Utah

Prepared for:

Quicksilver Solar, LLC
P.O. Box 71810
Salt Lake City, UT 84171

Prepared by:

Martin & Nicholson Environmental Consultants, LLC
935 Williamstown Ct.
Park City, UT 84098

MARTIN & NICHOLSON
ENVIRONMENTAL CONSULTANTS

July 11, 2025

Contents

List of Tables

List of Appendices

1. Introduction

1.1 Background

This environmental analysis has been prepared for Quicksilver Solar, LLC (Quicksilver) for Phase VI of the Quicksilver Solar Project (Project) located in Cedar Valley, western Utah County, Utah. The purpose of this analysis is to provide an overview of the environmental effects associated with construction and operation of solar photovoltaic (PV) facilities on approximately 750 acres of land being added to the Project. It provides: a brief project description (Section 1), key findings and risks associated with community, land use, cultural and biological resources (Section 2), a summary of environmental issues (Section 3), and a conclusion regarding the suitability of the site for solar energy development (Section 4).

Environmental issues assessed as part of this analysis include land use and community resources including aesthetics, noise, and air quality, and potential contamination; biological resources including vegetation, wetlands, and wildlife; and cultural resources. Project-related impacts to these resources are non-existent or minor and can be mitigated through planning, design, pre-construction nest surveys, and the completion of appropriate permits.

1.2 Project Area Description

Phase VI of the Project consists of 170 megawatts (MW) of solar photovoltaic (PV) generation capacity to be located on approximately 750 acres of private land being added to the Project. These lands are the subject of this report and include 80 acres of land belonging to Merrell Call (the "northern parcel"), and approximately 670 acres of land owned by Myrna Carter comprising the 460-acre "eastern parcel" and the 210.45-acre "southern parcel." Throughout this report, these parcels are referred to collectively as the "Project Area." Project components expected to be sited on these lands include solar panels mounted on steel racking with a single-axis tracking system, inverters, underground electrical collector lines, and internal access roads. All three of the Project Area parcels adjoin areas that have already been permitted for either Phase I or Phase II of the Quicksilver Solar Project. The northern parcel is located approximately 0.22 miles west of Lake Mountain Road and the eastern and southern parcels are located approximately 1.25 miles south-southeast and 3.4 miles south-southwest of the Call property, respectively. Table 1 identifies the location of the Project Area by Township, Range, and Section. **Map 1 in Appendix A** provides an overview of the Project Area location.

Table 1. Project Area Location

Township and Range (Salt Lake Base and Meridian)	Section, Quarter Section
T7S R2W	13, E1/2SE1/4
T7S R2W	30, S1/2NW1/4NE1/4, SW1/4NE1/4, S1/2NE1/4NW1/4, S1/2NW1/4, SW1/4
T7S R2W	31, NW1/4
T8S R2W	2, NW1/4NW1/4
T8S R2W	3, NE1/4

The Project Area is accessible by county-maintained unpaved roads including Lake Mountain Road, and Soldiers Pass Road, along with a variety of unmaintained, unnamed dirt roads. There are existing two-track roads through and adjacent to the Project Area. The surrounding properties are currently vacant or used for grazing.

The Project Area is zoned as M&G-1, Mining and Grazing. This zone is considered a place for the location of activities and industrial operations which are not appropriate near urban centers including, as a permitted conditional use, electrical power generation plants which the Utah County Board of Adjustment or Planning Commission has approved in accordance with provisions of the ordinance.

1.3 Study Methodology

This environmental analysis is primarily a desktop study that has been supplemented by field observations made during site visits either conducted during the preparation of a phase I environmental site assessments or as part of a habitat assessment completed for the Project. The desktop portion of the analysis is based on relevant, publicly available information that has been gathered by a search of existing data sources.

This report characterizes the Project's existing environmental setting and related issues. For natural resources, the following data sources were reviewed:

- U.S. Geological Survey (USGS) 7.5-minute topographic maps
- Aerial Imagery (e.g., National Agricultural Imagery Program [NAIP] and Google Earth Pro)
- Utah Environmental Interactive Map (Utah Department of Environmental Quality,)
- U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) data
- USGS National Hydrologic Dataset (NHD) data, including streams and lakes
- Utah Division of Wildlife (UDWR) data on big game seasonal use ranges and migration corridors (UDWR, 2025)
- Utah Wildlife Habitat Analysis Tool (Utah Division of Wildlife Resources, 2025)
- eBird Data (The Cornell Lab of Ornithology, 2025)
- County Maps and GIS Data

While gathering the data for the Project, the following data gaps or other limitations were identified:

Cultural Resources - Although previous phases of the project have been surveyed for cultural resources in conjunction with the BLM right-of-way grant process, there have been no on-site surveys or reviews of Utah Historical Society and Utah Division of State History files completed for the Phase VI Project Area. Cultural resources are not protected on private lands in Utah; hence, the Project Area's 750 acres of private land are not subject to a cultural resources file search or field survey.

Conservation Reserve Program (CRP) lands -The specific locations of CRP lands, if any, are not publicly available. Additional information should be obtained from the landowners.

2. Environmental Setting

2.1 Land Use and Community Resources

The Project Area is located in Cedar Valley west of the Lake Mountains and Utah Lake. The closest municipalities are Eagle Mountain City and Fairfield Town. The Project Area lies between 1.5 and 5.4 miles south of the southern boundary of Eagle Mountain City and between 1.0 and 4.8 miles south of the southeastern boundary of Fairfield Town.

2.1.1 General Land Use

The Project Area ranges in elevation from 4,847 feet to 5,060 feet above mean sea level and consist of former hayfields or pastureland and unmanaged rangelands. The northern parcel was likely a hayfield or pasture at one time but may have burned in the fairly recent past, reducing the prevalence of pasture grasses, increasing the area of bare ground, and allowing for the introduction and spread of more weedy species. It is characterized by large areas of bare ground with weeds including Russian thistle (*Salsola kali*), tansy mustard (*Descurainia pinnata*), bottlebrush squirrel tail (*Elymus elymoides*), small pockets of crested wheatgrass (*Agropyron cristatum*) and small, sparsely distributed sagebrush (*Artemisia tridentata*) in places.

The eastern parcel does not appear to have been used for pasture and is characterized by larger, denser sagebrush with other native species including green rabbitbrush (*Chrysothamnus viscidiflorus*), Mormon tea (*Ephedra viridis*), and desert globemallow (*Sphaeralcea ambigua)*. Weeds including cheatgrass (*Bromus tectorum*) and Russian thistle are locally common in portions of this parcel.

The majority of the southern parcel was cleared, seeded, and likely managed for hay production in the past and is currently dominated by crested wheatgrass. The north central portion of this parcel is dominated by tall rye grass (*Schedonorus arundinaceus*), desert globemallow, Russian thistle, cheatgrass, and Halogeton (*Halogeton glomeratus*). The eastern portion of this parcel contains unmanaged land, the west side of which is characterized by a large amount of dead Russian thistle, which has accumulated into an approximately 2-foot-deep layer of tumbleweed debris. Big sagebrush is present around and within the debris; however, no new vegetation appears to be sprouting underneath the debris. The eastern side of this parcel is characterized by more native vegetation including patches of big sagebrush with globemallow, areas of open sand, and some Russian thistle.

The surrounding land parcels primarily consist of other undeveloped properties and hayfields. There is a sod farm approximately 0.5 miles west of the southern parcel and a solar PV power generation facility approximately 2.6 miles south of the southern parcel. The nearest home is located just over 1 mile north of the northern parcel. There is a gravel mine off Soldiers Pass Road approximately 0.3 miles east of the eastern Project Area parcel. The Lake Mountains run north-south to the east-northeast of the Project Area parcels and are comprised predominantly of state and federal lands used for recreation, grazing, and sand/gravel mining.

2.1.2 Potential Site Contamination

According to a phase I environmental site assessment (Phase I) completed for the Call property, there are no recognized environmental concerns on the northern parcel. A Phase I has not yet been

completed for the Carter parcels but based on preliminary results and the Utah Environmental Interactive Map (https://enviro.deq.utah.gov/), there are no EPA Active Hazardous waste sites mapped within the eastern and southern Project Area parcels.

2.1.3 Important and Sensitive facilities

Schools, religious facilities, hospitals, and libraries are often considered uses sensitive to disturbance from nearby development. The nearest such facilities are located in Eagle Mountain City, over 6 miles north of the northern Project Area parcel. Project construction and operation would have no effect on these facilities.

2.1.4 Land Ownership and Management

As stated above, the Project Area is privately owned. Approximately 0.8 to 1.8 miles east of the northern and southern parcels, respectively, and abutting the eastern parcel, the Utah Trust Lands Administration (TLA) owns approximately 19,000 acres of state land. Federal lands managed by the U.S. Department of Interior, Bureau of Land Management (BLM) are located in the Lake Mountains and associated western foothills approximately 1 mile northeast of the northern Project Area parcel. The BLM has granted the Applicant a right-of-way for crossing two miles of federal lands along the alternate transmission line route. Additional TLA lands and BLM-administered federal lands are present approximately 5 miles to the west of the Project Area parcels on the western boundary of Cedar Valley. **Map 1 in Appendix A** illustrates the spatial distribution of land ownership in the vicinity of the Project Area.

2.1.5 Recreation Resources

There are no public or other specified or recognized recreational resources in the Project Area. The nearest developed recreation facilities are city parks located over 6 miles north and northwest of the Project Area in Eagle Mountain City and Fairfield Town. The Soldier Pass Shooting Range is located on BLM-administered federal land approximately 2.1 miles east of the eastern Project Area parcel.

BLM-managed lands within the Lake Mountains are part of an Extensive Recreation Management Area (ERMA) that is designated to generally allow for dispersed recreation, but where recreation is not a priority use of the land (BLM, 1988). Off-highway vehicle (OHV) use on BLM lands is limited to existing roads and trails. TLA lands are open to OHV use.

No public recreation resources would be affected by construction and operation of solar power generation facilities in the Project Area.

2.1.6 Agricultural Land Use

As noted above, the Project Area is zoned for mining and grazing. As shown on **Map 2 in Appendix A**, approximately 459 acres or about 60 percent of the Project Area is classified as “Prime Farmland if Irrigated.” Approximately 165.9 acres or 22 percent of the Project Area are classified as “Farmland of Statewide Importance.” Neither of these two classes of farmlands are currently irrigated. The remaining 141.7 acres (18 percent) of the Project Area are classified as “Not Prime Farmland” (USDA Natural Resources Conservation Service, 2025). Thus, no currently productive farmlands would be affected by construction and operation of the Project.

2.2 Designated Protected Areas

2.2.1 Public and Tribal Lands

There are no public or tribal lands in or adjacent to the Project Area.

2.2.2 Conservation Reserve Program

In some cases, landowners apply to the NRCS for technical and financial assistance to address soil, water, and related natural resource concerns on their properties. Landowners participating in these programs may receive annual rental payments over the term of a multi-year contract if environmentally beneficial land use practices are implemented. The specific locations of CRP lands are not publicly available. Additional information should be obtained from the landowners. If any land in the study area is managed under the CRP, additional coordination with the Farm Services Agency (FSA) may be required.

2.2.3 Special Status Land

The are no public lands and thus, no lands with special status, e.g., wilderness study areas or areas of critical environmental concern, within the Project Area. Moreover, there are no conservation easements or other types of deed restrictions that would prevent development of a solar energy facility on these parcels.

2.3 Infrastructure

2.3.1 Surface Transportation

Lake Mountain Road and Soldiers Pass Road are county-maintained unpaved roads that will be used as the primary access routes during construction and operation of the Project. Lake Mountain Road runs southward along the western base of the Lake Mountains (east side of Cedar Valley) from Eagle Mountain City and along the eastern side of the Project Area (**Map 1, Appendix A**).

A number of local dirt roads or “two-tracks” traverse the Project Area parcels. The condition of these roads varies. During the construction phase of the Project, there is expected to be an increase in workers, heavy machinery and large trucks traveling on Lake Mountain Road. Relative to the pace of construction in Eagle Mountain City, it is unlikely that the additional vehicles associated with Project construction would result in a substantive increase in traffic in the area.

2.3.2 Energy Infrastructure

Two utility corridors are located in or near the Project Area. The Kern River natural gas pipeline and the Camp Williams to Mona 345-kV transmission line run north-south approximately 0.2 – 1.8 miles east of the northern and southern parcels, respectively, and through west side of the eastern Project Area parcel. These utility corridors are shown on **Map 1** in **Appendix A**. There are no active oil or gas wells in the Project Area. Construction and operation of the Project would have no effect on existing energy infrastructure.

2.4 Community Resources

2.4.1 Aesthetics

There are no known aesthetic standards for development of the Project Area. Utah County has not adopted any scenic viewsheds or viewpoints, nor any substantive aesthetic standards for development. Aesthetics are not included as CUP approval criteria under Utah County's Code. There are no designated Scenic Byways within or near the study area.

Impacts to the viewshed are occasionally raised by opponents of solar energy projects. Solar PV facilities are generally too low to the ground to be highly visible from areas at similar or lower elevations. Solar panels on the northern and eastern parcels will be visible from Lake Mountain Road but are not expected to be any more obtrusive than those already approved under the Project's existing conditional use permits. Panels on the Project Area will be difficult or impossible to see with the naked eye from the more populated areas in Fairfield Town and Eagle Mountain City. The Project will not be illuminated at night except when workers are present. Consequently, solar development of the Project Area parcels is expected to have negligible impacts on the viewshed of Cedar Valley.

2.4.2 Noise

The operational noise at a solar PV facility is minimal and typically associated with maintenance vehicles and the hum of transformers at the power inverters distributed throughout the solar arrays. These noises are rarely audible beyond a few hundred feet from the source and would not be noticeable at the nearest residence approximately 1 mile north of the northern parcel.

The noise associated with project construction will be considerably louder but short-term. Because it is temporary, construction noise is generally not considered a nuisance and is typically not regulated or limited except by time-of-day restrictions. Construction equipment generates noise with maximum sound pressure levels generally ranging from 80 to 90 A-weighted decibels (dBA) at a distance of 50 feet. While these sound levels may be detectable from the nearby roads, they are unlikely to be noticeable over ambient (e.g., wind) noise.

2.4.3 Air quality

Utah County is a non-attainment area for Ozone, PM 2.5, and PM 10. Operation of a solar PV facility does not generate any emissions. During construction, there may be short-term emissions from construction equipment and workers' vehicles but the primary effects to air quality are expected to be from dust generated on site during excavation and backfilling of collector line trenches. In order to avoid or minimize the generation of dust during construction, Quicksilver will comply with state and federal law by preparing and submitting a Fugitive Dust Plan to the Utah Department of Environmental Quality, Air Quality Division. Dust suppression measures to be used on access roads and in the Project Area include use of a water truck to spray down dirt roads prior to and during vehicle and equipment movements and/or soil disturbance. A dust suppressant, such as magnesium chloride, may be used along the affected portions of Lake Mountain Road and other county roads.

2.5 Biological Resources

2.5.1 Wetlands and Other Waters of the U.S.

In addition to wetlands, waters of the U.S. can include rivers, lakes, streams, playas, and canals. Protection of aquatic resources falls under the Clean Water Act. Preliminary identification of aquatic resources in the study area was completed using USFWS NWI Data and the USGS National Hydrography Dataset (NHD). According to NWI and NHD data, there are no areas of wetlands or other waters of the U.S. in the northern and southern Project Area parcels. In the eastern Project Area parcel, both datasets show two stream channels entering the east side of the parcel and ending before they reach the parcel's western boundary (**Map 3, Appendix A**). These channels are classified as intermittent streams, i.e., they only flow part of the year in response to snowmelt or stormwater runoff.

M&N has not conducted a field assessment of aquatic resources in eastern parcel but these channels are not connected to nor are they adjacent to any traditional navigable waters. Consequently, they are unlikely to be jurisdictional waters of the U.S. As such, no Clean Water Act permits would be required for impacting them during construction and operation of solar PV facilities. Nonetheless, impacts to these channels will be avoided or minimized and they will be incorporated into the Project's stormwater runoff system to the extent practicable.

2.5.2 Vegetation

Observations made during visits to the Project Area parcels indicate that they are mostly dominated by varying heights and densities of scrub-shrub habitat or by introduced grasses and large, open areas dominated by bare ground, sand, and weedy forbs and grasses. The three basic land cover types observed on the Project Area are described below.

Developed/Disturbed

This cover type is common along roadsides in and adjacent to the Project Area. It is dominated by weedy species including cheatgrass and bur buttercup (*Ceratocephala testiculata*) and introduced crested wheatgrass.

Weedy Scrub-Shrub

Plant species characteristic of this cover type include big sagebrush, Mormon tea, green rabbitbrush, and desert globemallow. Weedy species including Russian thistle, cheatgrass, and halogeton are prevalent throughout this vegetation type and locally dominant in places.

Pasture/Hayfield

This cover type is dominated by crested wheatgrass and other introduced forage grasses. This is the dominant cover type in the western portion of the southern Project Area parcel. Russian thistle is becoming increasingly prevalent in the eastern portion of this parcel.

2.5.3 Groundwater

Depth to groundwater and well information for the Project Area were not readily available from publicly accessible datasets but might be obtainable from the Utah Department of Environmental Quality upon request. Groundwater resources are not expected to be impacted by or affect construction and operation of solar PV facilities in the Project Area.

2.5.4 Floodplains

The Project Area is classified by FEMA as being in Zone X, an area of minimal flood hazard. Consequently, the Project is unlikely to affect or be affected by flooding in the area.

2.5.5 Threatened and Endangered Species

A USFWS Information for Planning and Consultation (IPaC) report generated for the Project Area (**Appendix B**) indicates that no Endangered Species Act (ESA)-listed threatened or endangered species have potential to occur on these parcels. Two species proposed for ESA listing, the monarch butterfly and Suckley's cuckoo bumble bee, have potential to occur in the general area. Habitat requirements and the likelihood that these species occur on the Project Area parcels are summarized in Table 2.

Table 2. Species Proposed for ESA Listing Identified by the IPaC Report

Species	Habitat	Potential to Occur in Project Area	Status
Monarch Butterfly (*Danaus plexippus*)	Occurs in a wide variety of habitats throughout the year. Breeds in patches of milkweed (*Asclepias* spp.) throughout North America. Requires nectar-producing floral resources for foraging and milkweed for breeding (USFWS, 2022).	Low. No milkweed was observed on site during field surveys of the Project Area parcels. Without their obligate host plant, monarchs only have potential to occur on the Project Area on a limited, transitory basis during migration.	Proposed Threatened
Suckley's Cuckoo Bumble Bee (*Bombus suckleyi*)	Found in grasslands and meadows with rich, pollen- and nectar-producing floral resources. Requires above and below ground microsites for overwintering. *Bombus suckleyi* is a social parasite and depends on other bumble bees, primarily the Western bumble bee (*Bombus occidentalis*), to raise its young.	Low. Potentially suitable habitat is not prevalent on the Project Area due to a lack of rich, floral resources. Unlikely to occur in the area unless another bumble bee species is also present.	Proposed Endangered

It is highly unlikely that Project construction/operation would impact any ESA-listed species or species proposed for listing.

2.5.5.1 Critical Habitat

According to the IPaC report (**Appendix B**), there are no designated critical habitats for federally listed threatened or endangered species present in or adjacent to the Project Area.

2.5.6 Other Special Status Species

Other special status species with potential to occur in the Project Area include migratory birds of conservation concern (BCC) and species identified in the Utah Wildlife Action Plan (UDWR, 2015) as species of greatest conservation need (SGCN). BCC species are those whose populations or habitats appear to be under threat, but for which no regulatory protection is yet offered beyond that of the Migratory Bird Treaty Act (MBTA). In developing the Utah Wildlife Action Plan, UDWR and its partners identified SGCN based on three basic factors: (1) the likelihood of an ESA listing, (2) the consequences of such a listing, and (3) the state's ability to influence a listing decision. NatureServe's

national and state species rankings, which provide an integrated, weighted index of rarity, trends, and threats, combined with more Utah-specific information about rarity, trends, and distribution were key factors in the identification of SGCN across the state.

The USFWS IPaC report (**Appendix B**) identified 10 migratory BCC that may occur in or around the Project Area. Information on these species and their habitats and potential to occur on the three Project Area parcels is summarized in Table 3.

Table 3. Birds of Conservation Concern Identified in the IPAC Report

Species	Habitat[1]	Potential to Occur in Project Area[2]	Breeding Season
American White Pelican (*Pelecanus erythrorhyncos*)	Habitat includes lakes, ponds, rivers, open marshes, and inshore marine habitats. Nests in ground depressions or mounds on islands or peninsulas. Breeds throughout the Great Salt Lake and Utah Lake ecological complex. Forages in open water for fish and crustaceans.	None. The Project Area lacks suitable marine and shoreline foraging and breeding habitat.	April 1 - Aug. 31
Bald Eagle (*Haliaeetus leucocephalus*)	Breeds in areas near water bodies that support an abundance of food sources such as fish, waterfowl, and seabirds. Nests in tall trees, cliffs, or rock pinnacles.	Low. The Project Area lacks suitable nesting and foraging habitat. This species may occur over the Project Area on a transitory basis during migration and dispersal.	Dec. 1 - Aug. 31
Broad-tailed Hummingbird (*Selasphorus platycercus*)	Breeds in meadows and open woodlands, especially pinyon juniper, pine-oak, evergreen and montane scrub around 5,500 to 10,000 feet elevation. During migration they move from highland meadows to lowlands abundant with wildflowers. Drink nectar from flowers as well as sugar water from feeders.	Low. Suitable roosting, nesting and foraging habitats are not present in the Project Area. Presence during migration is likely limited by the general lack of nectar-producing flowers in the area.	May 25 – Aug. 21
California Gull (*Larus californicus*)	Breeds in the Great Salt Lake and Utah Lake ecological complex in estuaries, mudflats, marshes, irrigated fields, lakes, and ponds. Nests on the ground along lake and pond shores. Forages for insects, alkali flies, and small rodents and scavenges for dead fish and in landfills.	Low. The Project Area lacks suitable shoreline nesting and breeding habitat. This species may occur over the Project Area on a transitory basis in route to foraging areas along the shoreline of Utah Lake to the east and the Intermountain Regional Landfill to the west.	March 1 - July 31
Cassin's Finch (*Haemorhous cassinii*)	Breeds in open coniferous forests where they nest in conifer limbs. Occurs in deciduous woodlands, second growth forest, and scrub or brushy areas during migration and in winter.	Low. The Project Area lacks suitable coniferous breeding and nesting habitat. This species may visit scrub-shrub habitats in the eastern parcel on a transitory basis during migration or during winter.	May 15 - July 15

Species	Habitat[1]	Potential to Occur in Project Area[2]	Breeding Season
Golden Eagle (*Aquila chrysaetos*)	Habitat generalist that primarily forages in open to semi-open landscapes such as shrublands, grasslands, and woodland-brushlands. Nests are placed on cliffs, or less commonly built in trees, on the ground, or upon man-made structures. Diet consists of small mammals and rodents, large insects, fish, reptiles, ungulates, and carrion.	High. The Project Area provides potentially suitable foraging habitat and transmission line structures in and adjacent to the Project Area provide potentially suitable nesting habitat. A golden eagle was observed perched on a transmission line structure in the eastern Project Area parcel on June 27, 2025.	Jan 1 – Aug 31
Long-eared Owl (*Asio otus*)	During the breeding season, species uses dense vegetation adjacent to open areas such as grassland or shrubland. Nests and roosts in trees. In winter range, occupies similar habitats as breeding season, including farmland with hedgerows.	Low. The Project Area lacks dense vegetation and does not contain any trees suitable for nesting or roosting.	March 1 - July 15
Northern Harrier (*Circus hudsonius*)	Common in large, undisturbed tracts of wetlands and grasslands with low, thick vegetation. Breeds in dry upland habitats. During breeding season, they eat small mammals, reptiles, and birds. In winter, they almost exclusively feed on meadow voles. Nests on ground or on clumps of vegetation.	High. The Project Area parcels provide potentially suitable breeding, nesting, and foraging habitat for this species. Two Northern Harriers were observed at Hamburger Rock, approximately 1.5 miles east of the eastern parcel, on June 30, 2025.	Apr 1 – Sep 15
Pinyon Jay (*Gymnorhinus cyanocephalus*)	Common in the pinyon-juniper forests of Utah. They forage for pinyon seeds, berries and insects. Nests are located in trees.	None. The Project Area lacks suitable habitat for this species.	Feb. 15 - July 15
Sage Thrasher (*Oreoscoptes montanus*)	Nests on the ground in sagebrush and greasewood communities in low elevation deserts. They forage for insects.	Moderate. Potentially suitable nesting and foraging habitat is present in the eastern Project Area parcel.	April 15 - Aug. 10

[1] (Utah Division of Wildlife Resources,) and (NatureServe,)
[2] Occurrence potential based on recent nearby sightings as documented in (The Cornell Lab of Ornithology, 2025) and (iNaturalist,) and on best professional judgement accounting for existing habitat conditions in the Project Area

If Project construction must occur during the avian nesting season (generally January 1-August 31), pre-construction nest clearance surveys should be conducted within the disturbance footprint and surrounding species-specific nest buffers. If any active nests are found within the survey area, they should be avoided in accordance with USFWS-recommended species-specific spatial and temporal nest buffers (Romin and Muck, 2002) until the nest is abandoned or the young have fledged. If these procedures are followed, solar development of the Project Area is expected to have no direct adverse effects on migratory birds.

To determine what SGCN are known or have potential to occur in the Project Area, M&N used the Utah Division of Wildlife Resources Wildlife Habitat Assessment Tool (WHAT) to generate a report. According to the WHAT report (**Appendix B**), there are records of occurrence for three SGCN within

0.5 miles of the Project Area. The same three SGCN have also been documented within 2 miles of the Project Area.

Information on these species is provided in Table 4, below. It should be noted that there are no permitting or consultation requirements specific to SGCN. However, SGCN that are federally listed as threatened or endangered species are protected by the ESA. Migratory birds considered SGCN are protected under the MBTA. Golden eagles are considered Utah SGCN and are protected under the MBTA as well as the Bald and Golden Eagle Protection Act of 1940, as amended.

Table 4. SGCN Known to Occur within 0.5 and 2 Miles of the Project Area

Species	Habitat	Potential to Occur in the Project Area	Status
Golden Eagle *(Aquila chrysaetos)*	See Table 3.	See Table 3.	SGCN
Burrowing Owl *(Athene cunicularia)*	Nests in an abandoned mammal burrow in open grassland, steppe, and desert habitats.	High. Potential to nest and forage in the Project Area where mammal burrows are present.	SGCN
Ferruginous Hawk *(Buteo regalis)*	Forages in grasslands, shrub steppe, and the periphery of pinyon-juniper woodlands. Nests in trees and shrubs, cliffs and rock outcrops, utility structures, and on the ground.	High. Potential to nest and forage in the Project Area. Species observed 1.5 miles east of the eastern Project Area parcel on June 20, 2025.	SGCN

2.5.7 Fisheries

There are no lakes, rivers, or streams in the study area. Consequently, no fisheries would be affected by the Project.

2.5.8 Big Game

Although the Project Area is classified by UDWR as crucial year-long habitat for pronghorn (*Antilocarpa americana*) (**Map 4, Appendix A**), past observation records of GPS-tagged pronghorn individuals indicate that pronghorn use of the area is limited. Although there are no regulatory constraints associated with the designation of big game crucial year-long habitat on private land, solar development of the Project Area is not expected to have any substantive impacts on pronghorn, provided that that the site is designed in a manner that accounts for potential pronghorn movement.

Utah Migration Initiative-mapped mule deer migration corridors lie 0.2 to 1.6 miles east of the northern and southern Project Area parcels, respectively. Low- and medium-use corridors overlap the east side of the eastern parcel (**Map 4, Appendix A**). Most of the mule deer corridor that overlaps this parcel (102.6 acres or 22 percent of the parcel) is considered low use. Medium-use corridor is present in the northeastern corner of the eastern parcel where it overlaps 63.6 acres or about 14% of the parcel. The eastern boundary of this parcel is roughly 0.5 miles west of a high-use mule deer migration corridor, which is located primarily on state and federal lands and is therefore unlikely to be developed in the future. Due to the eastern parcel's relatively small overlap of low- and medium-use corridors, the large areas of these corridors that extend to the east of the parcel, and its

avoidance of the high-use corridor, construction and operation of solar PV facilities on the Project Area are not expected to have a substantive impact on mule deer migration in this area.

2.6 Cultural Resources

2.6.1 Archeological and Historic Resources

Significant archeological and architectural properties (those protected by federal, state, or local laws) are generally defined by the eligibility criteria for listing on the National Register of Historic Places (NRHP) and developed pursuant to the National Historic Preservation Act (NHPA; 16 U.S. Code §470f). Section 106 of the NHPA is triggered when projects require federal permits, occur on federal lands, or use federal funding. Such federal undertakings require consultation by federal agencies with the state historic preservation office (SHPO) and Native American Tribes with historical ties to a given place. These consultations identify the area of potential effect (APE) and potential adverse effects on archaeological, architectural, or other cultural resources that are listed on or are potentially eligible for listing on the NRHP. As required by Section 106 of the NHPA, the Utah SHPO (part of the Utah Division of State History) conducts reviews and provides comments about historic properties and possible effects for all projects that are federally funded, licensed, or permitted, either directly through the federal agency, or by delegation of the federal agency to the states.

The SHPO also reviews actions of other state agencies and some local government-sponsored actions to determine whether actions to issue permits would have a detrimental effect on historic properties, pursuant to Utah Annotated Code 9-8-404. Development of state lands triggers SHPO review. Necessary prerequisites to SHPO review include a records search and site survey. Pursuant to the Utah Administrative Code, Title R694, a permit is required to excavate sites on public lands or listed on the State Register.

The Project Area parcels do not contain nor are they located close to any sources of fresh water, which limits the likelihood that they harbor any important pre-historic or historic sites. Regardless, the Project Area is comprised entirely of private lands and no federal authorizations, permits, or funds are required for the construction and operation of solar PV facilities on these parcels. As such, cultural resource surveys and protection of any archaeological and historical sites on the Project Area are not required.

2.6.2 Tribal Consultations

Because the Project Area is privately owned and development of the Quicksilver Solar Project is not a federal undertaking (see Section 2.6.1, above), there is no requirement for tribal consultation. Tribal consultation for the 2-mile portion of the alternate transmission line route that crosses BLM-administered federal land to the east of the northern Project Area parcel was completed during the National Environmental Policy Act (NEPA) process conducted for the line's right-of-way grant. The Tribes contacted did not provide comments or express any concerns about the proposed right-of-way.

3. Summary of Environmental Issues

This section summarizes resource issues and potential development constraints associated with the construction and operation of solar PV facilities in the Project Area. Each issue included in Table 5 is qualitatively ranked as High, Medium, Low, or None. These rankings are defined as follows:

None: resource/issue is not present or applicable; no risk to Project.

Low: resource/issue may be present but would have little or no effect on Project design or permitting.

Medium: resource/issue is present and may require detailed analysis, possible mitigation, and could affect Project design, construction timing, and/or operations.

High: resource/issue is present, will require substantial time/cost to complete required analyses and permitting documentation, and will affect Project design, mitigation requirements, construction timing, and/or operations.

These findings are preliminary and considered "screening-level." In some cases, further study will be required to verify the presence or severity of each constraint.

Table 5. Environmental Issues Associated with Solar Development of the Project Area

Resource	Potential Impact (High/Medium/Low/Not Applicable [N/A])	Rationale
Land Use and Community Resources		
Land Use	Medium	The Project Area is currently vacant and unused. Project implementation will have no effect on surrounding land uses. A new conditional use permit from Utah County will be required prior to obtaining a building permit for the Project.
Potential Site Contamination	Low	Based on the results of past and pending Phase I environmental site assessments, no site contamination has been identified on the Project Area.
Important or Sensitive Facilities	None	There are no important or sensitive facilities within 6 miles of the Project Area.
Recreation	None	There are no publicly available recreational amenities in the Project Area.
Agricultural	Low	Approximately 82% of the Project Area area is classified as important or prime farmland, if irrigated. The Project Area is not currently irrigated and there are no active farming operations there.
Designated Protected Areas		
Public and Tribal Lands	None	The Project Area is comprised entirely of private land.
Conservation Reserve Program	Low	During private land lease negotiations, Quicksilver should determine if conservation reserve programs are in effect in the Project Area.
Special Status Land	None	The Project Area does not include any public lands or private lands with conservation easements or other deed restrictions.

Resource	Potential Impact (High/Medium/Low/Not Applicable [N/A])	Rationale
Infrastructure		
Surface Transportation	Low	Coordination with Eagle Mountain City, and/or Utah County on road use and improvements prior to construction will be required.
Energy Infrastructure	Low	Crossing existing utility corridors with Project infrastructure may require consultation with and approval by affected utilities.
Community Resources		
Aesthetics	Low	There are no aesthetic requirements for Utah County. Regardless, visibility of the Project from the nearest populated areas is expected to be minimal.
Air Quality	Low	The Project Area is located in a non-attainment area for multiple air pollutants. Quicksilver will comply with state/federal requirements and develop a fugitive dust control plan prior to project construction. Dust control measures will minimize potential impacts to air quality.
Noise	Low	Low-level sounds emitted by power inverters in the Project Area are not likely to affect neighboring land uses.
Biological Resources		
Wetlands and other waters of the U.S.	Low	Based on NWI data, the northern and southern Project Area parcels contain no wetlands or other waters. The eastern Project Area parcel contains two intermittent streams, both of which are unlikely to be considered jurisdictional waters of the U.S.
Groundwater	None	Construction and operation of solar PV facilities in the Project Area are not expected to affect or be affected by groundwater resources.
Floodplains	None	The Project Area is not located within any flood-prone areas.
Vegetation	Low	A large portion of the Project Area is dominated by invasive, weedy species with little value to wildlife.
Special Status Plant species	None	There is no habitat or records of occurrence for federally listed or SGCN plant species in the Project Area.
Threatened and Endangered Wildlife Species	None	There is no habitat or records of occurrence for federally listed threatened or endangered species or for species that have been proposed or are candidates for listing under the ESA.
Critical Habitat	None	There are no designated critical habitats in or near the Project Area.
Special Status Wildlife – Migratory Birds and SGCN	Low	Implementation of pre-construction nest clearance surveys and associated measures to avoid impacts to nesting migratory birds would avoid or minimize potential impacts to BCC and SGCN.
Fisheries	None	There are no water bodies within the Project Area.

Resource	Potential Impact (High/Medium/Low/Not Applicable [N/A])	Rationale
Big Game	Low	While the Project Area is classified as crucial year-long habitat for pronghorn, over the course of one full year UDWR recorded only 14 GPS-tagged pronghorn locations within the Project Area and all but one of these was from the southern parcel. Regardless, the crucial habitat designation does not preclude or constrain development of private property.
Bald and Golden Eagles	Low	Solar development of the Project Area will have no effect on bald eagles and will result in a relatively minor reduction in potential golden eagle foraging habitat.
Cultural Resources		
Archeological and Historic Resources	Low	Cultural resources are not protected on private lands. No historic properties would be affected by construction and operation of the alternate transmission line across federal lands.
Tribal Consultation	None	Tribal consultation is not required for development of private lands where no federal authorization, permit, or funding is involved. No Tribes contacted by the BLM expressed concerns regarding the alternate transmission route during the NEPA process completed for its federal right-of-way grant.

4. Conclusion

Although the closest residence to the Project Area is approximately 1 mile north of the northern parcel, the Project Area is at least 5 to 7 miles away from developed residential areas in Fairfield Town and Eagle Mountain City. These distances, and the fact that operation of the Project will not produce any emissions, odors, or loud noises, ensure that it will have minimal environmental impact on the communities and the residents of Cedar Valley.

The Project Area does not contain any perennial streams, wetlands, or other sensitive habitats. As described in the Vegetation section above (Section 2.5.2), the Project Area consists of former hay fields and livestock grazing land that is now dominated by weedy species. Portions of the Project Area that still contain native shrub-steppe vegetation have been highly degraded by past land uses (e.g., off-road vehicle use, wildfire, and livestock grazing), which have allowed cheatgrass, Russian thistle, and other invasive plant species to become established and spread, degrading the area's value to wildlife.

The Project Area does not provide habitat for any federally listed threatened or endangered species nor species that have been proposed or are candidates for listing under the ESA. Although migratory birds use portions of the site, impacts to these species will be avoided or minimized by either timing construction to occur outside of the nesting season or conducting nest clearance surveys to ensure that active nests are located and avoided by construction activities until young have fledged or the nests are no longer active.

Despite being located in UDWR-designated crucial year-long habitat for pronghorn, it appears that the Project Area is little used by pronghorn. Moreover, the site is located outside of the high-use mule deer migration corridors mapped by the Utah Migration Initiative. Provided that pronghorn are able to move between the larger solar arrays, construction and operation of solar PV facilities on the Project Area parcels are expected to have minimal effects on big game beyond those associated with current land uses in the area.

Based on the above analysis, it is our opinion that construction and operation of the Phase VI of the Quicksilver Solar Project will have acceptable environmental impacts.

5. References

NatureServe. *NatureServe Network Biodiversity Location Data*. Retrieved from NatureServe Explorer: https://explorer.natureserve.org/

Romin and Muck. (2002). *Utah Field Office Guidelines for Raptor Protection from Human and Land Use Disturbances.* Salt Lake City: U.S. Fish and Wildlife Service, Utah Field Office.

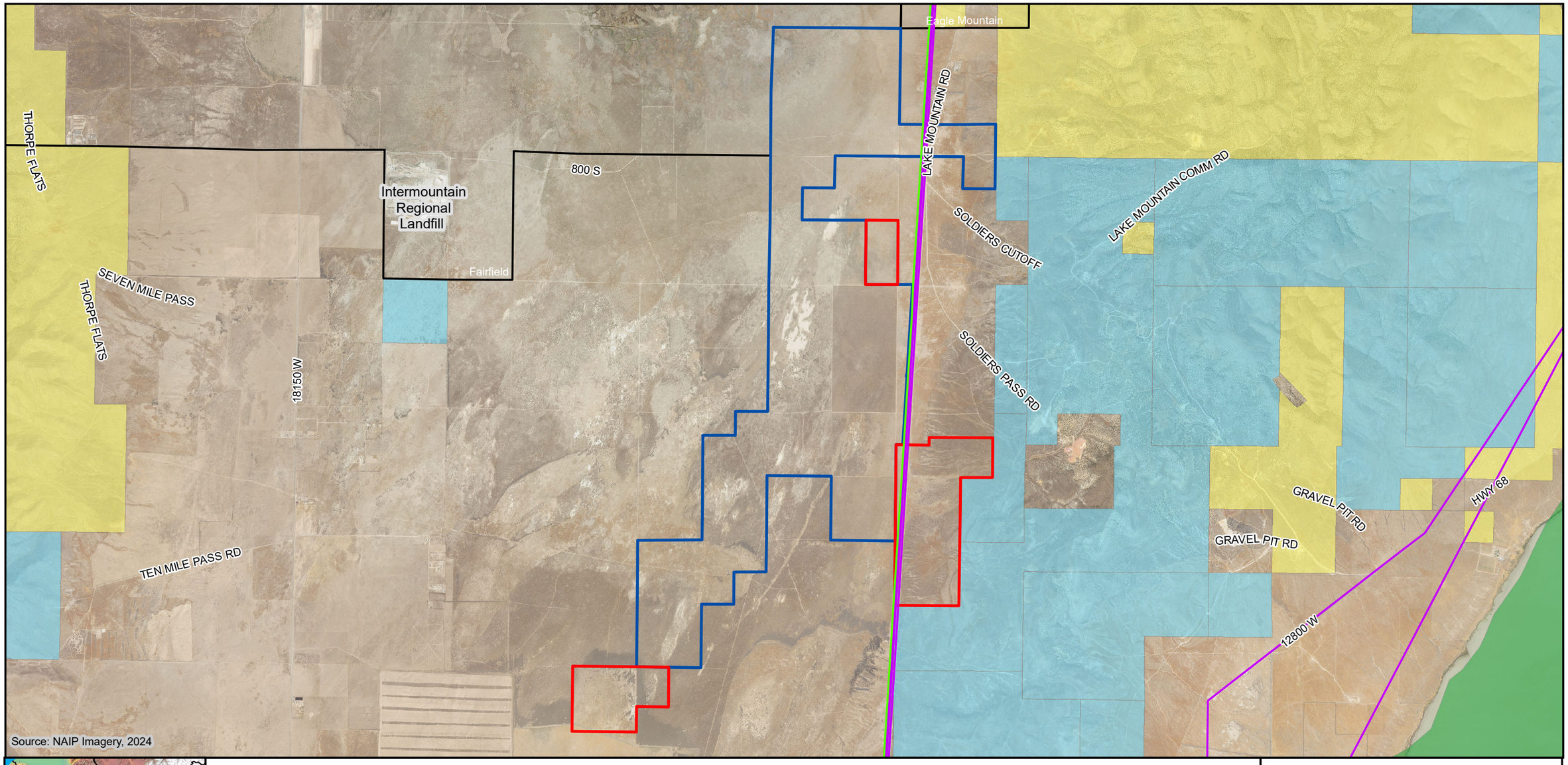
The Cornell Lab of Ornithology. *ebird*. Retrieved from ebird.

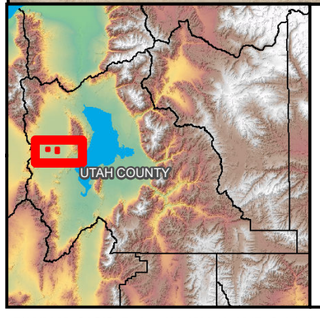
Utah Division of Wildlife Resources. Retrieved from Utah Wildlife Migration Initiative: https://wildlifemigration.utah.gov/land-animals/corridors/

USDA Natural Resources Conservation Service. Retrieved from Web Soil Survey: https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm

Appendix A-Maps

Map 1. Project Location
Map 2. Farmland Classification
Map 3. Wetlands and Other Waters of the U.S.
Map 4. Big Game





- Municipal Boundary
- Phase VI Project Area
- Previously Permitted Phase I & II Project Areas
- BLM
- DNR
- Private
- SITLA
- Kern River Pipeline
- Transmission Line

N

Miles
0 0.5 1

Quicksilver Solar Project
Phase VI

Map 1.
Location of the Project Area and
Surrounding Land Ownership

MARTIN & NICHOLSON
ENVIRONMENTAL CONSULTANTS

7/10/2025 C:\GIS_Projects\M_N\M_N_1047_Quicksilver_Solar\QKS_PhaseII_Ownership.mxd

Intermountain Regional Landfill

Fairfield

SEVEN MILE PASS

18150 W

TEN MILE PASS RD

SOLDIERS CUTOFF

LAKE MOUNTAIN COMM RD

SOLDIERS PASS RD

SOLDIERS PASS RD

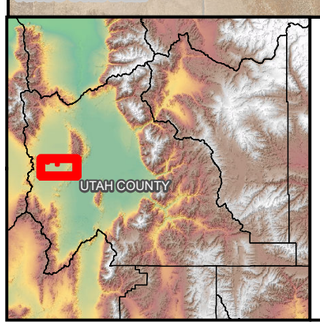
GRAVEL PIT RD

GRAVEL PIT RD

GRAVEL PIT RD

12800 W

Source: NAIP Imagery, 2024
NRCS Soils Data



Project Area
Municipal Boundary
Farmland of statewide importance
Not prime farmland
Prime farmland if irrigated

N

Miles
0 0.5 1

Quicksilver Solar Project
Phase VI

Map 2.
Farmland Classification

MARTIN & NICHOLSON
ENVIRONMENTAL CONSULTANTS

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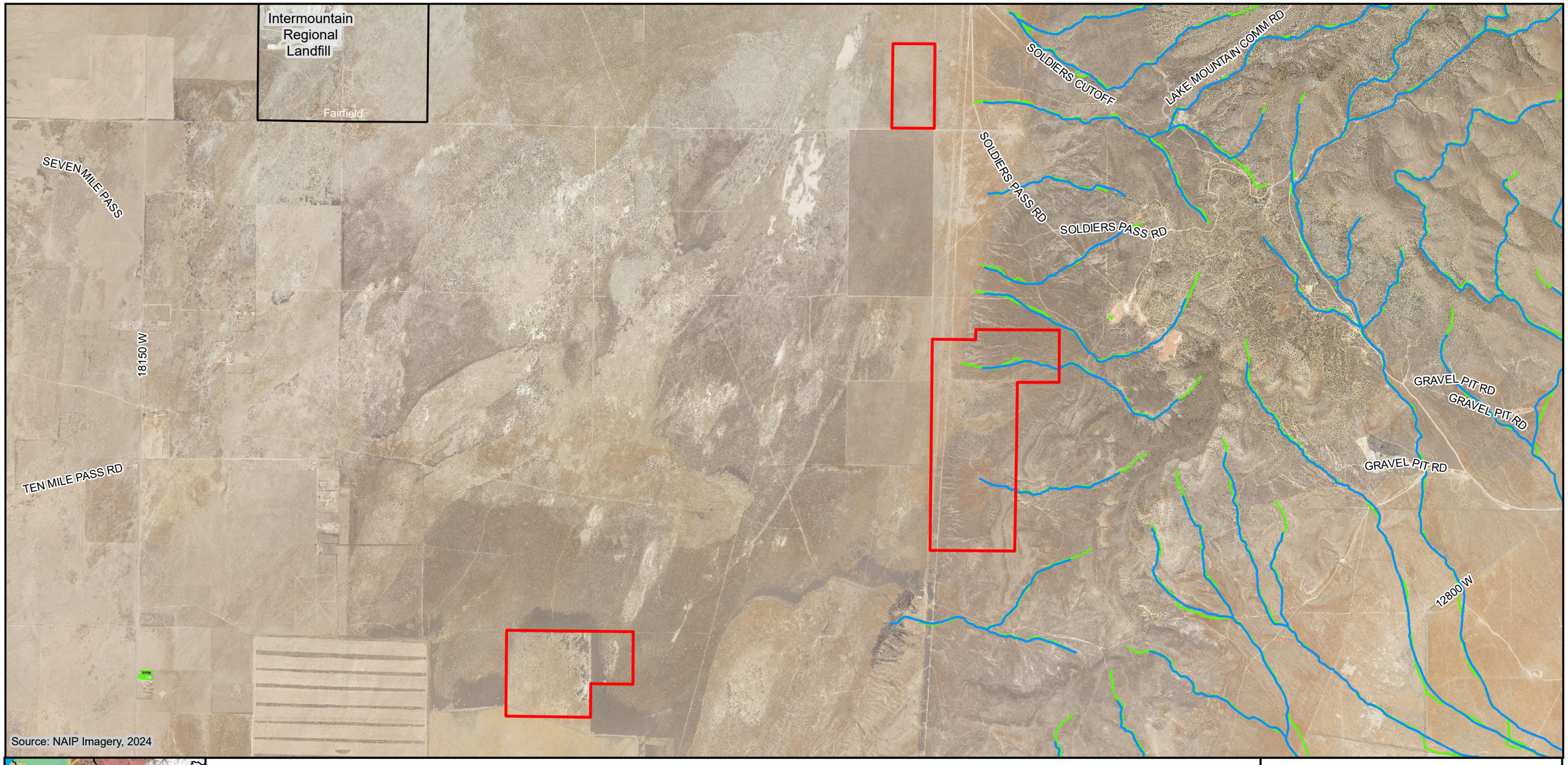

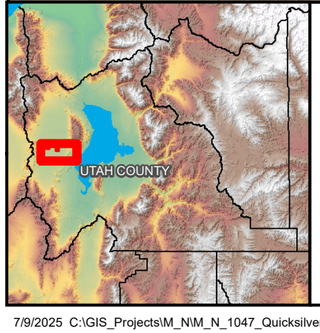

Project Area
Municipal Boundary
Artificial Path
Stream/River: Hydrographic Category = Ephemeral
Lake/Pond
National Wetlands Inventory

N

Miles
0 0.5 1

Quicksilver Solar Project
Phase VI

Map 3.
Wetlands and Other Waters of the U.S.

MARTIN & NICHOLSON
ENVIRONMENTAL CONSULTANTS

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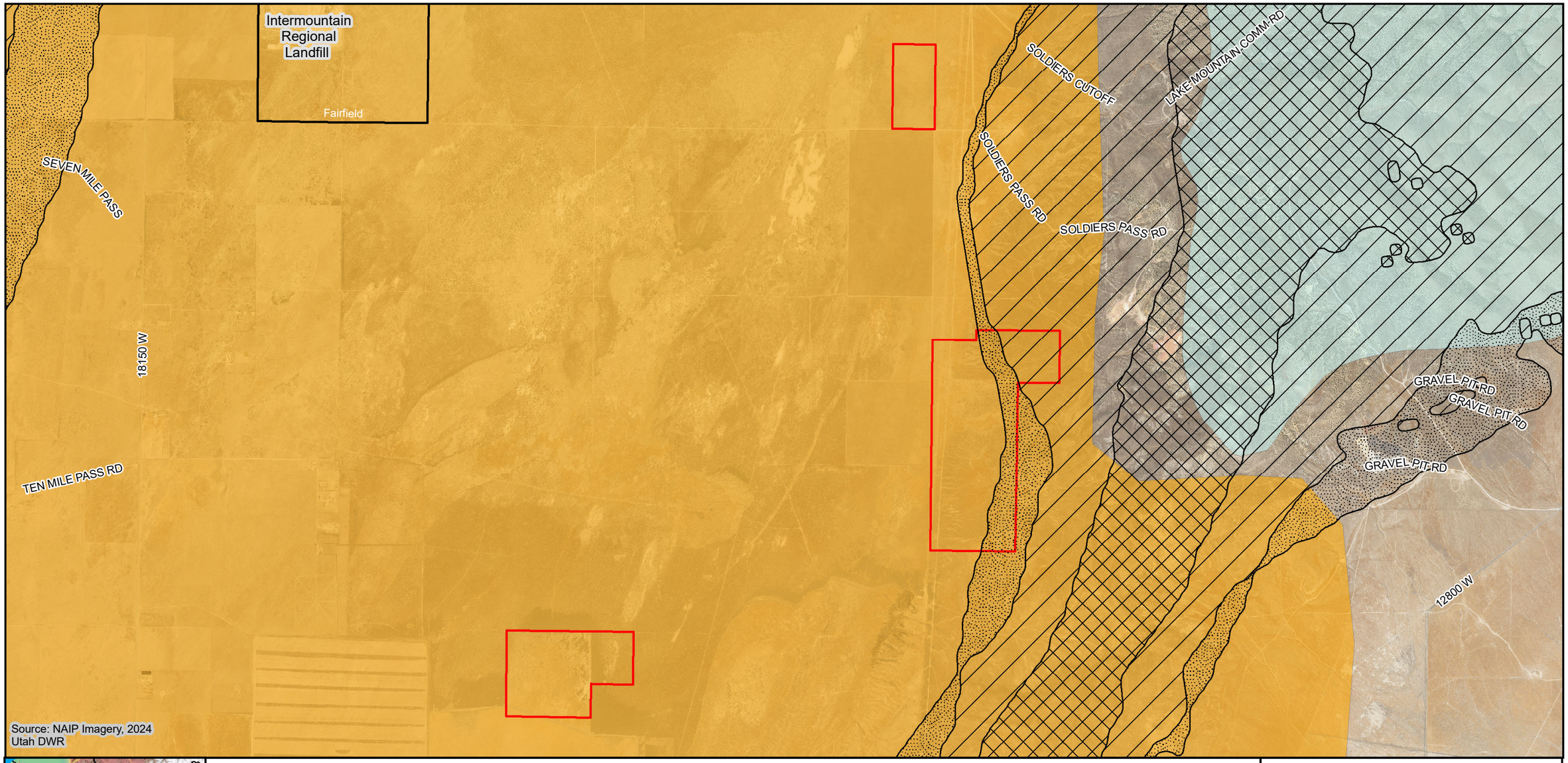

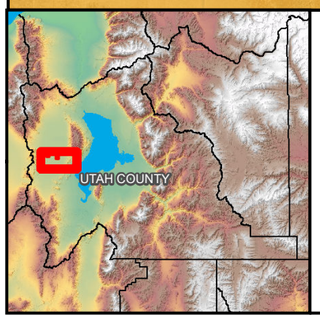

Project Area

Mule Deer Migration Corridor

- low use
- medium use
- high use
- Mule Deer Habitat

Pronghorn Antelope Habitat

- year-long, crucial

Municipal Boundary

N

Miles
0 0.5 1

Quicksilver Solar Project
Phase VI

Map 4.
Big Game Habitat

MARTIN & NICHOLSON
ENVIRONMENTAL CONSULTANTS

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Appendix B – Biological Resource Reports

USFWS IPAC Report and UDWR WHAT Report

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IPaC U.S. Fish & Wildlife Service

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Location

Utah County, Utah

Local office

Utah Ecological Services Field Office

(801) 975-3330
(801) 975-3331

2369 West Orton Circle, Suite 50

West Valley City, UT 84119-7603

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species[1] and their critical habitats are managed by the Ecological Services Program of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries[2]).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact NOAA Fisheries for species under their jurisdiction.

---

1. Species listed under the Endangered Species Act are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the listing status page for more information. IPaC only shows species that are regulated by USFWS (see FAQ).
2. NOAA Fisheries, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Insects

NAME	STATUS
Monarch Butterfly Danaus plexippus Wherever found There is **proposed** critical habitat for this species. Your location does not overlap the critical habitat. https://ecos.fws.gov/ecp/species/9743	Proposed Threatened
Suckley's Cuckoo Bumble Bee Bombus suckleyi No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/10885	Proposed Endangered

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

There are no critical habitats at this location.

You are still required to determine if your project(s) may have effects on all above listed species.

Bald & Golden Eagles

Bald and Golden Eagles are protected under the Bald and Golden Eagle Protection Act [2] and the Migratory Bird Treaty Act (MBTA) [1]. Any person or organization who plans or conducts activities that may result in impacts to Bald or Golden Eagles, or their habitats, should follow appropriate regulations and consider implementing appropriate avoidance and minimization measures, as described in the various links on this page.

Additional information can be found using the following links:

- Eagle Management https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds

- Nationwide avoidance and minimization measures for birds https://www.fws.gov/sites/default/files/documents/nationwide-standard-conservation-measures.pdf
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

There are Bald Eagles and/or Golden Eagles in your project area.

Measures for Proactively Minimizing Eagle Impacts
For information on how to best avoid and minimize disturbance to nesting bald eagles, please review the National Bald Eagle Management Guidelines. You may employ the timing and activity-specific distance recommendations in this document when designing your project/activity to avoid and minimize eagle impacts. For bald eagle information specific to Alaska, please refer to Bald Eagle Nesting and Sensitivity to Human Activity.

The FWS does not currently have guidelines for avoiding and minimizing disturbance to nesting Golden Eagles. For site-specific recommendations regarding nesting Golden Eagles, please consult with the appropriate Regional Migratory Bird Office or Ecological Services Field Office.

If disturbance or take of eagles cannot be avoided, an incidental take permit may be available to authorize any take that results from, but is not the purpose of, an otherwise lawful activity. For assistance making this determination for Bald Eagles, visit the Do I Need A Permit Tool. For assistance making this determination for golden eagles, please consult with the appropriate Regional Migratory Bird Office or Ecological Services Field Office.

Ensure Your Eagle List is Accurate and Complete
If your project area is in a poorly surveyed area in IPaC, your list may not be complete and you may need to rely on other resources to determine what species may be present (e.g. your local FWS field office, state surveys, your own surveys). Please review the Supplemental Information on Migratory Birds and Eagles, to help you properly interpret the report for your specified location, including determining if there is sufficient data to ensure your list is accurate.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to bald or golden eagles on your list, see the "Probability of Presence Summary" below to see when these bald or golden eagles are most likely to be present and breeding in your project area.

Review the FAQs
The FAQs below provide important additional information and resources.

NAME	BREEDING SEASON

Bald Eagle Haliaeetus leucocephalus — Breeds Dec 1 to Aug 31

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

Golden Eagle Aquila chrysaetos — Breeds Jan 1 to Aug 31

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.
https://ecos.fws.gov/ecp/species/1680

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "Supplemental Information on Migratory Birds and Eagles", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

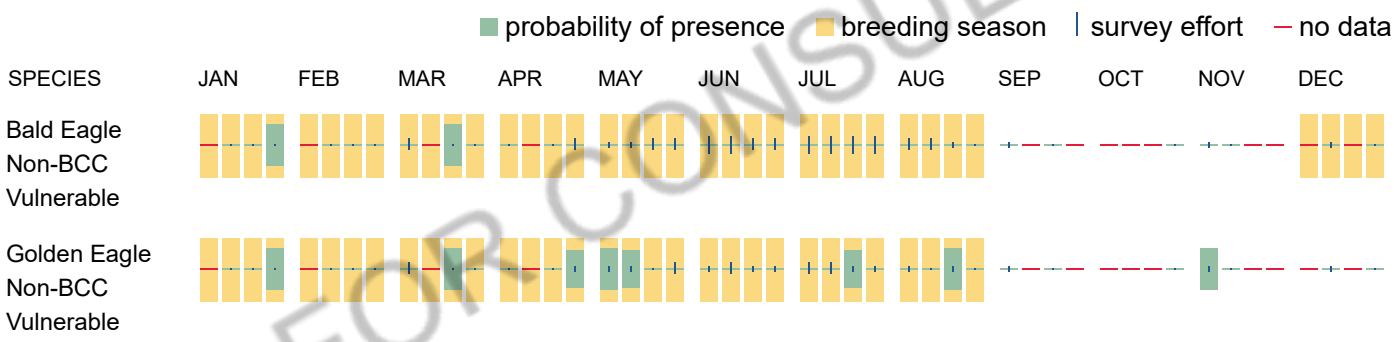
Breeding Season (▪)
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



Bald & Golden Eagles FAQs

What does IPaC use to generate the potential presence of bald and golden eagles in my specified location?

The potential for eagle presence is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are an eagle (Bald and Golden Eagle Protection Act requirements may apply).

Proper interpretation and use of your eagle report
On the graphs provided, please look carefully at the survey effort (indicated by the black vertical line) and for the existence of the "no data" indicator (a red horizontal line). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort line or no data line (red horizontal) means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests

might be present). The list and associated information help you know what to look for to confirm presence and helps guide you in knowing when to implement avoidance and minimization measures to eliminate or reduce potential impacts from your project activities or get the appropriate permits should presence be confirmed.

How do I know if eagles are breeding, wintering, or migrating in my area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating, or resident), you may query your location using the RAIL Tool and view the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If an eagle on your IPaC migratory bird species list has a breeding season associated with it (indicated by yellow vertical bars on the phenology graph in your “IPaC PROBABILITY OF PRESENCE SUMMARY” at the top of your results list), there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

Interpreting the Probability of Presence Graphs

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. A taller bar indicates a higher probability of species presence. The survey effort can be used to establish a level of confidence in the presence score.

How is the probability of presence score calculated? The calculation is done in three steps:
The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.

To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.

The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

Breeding Season ()
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort ()
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data ()
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.

Migratory birds

The Migratory Bird Treaty Act (MBTA) [1] prohibits the take (including killing, capturing, selling, trading, and transport) of protected migratory bird species without prior authorization by the Department of Interior U.S. Fish and Wildlife Service (Service).

1. The Migratory Birds Treaty Act of 1918.
2. The Bald and Golden Eagle Protection Act of 1940.

Additional information can be found using the following links:

- Eagle Management https://www.fws.gov/program/eagle-management
- Measures for avoiding and minimizing impacts to birds https://www.fws.gov/library/collections/avoiding-and-minimizing-incidental-take-migratory-birds
- Nationwide avoidance and minimization measures for birds
- Supplemental Information for Migratory Birds and Eagles in IPaC https://www.fws.gov/media/supplemental-information-migratory-birds-and-bald-and-golden-eagles-may-occur-project-action

Measures for Proactively Minimizing Migratory Bird Impacts

Your IPaC Migratory Bird list showcases birds of concern, including Birds of Conservation Concern (BCC), in your project location. This is not a comprehensive list of all birds found in your project area. However, you can help proactively minimize significant impacts to all birds at your project location by implementing the measures in the Nationwide avoidance and minimization measures for birds document, and any other project-specific avoidance and minimization measures suggested at the link Measures for avoiding and minimizing impacts to birds for the birds of concern on your list below.

Ensure Your Migratory Bird List is Accurate and Complete

If your project area is in a poorly surveyed area, your list may not be complete and you may need to rely on other resources to determine what species may be present (e.g. your local FWS field office, state surveys, your own surveys). Please review the Supplemental Information on Migratory Birds and Eagles document, to help you properly interpret the report for your specified location, including determining if there is sufficient data to ensure your list is accurate.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, see the "Probability of Presence Summary" below to see when these birds are most likely to be present and breeding in your project area.

Review the FAQs

The FAQs below provide important additional information and resources.

NAME	BREEDING SEASON

American White Pelican pelecanus erythrorhynchos — Breeds Apr 1 to Aug 31

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/6886

Bald Eagle Haliaeetus leucocephalus — Breeds Dec 1 to Aug 31

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

Broad-tailed Hummingbird Selasphorus platycercus — Breeds May 25 to Aug 21

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

California Gull Larus californicus — Breeds Mar 1 to Jul 31

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Cassin's Finch Haemorhous cassinii — Breeds May 15 to Jul 15

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9462

Golden Eagle Aquila chrysaetos — Breeds Jan 1 to Aug 31

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.
https://ecos.fws.gov/ecp/species/1680

Long-eared Owl asio otus — Breeds Mar 1 to Jul 15

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/3631

Northern Harrier Circus hudsonius — Breeds Apr 1 to Sep 15

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/8350

Pinyon Jay Gymnorhinus cyanocephalus — Breeds Feb 15 to Jul 15

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.
https://ecos.fws.gov/ecp/species/9420

Sage Thrasher Oreoscoptes montanus — Breeds Apr 15 to Aug 10

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA
https://ecos.fws.gov/ecp/species/9433

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read "Supplemental Information on Migratory Birds and Eagles", specifically the FAQ section titled "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season (■)

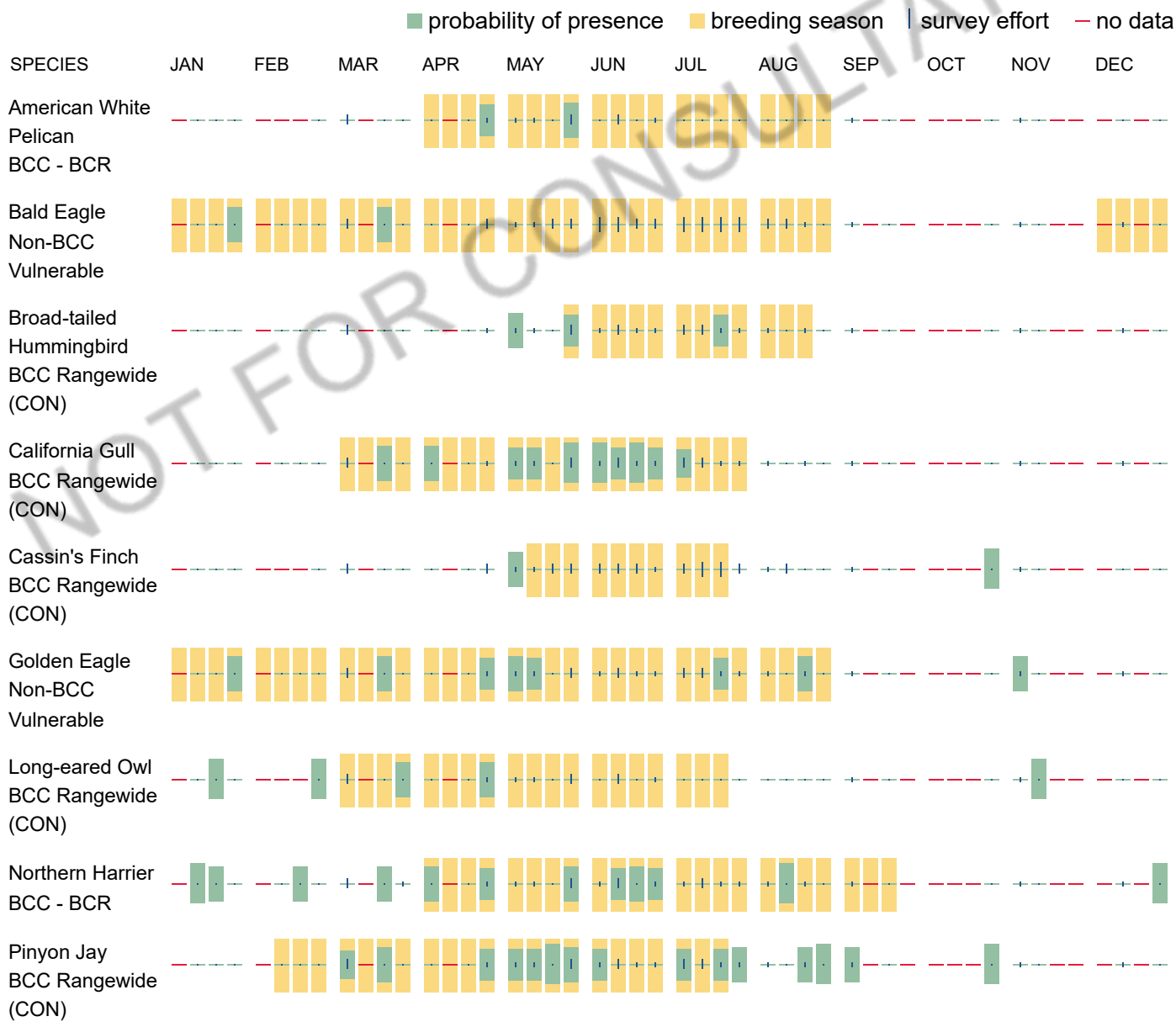
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

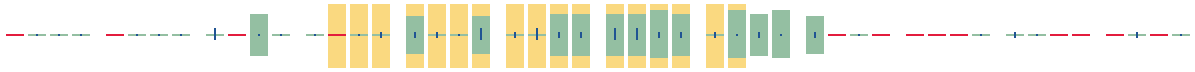
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (–)
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.



Sage Thrasher
BCC - BCR



Migratory Bird FAQs

Tell me more about avoidance and minimization measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Avoidance & Minimization Measures for Birds describes measures that can help avoid and minimize impacts to all birds at any location year-round. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is one of the most effective ways to minimize impacts. To see when birds are most likely to occur and breed in your project area, view the Probability of Presence Summary. Additional measures or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the list of migratory birds that potentially occur in my specified location?

The Migratory Bird Resource List is comprised of Birds of Conservation Concern (BCC) and other species that may warrant special attention in your project location, such as those listed under the Endangered Species Act or the Bald and Golden Eagle Protection Act and those species marked as “Vulnerable”. See the FAQ “What are the levels of concern for migratory birds?” for more information on the levels of concern covered in the IPaC migratory bird species list.

The migratory bird list generated for your project is derived from data provided by the Avian Knowledge Network (AKN). The AKN data is based on a growing collection of survey, banding, and citizen science datasets and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) with which your project intersects. These species have been identified as warranting special attention because they are BCC species in that area, an eagle (Bald and Golden Eagle Protection Act requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, and to verify survey effort when no results present, please visit the Rapid Avian Information Locator (RAIL) Tool.

Why are subspecies showing up on my list?

Subspecies profiles are included on the list of species present in your project area because observations in the AKN for **the species** are being detected. If the species are present, that means that the subspecies may also be present. If a subspecies shows up on your list, you may need to rely on other resources to determine if that subspecies may be present (e.g. your local FWS field office, state surveys, your own surveys).

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the Avian Knowledge Network (AKN). This data is derived from a growing collection of survey, banding, and citizen science datasets.

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go to the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, or migrating in my area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating, or resident), you may query your location using the RAIL Tool and view the range maps provided for birds in your area at the bottom of the profiles provided for each bird in your results. If a bird on your IPaC migratory bird species list has a breeding season associated with it (indicated by yellow vertical bars on the phenology graph in your “IPaC PROBABILITY OF PRESENCE SUMMARY” at the top of your results list), there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are Birds of Conservation Concern (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the Bald and Golden Eagle Protection Act requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially BCC species. For more information on avoidance and minimization measures you can implement to help avoid and minimize migratory bird impacts, please see the FAQ “Tell me more about avoidance and minimization measures I can implement to avoid or minimize impacts to migratory birds”.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Proper interpretation and use of your migratory bird report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please look carefully at the survey effort (indicated by the black vertical line) and for the existence of the "no data" indicator (a red horizontal line). A high survey effort is the key component. If the survey effort is high, then

the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list does not represent all birds present in your project area. It is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list and associated information help you know what to look for to confirm presence and helps guide implementation of avoidance and minimization measures to eliminate or reduce potential impacts from your project activities, should presence be confirmed. To learn more about avoidance and minimization measures, visit the FAQ "Tell me about avoidance and minimization measures I can implement to avoid or minimize impacts to migratory birds".

Interpreting the Probability of Presence Graphs
Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. A taller bar indicates a higher probability of species presence. The survey effort can be used to establish a level of confidence in the presence score.

How is the probability of presence score calculated? The calculation is done in three steps:
The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.

To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.

The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

Breeding Season ()
Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort ()
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps.

No Data ()
A week is marked as having no data if there were no survey events for that week.

Survey Timeframe
Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the National Wildlife Refuge system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

There are no refuge lands at this location.

Fish hatcheries

There are no fish hatcheries at this location.

Wetlands in the National Wetlands Inventory (NWI)

Impacts to NWI wetlands and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local U.S. Army Corps of Engineers District.

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

This location overlaps the following wetlands:

RIVERINE
R4SBJ

A full description for each wetland code can be found at the National Wetlands Inventory website

NOTE: This initial screening does **not** replace an on-site delineation to determine whether wetlands occur. Additional information on the NWI data is provided below.

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tuberficid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate Federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

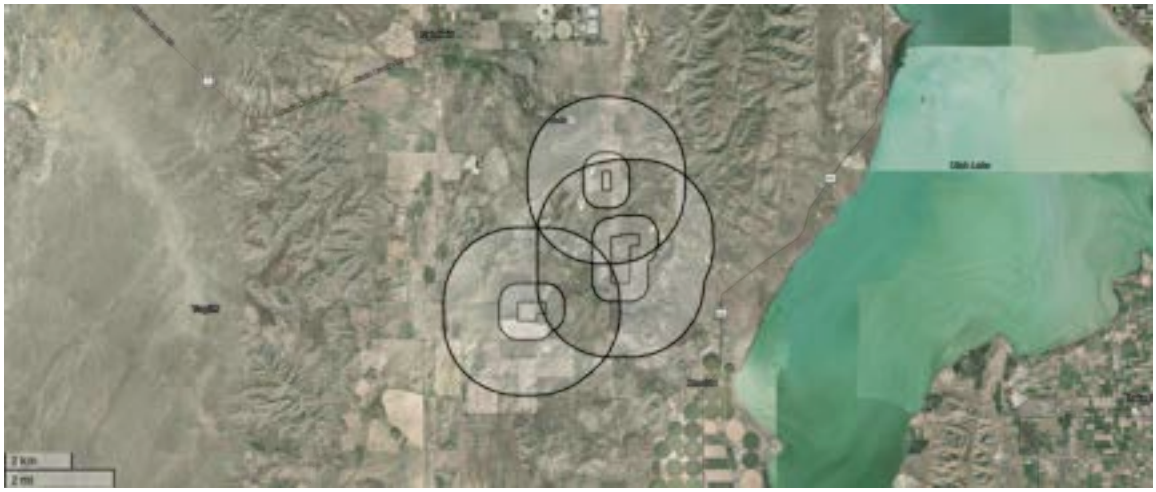
Utah Division of Wildlife Resources
1594 W. North Temple
Salt Lake City, UT 84116
(801) 538-4700, wildlife.utah.gov

Report Number: rsm_17485

Report Date: 2025-07-07 16:44:40

Quicksilver Solar Phase VI

Location: Cedar Valley
Description: Solar PV Power Generation Project



Project Area of Interest with a half-mile and two-mile radius.

Half-Mile Radius

Species Name	Scientific Name	UWAP Status	ESA Status	Last Reported Date	SDHM
Great Horned Owl	*Bubo virginianus*	None	None	2014-03-15	
Long-eared Owl	*Asio otus*	None	None	2014-04-16	

Species Name	Scientific Name	UWAP Status	ESA Status	Last Reported Date	SDHM
Ferruginous Hawk	*Buteo regalis*	SGCN	None	2003-01-01	
Burrowing Owl	*Athene cunicularia*	SGCN	None	2013-10-23	 Full View
Golden Eagle	*Aquila chrysaetos*	SGCN	None	2012-03-27	
Burrowing Owl	*Athene cunicularia*	SGCN	None	2014-04-02	 Full View
Ferruginous Hawk	*Buteo regalis*	SGCN	None	2013-10-23	

Two-Mile Radius

Species Name	Scientific Name	UWAP Status	ESA Status	Last Reported Date	SDHM
Great Horned Owl	*Bubo virginianus*	None	None	2014-04-16	
Barn Owl	*Tyto alba*	None	None	2014-06-11	

Species Name	Scientific Name	UWAP Status	ESA Status	Last Reported Date	SDHM
Long-eared Owl	*Asio otus*	None	None	2014-04-16	
Ferruginous Hawk	*Buteo regalis*	SGCN	None	2014-07-19	
Burrowing Owl	*Athene cunicularia*	SGCN	None	2014-05-29	 Full View
Golden Eagle	*Aquila chrysaetos*	SGCN	None	2014-04-30	
Golden Eagle	*Aquila chrysaetos*	SGCN	None	2013-06-05	
Ferruginous Hawk	*Buteo regalis*	SGCN	None	1933-04-09	
Bald Eagle	*Haliaeetus leucocephalus*	None	None	1991-01-25	
Great Horned Owl	*Bubo virginianus*	None	None	2013-04-24	
Red-tailed Hawk	*Buteo jamaicensis*	None	None	2013-06-05	
Ferruginous Hawk	*Buteo regalis*	SGCN	None	2014-07-19	

Species Name	Scientific Name	UWAP Status	ESA Status	Last Reported Date	SDHM
Burrowing Owl	*Athene cunicularia*	SGCN	None	2014-05-29	 Full View
Swainson's Hawk	*Buteo swainsoni*	None	None	1958-05-25	

Definitions

State Status	
SGCN, SGIN	Species of greatest conservation need (SGCN) or the special subcategory, species of greatest Information need (SGIN), are listed in the Utah Wildlife Action Plan (UWAP) and also included in the Utah Field Guide
U.S. Endangered Species Act	
LE	A taxon that is listed by the U.S. Fish and Wildlife Service as "endangered" with the probability of worldwide extinction
LT	A taxon that is listed by the U.S. Fish and Wildlife Service as "threatened" with becoming endangered
LE;XN	An "endangered" taxon that is considered by the U.S. Fish and Wildlife Service to be "experimental and nonessential" in its designated use areas in Utah
C	A taxon for which the U.S. Fish and Wildlife Service has on file sufficient information on biological vulnerability and threats to justify it being a "candidate" for listing as endangered or threatened
PT/PE	A taxon "proposed" to be listed as "endangered" or "threatened" by the U.S. Fish and Wildlife Service

Species Distribution and Habitat Suitability Models

Species distribution and habitat suitability models (SDHMs) can inform wildlife management decisions such as habitat protection, enhancement, and restoration. They may also help assess environmental impacts by identifying species' habitats. When reevaluating SDHMs with new information, they can help identify or track changes or trends in habitat quality. SDHMs assess habitats' spatial arrangement and connectivity, identify crucial habitats, or describe the environmental conditions a species selects. SDHMs provide an understanding of the impacts of invasive species spread and identify suitable areas for species translocations/re-introductions.

SDHMs show a predicted suitable habitat for a species based on various biotic and abiotic environmental factors. These models may be useful for statewide evaluation but should not be considered verified species presence or absence. Field survey information should be utilized to verify the presence or absence of taxa when making species-specific decisions. Models produced by the Utah Division of Wildlife Resources (DWR) were conducted using a blend of Generalized Linear Models, Generalized Additive Models, Random Forest Models, Boosted Regression Tree Models, and Maximum Entropy Models.

Mitigation Strategies

Typical recommendations to consider and help guide project activities to avoid, minimize or mitigate impacts on wildlife and their habitats from project disturbances are displayed below for some wildlife species found within/near your project area.

Common Name	Strategy
Burrowing Owl	If burrowing owls are found onsite, construction should be avoided within 0.25 miles of their burrow from March 15 - August 15.
Golden Eagle	Avoid disturbance within 0.5 miles from nest Feb. 1 - Aug. 15
Bald Eagle	Avoid disturbance within disturbance buffer (determined by activity; either 330 ft or 660 ft) from nest Jan. 1 - Aug. 15
pronghorn	Avoid disturbances in year-long pronghorn habitat during fawning from Apr. 15 - June 15 and during severe snow conditions (snow > 9” or heavily crusted snow that pronghorn can’t forage through). Consider mitigation at 4:1 ratio if avoidance is not possible or there is permanent habitat loss.

The DWR understands that mitigation strategies might conflict. Please reach out to DWR staff to develop strategies to minimize impacts on wildlife while still achieving project goals. Your project is located in the following UDWR region(s):

DWR Region Full Name	Regional Phone	Impact Analysis Biologist	Email	Phone
Central Region	801-491-5678	Josee Seamons	jseamons@utah.gov	385-421-1277

Wildlife Action Plan

The Utah Wildlife Action Plan (UWAP) is Utah's guiding document for native species conservation. The DWR encourages parties to use the UWAP in their environmental planning, as it provides a conservation framework to prevent future listings under the ESA.

Disclaimer

The information provided in this report is based on data existing in the Utah Division of Wildlife Resources' central database at the time of the request. It should not be regarded as a final statement on the occurrence of any species on or near the designated site, nor should it be considered a substitute for on-the-ground biological surveys. Moreover, because the Utah Division of Wildlife Resources' central database is continually updated, any given response is only appropriate for its respective request.

The Utah DWR provides no warranty nor accepts any liability occurring from any incorrect, incomplete, or misleading data or from any incorrect, incomplete, or misleading use of these data.

The results include a query of species tracked by the Utah Natural Heritage Program and Utah Division of Wildlife Resources, which includes all species listed under the U.S. Endangered Species Act, species in the Utah Wildlife Action Plan, and other species. Other significant wildlife values might also be present on the designated site.

For additional information about species listed under the Endangered Species Act and their Critical Habitats that may be affected by activities in this area or for information about Section 7 consultation under the Endangered Species Act, please visit https://ecos.fws.gov/ipac/ or contact the U.S. Fish and Wildlife Service Utah Ecological Services Field Office at (801) 975-3330 or utahfieldoffice_esa@fws.gov.

The "Not For Consultation" watermark is meant to inform users that this tool is not a substitute for the U.S. Fish and Wildlife Service (USFWS) environmental review process. While this tool provides courtesy information on ESA species for context, the U.S. Fish and Wildlife Service is the authority on Information for Planning and Consultation Endangered Species Act Reviews. Additionally, the Wildlife Habitat Analysis Tool provides information to assist in analysis but does not replace coordination and consultation with Utah Division of Wildlife Resource biologists who can often serve as an expert resource for site-specific information.

Supplemental Data

Migration Corridors

Species	Type
Mule Deer	low use
Mule Deer	medium use

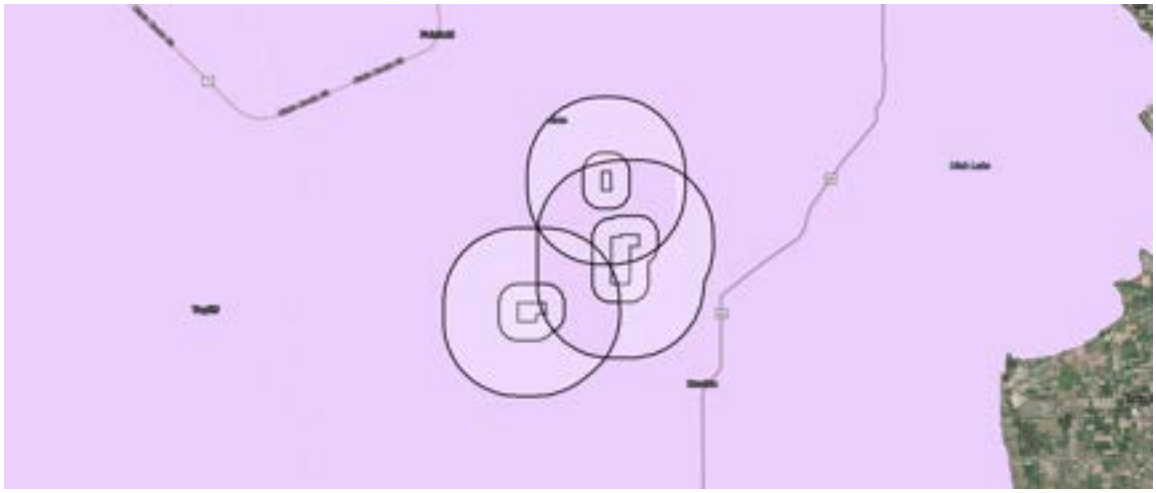
Unmapped Corridors

Unmodeled Corridors: Absent

Wildlife Habitat Information

Species	Season	Value	Comments
Chukar	year-long	substantial	
Pronghorn	year-long	crucial	No detailed biological data are available to determine season of use.

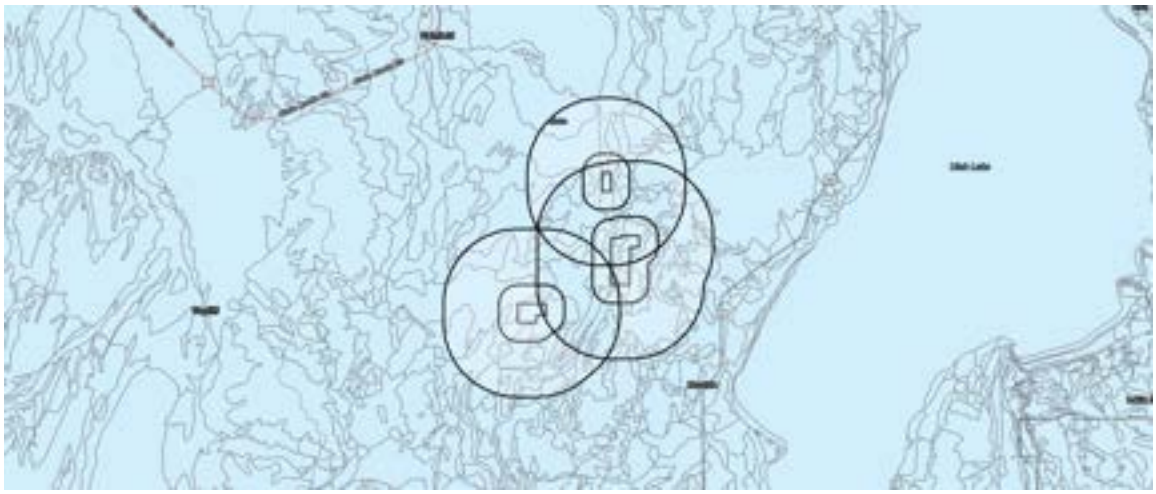
DVA Utah GSL Sentinel Landscape Boundary



Description: This dataset is a single boundary representing the area that falls under the Great Salt Lake Sentinel Landscape.What is the purpose of the dataset?The purpose of this dataset is to help current and future partners of the Great Salt Lake Sentinel Landscape spatially understand the area where conservation efforts may align with the goals of the Sentinel Landscape Partnership to best leverage funding opportunities.What does the dataset represent?The dataset represents a federally established boundary that shows the area of the Great Salt Lake Sentinel Landscape.How was the dataset created?The boundary was created by the Great Salt Lake Sentinel Landscape Coordinator with input from multiple federal agencies, state and local governments, and non-governmental organizations.How reliable and accurate is the dataset?The boundary was approved by the Federal Coordinating Committee (FCC) for the Sentinel Landscape Partnership. It will remain unchanged until an approval for expansion is granted by the FCC.

Label
Great Salt Lake Sentinel Landscape

USDA NRCS Utah Soils



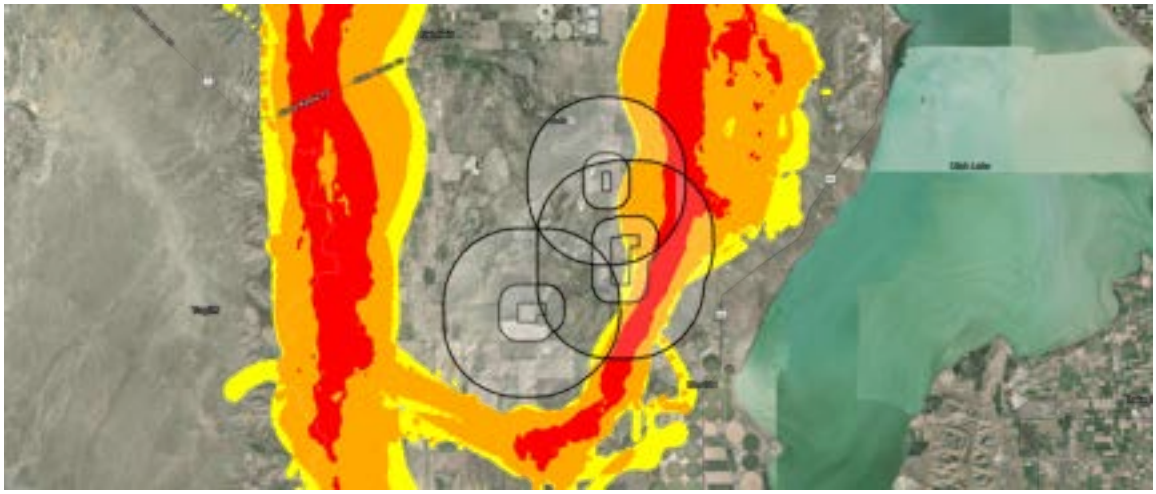
Description: Utah Soils is a subset of the more comprehensive Natural Resources Conservation Service (NRCS) SSURGO database. The SSURGO database is a collection of 6 feature classes, one raster, 76 tables, and 69 relationship classes that represent over a century's worth of soil data collected by the National Cooperative Soil Survey. Utah Soils is a collection of the more widely used SSURGO soil attributes and SSURGO MUPOLYGON geometry to provide users an overview of Utah soils data without the complexity of the SSURGO database itself.

Area Name	Area Symbol	Farm Class	Hydric Classification - Presence	Hydrologic Group - Dominant Conditions	Map Unit Name	Map Unit Key	Water Table Depth - Annual - Minimum	Water Table Depth - April - June - Minimum
Fairfield-Nephi Area, Utah	UT608	Prime farmland if irrigated	0	B	Genola fine sandy loam, hummocky, 1 to 2 percent slopes	482505	None	None
Fairfield-Nephi Area, Utah	UT608	Not prime farmland	0	D	Amtoft-Rock outcrop complex, 8 to 30 percent slopes	482446	None	None
Fairfield-Nephi Area, Utah	UT608	Not prime farmland	0	D	Saxby-Rock outcrop complex, 10 to 30 percent slopes	482609	None	None
Fairfield-Nephi Area, Utah	UT608	Prime farmland if irrigated	0	C	Genola silt loam, 0 to 1 percent slopes	482506	None	None
Fairfield-Nephi Area, Utah	UT608	Not prime farmland	0	B	Hiko Peak stony sandy loam, 4 to 8 percent slopes	482520	None	None
Fairfield-Nephi Area, Utah	UT608	Not prime farmland	0	D	Woodrow loamy fine sand, 1 to 2	482642	None	None

Area Name	Area Symbol	Farm Class	Hydric Classification - Presence	Hydrologic Group - Dominant Conditions	Map Unit Name	Map Unit Key	Water Table Depth - Annual - Minimum	Water Table Depth - April - June - Minimum
					percent slopes			
Fairfield-Nephi Area, Utah	UT608	Prime farmland if irrigated	0	C	Genola silt loam, 0 to 1 percent slopes	482506	None	None
Fairfield-Nephi Area, Utah	UT608	Farmland of statewide importance	0	B	Firmage gravelly loam, dry, 2 to 4 percent slopes	482495	None	None
Fairfield-Nephi Area, Utah	UT608	Farmland of statewide importance	0	B	Firmage gravelly loam, dry, 2 to 4 percent slopes	482495	None	None
Fairfield-Nephi Area, Utah	UT608	Prime farmland if irrigated	0	C	Genola silt loam, 1 to 2 percent slopes	482507	None	None
Fairfield-Nephi Area, Utah	UT608	Not prime farmland	0	B	Hiko Peak stony sandy loam, 4 to 8 percent slopes	482520	None	None
Fairfield-Nephi Area, Utah	UT608	Prime farmland if irrigated	0	D	Woodrow silt loam, 0 to 1 percent slopes	482643	None	None
Fairfield-Nephi Area, Utah	UT608	Prime farmland if irrigated	0	C	Genola silt loam, 2 to 5 percent slopes	482508	None	None
Fairfield-Nephi	UT608	Farmland of	0	B	Firmage gravelly	482495	None	None

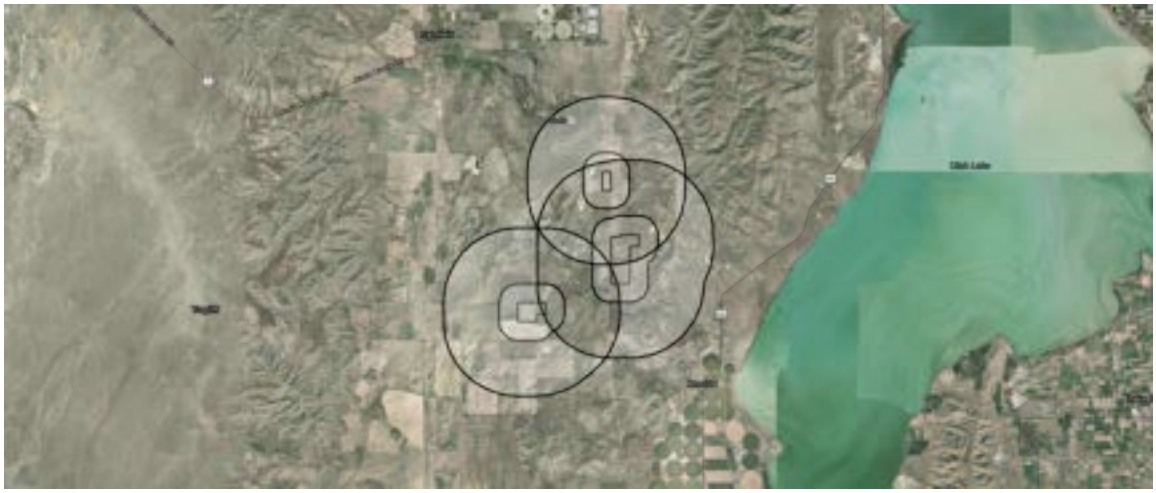
Area Name	Area Symbol	Farm Class	Hydric Classification - Presence	Hydrologic Group - Dominant Conditions	Map Unit Name	Map Unit Key	Water Table Depth - Annual - Minimum	Water Table Depth - April - June - Minimum
Area, Utah		statewide importance			loam, dry, 2 to 4 percent slopes			

Migration Corridors



Herd Size	Species	Type
2900	Mule Deer	medium use
2900	Mule Deer	low use

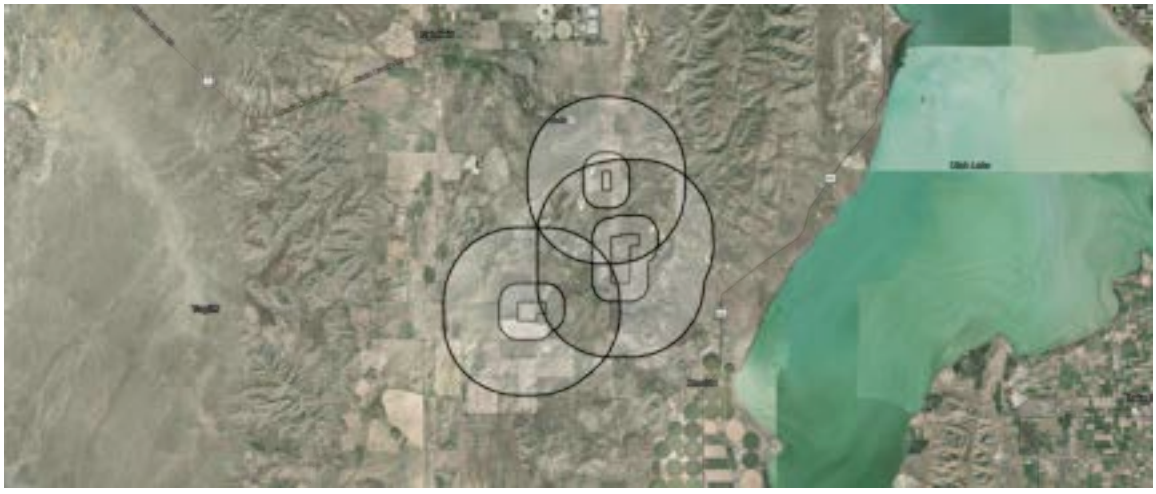
Terrestrial Key Habitat



Description: These polygons representing 13 terrestrial key habitats have been generalized for web mapping applications, and often under-represent the presence of key habitats, particularly small areas of discontinuous habitat.

Habitat Name
Lowland Sagebrush

DNR Water Rights Utah Points of Diversion



Description: Points generated daily from basic information in the tabular database from the Division of Water Rights database. The Points represents where water is diverted from a source.

Acft	Cfs	Type	Water Right Number	Weblink
0	0.015	Underground	54-503	https://www.waterrights.utah.gov/search/?q=54-503

Report Generated For

Name: Spencer Martin
Organization: Martin & Nicholson Environmental Consultants, LLC
Email: spencer@mnenvironmental.com
Phone: (801)-230-7261

End of Report

Thank you for using the Utah Wildlife Habitat Analysis tool. Feel free to reach out to the department for additional information or assistance.