Jordan Solar and Energy Storage Project

Initial Project Description

Jordan BC Solar Project Limited Partnership

RECURRENT ENERGY
A subsidiary of Canadian Solar

98 San Jacinto Blvd., Ste. 750; Austin, TX 78701 *jordansolar@recurrentenergy.com*

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Executive Summary

Purpose

The purpose of this Initial Project Description (IPD) is to provide general information on the proposed Jordan Solar and Energy Storage Project ("the Project") to the British Columbia Environmental Assessment Office ("BC EAO") and Communities of Interest, including Indigenous nations, to determine the requirements for review of the Project under the BC *Environmental Assessment Act* ("BC EAA"). The IPD was prepared using the guidance provided in the BC EAO's Early Engagement Policy document (BC EAO, 2019). In addition, the IPD and the Early Engagement Plan (Appendix 3) are used to initiate the Early Engagement Phase of the BC Environmental Assessment (EA) process. The documents will be posted on the BC EAO's Environmental Assessment Project Information Centre (EPIC) website and will be available for review by Indigenous nations and other Communities of Interest to provide information about the Project, facilitate engagement, and feedback received will be used to support the development of a Detailed Project Description (DPD). The DPD will provide additional details about the Project and inform the Environmental Assessment Readiness Decision. Following the Readiness Decision, if approved, the Process Planning Stage will determine the scope, methods, and information requirements for the Environmental Assessment and further engagement approach with Indigenous nations and Communities of Interest.

Project Description

Jordan BC Solar Project Limited Partnership ("Jordan Solar") proposes to develop the Project for the purposes of producing clean renewable solar energy in the southern Vancouver Island region of British Columbia (BC). Jordan Solar is a subsidiary of Recurrent Energy. This is a new project and Jordan Solar proposes to construct, operate, and maintain the Project. The Project is anticipated to include approximately 100 megawatts of alternating current (AC) power (MWac) generation capacity and would consist of installation of solar photo-voltaic (PV) modules, battery storage system, overhead transmission lines to connect the solar array to an existing BC Hydro transmission line, and upgrades to existing or construction of access roads. The current proposed Project area is approximately 235 hectares (ha). The Project is currently at the design level and components are currently being evaluated and will be informed by the engagement and EA processes.

The Project life will include three main phases: construction (anticipated to last approximately one year), operation and maintenance (estimated to have an operational life of 40 years) and decommissioning and reclamation.

Project Location

Jordan Solar respectfully acknowledges the proposed Project is located within the traditional territory of the Nuu-chah-Nulth and Coast Salish peoples. The Project is located on Crown land on southern Vancouver Island in proximity to the Jordan River and approximately 20 km northwest of Sooke and 40 km southeast of Port Renfrew, BC. The

Project area is north of Highway 14 and within the boundaries of the Capital Reginal District (CRD) (Figure 1 of the IPD). The Project area is in the Juan de Fuca Electoral Area of the CRD 2021 (population 5,132). The closest community is the District of Sooke (population 15,086; Statistics Canada, 2021), located approximately 20 km east of the Project area. Port Renfrew (population 144; Statistics Canada, 2021) is approximately 35 km west of the Project area.

The proposed Project layout area is approximately three km east of Highway 14 which runs along the west coast of southern Vancouver Island. The Project area can be accessed from Highway 14 heading west from Sooke turning right onto Fore Bay Road. Fore Bay Road connects a series of forest service roads (FSRs) that turn east and enter the Project area from the west. Some parts of the area have been previously logged, and several FSRs exist within and around the Project footprint. To the extent practicable, existing access roads will be used and may be upgraded if necessary to enable their use for construction and potentially during typical maintenance and operation activities. Reasonable and safe access to the Project site will be required for the construction, operations and maintenance, and decommissioning phases of the Project. Existing conditions of FSRs, trails, or other access routes may not be suitable for reasonable and safe delivery of construction equipment and materials. Jordan Solar will assess access routes to access the site and will determine if the preferred access route will require upgrades or improvements.

Regulatory Framework and Purpose

It is anticipated the Project will be subject to review under the BC EAA. In accordance with Part 4(12) and Table 7 of the *Reviewable Projects Regulation* (BC Reg. 67/2020), proposed electricity projects are reviewable under the BC EAA if is a new power plant with a total nameplate capacity of greater than 50 MW, which is the requirement for a reviewable project as per the BC EAA Reviewable Projects Regulation. Potentially relevant provincial and federal acts and regulations and permits, approvals, and authorizations which could potentially be required for the Project are discussed in Section 4.0 of the IPD. The purpose of the Project includes:

- Generation of a low-cost and greenhouse gas (GHG)-free, reliable, clean and renewable power source and to help increase energy security by increasing the diversity of BC's energy supply mix by adding solar to the current hydro dominated supply, especially during drought conditions.
- Help BC meet its climate goals and commitments including GHG reduction goals by supporting fuel-switching electrification which would replace energy produced from GHG-emitting fossil fuels with energy produced by emission-free clean electricity.
- Advance the BC government's reconciliation objectives with Indigenous nations by creating economic and employment opportunities for regional Indigenous nations and rural communities.

- Delivering new electricity to meet the electricity supply needs stated in BC Hydro's updated 2021 Integrated Resource Plan (IRP), issued on June 15, 2023. BC Hydro's IRP plans to acquire 3,000 GWh of clean and renewable electricity from new facilities starting operation in 2028 and to acquire more electricity from such facilities in subsequent years in its 20 year IRP.

The Project rationale is compliant with the BC *Clean Energy Act*, which among other things, specifies that the Province of BC is to achieve electricity self-sufficiency with the goal of generating at least 93% of the electricity in BC from clean or renewable resources and build the infrastructure necessary to transmit that electricity. The BC *Clean Energy Act* further states that power development should encourage economic development and the creation and retention of jobs and foster the development of Indigenous nations and rural communities through the use and development of clean or renewable resources. CleanBC is the BC government's plan to lower climate-changing emissions by 40% by 2030. CleanBC includes a wide range of actions to reduce emissions, build a cleaner economy, and prepare for impacts of climate change. Being a clean energy project, the Project will be in alignment with several of the initiatives included in the CleanBC plan.

The summer peaking energy profile of the proposed Project will help the BC system cope with summer drought conditions. Recent BC extreme drought has the potential to create water flow constraints for many small and large hydroelectric generation plants. In addition, the summer seasonal peaking profile of solar generation is complementary to the winter seasonal peaking profiles of hydro and wind power, enhancing the energy security of BC. A battery energy storage system (BESS) can extend power deliveries into dark hours to help serve evening peak loads or for emergency use. When AC is connected, the BESS can be dispatchable and discharge into the BC grid during next day high load hours, including the extreme winter loads experienced by BC Hydro.

Further, the solar Project, if built, could provide Project ownership and other economic and capacity building benefits and opportunities to Indigenous nations. Additional opportunities include potential employment or procurement opportunities during construction, operations and maintenance, and the decommissioning and reclamation phases of the Project. Those opportunities will be greater defined through further engagement. The Project may provide a setting for research opportunities in clean technology and energy storage technologies to Southern Interior technical and education institutions. Economically, the Project will provide employment, contractor supply services, and stimulation of local businesses. It will also provide government revenues in the form of regional district, provincial, and federal taxes and other benefits.

Project Components

The current proposed boundaries of the Project area are shown on Figure 2 of the IPD. The layout area will be enclosed by fencelines which are represented by the boundaries on Figure 2. The total Project area within the boundaries is approximately 235 ha (area of disturbance). Design of and siting of Project components are in the preliminary design

stages and will be further refined as the Project is developed. Further, Jordan Solar will gather and incorporate feedback received on the information, including Project components, provided in the IPD during the Early Engagement Phase. The Project is expected to include approximately 100 MWac generation capacity (subject to results of the BC Hydro Interconnection Study). While components are subject to change through the Project design and engagement process, it is currently expected that the system may utilize some or all the following onsite and offsite components:

- The installation of a system of solar PV modules. Each module has the potential of generating approximately 695 Watt Peak (Wp) with a total Project rated AC capacity of approximately 100 Mwac. However, a module has not yet been selected for the Project and the module output is subject to change as the Project design advances. The PV modules are mounted above ground on a steel single-axis tracking system array supported by steel piles, or similar alternatives, driven into the ground. The automatic tracking system slowly tilts the module array from east to west to follow the daily solar path and achieve maximum solar exposure on module faces.
- The BESS is composed of rechargeable lithium ion battery cells, similar in composition to small batteries used in consumer electronics, arranged into protective cases, called modules, which are arranged in groups of modules, called racks. Racks are stored in either containers or a building and connected to the electric grid.
- Electrical "string wires" connect the modules in series. Each array in turn is connected to one of the inverter transformers which are rated at 4.2 MWac each.
- The inverters convert direct current (DC) power to AC and transfer the power, through an electrical collector system consisting of several circuits, optionally to either or both the Project BESS or the Project power conversion station and substation. The Project battery storage system may be optionally charged and discharged in either DC or AC power, depending on final design and configuration. Excess power generated by the Project module arrays in DC current during peak daily hours is clipped by the inverters and sent to the energy storage battery, improving the real time energy profile constantly feeding the BC system while storing excess energy for later discharge to serve peak evening or nighttime load hours.
- The Project power conversion station and substation (proposed to be co-located in an area approximately 100 m x 100 m) converts power from 34.5 kilo volt (kV) to 138 kV and connects the Project to the existing BC transmission system by overhead conductors tapped into 138 kV transmission lines located on the Project site. Clean electricity generated by the Project in daylight hours or discharged by the Project storage battery in dark hours, is then injected into the BC transmission system.

Additional Project components and infrastructure could include the following:

- Overhead and underground electrical cables and fibre optic cables (length unknown at this time);

- Transmission right of way (ROW) – based on current Project assumptions, anticipated footprint of the permanent transmission ROW will be approximately 80 m in width by the length of the preferred route (area of the ROW is not accounted for in the estimated 235 ha of the "Project area");
- High or Medium voltage transmission line(s) to connect the Project to the BC Hydro 230 kV transmission corridor which is located approximately 2,000 m from the Project area (point of interconnection [POI]) to be confirmed.;
- Upgrades to existing access roads (where necessary), onsite connector roads and water crossings, and the development of new access roads, onsite connector roads, and water crossings to Project-related components;
- Operations centre, outdoor storage and parking (required for operational life of the Project;;
- Project fencing for safety and security;
- Permanent solar meteorological sensors;
- Potential fireguard around the layout area;
- Facility lighting for safety and security; and
- Temporary construction laydown areas for Project components and temporary parking, temporary buildings, and associated facilities.

There are no other dependent projects that are needed for the proposed Project to proceed. The Project is a single and complete project with a single construction phase and no other dependent projects. Layout of Project components are considered preliminary at this stage. Configuration could change based on results of engagement and feedback obtained during the Early Engagement phase and results of further studies during the EA phase.

Existing Environment

Previous and current use of the Project area includes forestry activity with cutblocks and active and deactivated forestry management access roads. Cutblocks have been replanted in some areas and plantation trees are at various stages of growth. Other uses within the vicinity of the Project area include recreational use for off-road vehicle use and hiking. Project area administrative and physiographic settings are provided in Table 1. Additional information about the biophysical and socio-economic conditions of the Project area are provided in Section 6.0 and 7.0 of the IPD.

Table 1. Project Area administrative and physiographic setting

Classification	*Description*
Administrative Boundary	
Natural Resource Region	West Coast
Natural Resource District	South Island
Ministry of Forest Region	Vancouver Island
Major Watershed	Sandcut Creek
Watershed Group	San Juan River

Classification	***Description***
Administrative Boundary	
Regional District	Capital Regional District
Health Authority Health Service Delivery Area Community Health Service Area/Local Health Area	Vancouver Island Health Authority South Vancouver Island Vancouver Island
Nearest Municipality	District of Sooke, BC (20 km) Duncan, BC (40 km) Victoria, BC (50 km)
Nearest Town or Hamlet	Jordan River, BC (6 km) Port Renfrew (35 km)
UTM	10U 427186.00 m E, 5365530.00 m N
Ecosystem Classification	
Ecodomain	Humid Temperate
Ecodivision	Cool Hypermaritime and Highlands
Ecoprovince	Georgia Depression
Ecoregion	Eastern Vancouver Island
Ecosection	Leeward Island Mountains
Biogeoclimatic Zone Subzone Variant	Coastal Western Hemlock Very Dry Maritime xm / Moist Maritime mm Western 2 / Submontane 1
Elevation Range (m)	180-540

*Source: iMapBC (Province of BC, 2023)

The biogeoclimatic ecosystem classification (BEC) of the Project area is Coastal Western Hemlock (CWH). The Project footprint is mainly within the Very Dry Maritime subzone, Western variant (CWHxm2); however, the northeast boundary is partially within and/or close to three other CWH subzones, likely due to the wide range of elevation and topography in the area. The three other subzone/variant groups are the Moist Maritime subzone, Submontane variant (CWHmm1), the Moist Maritime subzone, Montane variant (CWHmm2), and the Very Wet Maritime subzone, Montane variant (CWHvm2) (DataBC, 2023). This review will focus on the CWHxm2 as this makes up most of the footprint of the Project area and surrounding area to the east, south and southwest.

The mapped watercourses in the vicinity of the Project area consist of a network of unnamed drainages, many likely ephemeral, which collect runoff from the surrounding terrain. The mapped watercourses in the vicinity of the Project area have likely been altered or redirected into culverts at road crossings. Further assessments of watercourses will be conducted during the environmental assessment.

Indigenous Interests

The Project area is located within the southern region of Vancouver Island, within proximity to potentially interested Indigenous nations. Jordan Solar respectfully acknowledges the Project area is within the traditional territory of the Nuu-chah-nulth and Coast Salish peoples. The Project area is on Crown land and does not overlap with *Indian Act* reserve lands, lands subject to a Treaty, or lands subject to a land claim agreement.

Jordan Solar is committed to meaningful engagement with Indigenous nations throughout the regulatory process and the life of the Project. Jordan Solar has identified Indigenous nations who have a potential interest in the Project area or are potentially impacted by Project activities. Jordan Solar has begun reaching out to identified Indigenous nations and is committed to building relationships to understand Indigenous interests in the Project area. The proposed approach to engagement and a summary of communications and engagement with Indigenous nations to date is described in Section 5.0 of the IPD and Appendix 3: Early Engagement Plan. Should other Indigenous nations express an Indigenous interest in the Project during the Early Engagement Phase and are identified by BC EAO or self-identification, Jordan Solar will tailor future engagement to include them.

Potential Project Effects to the Biophysical and Socio-Economic Environment

An overview of potential Project effects to the biophysical and socio-economic environment, based on current design of the Project, are presented in Section 8.0 of the IPD. Solar projects and solar PV technologies and power plants do not produce air emissions or GHG emissions while in operation. Solar projects offer an alternative to generation of power from other energy sources, including fossil fuels, and reduce emissions of carbon dioxide and other GHGs. There are potential environmental and socio-economic effects which could occur from the construction, operations and maintenance, and decommissioning of the Project. The Project is in the initial design stage and the potential effects of the Project will be further assessed as part of the EA Application process. Potential Project effects and potential mitigation measures are provided in Table 13 of the IPD. The EA will also address specific mitigation measures and plans to avoid, minimize, and mitigate potential effects.

Closing

Through sharing this IPD with BC EAO and Communities of Interest, including Indigenous nations, Jordan Solar is providing an early design-stage overview of the Project. The IPD has been prepared to determine the requirements for review of the Project under the BC EAA and to initiate the Early Engagement Phase of the EA process. The IPD was prepared using the guidance provided in the BC EAO's Early Engagement Policy document (BC EAO, 2019). The IPD has been prepared early in the design process prior to finalization of all Project components and layout to allow for feedback received during the Early Engagement Phase to be considered. In addition, the IPD and the Early Engagement Plan (Appendix 3) are used to initiate the Early Engagement Phase of the BC EA process. The documents will be available for review by Indigenous nations and Communities of Interest to facilitate engagement. At the conclusion of the Early Engagement Phase, BC EAO will provide Jordan Solar with a Summary of Engagement which will be used to support the development of a DPD. The DPD will present a more detailed and refined Project design based on progression of design and considerations of input received during the Early Engagement Phase.

List of Abbreviations and Units

Abbreviation	*Definition*
AC	Alternating current
AIA	Archeological Impact Assessment
AOA	Archeological Overview Assessment
BC	British Columbia
BC CDC	British Columbia Conservation Data Centre
BC EAA	British Columbia *Environmental Assessment Act*
BC EAO	British Columbia Environmental Assessment Office
BC EMLCI	British Columbia Ministry of Energy, Mines and Low Carbon Innovation
BC MOE	British Columbia Ministry of Environment
BC MFLNRORD	British Columbia Ministry of Forests, Lands, Natural Resource Operations and Rural Development
BC MOFOR	British Columbia Ministry of Forests
BCUC	British Columbia Utilities Commission
BC WLRS	British Columbia Ministry of Water, Land and Resource Stewardship
BEC	Biogeoclimatic Ecosystem Classification
BESS	Battery energy storage system
BMP	Best management practice
COSEWIC	Committee on the Status of Endangered Wildlife in Canada
CRD	Capital Regional District
CWH	Coastal Western Hemlock
DC	Direct current
DFO	Fisheries and Oceans Canada
DPD	Detailed Project Description
EA	Environmental Assessment
EMA	*Environmental Management Act*
EPIC	EAO Project Information Centre
ESA	U.S. Energy Storage Association
FRPA	*Forest and Range Practices Act*
FSR	Forest Service Road
GHG	Greenhouse Gas
GHI	Global horizontal irradiance
ha	hectare
HFR	Heritage Field Reconnaissance
IH	Interior Health
IPD	Initial Project Description
IRP	Integrated Resource Plan
Jordan Solar	Jordan BC Solar Project Limited Partnership
kV	kilovolt
LEH	limited entry hunting
MW	Megawatt
MWac	megawatts of AC power

Abbreviation	***Definition***
MWp	megawatts-peak
MWh	Megawatt-hours
NDT	Natural Disturbance Type
OGMA	Old Growth Management Area
PFR	Preliminary Field Reconnaissance
POI	Point of interconnection
Project	Jordan Solar and Energy Storage Project
PV	Photo-voltaic
RAAD	Remote Access to Archaeological Data
RISC	Resources Inventory Standards Committee
ROW	Right of way
SARA	*Species at Risk Act*
SCADA	Supervisory control and data acquisition
UNDRIP	United Nations Declaration on the Rights of Indigenous Peoples
UWR	Ungulate Winter Range
VC	Valued Component
VLI	Visual Landscape Inventory
Wp	Watts peak
WSA	*Water Sustainability Act*
WSC	Watershed Code

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1.1 Introduction

Jordan BC Solar Project Limited Partnership ("Jordan Solar") proposes to develop the Jordan Solar and Energy Storage Project (the "Project") for the purposes of producing clean renewable solar energy in the southern Vancouver Island region of British Columbia (BC). Jordan Solar proposes to construct, operate, and maintain the Project. The Project is anticipated to include approximately 100 megawatts of alternating current (AC) power (MWac) generation capacity and would consist of installation of solar photo-voltaic (PV) modules, battery energy storage system (BESS), overhead transmission lines to connect the solar array to an existing BC Hydro transmission line, and access roads. The current proposed Project area is approximately 235 hectares (ha).

1.2 Purpose

The purpose of this Initial Project Description (IPD) is to provide general information on the proposed Project to the British Columbia Environmental Assessment Office ("BC EAO") and Communities of Interest, including Indigenous nations, to understand the Project and provide feedback to Jordan Solar. It has also been prepared to determine the requirements for review of the Project under the BC *Environmental Assessment Act* (BC EAA) and to initiate the environmental assessment process. The IPD was prepared using the guidance provided in the BC EAO's Early Engagement Policy document (BC EAO, 2019). The IPD has been prepared early in the design process prior to finalization of all Project components and layout to allow for feedback. In addition, the IPD and the Early Engagement Plan (Appendix 3) are used to initiate the Early Engagement Phase of the BC environmental assessment process. The documents will be available for review by Indigenous nations and other Communities of Interest including organizations, interest groups, the public, government and regulatory agencies, and other stakeholders to facilitate engagement. Feedback received during the Early Engagement Phase will be used to support the development of a Detailed Project Description (DPD) to inform the Environmental Assessment Readiness Decision.

2.0 Proponent Information

2.1 Key Proponent Contacts

Jordan BC Solar Project Limited Partnership ("Jordan Solar") proposes to develop, construct, and operate the Jordan Solar and Energy Storage Project (the "Project") for the purposes of producing clean renewable solar energy on southern Vancouver Island. Jordan Solar is a subsidiary of Recurrent Energy.

Jordan BC Solar Project Limited Partnership contact information:

Jordan BC Solar Project Limited Partnership
98 San Jacinto Blvd. Ste. 750
Austin, TX
78701
URL: http://recurrentenergy.com/project/jordan-solar-and-energy-storage/

Primary Project contact:
Attention: Mr. Riley Griffin; Manager – Permitting
Email: jordansolar@recurrentenergy.com
Phone: 226-821-1045

Attention: Mr. David Marieno; Manager - Development
Email: jordansolar@recurrentenergy.com

2.2 Environmental Consultant Information

Jordan Solar retained Triton Environmental Consultants Ltd. (Triton) to assist with preparation of the IPD and provide support during the Early Engagement Phase for the Project.

Triton contact information:

Triton Environmental Consultants Ltd.
#1- 4600 29th Street
Vernon, BC
V1T 5B9

Attention: Ms. Kellen Smith - Project Manager
Email: jordan.engagement@triton-env.com

3.0 General Project Information

3.1 Project Sector and Type

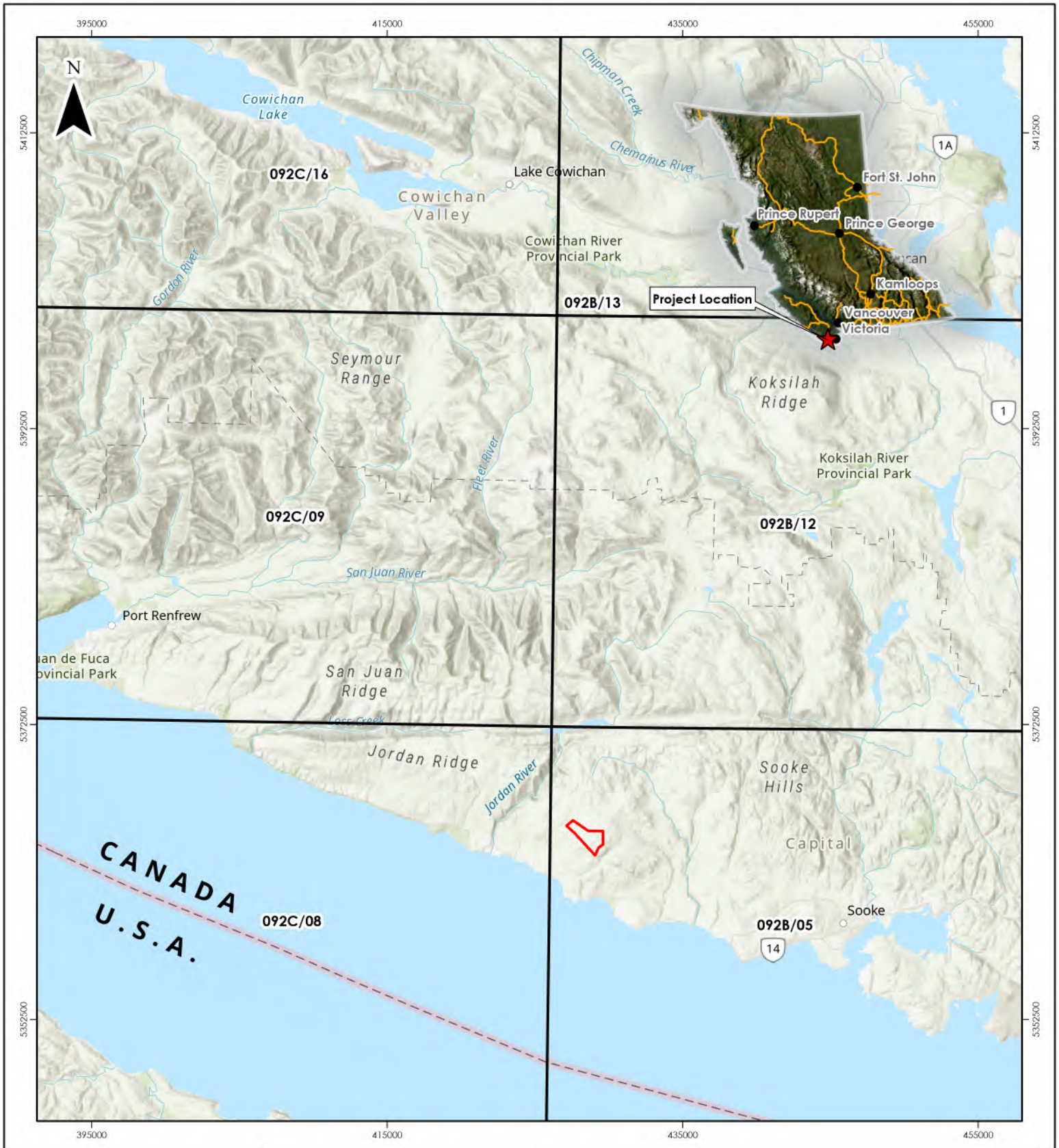
The Project sector is clean power generation using solar PV modules. PV panels convert light to electrical energy via the photovoltaic effect. The Project will also include a BESS.

3.2 Project Location

Jordan Solar respectfully acknowledges the proposed Project is located within the traditional territory of the Nuu-chah-Nulth and Coast Salish peoples. The Project is located on BC Crown land on southern Vancouver Island in proximity to the Jordan River approximately 20 km northwest of Sooke and 40 km southeast of Port Renfrew, BC north of Highway 14 and within the boundaries of the Capital Regional District (CRD) (Figure 1). More specifically, the "Project area" is within the boundaries of a BC Crown land Solar Investigative Licence and Licence of Occupation (File No. 1415020) which provides Jordan Solar the opportunity to undertake necessary studies to determine the engineering, technical, economic, and environmental viability of the Project. The land area within the boundaries of the Investigative Licence tenure area is approximately 4,133 ha. The current proposed layout and development area currently being studied by Jordan Solar (or "Project area") consists of approximately 235 ha, which represents roughly 6% of the tenured area.

3.2.1 Access

The proposed Project layout area is approximately three km east of Highway 14 which runs along the west coast of southern Vancouver Island. The Project area can be accessed from Highway 14 heading west from Sooke turning right onto Fore Bay Road. Fore Bay Road connects a series of forest service roads (FSRs) that turn east and enter the Project area from the west. Parts of the area have been previously logged, and several FSRs exist within and around the Project footprint. To the extent practicable, existing access roads will be used and may be upgraded if necessary to enable their use for construction and potentially during typical maintenance and operation activities. Reasonable and safe access to the Project site will be required for the construction, operations and maintenance, and decommissioning phases of the Project. Existing conditions of FSRs, trails, or other access routes may not be suitable for reasonable and safe delivery of construction equipment and materials. The Project will assess access routes to access the site and will determine if the preferred access route will require upgrades or improvements. Access to existing major access roads (active FSRs) in the Project area will be maintained with limited disruption during the construction, operations and maintenance, and decommissioning phases of the Project.



Jordan Solar and Energy Storage Project

Figure 1.
Project Location

Sources and Disclaimer

1. Base map Source: Esri Base Maps

2. Disclaimer: This map is a visual aid only to be used together with the accompanying report, including and incorporating any disclaimer contained therein. This map has been prepared to illustrate the results of Triton Environmental Consultants Ltd. work, and is not intended to be used for navigational purposes. Information displayed on this map is based, in whole or in part, on geographic information that may have been provided by third parties, including government data. Triton Environmental Consultants Ltd. disclaims (without limiting the generality of the foregoing) all responsibility for the accuracy of any such third party information, regardless of the source.

Prepared By: GF | **Reviewed By:** SH

Project Area (Approximate)

Project No: 11549
Date: Oct 03, 2023
Revision No: 04
Projection: UTM Zone 10 (NAD 1983)

0 3 6 9 km

Scale: 1:350,000

TRITON Environmental Consultants

File Path: G:\1.0 Projects\11549-Canadian Solar Jordan Solar BC EAO\11549-Canadian Solar Jordan Solar BC EAO.aprx

3.3 Project Purpose and Rationale

The purpose of the Project includes:

- Generation of a low-cost and greenhouse gas (GHG)-free, reliable, clean and renewable power source to help increase energy security within the southern Vancouver Island region of BC.
- Help BC meet its climate goals and commitments including GHG reduction goals by supporting fuel-switching electrification which will replace energy produced from GHG-emitting fossil fuels with energy produced by emission-free clean electricity.
- Advance the BC government's reconciliation objectives with Indigenous nations by creating economic and employment opportunities for regional Indigenous nations and rural communities.
- Delivering new electricity to meet the electricity supply needs stated in BC Hydro's updated 2021 Integrated Resource Plan (IRP), issued on Jule 15, 2023. BC Hydro's IRP plans to acquire 3,000 GWh of clean and renewable electricity from new facilities starting operation in 2028 and to acquire more electricity from such facilities in subsequent years in its 20 year IRP.

The Project rationale is compliant with the BC *Clean Energy Act*, which among other things, specifies that the province is to achieve electricity self-sufficiency with the goal of generating at least 93% of the electricity in BC from clean or renewable resources and build the infrastructure necessary to transmit that electricity. The BC *Clean Energy Act* further states that power development should encourage economic development and the creation and retention of jobs and foster the development of Indigenous nations and rural communities through the use and development of clean or renewable resources.

3.4 Potential Project Benefits

Potential benefits of the Project include, but are not limited to, the following:

- Solar uniquely provides diversity of supply to the BC system in the event of drought conditions which may impact hydro generation, which currently produces 85% of BC's electricity.
- The Project will increase seasonal energy security and reliability in the Greater Capital Region and southern Vancouver Island, which receives the majority of its energy by undersea cables from the BC mainland.
- The Project could provide economic benefits to Indigenous nations including equity ownership opportunities, employment and training opportunities, and procurement opportunities.
- The Project will assist BC's plans to increase electrification and meet climate commitments including generating at least 93% of electricity from clean or renewable sources and creating jobs to foster development of Indigenous nations and rural communities through the use and development of clean energy.

- The Project represents a significant investment in new BC clean energy infrastructure for the benefit of all British Columbians.
- The Project could provide proof of BC Hydro's expectation that "*utility-scale batteries can provide short-term storage and shift output from renewables (such as solar power) into periods with more demand*." The Project responds directly to BC Hydro's Integrated Resource Plan Signposts Update where it states: "*Advance utility-scale batteries to enable BC Hydro to achieve approximately 50 MW of additional capacity as early as F2027 and up to 500 MW of additional capacity by F2030*."
- The Project and its BESS will allow electricity to be made available every day of the year, in contrast to generation projects powered by intermittent resources such as wind and hydroelectric power generation.
- The Project and its BESS will supply dependable clean electricity to the BC system in both daylight and dark hours to serve electricity demand for residential and industrial users in the region, including mining and the compression and pumping of pipeline fuels.
- The Project's solar and BESS will extend the Project electricity delivery hours and provide power for use during dark hours or for emergency purposes.
- Solar power is summer peaking and will provide the BC system with complementary generation to that provided by winter peaking wind power projects. Solar generation in late summer can also mitigate late summer drought constraints that impact some hydro generation plants.
- The Project will improve the reliability of local electricity service in the event of potential disruptions of transmission lines from wildfires, floods, landslides, and other natural disasters.
- The Project provides an optimal use of the disturbed land to assist BC to meet its climate goals.
- The Project will create construction and long-term career opportunities in clean energy.
- The Project will pay Crown land lease payments and will contribute to the regional and provincial tax base.
- The Project will have a low visual profile and no discernible sound emissions outside of the Project boundaries.

The summer peaking energy profile of the proposed Project will help the BC system cope with summer drought conditions. Recent BC extreme drought has the potential to create water flow constraints for small and large hydroelectric generation plants. In addition, the summer seasonal peaking profile of solar generation is complementary to the winter seasonal peaking profiles of hydro and wind power, enhancing the energy security of BC. A BESS can extend power deliveries into dark hours to help serve evening peak loads or for emergency use. When AC is connected, the BESS can be dispatchable and

discharge into the BC grid during next day high load hours, including the extreme winter peak loads experienced by BC Hydro.

The proposed Project will increase the electricity supply to Victoria and the greater Capital Region. The proposed Project has potential to mitigate electricity supply concerns, as evidenced in BC Hydro's report entitled "Casting Drought" (BC Hydro, 2022).

Further, the solar Project, if built, could provide Project ownership and other economic and capacity building benefits and opportunities to Indigenous nations. Additional opportunities include potential employment or procurement opportunities during construction, operation and maintenance, and the decommissioning and reclamation phases of the Project. Those opportunities will be greater defined through the engagement process. The Project may provide a setting for research opportunities in clean technology and energy storage technologies to Vancouver Island and Lower Mainland technical and educational institutions. Economically, the Project will provide employment, contractor supply services, and stimulation of local businesses. It will also provide government revenues in the form of regional district, provincial, and federal taxes and other benefits.

3.5 Project Status

3.5.1 Project History

This is a new project and there are no previous proposals for the Project. The Project was first proposed by BC corporation and solar power developer Sunfield Energy Inc. ("Sunfield") in 2019 as a potential utility-scale solar development site. An application was submitted to FrontCounterBC on May 23, 2020, for a solar Investigative License to undertake feasibility studies in the area. After a period of consultation and review for land use conflicts, the Ministry of Forests, Lands, Natural Resource Operations and Rural Development (MFLNRORD), notified Sunfield the application was accepted for processing, and posted development plans and maps for public comment and referral notices for comment to impacted Indigenous nations, Regional Districts, and other stakeholders. During that process various Indigenous nations and stakeholders were notified and invited to provide feedback and input to the regulatory process. At the end of the public comment and referral processes, MFLNRORD approved an Investigative Licence on February 1, 2022. The Investigative Licence Tenure has since been assigned to and assumed by the Jordan BC Solar Project Limited Partnership.

3.5.2 Existing Permits or Tenures

BC Investigative License File No: 1415020. The Investigative Licence area includes District Lot 261, those parts of District Lots 92, 101, 261, 264, 265, 532, Section 7 and 8, the surfaces of District Lots 849, 850, 851, 855, 856, 857, surveyed as the Leroy, Nelson, Trail, Peggy, Ayah Fraction, and Dody Fraction mineral claims respectively, those parcels or tracts of Unsurveyed Crown Land in the vicinity of Sooke Hills. The land area within the boundaries of the Investigative Licence tenure area is approximately 4,133 ha. The current proposed layout and development area being studied by Jordan Solar (or "Project area") consists

of approximately 235 ha, which represents roughly 6% of the tenured area. An accurate calculation of the total footprint will be finalized during the design phases and based on results of the engagement and EA processes.

3.6 Project Components and Related/Dependant Projects

The current proposed boundaries of the Project area are shown on Figure 2. The layout areas will be enclosed by fencelines which are represented by the boundaries on Figure 2. The total Project area within the boundaries is approximately 235 ha (area of disturbance). Design of and siting of Project components are in the preliminary design stages and will be further refined as the Project is developed. Further, Jordan Solar will gather and incorporate feedback received from Indigenous nations and other Communities of Interest on the information, including Project components, provided in the IPD. The Project is expected to include approximately 100 MWac generation capacity (subject to results of the BC Hydro Interconnection study). While components are subject to change through the Project design and engagement process, it is currently expected that the system may utilize some or all the following onsite and offsite components:

- The installation of a system of solar PV modules. Each module has the potential of generating approximately 695-Watt Peak (Wp) with a total Project rated AC capacity of approximately 100 MWac. However, a module has not yet been selected for the Project and so the module output is subject to change as the Project design advances. The PV modules are mounted above ground on a steel single-axis tracking system array supported by steel piles, or similar alternatives, driven into the ground. The automatic tracking system slowly tilts the module array from east to west to follow the daily solar path and achieve maximum solar exposure on module faces.

Typical installation of PV modules

- The BESS is composed of rechargeable lithium ion battery cells, similar in composition to small batteries used in consumer electronics, arranged into protective cases, called modules, which are arranged in groups of modules,

called racks. Racks are stored in either containers or a building and connected to the electric grid.

Typical solar array and BESS.

- Electrical "string wires" connect the modules in series. Each array in turn is connected to one of the inverter transformers which are rated at 4.2 MWac.
- The inverters convert direct current (DC) power to AC and transfer the power, through an electrical collector system consisting of several circuits, optionally to either or both the Project BESS or the Project power conversion station and substation. The Project battery storage system may be optionally charged and discharged in either DC or AC power, depending on final design and configuration. Excess power generated by the Project module arrays in DC current during peak daily hours is clipped by the inverters and sent to the energy storage battery, improving the real time energy profile constantly feeding the BC system while storing excess energy for later discharge to serve peak evening or nighttime load hours.
- The Project power conversion station and substation (proposed to be co-located in an area approximately 100 m x 100 m) converts power from 34.5 kilo volt (kV) to 138 kV and connects the Project to the existing BC transmission system by overhead conductors tapped into 138 kV transmission lines located on the Project site. Clean electricity generated by the Project in daylight hours or discharged by the Project storage battery in dark hours, is then injected into the BC transmission system.
- The AC connected BESS can be charged by both the solar project during daylight hours, and by the BC transmission grid during low load overnight hours. The BESS will discharge into the grid to serve evening peak electricity loads year round, or for emergency purposes, a feature known in the energy sector as "time shifting."

Additional Project components and infrastructure could include the following:

- Overhead and underground electrical cables and fibre optic cables (length unknown at this time);
- Transmission right of way (ROW) – based on current Project assumptions, anticipated footprint of the permanent transmission ROW will be approximately 80

m in width by the length of the preferred route (area of the ROW is not accounted for in the estimated 235 ha of the "Project area");

- High or Medium voltage transmission line(s) to connect the Project to the BC Hydro 138 kV transmission corridor which is located approximately 2,000 m from the Project area (point of interconnection [POI]), to be confirmed;
- Upgrades to existing access roads (where necessary), onsite connector roads and water crossings, and the development of new access roads, onsite connector roads, and water crossings to Project-related components;
- A permanent building (and parking area), for storage of Project spare components and office space for operations staff;
- Operations centre, outdoor storage and parking (required for operational life of the Project);
- Project fencing for safety and security;
- Permanent solar meteorological sensors;
- Potential fireguard around the layout area;
- Facility lighting for safety and security; and
- Temporary construction laydown areas, temporary buildings, temporary parking, and associated facilities.

There are no other dependent projects that are needed for the proposed Project to proceed. The Project is a single and complete project with a single construction phase and no other dependent projects. Layout of Project components are considered preliminary at this stage. Configuration could change based on results of engagement and feedback obtained during the Early Engagement phase and results of further studies during the EA phase.

3.6.1 Construction Materials and Transport

Construction equipment, materials, and supplies are anticipated to be transported to site by truck and tractor trailers from local regional centers. The preferred access to the Project area would be via Highway 14. The Project will assess potential impacts to public roads and road upgrades, as is appropriate, to facilitate the safe and efficient delivery of equipment and materials to site. This may include, but not limited to, geotechnical investigations of the roads to determine their suitability to accept deliveries, or to determine the extent of road upgrades required to make them suitable. These efforts are anticipated to occur prior, or one of the first steps in, the detailed design so that the results can be incorporated into the final Project design. It is anticipated that construction contractors and the Project owner will collaborate so that deliveries are done safely and efficiently. Initial collaborations will occur as the Project advances to the detailed design and construction contracting phase.

3.7 Project Alternatives

3.7.1 Site Selection

Jordan Solar considered multiple potential sites for development of a solar field in the southern region of Vancouver Island. The Project area, among other criteria, was selected based on existing land use and characteristics and to minimize potential impacts to the environment. Additional selection criteria used to select the Project area as a potential solar site included:

- The location within BC's highest solar irradiance zone within the Vancouver Island region;
- The relatively flat topography within complex and elevated terrains;
- The general lack of material shading from terrains to the east, west, and south;
- The accessibility to the site and proximity to transmission infrastructure;
- The current use of the area as Crown land and its disturbed state from activities in the area (e.g., cutblocks, FSRs, etc.);
- The proximity of the Project to growing electric loads; and
- Confirmation of commercial global horizontal irradiance (GHI) values by long term satellite observation showing the site to have similar GHI values to Alberta solar projects proposed or under construction.

The Project is in the design stage and design, or siting constraints of Project components are not entirely understood at this time. Additional alternative analysis for siting of infrastructure within the overall Project area will be conducted during the engagement process for inclusion with the DPD and further during the environmental assessment process. Jordan Solar will seek to further understand existing conditions of the Project area including the biophysical, socio-economic, and human environment and culturally sensitives areas to evaluate and determine the best available technological and engineering alternatives to employ during all phases of the Project. Initial analyses of the Project site indicate that it is a suitable location for a solar project from a technical and economic feasibility standpoint. The site is in an area of relatively good solar irradiance and the topography will allow for the successful technical execution of all project phases. Jordan Solar will evaluate available technological means and best management practices during design and siting of Project infrastructure to avoid, minimize, and mitigate for unavoidable Project impacts. A full alternative analysis will be conducted during the EA phase to avoid significant features or sensitive areas.

At this time, the proposed Project area is approximately 6% of the total area within the Investigative License. If it is constructive to do so, the Project footprint could be adjusted within the existing Investigative License to avoid or mitigate potential impacts to Indigenous nations' interests or traditional use, culturally sensitive areas, species at risk, and other valued components (VCs). Further, the Project has yet to reach the detailed design stage and so the locations of permanent infrastructure (e.g.,: access roads, solar

arrays, inverters, etc.) do have some flexibility when it comes to siting. Further investigation and site specific detail is required prior to making any adjustment.

Solar panels will be secured to a ballast that "tracks" the sun. The ballast will rotate, from east to west, to achieve maximum solar energy electricity generation. As a result, there is limited to no flexibility in adjusting the orientation of solar arrays or how the ballast rotates to track the sun.

Jordan BC Solar Limited Project Partnership was formed for the sole purpose of developing a solar energy generation and battery energy storage system project. Further, the proposed Project will assist BC Hydro in achieving its goal outlined in the June 15, 2023 news release. The news release states their intent to procure new sources of renewable and emission-free electricity to power BC.

3.7.2 No-Build Alternative

The no-build alternative assumes the Project will not be built. This alternative serves as a baseline for comparison with the other Project alternatives. It is assumed the Project area would remain in similar condition to the current state. The no-build alternative does not eliminate the potential for use of the site by others.

3.7.3 Transmission Route Alternatives

The Project will connect to an existing BC Hydro 138 kV transmission line located approximately 2,000 m from the Project area. Alternative transmission routes and POIs are currently being considered by Jordan Solar to connect the Project to the BC Hydro transmission line. Alternative routes require further study taking into consideration feasibility from engineering, environmental, and economic perspectives, as well as input received during the Early Engagement Phase and EA process. In addition to the feasibility of each transmission ROW corridor, the suitability of the POI area at the BC Hydro transmission line will also be taken into consideration.

3.8 Project Phases and Activities

The Project includes three main phases: construction, operations and maintenance, and decommissioning and reclamation.

3.8.1 Construction

Construction will begin after all applicable regulatory requirements are met and all permits and approvals have been received. Construction of the Project is proposed to last for approximately one year, ending with Project commissioning. The only known seasonal timing constraints on construction of the Project are those related to potential pre-construction best management practices (e.g., avoiding clearing vegetation during nesting season, adhering to instream timing windows) and any pauses in construction due to inclement weather such as high wind events, heavy rain, or winter storms. As Project design and planning advances, potential constraints will be further evaluated. Construction activities are expected to include:

- Vegetation clearing and site preparation for installation of the facility;
- Access road upgrades and construction if necessary;
- Vegetation clearing and site preparation for the lay down areas and storage activities;
- Construction of surface and storm water management and erosion control measures, including drainage ditches;
- Construction of foundation of PV modules and pile driving structure supports;
- Installation of solar modules on structure supports;
- Trenching and placement of underground collector cables;
- Construction of utility ROW and overhead transmission line;
- Installation of overhead transmission line within the transmission ROW;
- Construction of substation and operations centre; and
- Project commissioning including acceptance and performance testing.

3.8.2 Operations and Maintenance

Operation of the Project will include the operation of the solar modules and BESS(s) for the transfer and storage of energy and maintenance of infrastructure. As part of operations, site staff will monitor and inspect Project equipment to ensure that it is operating safely and within its expectant operating parameters. The Project is anticipated to operate for 24 hours a day, 365 days per year for 40 years. Maintenance activities are expected to include:

- Meeting facility permit requirements;
- Maintenance of vegetation;
- Inspection and monitoring of equipment and the facility; and
- Maintaining and servicing or replacing equipment.

3.8.3 Decommissioning

The Project is expected to operate for 40 years and complete decommissioning over a one-year period. Timing of decommissioning is described in general terms at this time. A decommissioning plan would be developed prior to Project decommissioning. Decommissioning could potentially include decommissioning of the facility and infrastructure, decommissioning and reclamation of roads, removal of watercourse crossing structures, restoration of riparian areas, and re-vegetation of affected areas with appropriate vegetation species. The decommissioning plan will address best management practices for minimizing potential impacts and describe potential controls that could be used (e.g., erosion and sediment control measures). Following decommissioning, site reclamation, including the potential establishment of permanent vegetation on the Project site, will be as per applicable regulations and agreements and

will be incorporated into the construction execution (e.g., Construction Environmental Management Plan, decommissioning plan, or similar).

Infrastructure, including PV panels, will be removed and it is anticipated the majority of the panels will be ready for re-use on other projects or can be sold on the secondary market. Any panel that cannot be re-used or sold on the secondary market will be lawfully disposed of at an approved facility and in accordance with regulatory requirements or guidelines. A specific location is not currently known but will be identified prior to Project decommissioning. The U.S. Energy Storage Association (ESA) published "Guidelines for End of Life and Recycling of Lithium-ion Battery Energy Storage Systems" outlines how to plan for end-of-life management of lithium-ion batteries from decommissioned energy storage systems in an environmentally sustainable manner (ESA, 2020) . Many materials in lithium-ion batteries, such as cobalt and nickel are valuable. Reinjecting these domestic resources into the supply chain can reduce costs and reduce the imports of raw materials. Other valuable materials including lithium, copper, and aluminum can also be recovered and recycled. The effective lifespan of a battery can sometimes be extended with enhanced maintenance and replacement activities. Refreshing individual components of the batteries can extend the economic lifetime and defer the retirement of a facility. Decommissioned batteries can also have a "second life" where they are used are used in a lower voltage context (ESA, 2020a).

Following decommissioning, site reclamation, which could potentially include final grading, seeding and soil stabilization will be conducted. The potential establishment of permanent vegetation on the Project site, will be as per applicable regulations and agreements and will be incorporated into the construction execution (e.g., environmental management plan, decommissioning plan, reclamation plan, or similar).

3.9 Water Use

Water requirements will vary during the construction, operations and maintenance, and decommissioning phases of the Project. During construction water will be used for dust suppression as necessary on dirt FSRs, stockpiles, and disturbed or exposed work areas, and the irrigation of establishing vegetation, as necessary. Water will be used during operation and maintenance activities to support cleaning activities as well as onsite plumbing and septic, as necessary. The source of water has not been determined at this time. Water could potentially be trucked in and stored onsite in tanks, groundwater wells could be drilled to access water, or water could be drawn from a source in the Project area. Any necessary permits for water use would be acquired prior to use (Table 2). Any withdrawal of water from sources in the Project area (e.g., freshwater streams or groundwater wells) would be done in a manner to avoid potential impacts fish and fish habitat and flow needs of watercourses in the area.

4.0 Legislative and Regulatory Framework

This section of the IPD includes a discussion of thresholds for an environmental assessment under the BC EAA, relevant provincial and federal acts and regulations, permits and approvals that could potentially be required for the Project, and how the Project aligns with other applicable government policies and strategies.

4.1 Regulatory Context

4.1.1 BC Environmental Assessment Act

According to Part 4(12) and Table 7 of the *Reviewable Projects Regulation* (BC Reg. 67/2020), proposed electricity projects are reviewable under the BC EAA if:

- It is a new power plant with a total nameplate capacity of greater than 50 MW, which is the requirement for a reviewable project as per the BC EAA Reviewable Projects Regulation

It is anticipated Jordan Solar will be required to prepare an Application for an EA Certificate (Application) for submission to the BC EAO. The Application will be reviewed by Communities of Interest including Indigenous nations; local, provincial, and federal regulatory agencies; local governments, and public stakeholders including tenure holders. The Application will include a detailed description of baseline conditions and Valued Components (VCs) in the Project area, an assessment of adverse environmental effects, identification of applicable mitigation and compensation measures, and a description of regulatory agency, Indigenous nations, and stakeholder engagement programs and their outcomes.

4.1.2 Canada Impact Assessment Act

The federal *Impact Assessment Act* (SC2019, c.28, s.1) outlines a process for assessing potential impacts on major projects and projects proposed on lands within federal jurisdiction, lands outside of Canada, or on types of activities considered designated projects. It is anticipated the Project will not require review under the federal *Impact Assessment Act* for the following reasons:

- The Project is proposed on BC Crown land and is not on lands within federal jurisdiction or lands outside of Canada.
- Solar facilities do not meet the definition of a "designated project" in Section 2 of the *Impact Assessment Act* as they are not listed as a "designated physical activity" in accordance with the *Physical Activities Regulations* (SOR/2019-285), pursuant to sections 109 and 188 of the *Impact Assessment Act.*

4.2 Potentially Relevant Provincial and Federal Acts/Regulations

Several provincial and federal legislative acts and regulations could potentially be applicable to activities to be conducted during the duration of the Project and are provided in Table 1 and detailed in the following sections.

Table 1. Potentially relevant legislation

Provincial	***Federal***
Environmental Assessment Act	*Species at Risk Act*
Water Sustainability Act	*Migratory Bird Convention Act*
Wildlife Act	*Fisheries Act*
Weed Control Act	
Environmental Management Act	
Heritage Conservation Act	
Clean Energy Act	
Forest and Range and Practices Act	
Land Act	
Utilities Commission Act	
Drinking Water Protection Act	
Public Health Act	
Parks Act	

4.3 Provincial Acts

4.3.1 Water Sustainability Act

The BC *Water Sustainability Act* (WSA) (2016) is a provincial statute which established a framework for managing water and water resources in British Columbia. Under Section 11 of the WSA, any proposed changes in and about a stream can only take place after a Change Approval or Notification has been submitted and approved by the Ministry of Water, Lands and Resource Stewardship (BC WLRS). The habitat officer in each region sets the terms and conditions for work in and about a stream in accordance with Section 44 of the WSA. Instream works in each region are generally restricted to specific times of year when work may be conducted with the lowest risk to fish species, or general timing windows. Section 10 of the WSA lays out requirements for diversion and use of water from a stream or aquifer.

4.3.2 Wildlife Act

The BC *Wildlife Act* (1996) provides for the conservation and management of wildlife and wildlife habitats and protects most vertebrate animals from direct harm or harassment except as allowed by regulation. Section 34 of the *Wildlife Act* prohibits possessing, taking, or destroying a bird or its egg or a nest when the nest is occupied by a bird or its eggs or the nest (occupied or otherwise) of an eagle, Peregrine Falcon (*Falco peregrinus*), Gyrfalcon (*Falco rusticolus*), Osprey (*Pandion haliaetus*), heron, or Burrowing Owl (*Athene cunicularia*). Section 29 of the *Wildlife Act* prohibits the capture of wildlife. Wildlife salvage, or removal of wildlife from a project area for protection, requires a salvage permit under the *Wildlife Act*.

4.3.3 Weed Control Act

The BC *Weed Control Act* (2011) designates a list of invasive plants as "noxious weeds" and legislates property owners, private companies, utility companies, regional districts and municipalities, and provincial government agencies or anyone in possession of land to control and manage these species. The *Weed Control Act* currently designates 40 plant species as noxious within all regions of the province.

4.3.4 Environmental Management Act

The BC *Environmental Management Act* (EMA) (2003) regulates industrial and municipal waste discharge, pollution, hazardous waste, and contaminated site remediation. It provides a framework for authorization to introduce wastes into the environment, while protecting public health and the environment. The Spill Reporting Regulations of the EMA establish a protocol for reporting the unauthorized release of substances into the environment and details reportable amounts for certain substances.

4.3.5 Heritage Conservation Act

The purpose of the BC *Heritage Conservation Act* (1996) is to encourage and facilitate the protection and conservation of heritage property in BC. The minister develops and maintains the Provincial heritage register and records Provincial heritage sites and objects including sites and objects of cultural value to Indigenous peoples, paleontological resources (fossils), and historical places. Archeological sites refer to places with physical evidence of human occupation or use, with a focus on sites that are protected under the *Heritage Conservation Act*.

4.3.6 Clean Energy Act

The BC *Clean Energy Act* (2010) outlines BC's provincial energy objectives to achieve electricity self-sufficiency by providing a framework to meet specified emissions-reduction targets by creating incentives for the reduction of GHG emissions through the implementation of various measures.

4.3.7 Forest and Range Practices Act

The BC *Forest and Range Practices Act* (FRPA) (2002) governs forest and range activities on public lands in BC during forest planning, road building, timber harvesting, reforestation, and livestock grazing activities. Formal legal establishment of ungulate winter range (UWR), old growth management areas (OGMAs), and wildlife habitat areas and associated objectives were established under FRPA. FRPA also governs forest activities on public lands in BC for identified resource values, including the management of visual and scenic quality.

4.3.8 Land Act

The BC *Land Act* (1996) is the primary article of legislation that is used by the government of BC to convey land to the public for community, industrial, and business use. The act

allows for granting of land and the issuance of Crown land tenure in the form of leases, licences, permits, and rights-of-way.

4.3.9 Utilities Commission Act

The *Utilities Commission Act* (1996) governs the British Columbia Utilities Commission (BCUC). The BCUC is an independent agency of the Government of BC which is responsible for regulating rates and standards of BC's natural gas and electricity utilities.

4.3.10 Drinking Water Protection Act

The BC *Drinking Water Protection Act* (2001) and the Drinking Water Protection Regulation covers all water systems other than single-family dwellings and systems excluded from the regulation. The act sets out certain requirements for drinking water operators and supplies to ensure provision of safe drinking water to users. The act helps ensure people of BC have safe and potable drinking water.

4.3.11 Public Health Act

The *Public Health Act* (2009) supports dealing with current and emerging public health issues. The *Public Health Act* works in connection with the *Drinking Water Protection Act*.

4.3.12 Parks Act

The BC *Park Act* (1996) provides for the establishment, classification, and management of parks, conservancies, and recreation areas in BC. The Park, Conservancy and Recreation Area Regulation provides regulations around he requirement for permits.

4.4 Federal Acts and Regulations

4.4.1 Fisheries Act

The *Fisheries Act* (2019) provides protection for fish, fish habitat, and water quality and is administered by the Department of Fisheries and Oceans (DFO) and Environment Canada (EC). Section 35 of the Act prohibits serious harm (death of fish or any permanent alteration to, or destruction of, fish habitat) to fish unless Authorized by DFO. Fish habitat includes spawning grounds and nursery, rearing, food supply, and migration areas on which fish depend directly or indirectly to carry out life processes. A Request for Review under the *Fisheries Act* could be required if any proposed works do not follow DFO's standards and code of practice and have the potential to harm fish or fish habitat.

4.4.2 Species at Risk Act

The *Species at Risk Act* (2002) (SARA) prohibits the killing, harming, harassing, capturing, or taking of species at risk, or damaging or destroying the residence of one or more individuals; or destruction of critical habitat of a listed species. Critical habitat for species where a final recovery strategy has been developed that identifies critical habitat for that species, is generally defined as habitat required for the survival or recovery of a listed

species or population. Environment and Climate Change Canada (ECCC) defines and maintains critical habitat areas. SARA established the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) as an independent body of experts responsible for assessing and identifying species at risk.

4.4.3 Migratory Birds Convention Act

The *Migratory Birds Convention Act* (2022) restricts the disturbance or destruction of migratory birds and their nests, eggs, and shelters, except in accordance with a permit. Under the 2022 regulation, it is prohibited to damage, destroy, disturb, or remove migratory bird nests when they contain a live bird or viable egg. For 18 species of migratory birds in Schedule 1, year-round protection of the nest is provided until the nest can be deemed abandoned in accordance with the conditions of the regulation. As previously mentioned, provincial general least risk windows for bird species are designed to avoid the nesting period, which is considered late March to mid-August for most species in the Vancouver Island Region (ECCC, 2023).

4.5 Potential Permits, Approvals, and Authorizations

A summary of key permits, approvals, or authorizations which could potentially be required for the Project as currently understood is provided in Table 2. Additional permits, approvals, or authorizations could be required by government agencies, local governments, or Indigenous nations and additional information on requirements will be sought during the Early Engagement Phase and the EA process. Jordan Solar will consult with regulatory agencies, Technical Advisors, local and government officials, and Indigenous nations to identify requirements and prepare applications for submission. Jordan Solar will develop a Permitting Plan in collaboration with the relevant agencies which will be submitted as part of the DPD for the Project.

Table 2. Potential permits, approvals, or authorizations

Regulatory Agency	***Related Act/Regulation***	***Project Component or Activity***	***Permit, Approval, Authorization***	***Trigger***
Archeology Branch	*Heritage Conservation Act*	Alteration, recovery, or destruction of archeological sites, heritage resources or sites, or paleontological resources.	Heritage Inspection Permit, Site Alteration Permits	Archaeological inventories prior to site disturbance.
Ministry of Water, Land and Resource Stewardship (BC WLRS)	*Water Sustainability Act*	Works in or in proximity to a watercourse.	Changes In and About a Stream Notification or Approval	Proposed works that occur in or in proximity to a watercourse (e.g., installation of culverts or watercourse crossings).

Regulatory Agency	***Related Act/Regulation***	***Project Component or Activity***	***Permit, Approval, Authorization***	***Trigger***
	Water Sustainability Act	Water for construction, operations, and maintenance activities.	Water licence	Diversion, storage, or use of specific quantities of water for one or more water use purposes.
Ministry of Forests (MOFOR)	*Wildlife Act*	Works in or in proximity to wildlife habitat (e.g., amphibian habitat).	General Wildlife Permit	Permit for sampling for or salvage of individuals if works are proposed in proximity to wildlife habitat and any wildlife (e.g., fish or amphibians) that require relocation prior to works.
	Land Act	Use and occupation of Crown land. Use of roads on Crown land.	General Area Licence of Occupation Road Use Agreements and Permits	Primary authorization to occupy Crown land. Authorization to use public roads.
	Forest Act *Land Act* *Licence to Cut Regulation*	Timber/vegetation clearing during construction or maintenance.	Occupant Licence to Cut	Clearing of timber prior to installation of solar modules and access road maintenance/construction on Crown land.
Ministry of Transportation and Infrastructure (MOTI)	*Transportation Act*	Upgrades or construction of new access roads	Industrial Access Permit	Permit for use of or construction of new roads that join onto roads controlled by MOTI if applicable.
Ministry of Environment and Climate Change Strategy	*Environmental Management Act*	Generation of any waste during construction or operations (e.g., domestic waste)	Waste Discharge Permit	Disposal of office and onsite waste (e.g., domestic waste)
Interior Health	*Drinking Water Protection Act*	Onsite drinking water (if required)	Source approval and Permit to Operate	Installation of a drinking water system.
	Public Health Act	Onsite sewerage system (if required)	Permit in compliance with the Sewerage System Regulation	Onsite sewer system if required.

Regulatory Agency	***Related Act/Regulation***	***Project Component or Activity***	***Permit, Approval, Authorization***	***Trigger***
Fisheries and Oceans Canada (DFO)	*Fisheries Act*	Works in or around fishery habitat.	Request for Project Review	Works near water which do not follow DFO's standards and codes of practice.
Capital Regional District	Vancouver Island Land Use Plan, other zoning regulations	Any building or construction associated with the facility	Building permit	Development

4.6 Land Use Plans

4.6.1 Vancouver Island Land Use Plan

The Vancouver Island Land Use Plan was announced by the BC government in 1994 and covers the majority of Vancouver Island except for the general area of the Alberni-Clayoquot Regional District. The Vancouver Island Land Use Plan designates Protected Areas and Management Zones and summarizes the strategic directions of the region.

4.6.2 Zoning

Lands associated with the Project area are designated for Enhanced Forestry under the Vancouver Island Land Use Plan. These areas are managed to produce higher volumes and values of timber while respecting environmental standards and the Forest Practices Code (Province of BC, 2000). Zoning may need to be amended as a solar PV power generation facility is likely a new land use in the area. Zoning requirements or potential permits will be discussed further with local governments.

4.6.3 Old Growth Management Areas

A search of the provincial iMapBC online database was conducted to identify OGMAs that overlap with the Project area (Province of BC, 2023). OGMAs are areas that are recommended for legal designation to maintain existing old forest and retain associated values such as wildlife and cultural uses (Province of BC, 2023). There are no OGMAs within 5 km of the Project area.

4.6.4 Old Growth Deferral Areas

MOFOR is working in partnership with Indigenous nations to defer logging activity within 2.6 million hectares of BC most at-risk old growth forests (BC MOF, 2023). Harvesting has been deferred in designated areas. Deferrals are not permanent protections, but areas established under Part 13 of the BC *Forest Act* gives authority for the ministry to direct activities within designated areas. The independent Old Growth Technical Advisory Panel (TAP) designates Classification Levels of areas. There are old growth mapped areas within and around the Project area (see Section 6.3.8).

4.7 Indigenous Nations Agreements, Protocols, and Policies

Agreements, protocols, and policies that are publicly available or have been shared with Jordan Solar that could potentially facilitate meaningful engagement between the Government of BC and participating Indigenous nations and other policies include the following:

- Pacheedaht Amending Agreement to the Incremental Treaty Agreement – 2020 (Province of BC, 2020).
- Pacheedaht Incremental Treaty Agreement Amending Agreement – 2019 (Province of BC, 2019).
- Ditidaht and Pacheedaht Agreement-in-Principle – 2019 (Province of BC, 2019a).
- Pacheedaht Incremental Treaty Agreement – 2013 (Province of BC, 2013).
- Pacheedaht Fores and Revenue Sharing Agreement – 2021 (Province of BC, 2021).
- Te'mexw Treaty Association Agreement-in-Principle – 2015 (Province of BC, 2015).
- T'sou-ke Nation Incremental Treaty Agreement – 2013 (Province of BC, 2013a).
- T'sou-ke Nation Forest Consultation and Revenue Sharing Agreement – 2016 (Province of BC, 2016).

Additional protocols, permits, or policies could be shared with Jordan Solar during the Early Engagement Phase.

4.8 Government of BC Policies and Strategies

The following sections identify relevant government policies and strategies. No relevant government policies and/or strategies that the Project may not be compatible with have been identified.

4.8.1 Capital Regional District Regional Growth Strategy (Bylaw 4017)

The CRD Regional Growth Strategy (Bylaw 4017) (CRD, 2018) provides a framework for a cooperative strategy for achieving a sustainable future for the region. The strategy supports the reduction of community-based GHG emissions to address the effects of a changing climate. Among other things, increase energy efficiency and the use of renewable, clean energy to reduce reliance on fossil fuels (CRD, 2018).

4.8.2 Environmental Mitigation Policy for BC

The provincial Environmental Mitigation Policy and supporting procedures including those outlined in the Procedures for Mitigating Impacts on Environmental Values (BC MOE, 2014) provide processes for making well-informed decisions about how to use or develop BC's natural resources. The policy will be used as a guideline to develop Project-specific mitigation measures that will be contained in Environmental Management Plans developed for the Project.

4.8.3 CleanBC

CleanBC is the government's plan to lower climate-changing emissions by 40% by 2030. CleanBC includes a wide range of actions to reduce emissions, build a cleaner economy, and prepare for impacts of climate change. Being a clean energy project, the Project will be in alignment with several of the initiatives included in the CleanBC plan including, but not limited to, the following:

- Implement a 100% Clean Electricity Delivery Standard for the BC Hydro grid.
- Advance the BC government's reconciliation objectives with Indigenous nations by creating economic and employment opportunities for regional Indigenous nations and rural communities; and
- Create economic opportunities for regional Indigenous nations and rural communities in BC's low carbon energy sector.

CleanBC has published the following strategies which incorporated input from people throughout the province, including Indigenous leaders and climate experts.

4.8.3.1 Climate Preparedness and Adaptation Strategy

BC's Climate Preparedness and Adaptation Strategy outlines a broad range of actions for 2022 – 2025 to address climate impacts and build resilience in BC. The strategy strengthens BC's capacity to respond to sudden events such as wildfires, floods, and heatwaves, while also preparing for and responding to changes that happen more slowly due to climate change. It addresses foundational needs for data, training, and capacity, and presents targeted actions that support Indigenous nations, communities, local governments, businesses, and industry.

4.8.3.2 CleanBC Roadmap to 2030

The CleanBC Roadmap to 2030 provides BC's approach to meeting the targets and transforming markets toward clean solutions. It sets out key areas of BC's economy that generate emissions or can create solutions, assesses progress in developing and deploying low- and zero carbon technologies, and sets out pathways to support innovation in sectors where low-carbon solutions are emerging.

Further, the Premier of BC laid out priorities to the Minister of Energy, Mines and Low Carbon Innovation in a mandate letter dated December 7, 2022. The Project will align and support the following objectives identified in the mandate letter:

- A sustainable, clean, secure, and fair economy that builds a clean economy that address BC's obligations to combat climate change by driving down emissions.
- Deliver on the CleanBC Roadmap to 2030 policies and programs to help ensure legislated GHG goals.

BC's plan to work with BC Hydro to implement its Electrification Plan and to ensure the province is well positioned to electrify BC's economy, including options for Indigenous partnerships in clean energy projects.

5.0 Indigenous Nation Interests

5.1 Indigenous Nations and Community Interests

The Project area is located within the southern region of Vancouver Island, within proximity to potentially interested Indigenous nations. The Project area is within the traditional territory of the Nuu-chah-nulth and Coast Salish peoples. The Project area is on Crown land and does not overlap with *Indian Act* reserve lands, lands subject to a Treaty, or lands subject to a land claim agreement.

Jordan Solar is committed to meaningful engagement with Indigenous nations throughout the regulatory process and the life of the Project. Jordan Solar has identified the Indigenous nations listed in the following sections as potentially impacted by Project activities. Jordan Solar generated this list by using the provincial Consultative Areas database (Province of BC, 2023a) and preliminary feedback from the BC EAO. The proposed approach to engagement and a summary of communications and engagement with Indigenous nations to date is described in Appendix 3: Early Engagement Plan. Should other Indigenous nations express an Indigenous interest during the Early Engagement Phase and are identified by BC EAO or self identification, Jordan Solar will tailor future engagement to include them.

5.1.1 Nuu-chah-nulth Nation

The Nuu-chah-nulth peoples are from the western side of Vancouver Island and are comprised of 14 communities with language, family, and culturally affinities. The territory stretches approximately 300 km of Vancouver Island's Pacific Coast from Brooks Peninsula in the north to Point-no-Point in the south, including island regions. Indigenous nations identified for engagement on the Project includes Pacheedaht First Nation.

5.1.1.1 Pacheedaht First Nation

Pacheedaht First Nation reserve lands are comprised of four land parcels totalling 178.7 ha of reserve land, centered near Port Renfrew, BC approximately 80 km northwest of Victoria and approximately 35 km northwest of the Project area (INAC, 2023). Pacheedaht territory includes lands between Bonilla Point and Sheringham Point on the southwest coast of Vancouver Island and has traditional village sites in and around Port Renfrew. Pacheedaht First Nation is an independent nation and is not affiliated with any tribal councils. Pacheedaht First Nation is negotiating with Canada and the Province of BC in the BC treaty process at a common treaty table with the Ditidaht First Nation (Province of BC, 2023b).

5.1.2 Coast Salish Nation

The Coast Salish peoples include a variety of Indigenous nations living along the Northwest Pacific Coast of BC from the Lower Mainland and Vancouver Island south to western Washington and northwestern Oregon in the United States. Fishing is an important part of the Coast Salish culture and economy. Indigenous nations identified for engagement on the Project include T'Sou-ke First Nation.

5.1.2.1 T'Sou-ke First Nation

T'Sou-ke First Nation First Nation reserve lands are comprised of two land parcels totalling approximately 67 ha of reserve land around the Sooke Basin on the Strait of Juan de Fuca, centred near Sooke, BC approximately 30 km south of Victoria and 20 km west of the Project area (INAC, 2023a). T'Sou-ke First Nation is one of 11 member bands of the Naut'sa mawt Tribal Council and the Te'mexw Treaty Association. The Te'mexw Treaty Association is negotiating with Canada and the Province of BC in the BC treaty process on behalf of its five member bands including Malahat, Scia'new (Beecher Bay), Songhees, Snaw-aw-as (Nanoose), and T'Sou-ke First Nations (Province of BC, 2023c).

5.2 Indigenous Interests

Indigenous interests in the Project area that have been raised to Jordan Solar by Indigenous nations or groups during pre-early engagement are summarized in Table 3. These are provided in general terms and details on locations have not been provided.

Jordan Solar is seeking additional information from Indigenous nations that are currently being engaged or will be engaged with and additional information on potential Project interactions and impacts on Indigenous interests will be identified through further engagement. The Early Engagement Plan (Appendix 3) provides additional information about Indigenous nations potentially affected by or potentially having a potential interest in the Project and sets out the Project's engagement plan with Indigenous nations throughout the Project.

Table 3. Indigenous interests related to the Project

Indigenous interest	*Potential Issue or Concern Raised*	*Response/Potential Mitigations*
Potential impacts to wildlife and wildlife habitat	Jordan Solar heard concerns about potential impacts to wildlife and wildlife habitat which have historically been impacted in the area by forestry activities.	Jordan Solar will continue discussions about design components and potential impacts to wildlife and wildlife habitat through early engagement. Consider mitigation measures including incorporating wildlife corridors into Project design to allow for movement through the Project area. Prepare management plans including best management practices during appropriate phases of the Project. Potential mitigation measures provided in Table 11.

Indigenous interest	*Potential Issue or Concern Raised*	*Response/Potential Mitigations*
		Project Environmental Assessment will include further assessments of wildlife and wildlife habitat in the Project area.
Economic opportunities and capacity building	Jordan Solar heard Indigenous nations are interested in economic and capacity building opportunities related to the Project including construction jobs, procurements opportunities, etc. Jordan Solar heard Indigenous nations are interested in participation and training opportunities during the EA field assessments as well as providing environmental and archaeological monitoring during the construction phase of the Project.	Jordan Solar is committed to providing economic and capacity building opportunities to Indigenous nations.
Archeological and heritage resources, cultural resources	Jordan Solar heard concerns about potential impacts to archaeological resources in the Project area during construction of Project components. Project may require a Preliminary Field Reconnaissance (PFR) prior to ground disturbance. Indigenous nations are interested in conducting and participating in PFRs.	Jordan Solar is committed to working with Indigenous nations to gather further information including conducting site visits, Preliminary Field Reconnaissance (PFR), conducting appropriate archeological studies including Archeology Overview Assessments (AOA) and Archaeological Impact Assessments (AIA) prior to development.
Traditional and current land use of Project area	Jordan Solar heard that forestry activities and road building in the area have opened the area to unregulated recreational use. Concerns additional projects in the area would lead to increased road building and access by others. Jordan Solar heard concerns about potential impacts to the ability to continue to use the Project area for traditional and current land and resource use.	Jordan Solar will conduct additional engagement and continue discussions about design components that could impact use of the Project area through early engagement. Coordinate TLU studies with interested Indigenous nations to identify site-specific areas of cultural importance and inform Project design. Prepare management plans and implement best management practices during appropriate phases of the Project.

Indigenous interest	***Potential Issue or Concern Raised***	***Response/Potential Mitigations***
Reclamation and clean up of Project area following decommissioning.	Jordan Solar heard concerns about what will happen to the Project area at the end of the Project life.	Jordan Solar will prepare management plans which will include best management practices to follow during and following Project decommissioning. Plans could include measures for proper removal and disposal of infrastructure.
Water quality	Jordan Solar heard concerns about potential impacts to water quality of watercourses and potential water use. Potential impacts to downstream and upstream drainage basins. Jordan Solar heard concerns about potential impacts to salmon habitat restoration efforts undertaken on the Jordan River and other watercourses around the Project area.	Jordan Solar will continue discussions about design components that could impact water quality through early engagement. Prepare management plans and implement best management practices during appropriate phases of the Project. Potential mitigation measures provided in Table 11. Jordan Solar will work with Indigenous nations to understand salmon habitat restoration work that has taken place. This historic information, if deemed appropriate to share with Jordan Solar, could further inform watercourse assessments and design considerations of the Project during the EA.
Cumulative impacts	Jordan Solar heard concerns raised about indirect and direct impacts to the area from the number of current and proposed projects in the traditional territory causing changes on the landscape - highways, forestry operations, access roads, transmission ROWs, etc. Potential impacts to waters, additional roads and use of the area, cultural values, traditional land and resource use of the area.	Consider cumulative effects during the EA. Continued discussions about design components through early engagement. Prepare management plans and implement best management practices during appropriate phases of the Project.

5.3 Incorporating Indigenous Knowledge

Jordan Solar acknowledges Indigenous peoples have a long and close relationship with the land and can provide knowledge about the local environment. The BC EAO Guide to Indigenous Knowledge in Environmental Assessments (BC EAO, 2020) provides guidance to environmental assessment participants to support the inclusion of Indigenous Knowledge in the EA process in accordance with guiding principles and requirements for confidentiality. The Government of BC recognizes inclusion of Indigenous Knowledge in the EA process is an important component in supporting the reconciliation objectives of the BC EAA including supporting the implementation of the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP, 2007) and provides Indigenous decision-makers and Participants with greater knowledge and understanding of the environment where a project is proposed, potential impacts of a project, and the significance of those impacts on Indigenous nations and communities.

Jordan Solar recognizes that Indigenous Knowledge informs the knowledge and experience of Indigenous participants in the EA process and can provide meaningful input as to how to conduct an environmental assessment, how to evaluate impacts, and how decisions are made by Indigenous nations. Building and maintaining relationships and open dialogue to ensure environmental assessments are effectively informed by Indigenous Knowledge spans all phases of conducting an environmental assessment.

Jordan Solar recognizes in addition to the guidelines provided by BC EAO, Indigenous nations will have their own governance, rights, protocols, guidelines, policies and practices regarding sharing or using their knowledge. Jordan Solar will continue to engage with Indigenous nations to learn more about the same through leadership, community representatives chosen by the nation, and knowledge holders (as appropriate and determined by the Indigenous nation), with the view of its application in the EA process. Jordan Solar will work with Indigenous nations and knowledge holders collaboratively to learn how Indigenous knowledge is considered in the EA process.

Jordan Solar will seek to understand and respect Indigenous governance, rights, protocols, policies, and practices when requesting access to Indigenous Knowledge and gaining permission to use Indigenous Knowledge. Jordan Solar will continue to work with Indigenous nations and knowledge holders to:

- Determine the community protocols and expectations regarding the conduct of Indigenous Knowledge studies to determine how the research is to be conducted and how information will be used;
- Work with the Indigenous nations and their designated representative to determine how permission will be obtained from a participating Indigenous nation or knowledge holders;
- Identify how and what Indigenous Knowledge may be useful for Project design, EA process, impact prediction and mitigation;
- Determine expectations for handling, sharing, and incorporating Indigenous Knowledge studies; and

- Identify possibilities for scoping the study in a manner that may also contribute to broader goals and priorities of the Indigenous nation.

Jordan Solar will continue to engage participating Indigenous nations and decision makers to identify knowledge holders as applicable through the Early Engagement Phase by regularly sharing information, what they have learned, and considering feedback to shape the development of the DPD.

6.0 Biophysical and Socio-Economic Environment

This section includes a general description of existing biological and socio-economic or human environmental conditions in the Project area. Further engagement with the BC EAO, Indigenous nations, regulatory agencies, and other Communities of Interest will be required to determine appropriate Valued Components (VCs) and assessment methodology for potential environmental assessment work. Additional details on VCs and assessment methodology will be gathered during the Early Engagement Phase and VCs will be provided in the DPD.

6.1 Assessment Methodology

6.1.1 Desktop Constraints Analysis

A desktop background review of potential environmental constraints within the Project area was performed for aquatic and terrestrial resources using provincial and federal government databases and mapping tools, as well as relevant literature, previous studies and assessments of the Project area, and other data pertaining to wildlife and environmentally sensitive features that may be present in the Project area. The background review included searches for known occurrences of rare and/or endangered species and ecosystems within the Project area, designated wildlife critical habitats, and a search of ecosystems, plants, and wildlife species at risk that have the potential to occur, as well as available fisheries information. Databases and reports utilized in the background review and constraints analysis included the following:

- DataBC iMapBC mapping tool (DataBC, 2023);
- BC Conservation Data Centre's (CDC) BC Species and Ecosystems Explorer and CDC iMap mapping tool (CDC, 2023);
- Habitat Wizard mapping tool (Province of BC, 2023c); and
- BC Integrated Land and Resource Registry (ILRR) online database (Province of BC, 2023d).

6.1.2 Site Visit

Preliminary site visits to the Project area were conducted by Triton biologists on June 29, 2023. Triton was accompanied to the Project area by representatives from T'Sou-ke First Nation on July 14, 2023. The site visits were focused on assessing access to the Project area and capturing a general overview of the Project area noting presence of wildlife or wildlife habitat features (mammals, birds, amphibians) and vegetation species. The mapped watercourses which occur within the Project area were visited. Additional field surveys will be completed during the EA process.

6.1.3 Historical and Current Use of the Project Area

Previous and current use of the Project area includes forestry activity with cutblocks and active and deactivated forestry management access roads. Cutblocks have been replanted in some areas and plantation trees at various stages of growth are present.

Other uses within the vicinity of the Project area include recreational use for off-road vehicle use, hunting, hiking, and other recreational activities.

6.2 Project Area

Table 4 outlines the Project area administrative and physiographic setting.

Table 4. Project area administrative and physiographic setting

Classification	*Description*
Administrative Boundary	
Natural Resource Region	West Coast
Natural Resource District	South Island
Ministry of Forest Region	Vancouver Island
Major Watershed	Sandcut Creek
Watershed Group	San Juan River
Regional District	Capital Regional District
Health Authority Health Service Delivery Area Community Health Service Area/Local Health Area	Vancouver Island Health Authority South Vancouver Island Vancouver Island
Nearest Municipality	District of Sooke, BC (20 km) Duncan, BC (40 km) Victoria, BC (50 km)
Nearest Town or Hamlet	Jordan River, BC (6 km) Port Renfrew (35 km)
UTM	10U 427186.00 m E, 5365530.00 m N
Ecosystem Classification	
Ecodomain	Humid Temperate
Ecodivision	Cool Hypermaritime and Highlands
Ecoprovince	Georgia Depression
Ecoregion	Eastern Vancouver Island
Ecosection	Leeward Island Mountains
Biogeoclimatic Zone Subzone Variant	Coastal Western Hemlock Very Dry Maritime xm / Moist Maritime mm Western 2 / Submontane 1
Elevation Range (m)	180-540

*Source: iMapBC (Province of BC, 2023)

6.3 Terrestrial Resources

6.3.1 Biogeoclimatic Ecosystem Classification and Vegetation

The biogeoclimatic ecosystem classification (BEC) of the Project area is Coastal Western Hemlock (CWH). The Project footprint is mainly within the Very Dry Maritime subzone, Western variant (CWHxm2); however, the northeast boundary is partially within and/or close to three other CWH subzones, likely due to the wide range of elevation and topography in the area. The three other subzone/variant groups are the Moist Maritime subzone, Submontane variant (CWHmm1), the Moist Maritime subzone, Montane variant (CWHmm2), and the Very Wet Maritime subzone, Montane variant (CWHvm2) (Province of BC, 2023). This review will focus on the CWHxm2 as this makes up most of the footprint of the Project area and surrounding area to the east, south and southwest.

The CWHxm2 is characterized by warm, dry summers and moist, mild winters with minimal snowfall. Mean annual precipitation is 1505 mm and mean annual temperature is 9.3 ˚C. Forests are typically dominated by Douglas-fir and Western hemlock with minor quantities of Western Redcedar. The understory contains salal (Gaultheria shallon), dull Oregon-grape (*Mahonia nervosa*), red huckleberry (*Vaccinium parvifolium*), twinflower (*Linnaea borealis*), sword fern (*Polystichum munitum*), vanilla leaf (*Achlys triphylla*), step moss (*Hylocomium splendens*), and Oregon beaked moss (*Kindbergia oregana*). The Project area is located in the Natural Disturbance Type Class 2 (NDT2). These ecosystems are characterized by infrequent stand-initiating events (Province of BC, 2023).

6.3.2 Wildlife and Wildlife Habitat

The CWH zone is estimated to have the greatest diversity and abundance of habitat elements of all zones in the province, contributing to a large diversity of wildlife species o be found in CWH zones. The most common large mammals are Black Bear (*Ursus americanus*), Black-tailed Deer (*Odocoileus hemionus*) and Gray Wolf (*Canis lupus*). Forests containing fish-bearing streams in addition to lush vegetation and berries provide forage for these mammals as well as Roosevelt Elk (*Cervus canadensis roosevelti*). A variety of passerine birds, woodpeckers and owls also live and forage in CWH forests, and many species of amphibians occur due to the damp litter of the forest floors (Meidinger, et. al. 1991).

6.3.3 Rare and Endangered Wildlife

Species at risk information is available from provincial and federal sources (Table 5). Provincially, BC MOE maintains information on the BC Species and Ecosystems Explorer for species in the province (CDC, 2023). Data on known species at risk occurrences are available through the BC Conservation Data Centre (BC CDC) (CDC, 2023). Federally, the Committee on the Status of Endangered Wildlife in Canada (COSEWIC) was established under Section 14 of the Species at Risk Act (SARA) and ranks species. Schedule 1 of SARA provides the list of species at risk. SARA typically only applies to federal land and only aquatic species as defined by the federal *Fisheries Act* and migratory birds listed under the federal *Migratory Bird Act* are protected under SARA on private or provincially owned lands.

Table 5. Definitions of conservation status classifications

Regulation	*Status*	*Definition*
COSEWIC (federal)	Endangered (E)	A species facing imminent extirpation or extinction.
	Threatened (T)	A species that is likely to become endangered if nothing is done to reverse the factors leading to its extirpation or extinction.
	Special Concern (SC)	A species that may become threatened or endangered because of a combination of biological characteristics and identified threats.
BC CDC (provincial)	Red-listed	Species, subspecies, or ecological communities considered to be Extirpated, Endangered, or Threatened.

Regulation	*Status*	*Definition*
	Blue-listed	Species, subspecies, or ecological communities considered to be of Special Concern (formerly Vulnerable).
	Yellow	Species or subspecies that is apparently secure and not at risk of extinction.

6.3.4 Wildlife Species at Risk

The Project area has the potential to provide important foraging, breeding, nesting, and travel corridor habitat for rare and endangered wildlife. The CDC database was used to prepare a list of red- and blue-listed wildlife species which could potentially occur within the Project area. The list was compiled by filtering the tool's database to search for animal occurrences in the Leeward Island Mountains Ecosection, CWHxm BEC zone and subzone, and further refined to conifer forest – dry, conifer forest – mesic, and riparian forest habitat types. Based on the results of the query, provincially rare or at-risk wildlife species potentially could occur within or in proximity to the Project area (CDC, 2023). The full results of the query are provided in Table 1 of Appendix 2. Species with high or moderate potential to occur based on preliminary results of background information and field visits are provided in Table 5. The potential for species to occur within the Project area will be further refined following additional field survey programs conducted during the EA process.

6.3.5 Known Occurrences of Wildlife Species-at-Risk

The CDC database and mapping tool was accessed to identify known occurrences of wildlife species at risk (an area of land and/or water where a species or ecosystem is known to occur) within and in proximity (within 5 km) to the Project area. No known occurrences were identified within the Project area; two occurrences were identified within 5 km of the Project area (CDC, 2023).

6.3.5.1 Northern Red-legged Frog Occurrence #7123; Shape ID 32313

The Northern Red-legged Frog (*Rana aurora*) is a provincially blue-listed species and is listed as a species of Special Concern under both COSEWIC and SARA. Observations were recorded in 2005 at two locations along a logging road between Desolation Creek and Jordan River, and in 2006 at one location in a runoff ditch near a logging road near Sandcut Creek headwaters. The closest recorded location is approximately 380 m northeast of the Project footprint.

6.3.5.1 Wandering Salamander Occurrence #12875; Shape ID 103421

The Wandering Salamander (*Aneides vagrans*) is a provincially blue-listed species and is listed as a species of Special Concern under both COSEWIC and SARA. Incidental sightings have been recorded around the mouth of the Jordan River, approximately 4 km from the Project area, between 1941 and 1977. Since large tracts of suitable habitat exist in the greater area and in nearby Juan de Fuca Provincial Park, it is expected that the species remains present throughout (CDC, 2023).

Table 6. Species-at-risk with potential to occur around the Project area

Common Name	*Scientific Name*	*BC Status*	*SARA Status*	*COSEWIC Status*	*Potential to Occur*	*Rationale***
Mammals						
Ermine, anguinae subspecies	Mustela richardsonii anguinae	Blue	Not listed	Not listed	Moderate – high	Use wide range of forest and woodland habitats including wet coniferous and riparian forest. Two occurrences within 10 km of project area: one on Jordan River and one on Muir River.
Fisher	Pekania pennanti	No Status	Not listed	Not listed	Moderate	Use dense coniferous or mixed forests, including early successional forest with dense overhead cover. Associated with riparian areas. May use second growth if there is high canopy closure, large legacy trees and woody debris.
Hoary Bat	*Lasiurus cinereus*	Blue	Not listed	Not listed	Moderate	Associated with a wide variety of forested habitats in the province including riparian forest and anthropogenically altered areas. Its elevational range is from sea level to 1250 metres.
Little Brown Myotis	*Myotis lucifigus*	Blue	1-E	E	Moderate	Use a wide range of habitats and frequently use mesic to moist coniferous forests. One iNaturalist observation from 2021 near Jordan River.
Western Water Shrew, brooksi subspecies	Sorex navigator brooksi	Blue	Not listed	Not listed	Uncertain	Western water shrews found in streams of coniferous forests. Minimal data on BC habitat or distribution.
Birds						
Band-tailed Pigeon	*Patagioenas fasciata*	Blue	1-SC	SC	Moderate – high	Use wet mountain coniferous forests especially with hemlock, cedar, Doug fir. iNat observations around Jordan River.
Evening Grosbeak	*Coccothraustes vespertinus*	Yellow	1-SC	SC	Moderate	Evening Grosbeak is found in British Columbia from sea level to high mountainous forest (i.e., up to 1950 m).

Common Name	***Scientific Name***	***BC Status***	***SARA Status***	***COSEWIC Status***	***Potential to Occur***	***Rationale*****
Common Nighthawk	*Chordeiles minor*	Blue	1-SC	SC	Low – moderate	Frequently uses coniferous forests and wide variety of habitats. Recorded occurrences along west coast of island.
Marbled Murrelet	*Brachyramphus marmoratus*	Blue	1-T	T	Moderate	Use wet coniferous forests for nesting within 5 km of shore (Project within 3 km), nests observed near Sooke Lake and Noyse Creek. May depend on maturity of forest as they prefer old trees.
Northern Goshawk, *laingi* subspecies	*Accipiter gentilis laingi*	Red	1-T	T	Moderate	Prefer dense canopy with open understory, large mature trees (>60 years) or old growth. Use mesic and wet coniferous forest and riparian forest.
Olive-sided Flycatcher	*Contopus cooperi*	Blue	1-T	SC	Moderate	Widely distributed throughout BC. Potential to use riparian coniferous stands. Facultative frequent use of mesic and moist conifer forests and riparian forests.
Pine Grosbeak, *carlottae* subspecies	*Pinicola enucleator carlottae*	Blue	Not listed	Not listed	Moderate	Minimal data but expected to be present on Island and frequently uses mesic and wet coniferous forest.
Western Screech-Owl, *macfarlanei* subspecies	*Megascops kennicotti macfarlanei*	Blue	1-T	T	Moderate	Restricted to moist woodlands along streams and lakes. Several occurrences recorded in 2017-2018 near the Jordan River diversion reservoir.
Amphibians and Reptiles						
Coastal Tailed Frog	*Ascaphus truei*	Yellow	1-SC	SC	Moderate	Prefer clear, cold swift-moving mountain streams with coarse substrates. There are several small headwater streams in the Project footprint. Primarily in older forest sites; required microclimatic and microhabitat conditions are more common in older forests.
Northern Red-legged Frog	*Rana aurora*	Blue	1-SC	SC	High	Breed in lake or wetland habitats in close proximity to forests and use all forest types outside of breeding season. Recent recorded observations within 5 km of project area.
Wandering Salamander	Aneides vagrans	Blue	1-SC	SC	High	Recorded observations within 5 km of project area. Logs are primary microhabitat in spring, summer, and fall on Vancouver Island.

Common Name	***Scientific Name***	***BC Status***	***SARA Status***	***COSEWIC Status***	***Potential to Occur***	***Rationale*****
Western Toad	*Anaxyrus boreas*	Yellow	1-SC	SC	High	Use all forest types and will breed in roadside ditches. Migrate long distances between aquatic breeding sites and upland summer or overwintering habitats. Known populations on southern Vancouver Island.
Invertebrates						
Broadwhorl Tightcoil	*Pristiloma johnsoni*	Blue	Not listed	Not listed	Unknown	Minimal data available but it may use the type of forest in the area.
Common Wood-nymph, incana subspecies	*Cercyonis pegala incana*	Red	Not listed	Not listed	Moderate	Facultative frequent use of dry conifer forests. Mapped occurrences in other parts of the southern island area.
Johnson's Hairstreak	*Callophrys johnsoni*	Red	SC	Not listed	Unknown	Unknown - use hemlock forests if infected by dwarf mistletoe. Caterpillars rely on parasitic mistletoes on conifers.
Warty Jumping-slug	*Hemphillia glandulosa*	Red	1-SC	SC	Moderate	Moist forest and riparian sites from low to mid elev. Small in size approx.. 20 mm.

6.3.6 Critical Habitat

The CDC database and mapping tool was accessed to identify designated critical habitat of wildlife species at risk and in proximity (within 5 km) to the Project area. There is one critical habitat polygon for Marbled Murrelet (*Brachyramphus marmoratus)* within the Project footprint (Critical habitat ID No. 23589), and 31 critical habitat polygons for the same species that occur within the 5 km zone of the footprint. The Project is also situated within a general critical habitat polygon for two species of bat: Little Brown Myotis (*Myotis lucifugus*) (Critical habitat ID No. 22602) and Northern Myotis (*Myotis septentrionalis)* (Critical habitat ID No. 22609; CDC, 2023).

6.3.6.1 Marbled Murrelet, Critical Habitat – ID #23589 and others

There are 32 critical habitat polygons for Marbled Murrelet that occur within 5 km of the Project area, including one polygon that occurs inside the Project footprint (CDC, 2023). The Marbled Murrelet is a small sea bird that is blue-listed (Special Concern) in BC and listed as Threatened (likely to become endangered if limiting factors are not reversed) under COSEWIC and SARA. In Canada it is only found on the Pacific Coast. These birds spend most of their lives on the ocean and coastline, nesting typically in old-growth forests within 50 km of the shore. Nesting locations are most likely found in stands of trees older than 250 years, within 30 km of the ocean and up to 900 masl (ECCC, 2023). There is mapped old-growth forest within the Project footprint as well as within 5 km of the footprint (see Figure 2 and Section 6.3.8). The critical habitat polygons were created from a combination of mapped potentially suitable habitat based on the above and other habitat features, known nest locations, and known occupied detections; however it should be noted that critical habitat mapping is not complete for this species and so more critical habitat may exist on the Pacific Coast that has not yet been mapped (ECCC, 2023).

6.3.6.2 Little Brown Myotis, Critical Habitat – ID # 22602

The Little Brown Myotis is a small insectivorous bat that is blue-listed (Special Concern) in BC and listed as Endangered under both COSEWIC and SARA. Its confirmed range extends across Canada, most of the United States and into Mexico. The Project footprint falls within a standardized UTM grid where the criteria for Little Brown Myotis critical habitat are met (ECCC, 2018), and this species uses a wide variety of habitats; however, the presence of specific habitat features required for breeding and overwintering would need to be confirmed during field assessments.

6.3.6.3 Northern Myotis, Critical Habitat – ID # 22609

Northern Myotis is a bat species similar to the Little Brown Myotis that is blue-listed (Special Concern) in BC and listed as Endangered under both COSEWIC and SARA. The Project footprint falls within a standardized UTM grid where the criteria for Northern Myotis critical habitat are met; however, the Recovery Strategy distribution map for this species shows its range does not extend to the Pacific Coast (ECCC, 2018), so it is unlikely that this species is present on Vancouver Island.

6.3.7 Ungulate Winter Range

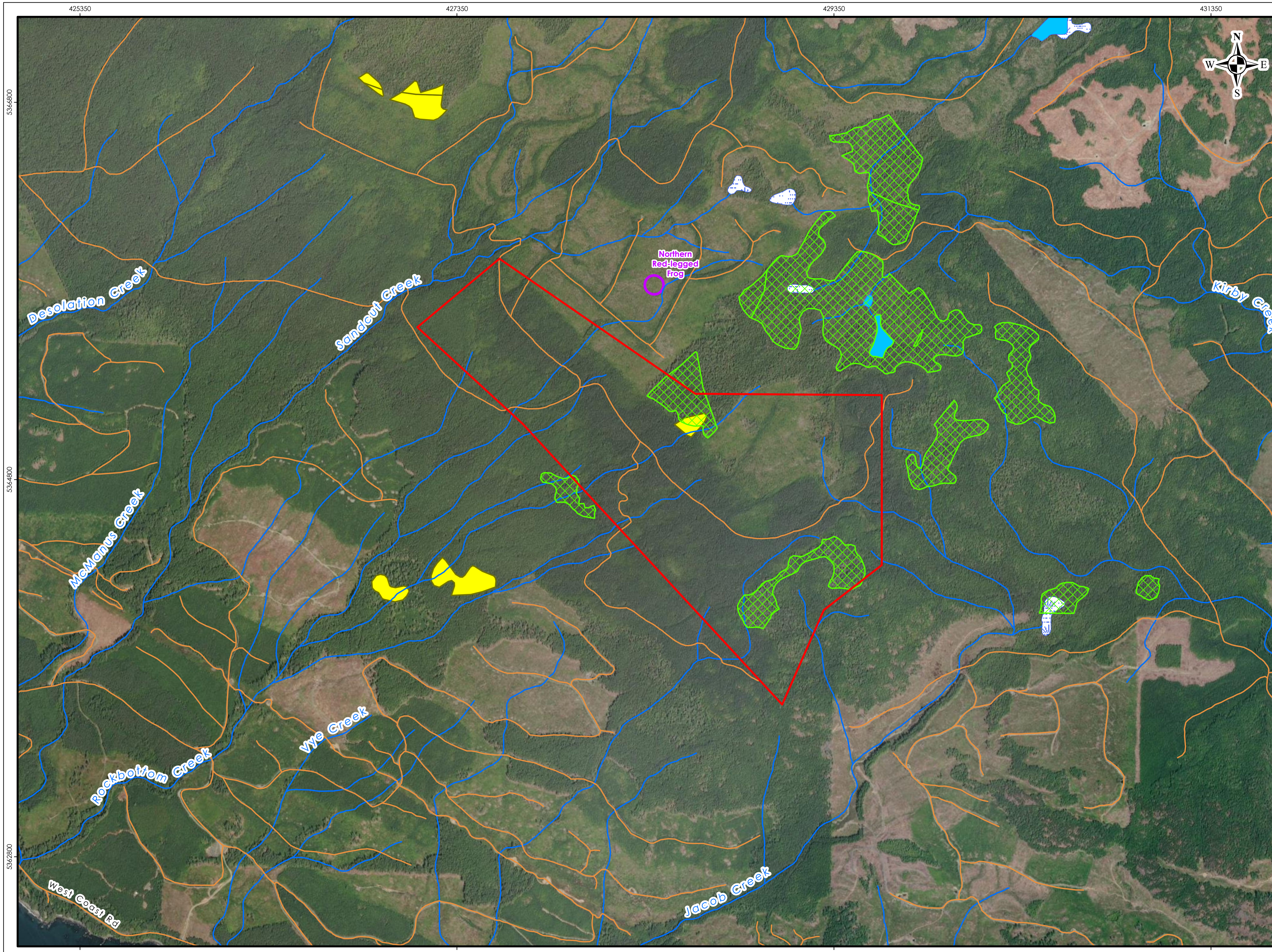
Ungulate winter range (UWR) is defined as an area that contains habitat necessary to meet the winter habitat requirements of an ungulate species. UWR include landscapes to which ungulates move in response to snow accumulation and contains habitat that is necessary to meet the winter habitat requirements of an ungulate species, as interpreted by the MOE regional staff from scientific and management literature (BC MOE, 2021). Legal establishment of UWR and associated objectives are managed under the *Forest and Range Practices Act*. There are no UWR areas in close proximity to the Project footprint; the closest mapped UWR is for Black-tailed Deer and Roosevelt Elk and is approximately 15 km away from the Project footprint (Province of BC, 2023).

6.3.8 Old Growth Forest

There are several polygons within and around the Project Footprint that have been mapped as Priority Big-treed Old Growth, and one polygon mapped as Priority Big-treed Older Mature Forest (Figure 2), in the provincial 2020 Old Growth Strategic Review (Old Growth Technical Advisory Panel, 2020; Province of BC, 2023). Big-treed Old growth is the highest priority category recommended for deferral of development because it is at highest risk of irreversible damage in the near future. These areas have not been officially established by the government as "designated areas" under Part 13 of the *Forest Act*.

Canadian Solar Jordan Solar BC EAO
Initial Project Description and Engagement

Figure 2.
Wildlife Occurrences and Habitat Areas



Project Area (Approximate)
Road
Watecourse
Waterbody
Wetland
Ecosystems and Species at Risk
Old Growth Deferral Area

Critical Habitat
Marbled Murrelet

Sources and Disclaimer
Base map Source: ESRI
Disclaimer: This map is a visual aid only to be used together with the accompanying report, including and incorporating any disclaimer contained therein. This map has been prepared to illustrate the results of our work, and is **not intended to be used for navigational purposes**. Information displayed on this map is based, in whole or in part, on geographic information that may have been provided by third parties, including government data. Triton Environmental Consultants Ltd. disclaims (without limiting the generality of the foregoing) all responsibility for the accuracy of any such third party information, regardless of the source.

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Projection: NAD 1983 UTM Zone 10N

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6.3.9 Vegetation Species-at-Risk

The CDC database was used to prepare a list of blue- and red-listed vascular and non-vascular plant species which could potentially occur within the Project area. The list was compiled by filtering the tool's database to search for occurrences in the South Island Natural Resource District, CWHxm BEC Zone and Subzone, and further refined to conifer forest – dry, conifer forest – mesic, old forest, and riparian forest habitat types. Based on the results of the query, 11 provincially rare or at-risk plant species were identified (CDC, 2023). The results of the query are provided in Table 7.

Table 7. Vegetation species-at-risk with potential to occur in and around the Project area*

Common Name	*Scientific Name*	*BC Status*	*SARA Status*	*COSEWIC Status*
Pine Broomrape	*Aphyllon pinorum*	Red	Not listed	Not listed
Phantom Orchid	*Cephalanthera austiniae*	Red	1-T (2003)	E
Washington Springbeauty	*Claytonia washingtoniana*	Blue	Not listed	Not listed
Western Strawberry-bush	*Euonymus occidentalis var. occidentalis*	Red	Not listed	Not listed
Rough-leaved Aster	*Eurybia radulina*	Red	Not listed	Not listed
Butterfly Bearing Lomatium	*Lomatium papilioniferum*	Red	1-T (2011)	T
Leafy Mitrewort	*Mitellastra caulescens*	Blue	Not listed	Not listed
Smith's Fairybells	*Prosartes smithii*	Blue	Not listed	Not listed
Leafless Wintergreen	*Pyrola aphylla*	Blue	Not listed	Not listed
Dwarf Bramble	*Rubus lasiococcus*	Blue	Not listed	Not listed
Nevada Marsh Fern	*Thelypteris nevadensis*	Red	Not listed	Not listed

*Search Criteria: Plants AND BC Conservation Status: Red (Extirpated, Endangered, or Threatened) OR Blue (Special Concern) AND Distribution: Native OR Endemic (Yes, Probable, or Breeding) OR Probable Endemic AND 'Natural Resource (NR) Districts': South Island Natural Resource District
AND Habitat Subtypes: Conifer Forest - Dry,Conifer Forest - Mesic (average),Old Forest,Riparian Forest
AND BGC Zone, Subzone: CWHxm

6.3.10 Known Occurrences of Vegetation Species-at-Risk

The CDC database and mapping tool was accessed to identify known occurrences of vegetation species at risk within and in proximity (within 5 km) to the Project area. There is one known occurrence of a terrestrial vegetation species at risk within 5 km of the Project area (CDC, 2023).

6.3.10.1 Dwarf Maiden-hair Fern Occurrence #17202; Shape ID 136962

The Dwarf Maidenhair Fern (*Adiantum aleuticum* var. *subpumilum*) is a provincially blue-listed plant species. It does not have a ranking under COSEWIC or SARA. A CDC occurrence is recorded from 1988 when a specimen was collected from a seepage clay cliff overhang above a rock headland near the mouth of Vye Creek, approximately 1.5 km from the Project (CDC, 2023).

6.3.11 Ecological Communities at Risk

Ecological communities at risk are of concern because of their limited distribution on the landscape and sensitivity to disturbance. The CDC database was used to prepare a list of blue- and red-listed ecological communities which could potentially occur within the Project area. The list was compiled by filtering the tool's database to search for South Island Natural Resource District, CWHxm BEC Zone and Subzone. Based on the results of the query, five provincial ecological communities of concern were identified (CDC, 2023) (Table 8). The list will be further refined based on the results of additional field surveys conducted during the EA phase.

Table 8. Ecological communities at risk with potential to occur in and around the project area*

Common Name	*Scientific Name*	*BC Status*
Arbutus / Hairy Manzanita	*Arbutus menziesii / Arctostaphylos columbiana*	Red
Sitka Sedge - Pacific Water-parsley	*Carex sitchensis - Oenanthe sarmentosa*	Blue
Trembling Aspen / Pacific Crab Apple / Slough Sedge	*Populus tremuloides / Malus fusca / Carex obnupta*	Red
Garry Oak / California Brome	*Quercus garryana / Bromus carinatus*	Red
Hard-stemmed Bulrush Deep Marsh	*Schoenoplectus acutus* Deep Marsh	Blue

*Search Criteria: Ecosystem Realm-Groups: Forest OR Rock Group (R) OR Peatland Group OR Ecosystem Classes: Spring-seepage Class (Hs) OR Vernal Pool Class (Hv) OR Marsh Wetland Class (Wm) OR Shallow Water (Aquatic) Wetland Class (Ww) OR Swamp Wetland Class (Ws)
AND BC Conservation Status:Red (Extirpated, Endangered, or Threatened) OR Blue (Special Concern)
AND Distribution: Native OR Endemic (Yes, Probable, or Breeding) OR Probable Endemic
AND 'Natural Resource (NR) Districts':South Island Natural Resource District
AND BGC Zone, Subzone: CWHxm

6.4 Aquatic Resources

6.4.1 Watercourses and Fish and Fish Habitat

There are a number of mapped streams in the vicinity of the Project although there is limited information available on all of them. General descriptions of mapped watercourses within the Project area and gazetted watercourses in the surrounding area are provided in Table 9 (Province of BC, 2023d). The mapped watercourses are shown on Figure 3 (Map Labels correspond with watercourses in Table 9).

Table 9. Mapped Watercourses in the vicinity of the Project area

Mapped Watercourses in Vicinity of the Project Area			
Watercourse and Map Label	***Position related to Project Area***	***Watershed Code (WSC)***	***Comments***
Unnamed Creek Map Label: A	Overlaps the northwest portion of Project area	930-037577-016722-288412	Tributary of Rockbottom Creek. No fish or stream information available. 1st order
Unnamed Creek Map Label: B	Overlaps the northwest portion of Project area	930-037577-016722-521135	Tributary of Rockbottom Creek. No fish or stream information available. 1st order
Unnamed Creek Map Label: C	Originates at central west edge of the Project area	930-037577-016722-370273-248784	Tributary of Rockbottom Creek. No fish or stream information available. 1st order

Mapped Watercourses in Vicinity of the Project Area			
Watercourse and Map Label	***Position related to Project Area***	***Watershed Code (WSC)***	***Comments***
Unnamed Creek Map Label: D	Runs through the center of the Project area.	930-037577-016722-370273	Tributary to Rockbottom Creek. No fish or stream information available. 1st order
Unnamed Creek Map Label: E	Runs through the center of the Project area	930-037577-016722-326666	Tributary of Rockbottom Creek. No fish or stream information available. 1st order
Unnamed Creek Map Label: F	Begins just outside of southwest perimeter of Project area.	930-037577-016722-326666-504638	Tributary of Watercourse 930-037577-016722-326666. No fish or stream information available. 1st order
Unnamed Creek Map Label: G	Overlaps southern portion of Project area	930-036662-732384	No fish information available. Connects to Juan de Fuca Strait. 1st order
Unnamed Creek Map Label: H	Originates in southeastern portion of Project area	930-036607-551209-677053	Tributary of Jacob Creek. No fish or stream information available. 1st order
Unnamed Creek Map Label: I	Originates in southeastern portion of Project area	930-036607-740690	Tributary of Jacob Creek. No fish or stream information available. 1st order
Unnamed Creek Map Label: J	Overlaps eastern portion of Project area	930-036607	Tributary of Jacob Creek. No fish or stream information available. 1st order
Unnamed Creek Map Label: K	50 m outside of eastern perimeter of Project footprint	930-036607-832975	Tributary of Jacob Creek. No fish or stream information available. 1st order
Unnamed Creek Map Label: L	50 m outside of northwestern perimeter of Project footprint	930-037577-559328	Tributary of Sandcut Creek. No fish or stream information available. 5th order
Gazetted Watercourses in Vicinity of the Project Area			
Watercourse and Map Label	***Position related to Project Area***	***Watershed Code (WSC)***	***Comments***
Sandcut Creek Map Label: M	Outside of Project area. Approximately 170 m northwest of Project area.	930-037577-323514	4th order stream. Drains to Pacific Ocean. No fish or stream information available.
Rockbottom Creek Map Label: N	Runs through the northwest portion of Project area.	930-037577-016722	1st order stream, tributary to Sandcut Creek. Associated with Sandcut Creek watershed. No fish or stream information available.
Jacob Creek Map Label: O	Approximately 500 m southeast of the Project area	930-036607	3rd order stream. Drains to Pacific Ocean. No fish or stream information available.

6.4.1.1 Sandcut Creek

Sandcut Creek (WSC: 930-037577-323514) (Figure 3, Map Label M) begins approximately 2.5 km north of the Project area and flows south past the footprint and on to the Pacific Ocean on the west coast of the island. There are approximately seven tributaries to Sandcut Creek, including Rockbottom Creek, before it reaches its drainage point (Province of BC, 2023d).

6.4.1.2 Rockbottom Creek

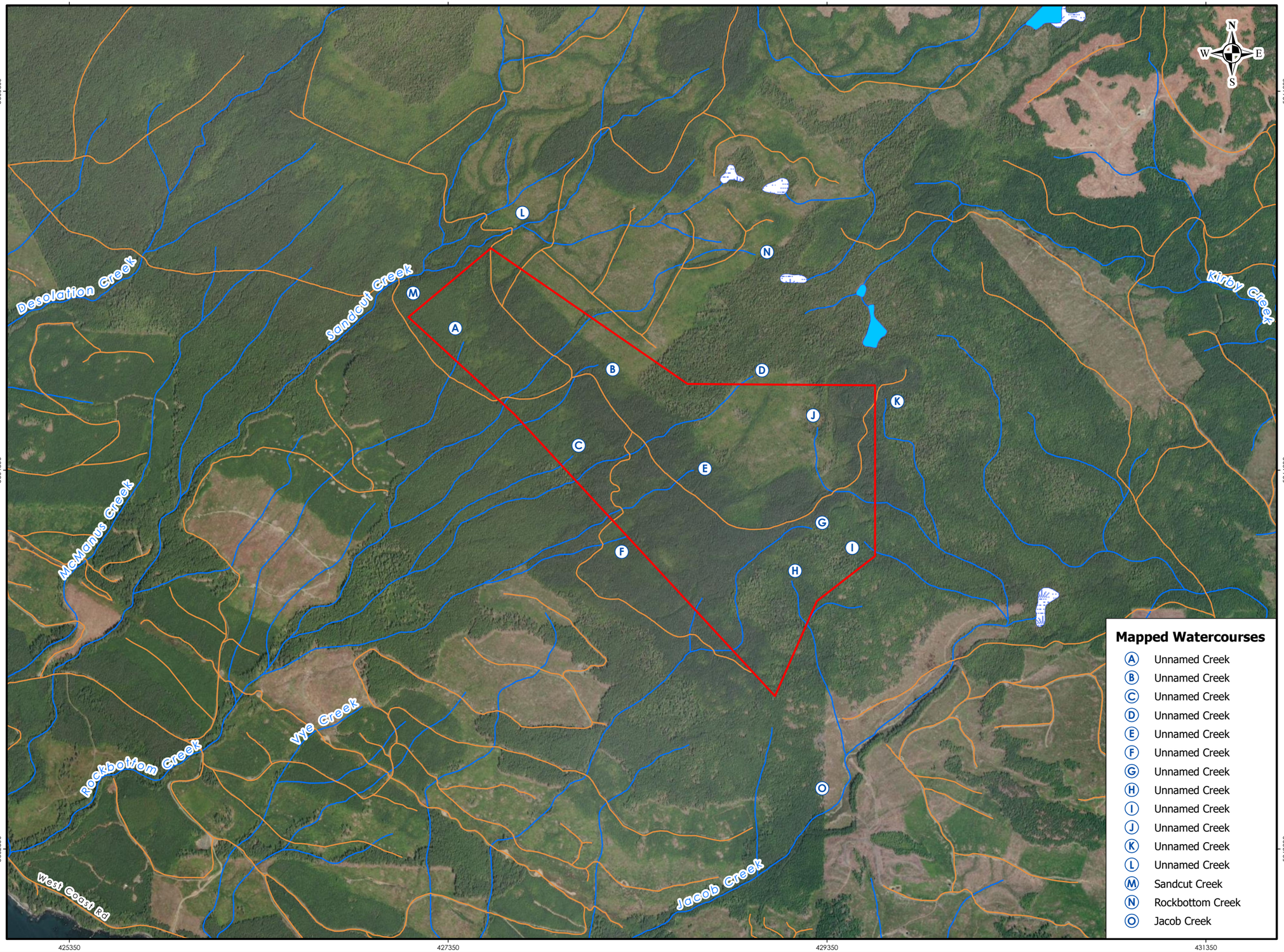
Rockbottom Creek (WSC: 930-037577-016722-521135) (Figure 3, Map Label N) begins approximately one km northeast of the Project footprint and flows southwest through the Project footprint and flows into Sandcut Creek approximately 160 m upstream of the Pacific Ocean. There are at least five tributaries to Rockbottom Creek (Province of BC, 2023d).

6.4.1.3 Jacob Creek

Jacob Creek (WSC: 930-036607) (Figure 3, Map Label O) begins approximately 800 m to the southeast of the Project area and flows southwest to the Pacific Ocean. There are three mapped tributaries to Jacob Creek (Province of BC, 2023d).

6.4.2 Wetlands

No mapped wetlands overlap the Project area. There are several mapped wetlands to the northeast and east of the Project area; the closest one is approximately 500 m north of the Project footprint. Wetland habitats provide wildlife and biodiversity values that are increased compared with surrounding habitats, support various life stages of amphibians, and provide food and shelter for other wildlife, including species of concern.



Mapped Watercourses

A	Unnamed Creek
B	Unnamed Creek
C	Unnamed Creek
D	Unnamed Creek
E	Unnamed Creek
F	Unnamed Creek
G	Unnamed Creek
H	Unnamed Creek
I	Unnamed Creek
J	Unnamed Creek
K	Unnamed Creek
L	Unnamed Creek
M	Sandcut Creek
N	Rockbottom Creek
O	Jacob Creek

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Initial Project Description and Engagement

Figure 3.
Mapped Watercourses

- Mapped Watercourse
- Project Area (Approximate)
- Road
- Watecourse
- Waterbody
- Wetland

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6.5 Socio-Economic Environment

6.5.1 Local Communities and Population

The Project area is located on Crown land in a fairly remote region within the boundaries of the CRD. The CRD is a regional government for 13 municipalities and three electoral areas on southern Vancouver Island and the Gulf Islands and serves approximately 440,000 people. The CRD provides regional decision-making on matters outside of municipal boundaries and to enable more effective service delivery and serves as a local government entity for electoral areas to facilitate and deliver services for residents living in unincorporated areas. The Project area is in the Juan de Fuca Electoral Area of the CRD (2021 population 5,132). The Juan de Fuca Electoral Area encompasses an area of approximately 222 km^2 on the southwest coast of Vancouver Island from the community of Otter Point to Port Renfrew (CRD, 2023). The closest community is the District of Sooke (population 15,086; Statistics Canada, 2021), located approximately 20 km east of the Project area. The District of Sooke is located on Southern Vancouver Island approximately 45 km south of Victoria along Highway 14. Port Renfrew (population 144; Statistics Canada, 2021) is approximately 35 km west of the Project area. It is a small unincorporated community located on the south shore of Port San Juan on the west coast of Vancouver Island.

6.5.2 Land Use Setting

A search of the provincial ILRR online database was conducted to determine BC *Land Act* tenures, rights, and interests that overlap or are within close proximity to the Project area (Province of BC, 2023e). A summary of existing permits, tenures, and interests that overlap or are within close proximity to the Project area is provided below and further discussed in the Early Engagement Plan (Appendix 3):

- Trapline Area (one overlaps the Project area);
- Trapper cabin (approximately 2 km south of the Project area);
- Forest tenures and road use permits; and
- Wind power investigative licence (north of the Project area).

The Project area is located within the Vancouver Island Region Wildlife Resource Management Unit, within the Southern Vancouver Island Game Management Zone. The Project area is located within Unit 1-3 (Province of BC, 2023). Limited entry hunting (LEH) permits are available for Elk in Unit 1-3, and hunting for other mammals and upland game birds is permitted within Management Units 1-3. One trapline area overlaps the Project area and a trapline cabin is approximately 2 km south of the Project area. No guide outfitter areas overlap the Project area (Province of BC, 2023). Further engagement with these tenure holders will occur in an effort to understand how the Project may impact the tenure holder and identify opportunities to avoid potential impacts. Additional information regarding engagement with tenure holders is provided in the Early Engagement Plan (Appendix 3).

6.5.3 Parks and Protected Areas

No provincial, federal, regional, or municipal parks or protected areas overlap with the Project area. Jaun de Fuca Provincial Park is approximately 7 km west of the Project area. Juan de Fuca Provincial Park is on the west coast of southern Vancouver Island and follows the coastline of the Strait of Juan de Fuca. The park offers camping, scenic beauty, hiking, marine wildlife viewing, and beaches. The Juan de Fuca Marine Trail is a major feature of the park and follows 47 km of wilderness stretching along the western shoreline of the southern island (BC Parks, 2023). French Beach Provincial Park is situated on the Strait of Juan de Fuca on the west coast of Vancouver Island and is approximately 3 km south of the Project Area. French Beach Provincial Park has a 1,600 m long beach and is an ideal spot for whale watching as well as other wildlife including otters, seals, sea lions, and a variety of sea birds. Other activities include hiking, camping, canoeing, and kayaking (BC Parks, 2023a).

The Project would not hinder use of any parks or protected areas in the vicinity of the Project area. The parks are on the coast and the Project would likely not be visible from the provincial parks or the access roads to the provincial parks.

6.5.4 Visual Resources

The Province of BC maintains a visual landscape inventory (VLI) which maps the visible topography from public-use areas such as communities, recreational areas, highways, and waterways. Further, the *Forest and Range Practices Act* governs forest activities on public lands in BC for identified resource values, including the management of visual and scenic quality. The most visible and sensitive landscapes are typically steep, forested slopes exposed to many viewers and the least sensitive landscapes are typically low in relief, more remote, and with fewer viewers or viewing opportunities. "Scenic Areas" are legally designated areas that are subject to visual quality objectives to limit some activities that have a noticeable impact on the land. It is expected that activities attempt to be consistent with the visual quality objective. A small portion on the southern edge of the Project area overlaps with a mapped Scenic Area.

6.6 Archaeological Resources

No publicly available information about archaeological resources has been identified to date. Jordan Solar will submit an Archaeological Information Request to the BC Archaeology Branch and will work with Indigenous nations and groups to perform Preliminary Field Reconnaissance (PFR) and Heritage Field Reconnaissance (HFR) as required. Based on the results of desktop reviews and the PFRs, Jordan Solar will collaborate with a Qualified Archaeologist to conduct Archaeological Overview Assessments (AOAs) to identify known archaeological sites and traditional use areas to identify and assess potential of an area to contain unrecorded archaeological sites. Archaeology Impact Assessments (AIAs) will be conducted as required and with necessary permits issued by the BC Archaeology Branch (e.g., Heritage Inspection Permit or Site Alteration Permit) under the authority of the *Heritage Conservation Act* to establish presence or absence of archeological sites including subsurface investigations and

artifact collection. The results of the AOA and AIA will be incorporated into the final design of the Project with the intent to avoid disturbance or mitigate potential Project effects to identified archaeological resources and sites.

6.7 Human Health

Traditional land use and Indigenous Knowledge may apply as it relates to country foods that are important to Indigenous nations for nutritional, medicinal, cultural, ceremonial, and spiritual purposes.

7.0 Preliminary Site Visits

A preliminary site visit to the Project area was conducted on June 29, 2023, to provide a general overview of the baseline conditions of the Project area. Photographs taken during the site visits are provide in Appendix 1. Detailed field assessments will be conducted in accordance with appropriate guidelines and standards, including the Resources Information Standards Committee (RISC) standards as applicable, for natural resource inventories during the EA process.

7.1 Wildlife

Wildlife observed and signs of wildlife (e.g., prints, scat, habitat features) during the initial site visit includes scat and the pelt of a Black Bear (*Ursus americanus*). Additional wildlife surveys during various seasons will be conducted during the environmental assessment.

7.2 Vegetation

The Project area has historically been cleared for logging purposes. The area consists of areas that have been replanted at various growth stages with a thick understory of shrub and herbaceous species. Vegetation species observed onsite during the initial site visit are provided in Table 10. Additional vegetation surveys during appropriate times of year (e.g., growing seasons when flowering species are in bloom) will be conducted during the environmental assessment.

Table 10. Vegetation noted during the initial site visits

Common Name	*Scientific Name*
Tree Species	
Douglas-fir	*Pseudotsuga menziesii*
Western Hemlock	*Tsuga heterophylla*
Western Red Cedar	*Thuja plicata*
Shrubs and Herbaceous Species	
Alder	*Alnus* spp.
Ash	*Sorbus* spp.
Bracken Fern	*Pteridium* spp.
False Lily of the Valley	*Maianthemum dilatatum*
Foam Flower	*Tiarella unifoliata*
Red Huckleberry	*Vaccinium parvifolium*
Salal	*Gaultheria shallon*
Salmonberry	*Rubus spectabilis*
Skunk Cabbage	*Lysichiton americanum*
Sweet-scented Bedstraw	*Galium triflorum*
Trailing Blackberry	*Rubus ursinus*
Twinflower	*Linnaea borealis*
Western Swordfern	*Polystichum munitum*

7.3 Watercourses

The mapped watercourses which occur within or in the vicinity of the Project area (Table 9) were visited during the preliminary site visit. Several crossing structures were noted on the access road through the Project area. The drainages in the Project area consist of a network of relatively small-sized watercourses, likely ephemeral watercourses based on initial assessments, which collect runoff from the surrounding terrain and are tributaries to Rockbottom and Jacob Creek. The tributaries in the vicinity of the Project area have been altered or redirected into culverts at road crossings. Watercourse assessments will be conducted during the EA process to determine fish presence or absence as well as stream classification and potential downstream connection to fish-bearing streams.

7.4 Wetlands

Several mapped wetlands occur in and around the Project area. Additional wetland assessments will be conducted in the entire Project area during the EA process.

8.0 Potential Environmental and Socio-Economic Effects

This section provides an overview of potential environmental and socio-economic effects of solar projects in general and the Project. Solar projects offer an alternative to generation of power from fossil fuels and reduce emissions of carbon dioxide and other GHGs. There are potential environmental and socio-economic effects which could potentially occur from the construction, operations and maintenance, and decommissioning of the Project. The Project is in the initial design stage and the potential effects of the Project will be further assessed as part of the EA Application process. The EA will also address mitigation measures and plans to avoid, minimize, and mitigate potential effects.

8.1 Project Footprint

The total Project area (area of disturbance from the current proposed layout of solar arrays) is approximately 235 ha. The proposed ROW and POI is not included in this area of disturbance. The area of disturbance is considered preliminary and could potentially change based on feedback received during the Early Engagement Phase and environmental assessment process.

8.2 Cumulative Effects

The BC Cumulative Effects Framework defines cumulative effects as changes to economic, environmental, and social values caused by the combined effects of present, past, and reasonably foreseeable actives or events (Province of BC, 2021). Cumulative effects will be considered further during the EA process. Existing cumulative effects data will be used to support further defining the VCs. The cumulative effects assessment will consider residual environmental, socio-economic, and cultural effects from the Project and residual effects from past, current and existing, and foreseeable projects and activities on identified VCs. Provincially approved Cumulative Effects Framework values will be considered during the EA.

Historic human activities in the southern region of Vancouver Island have had an influence on the ecosystems and natural environment of the area. Forestry activities have occurred within the area and have influenced the surrounding landscape through removal of old growth and mature trees and the construction of forestry roads which allow access to the area for other commercial and recreational uses. In addition, a large portion of land around Jordan River is managed under a tree farm licence (TFL). Western Forest Products has held the TFL since 1934 and it encompasses 32,490 ha between Sooke and Port Renfrew, BC. A log sorting facility is located near the mouth of the Jordan River. A hydroelectric power plant is located on the Jordan River approximately 5 km west of the Project area. The Vancouver Island Power Company completed construction of the Jordan River hydroelectric system in 1911. Current capacity of the plant is 175 MW. Other uses and influences on the environment in the area include construction and maintenance of power line ROWs, highways, and altering existing land uses through development in the surrounding communities. Cumulative effects will be addressed in

the EA, as it relates to VCs. Cumulative effects will help to quality potential impacts, thereby information the decision-making process.

8.2.1 Effects of the Environment on the Project

Environmental factors including climate change or natural hazards could lead to environmental effects on the Project's physical infrastructure. In 2014 BC Hydro identified the Jordan River system as the highest seismic hazard within BC Hydro's system due to Vancouver Island being a known seismically active region of the province (BC Hydro, 2014). Warmer and drier climate conditions in the summer could lead to more frequent wildfires in the region. Higher precipitation, especially during winter months, could lead to increased flooding and other hydrological changes. Natural hazard events including seismic events, wildfires, and extreme weather events could interact with Project components and operations.

As previously discussed, the Project provides an opportunity to generate low-cost GHG-free, dependable, and renewable power source. Vancouver Island, along with the Lower Mainland of BC, is one of the most populated places in BC. Power-generating facilities on Vancouver Island generate about 4% of BC Hydro's total capacity (BC Hydro, 2023). The summer peaking energy profile of the proposed Project could help the BC system cope with summer drought conditions. Recent BC extreme drought is creating water flow constraints for many small and large hydroelectric generation plants. In addition, the summer seasonal peaking profile of solar generation is complementary to the winter seasonal peaking profiles of hydro and wind power, enhancing the energy security of BC. Potential effects posed by climate change and natural hazards will be further assessed further during the Project design phases and the EA process.

8.3 Potential Project Effects

The scope of the Project work that has the potential to impact the environment during construction, routine operations and maintenance, and decommissioning includes, but is not limited to:

Construction:

- Clearing, grubbing, and removal of vegetation to allow for construction of Project infrastructure;
- Clearing, grubbing, and removal of vegetation for construction of the transmission line ROW and installation of transmission line poles;
- Erosion and sediment generation during site grading;
- Noise and sensory impacts (vibrations) from mobile construction equipment;
- Noise and sensory impacts (vibrations) from pile driving during installation of solar arrays;
- Potential impacts to watercourses and riparian vegetation or watercourse crossings during potential road upgrading works;

- Introduction of invasive or noxious weeds from construction equipment or materials brought in from off-site;
- Roadway and drainage excavation and construction;
- Air quality impacts from combustible emissions from construction equipment;
- Improper waste handling and disposal and potential human-wildlife interactions; and
- Fuel spills from equipment or improper handling of fuels or other deleterious substances.

Operations and maintenance:

- Clearing of vegetation during operation and maintenance of the Project;
- Clearing of vegetation during maintenance of transmission ROW;
- Noise and sensory impacts from equipment and vibrations from mobile equipment;
- Disruptions to wildlife movement (e.g., alteration or impediment) caused by the physical barrier of solar infrastructure fencing;
- Introduction of invasive or noxious weeds from construction equipment or materials brought in from off-site;
- Potential erosion and sediment generations from runoff while washing solar panels;
- Potential impacts to watercourses and riparian vegetation or watercourse crossings during road maintenance works;
- Air quality impacts from combustible emissions from construction equipment;
- Waste handling and disposal;
- Improper waste handling and disposal and potential human-wildlife interactions; and
- Fuel spills from equipment or improper handling of fuels or other deleterious substances.

Decommissioning:

- Potential erosion and sedimentation during site grading;
- Noise and sensory impacts from construction equipment and vibrations from mobile equipment;
- Potential impacts to watercourses and riparian vegetation or watercourse crossings during decommissioning works;
- Introduction of invasive or noxious weeds from construction equipment or materials brought in from off-site;
- Air quality impacts from combustible emissions from construction equipment;
- Improper waste handling and disposal and potential human-wildlife interactions;

- Improper disposal of facility infrastructure causing impacts to surrounding environment; and
- Fuel spills from equipment or improper handling of fuels or other deleterious substances.

8.3.1 Potential Effects to Terrestrial Resources

8.3.1.1 Wildlife and Wildlife Habitat

The Project area provides habitat for a range of wildlife. Activities that have the potential to adversely affect the environment are largely associated with clearing vegetation and potential erosion and sediment generation during clearing and grubbing of vegetation and grading works. These activities have the potential to disrupt wildlife species due to physical disturbance, habitat alteration, or destruction. Potential effects to wildlife and wildlife habitat during the construction, operations and maintenance, and decommissioning phases include:

- Potential loss of habitat due to clearing, grubbing, and removal of vegetation during clearing and grubbing of trees to provide a footprint for the PV solar modules and additional Project infrastructure;
- Potential loss of habitat due to removal of vegetation during clearing and grubbing of trees to upgrading existing access roads or clear new access roads as required and transporting equipment and infrastructure to the Project area;
- Potential loss of habitat from clearing and grubbing of vegetation for construction of the transmission line ROW and installation of transmission line poles and maintenance of transmission line ROW;
- Noise and sensory disturbance from construction equipment and vibrations from mobile equipment during construction, operations and maintenance, and decommissioning of the facility;
- Sensory disturbance from facility lighting during operations and maintenance phase;
- Accidental mortality of wildlife due to equipment and increased traffic on access roads and in the Project area during construction, operations and maintenance, and decommissioning phases;
- Direct loss or change in the quality and quantity of vegetation and wildlife habitat;
- Direct and indirect habitat loss from removal of vegetation and development of large-scale facilities including edge effects and habitat isolation;
- Habitat fragmentation from roads and layouts;
- Impacts to wetlands located within or in proximity to the Project area;
- Potential impacts from poor management of waste (e.g., garbage or food waste) and other attractants that could lead to human-wildlife conflicts during construction, operations and maintenance, and decommissioning phases;

- Displacement of individuals; and
- Disruption of wildlife movement and existing wildlife corridors in the Project area and regional landscape.

Avian Resources

Vegetation including grasses, shrubs, and trees in the Project area provide nesting and foraging habitat for birds. The proposed works will result in the clearing and grubbing of trees and taller vegetation to allow for installation of the solar array infrastructure and there will be the potential for loss of foraging and nesting habitat.

Other potential effects from solar projects include the possibility of collisions with PV equipment and transmission lines and electrocution from the substation and distribution lines. Although not well understood, utility-scale PV facilities may attract migrating waterfowl and shorebirds through a phenomenon known as "lake effect" whereby migrating birds perceive the reflective surfaces of solar arrays as water features and attempt to land on the panels (Multiagency Avian-Solar Collaborative Working Group, 2016). A recent study found limited evidence of attraction of aquatic birds to PV solar facilities in a variety of habitats (desert/scrub, grassland, or agricultural environments). The study found no evidence of landing, circling, or approaching the panels (Kosciuch, 2021).

8.3.1.2 Potential Effects to Vegetation Resources

Clearing and grubbing of trees and stumps would be required during construction. Low-profile vegetation, including grasses and other herbaceous species, would be retained to the extent practicable and incorporated into the Project layout to provide protection against potential erosion issues. Disturbed areas would be re-seeded as soon as practicable with a native grass and flowering herbaceous species seed mix. Vegetation including grasses and other herbaceous species would be maintained at a low profile during the operations and maintenance phases. These species would provide foraging habitat for pollinators and avian species.

8.3.2 Potential Effects to Aquatic Resources

Several mapped watercourses occur in the vicinity of the Project area. Activities that have the potential to adversely affect the aquatic environment are largely associated with erosion and sediment generation during clearing and grubbing of vegetation and grading works and maintenance work on access roads that interact with watercourses. Erosion and sedimentation have the potential to affect downstream fish and fish habitat. To the maximum extent practical, aquatic resources including watercourses or waterbodies (e.g., permanent streams, ephemeral watercourses, and wetlands) will be avoided by the Project footprint. Potential effects to aquatic resources during the construction, operations and maintenance, and decommissioning phases include:

- Potential for runoff and sedimentation during vegetation clearing and grading activities;

- Potential impacts to water quality from water used during operations (e.g., cleaning panels);
- Potential for runoff and sedimentation during access road upgrades or construction;
- Direct loss of riparian and wetland habitats affecting quality of fish habitat;
- Downstream impacts to fish-bearing streams;
- Potential impacts to riparian vegetation and habitat during upgrades of existing access roads or construction of new roads (e.g., repairs or installation of watercourse crossing structures such as culverts); and
- Potential impacts to changes to flows or storage to nearly watercourses from water extraction.
- Cumulative effects to watersheds in the area.

Under Section 11 of the WSA, any proposed changes in and about a stream can only take place after a Change Approval or Notification has been submitted and approved by the BC WLRS. The habitat officer in each region sets the terms and conditions for works in and about a stream in accordance with Section 44 of the WSA. Instream works in each region is generally restricted to general timing windows, or specific times of year when work may be conducted with the lowest risk to fish species. This can pose a seasonal timing restriction and a potential mitigation measure to implement during instream works. Conducting instream works during construction, operations and maintenance, and decommissioning of the Project during identified least risk timing windows will occur, unless otherwise approved.

8.4 Project Emissions, Discharges, and Waste

Project air emissions and release of GHGs are expected to vary by stage. During the construction and decommissioning phases, emissions and GHGs would come from the combustion of fossil fuels from construction equipment. The number, type, and size of equipment required during the construction, operation and maintenance, and decommissioning phases of the Project are still to be determined. Requirements on the type and size of equipment during construction and decommissioning phases are not known at this time and an accurate estimate of direct emissions from construction equipment will be revised as the Project design progresses. Sound emissions during construction and decommissioning phases would be from construction equipment including pile driving structure supports during construction.

During operations and maintenance, the Project would generate electricity without GHG or water emissions. Solar PV technologies and power plants do not produce air pollution or GHG emissions while in operation. Solar can have positive and indirect effects on the environment when solar energy replaces or reduces the use of other energy sources that potentially have larger impacts, including release of GHG emissions. GHG emissions during operations and maintenance would be limited to the occasional use of equipment to replace faulty equipment or perform other routine maintenance activities.

There would be no sound emissions which would be discernable by receptors outside of the Project fenced perimeter during the operations phase. During operations and maintenance of the Project sound emissions would be limited to the occasional use of equipment during routine maintenance activities.

Types of waste that would potentially be generated by the Project include:

- Hazardous and non-hazardous waste (e.g., domestic waste from the site office, vehicle, and equipment maintenance wastes);
- Sewage; and
- Contaminated soil (in the event of spills or leaks from equipment working onsite during construction and maintenance).

Waste would be removed from site and disposed of in an approved disposal site in accordance with any applicable local, provincial, or federal regulatory requirements.

8.5 Potential Effects to Land Use and Visual Aesthetics

The construction and operation of the Project will limit the use of the Project area for other land uses. There is potential for disruption or loss of land use for other commercial (e.g., forestry, timber harvesting, trapping, etc.) and non-commercial (e.g., recreational uses) activities. Additional indirect impacts to hunting could occur because of loss of wildlife habitat or use of the Project area during the construction, operations and maintenance, and decommissioning phases.

Solar projects have a low visual profile in comparison to other generation technologies such as large hydro dams and wind power projects. There is potential for disturbance to visual aesthetics due to removal of vegetation during construction of solar infrastructure. Low-profile vegetation including grasses would be retained to the extent practicable and incorporated into the layout to provide protection against potential erosion issues. Disturbed areas would be re-seeded as soon as practicable with native grass and flowering plant species seeds. Vegetation would be maintained at a low profile during the operations and maintenance phases. The Project is sited in a location where it will have little or no visual impact to Highway 14 due to the remote location of the Project. A Scenic Area, as identified by The Project will potentially be visible during the construction, operation and maintenance, and decommissioning phases from commercial and recreational users of the FSRs in the area. The Project may also have indirect effects to cultural and recreation values that are related to the enjoyment of scenic values of the area. Potential visual impacts will be further considered during the EA process.

8.6 Potential Effects to Archaeological Resources

Clearing and grubbing, land clearing, grading, and earthworks have the potential to remove or damage archeological resources in areas which contain or with significant potential to contain an archaeological site protected under the *Heritage Conservation Act*. An Archaeological Information Request will be submitted to the BC Archaeology

Branch and AOAs and AIAs will be completed as part of the Project and a Chance Find Procedure will be prepared and implemented during construction.

8.7 Potential Socioeconomic Effects and Labour Force

The Project provides an opportunity for regional employment opportunities and local revenue generation for surrounding communities, including Indigenous nation communities and businesses. During the construction phase, the Project is expected to provide up to 200 construction jobs sourced generally from the southern Vancouver Island region including those supplied by contractors from Indigenous nations and communities. Up to six full time operations and maintenance technicians would be required following Project commissioning. Accommodation and support for workers is available in local communities and commercial hotels and motels located in the nearby centre of Sooke (20 km). Victoria is approximately 50 km east of the Project area and could provide additional support. Regional and local procurement opportunities and supply contracts could be available to are residents and Indigenous nations.

An Employment Plan will be developed as the Project advances in design. To the extent possible, the Project will include and maximize local resources and provide employment opportunities to local Indigenous nations and local rural communities during the construction, operations and maintenance, and decommissioning process.

8.8 Potential Effects to Public and Environmental Safety

No worker safety issues with respect to malfunction or accidents associated with the Project have been raised with Jordan Solar from any Indigenous nations, members of the public, or other stakeholders to date. Further, Jordan Solar is not aware of any special risks or hazards with respect to the construction, operation, or decommissioning of the Project when such activities are conducted in compliance with worker safety and other regulations, policies, and safety practices which will be used in Project construction and operations. Regardless, as with any Project of this magnitude, there is the risk of injury or death to workers or contractors as a result of unintended accidents involving vehicles, machinery, or Project infrastructure. During ongoing operations, there is also the risk of unintended and accidental injury or death of workers or members of the public involving the mishandling of high voltage equipment in a manner inconsistent with regulation, training, and operational protocols set out by the Project owner or operator. Other risks include electrical faults or arcs leading to fire risk incidents, oil spills from transformer leaks, and hydrogen off gassing and related fire risk from the BESS. Working in remote areas also pose the potential for interactions with wildlife.

Given the early stage of the Project design and of the EA and permitting processes of the Project, potential for accidents and malfunctions to occur during construction or operations will be assessed further during the engagement and EA processes. Further assessments will include potential affects on the biophysical and human environment and include project-specific mitigation measures and management plans including emergency response procedures and training programs to address events related to accidents and malfunctions during construction, such as spills or unauthorized releases.

The PV portion of the Project will be fenced for safety and security. Signage will be installed on the perimeter fence to notify the public and land users. Signage would provide sufficient safety notices as well as emergency contact numbers.

Site specific health and safety plans will be developed for all phases of the Project. While the Project is not at this stage yet, it is anticipated that the plan will address worker safety issues (e.g., personal protective equipment, mechanical equipment operation, workplace hazardous materials information system [WHMIS], etc.), interactions with the public, interactions with wildlife, include an emergency response procedure, and other procedures and guidelines.

During the operations and maintenance phase of the Project, it is anticipated that the site will be equipped with a supervisory control and data acquisition (SCADA) system. The SCADA system monitors and analyzes equipment operating parameters in real time. The SCADA allows the Project operator to set alerts so that the operator can be made aware of abnormal operating conditions. Moreover, an emergency stop can be deployed to stop the system.

There are two categories of potentially possible incidents or malfunctions that could occur during the construction and operations of the Project. They are as follows:

1) Unlikely to occur; Potentially high magnitude impact
    a. Fire originating from within the site
    b. Major oil leak (e.g., full capacity leak from main power transformer)
    c. Recordable health and safety incident (e.g., an incident that by law is to be reported to WorkSafeBC).
2) Could occur; Potentially low magnitude impact
    a. Minor oil leaks (any mechanical equipment)
    b. Sediment laden water discharge from site
    c. Trash accumulation during construction
    d. Minor worker first aid (e.g.,: an incident that occurs, but is not required by law to be reported to the WorkSafeBC).

Further, Jordan Solar will develop and implement management plans (e.g., environmental management plans, emergency response plans, etc.) consistent with industry best practices to prevent or minimize low and high magnitude events from occurring. Additional mitigation measures are provided in Table 11.

8.9 Further Studies

Jordan Solar is conducting various technical and economic feasibility studies related to the Project. Engagement and information sharing activities are underway with various Indigenous nations and other Communities of Interest. Preliminary environmental inventories including initial desktop review and a preliminary site visit have been

conducted to support the IPD. Additional baseline surveys will be conducted in accordance with the RISC standards for natural resource inventories. Valued Components (VCs) will be selected based on the results of baseline studies, input from engagement activities with Indigenous nations and Communities of Interest, and government agencies. Where available, Jordan Solar will seek input on baseline studies and will incorporate Indigenous knowledge, traditional land and resource use information, and additional environmental or heritage values of the Project area as provided by Indigenous nations. Archeological resource inventories will be conducted as needed including AOAs and AIAs.

8.10 Potential Management Plans and Mitigation Measures

Table 11 provides a summary of potential Project effects and potential mitigations. Project-specific Environmental Protection Plans will be prepared prior to construction and during subsequent phases of the Project (e.g., operations, maintenance, and decommissioning). The Environmental Protection Plans will include specific management plans which would provide mitigation measures, guidelines, and best management practices to implement during construction, operation and maintenance, and decommissioning of the Project to help the Project meet requirements of necessary legislation, regulations, policies, and permit terms and conditions and to reduce the potential effects on the biological and socio-economic or human environmental VCs. The provincial Environmental Mitigation Policy and Procedures for Mitigation Impacts on Environmental Values (MOE, 2014) will be used as a guideline to develop Project-specific mitigation measures that will be contained in management plans, and the selection of mitigation measures will be based upon practicability and regulatory requirements. Potentially applicable management plans could include, but not be limited to, the following:

- Construction Environmental Management Plan;
- Air Quality and Dust Management Plan;
- Erosion and Sediment Control Plan;
- Wildlife Management Plan;
- Spill Contingency and Emergency Response Plan;
- Clearing and Grubbing Plan;
- Access Management Plan;
- Archaeological and Chance Find Management Plan;
- Operations Environmental Management Plan;
- Decommissioning Plan; and
- Reclamation and Closure Plan.

Table 11. Potential project effects and potential mitigations

Environmental Component	*Potential Project Effect*	*Potential Mitigations*
Biological components		
Wildlife and wildlife habitat, terrestrial resources	• Direct loss or change in quality or quantity of habitat through clearing (removal of vegetation and surface grading) or displacement during construction and operation/maintenance phases. • Disruption of migration corridors. • Loss of vegetation during Project operations and maintenance. • Barrier effects – disrupt wildlife movement and/or migrations by acting as a barrier. • Habitat degradation due to changes in hydrology and water availability and quality. • Noise and sensory impacts from equipment and vibrations from pile installation during construction phase. • Disruption caused by noise or light pollution (e.g., dust, light, noise, and vibration) during construction, operations and maintenance (facility lighting), and decommissioning of the Project. • Introduction of invasive or noxious weed species during construction and operations (movement of people and equipment through Project area). • Habitat alteration due to changes in microclimatic effects of solar panels (shadow effects could alter species composition) during the operation and maintenance phases. • Mortality due to increased equipment and vehicle traffic during all Project phases. • Noise and sensory impacts from equipment and vibrations from mobile equipment during operations and	• Prepare an Environmental Protection Plan which would include best management practices (BMPs) and operational controls to implement during construction to minimize potential impacts. • Prepare and implement appropriate management plans and practices for ecosystems and species. • Minimize clearing and grubbing or disturbance to maximum extent practicable. • Site infrastructure to avoid or minimize interaction with sensitive and at-risk species or habitat. • Lighting will be minimized to extent practicable and used where needed for safety and security. • Identify and consider potential BMPs such as planning construction activities to avoid sensitive periods for wildlife (e.g., nesting period for migratory birds). • Retain wildlife trees where possible. • Implement speed limits on Project roads and communicate to Project personnel through orientation and signage. • Implement buffers or avoidance zones around sensitive features (e.g., important nesting or foraging areas for particular species). • Fence the layout areas to prevent wildlife from entering the facility and interacting with Project components. Leave corridors between the fenced layout areas to allow for continued movement through the surrounding area.

Environmental Component	***Potential Project Effect***	***Potential Mitigations***
	maintenance and decommissioning and removal of Project infrastructure. • Potential wildlife-human interactions due to poor waste management and storage. • Potential impacts to amphibians in small pocket wetlands and ephemeral ponds.	• Develop and implement a waste management plan to properly manage waste and other attractants.
Avian resources	• Injury or mortality due to collisions with solar panels and/or transmission lines. • Loss of nesting habitat due to loss of large trees and shrubs during construction phase. • "Lake effect" – potential for arrays of solar panels to attract water birds confuse the panels with large waterbodies and collide with them causing injury or death.	• Prepare and implement appropriate management plans and practices for ecosystems and species. • Implement buffers or avoidance zones around sensitive features (e.g., important nesting or foraging areas for particular species). • Maintain existing low-growing vegetation (grasses and herbaceous species) during the construction phase. Reseed disturbed areas with a native seed mix to maintain low-profile vegetation under the solar arrays during operations and maintenance phase. Prepare reclamation plans which will include replanting and restoration plans following Project decommissioning.
Aquatic resources, fish and fish habitat	• Potential for runoff and sedimentation during vegetation clearing and grading activities. • Direct loss of riparian and wetland habitats affecting quality of fish habitat. • Potential impacts to watercourses and/or riparian vegetation if watercourse crossings require upgrades or installation. • Impacts to flow needs of watercourses or downstream watercourses if water is utilized during construction, operations and maintenance, or decommissioning of the Project.	• Prepare and implement appropriate management plans and practices for ecosystems and species. • Incorporate BMPs for erosion and sediment control and spill prevention and control into the EPP. • Implement buffers or avoidance zones around sensitive features (e.g., watercourses and wetlands or important breeding or foraging areas for particular species). • Adhere to regional timing windows for instream works. • Obtain necessary permits for any instream works and adhere to terms and conditions of permits.

Environmental Component	***Potential Project Effect***	***Potential Mitigations***
		• Obtain necessary permits for water use and account for flow needs of watercourses in the vicinity of the Project area and adhere to permit terms and conditions.
Human Environment		
Indigenous rights and title and interests Traditional land and resource use of the Project area	• Exercising Indigenous rights and traditional land and resource use of the Project area and surrounding lands. • Potential to impact use of the Project area for traditional and resource use including the harvesting of traditional plants for food, medicinal, or ceremonial purposes. Potential impacts to presence, quantity, quality of resources used for traditional purposes. • Potential to impact or prevent access to traditional hunting or fishing areas.	• Project will consider the rights and interests of Indigenous nations and peoples. • Consider and incorporate Indigenous Knowledge and traditional land and resource use in Project planning as deemed appropriate. • Continued engagement and communication with participating Indigenous nations to identify additional Indigenous interests and potential mitigation measures to protect interests (e.g., incorporating traditional plants into reclamation plans, avoiding sensitive areas through siting of infrastructure, or providing corridors between layout areas to allow for continued use of the area by wildlife and users of the land). • Implement potential mitigations as discussed for potential impacts from noise, dust, water quality, wildlife and wildlife habitat, etc.
Archaeological and Heritage Resources	• Potential impacts (damage or loss) to archaeological and heritage resources due to logging, land clearing, grading, or pile driving.	• Conduct appropriate field surveys (e.g., HFRs and PFRs) to identify areas of high potential archaeological and heritage resources. • Acquire proper permits and conduct appropriate archeological assessments and studies (e.g., AOAs and AIAs). • Develop and implement chance find procedures.

Environmental Component	***Potential Project Effect***	***Potential Mitigations***
Land use	• Potential for loss or disruption of use or access for other land users including commercial (e.g., forestry, guide outfitting, trapping, mining, grazing) and non-commercial (recreational trails) users. • Changes in traffic patterns or amount on nearby highways or access roads (FSRs). • Potential for users to utilize other areas for activities. • Impacts to access for traditional uses and harvesting activities (e.g., gathering of traditional plants, hunting, trapping, fishing).	• Design Project components to allow for continued travel through and use of the surrounding area via main FSRs. • Constructive early engagement with stakeholders and land users.
Visual aesthetics	• Visual disturbance from removal of vegetation, alteration of landscape, and installation of built features (e.g., solar arrays, battery storage facility, transmission lines). • Indirect effects to cultural, recreational, and commercial values that are related to enjoyment of scenic values.	• Implement design and maintenance BMPs to address potential visual effects. • Vegetation screening to mitigate visual disturbance.
Economy and socio-community	• Employment, income, local revenue generation. • Changes to and/or maintenance of community and individual health and well-being. • Effects that specifically impact sub-groups within the region, including Indigenous peoples, women, low income, under or unemployed, disable, seniors, and vulnerable groups.	• Consider local employment policies and planning. • Consider local procurement of goods and services. • Consider local skills inventory, training, and skills development programs. • Consider targeted initiatives to address effects to specific sub-groups. • Develop Employment Plans.
Human health and safety	• Risks to public and worker safety from interaction with Project infrastructure. • Worker and public health and safety. • Potential risks to workers from working in a remote location. • Increased dust concentrations from increased use of FSRs and access roads and disturbed surfaces during	• Develop and implement training programs and protocols. • Install fencing and signage to notify the public and land users of risks and prevent entry into facility. • Incorporate BMPs for dust control into management plans.

Environmental Component	***Potential Project Effect***	***Potential Mitigations***
	construction, operations and maintenance, or decommissioning phases. • Potential for Project interaction from wildfires in the area. • Potential risks to human safety including electrical faults or arcs leading to electrocution or fire risk incidents.	• Consider BMPs such as fireguards to protect the public and infrastructure from potential fires from within our outside of the Project area.
Physical Environment		
Geology and soils	• Loss of surface soil or changes to soil profile due to vegetation removal. • Changes to soil quality.	• Implement BMPs for soil erosion control. • Implement a closure and reclamation plan which incorporates soil salvage plans.
Air quality, GHG emissions, noise, and vibration	• Dust emissions during construction and equipment operation can result in increases in particulate matter concentrations which can affect human health and dust deposition to vegetation, country foods, and waterbodies. • Combustion emissions from equipment during construction, operations and routine maintenance, and decommissioning can result in increases in concentrations of contaminants. • Noise and vibrations from equipment or pile support installation during construction, operations and routine maintenance, and decommissioning.	• Incorporate BMPs for dust control into management plans. • Ensure equipment is operated efficiently and limit idling when not in use. • Consider use of alternative technologies to reduce air emissions. • During operations and maintenance, the Project would generate electricity without GHG or water emissions. Solar PV technologies and power plants do not produce air pollution or GHG emissions while in operation.

9.0 Preliminary Project Schedule

Table 12 provides an overview of the preliminary Project schedule. This schedule assumes positive regulatory decisions and is subject to change.

Table 12. Preliminary Project schedule

Task Description	*Expected Timing*
Pre-Early Engagement with Indigenous nations and Communities of Interest about the Project prior to filing the IPD and Early Engagement Plan including Project emails, phone calls, and Project information meetings.	Q1 2023 – ongoing
Share DRAFT IPD to Indigenous nations for comment and feedback. Incorporate comments into DRAFT IPD.	Q4 2023
Submit the IPD and Early Engagement Plan to BC EAO in fulfilment of requirements of BC EAA.	Q4 2023
BC EAO formal acceptance of IPD and Early Engagement Plan. IPD posted on EPIC site and begin the 90-day Early Engagement Phase.	Q4 2023
Provide notice (letters, emails, phone calls) to Indigenous nations and other Communities of Interest including tenure holders and local governments of IPD publication. Invite comments and feedback during the 30-day public comment period.	Following acceptance of the IPD and start of the Early Engagement Phase.
Continue engagement with Communities of Interest including Indigenous nations during the Early Engagement Phase including Project emails, phone calls, and meetings. Provide Project information, review the IPD and invite feedback, and provide Project updates in virtual or in-person meetings requested by Indigenous nations or other Communities of Interest.	During the Early Engagement Phase
Participate in meetings with technical advisors to provide Project information to provincial and regulatory agency representatives and understand potential regulatory requirements.	During the Early Engagement Phase
BC EAO holds a 30-day public comment period.	During the Early Engagement Phase
Assist in planning and participate in BC EAO open houses and virtual information sessions. Participate in additional Project information sessions (in-person or virtual) as required.	During the Early Engagement Phase
Maintain a communication and engagement log to track comments and feedback received during pre-early engagement, the public comment period, and the Early Engagement Phase.	Ongoing and during the Early Engagement Phase
Indigenous nations notify BC EAO of intention to be a participating Indigenous nation on the Project.	Within 80 days of IPD publication
BC EAO provides the list of participating Indigenous nations and Summary of Engagement and direction on the DPD.	Q1 2024; Following the Early Engagement Phase
Prepare DRAFT DPD and share with Indigenous nations and technical advisors for review and comment. Incorporate comments into DPD.	Q1 2024

Task Description	***Expected Timing***
Prepare DRAFT DPD and submit DPD to BC EAO in fulfilment of requirement of BC EAA.	Q1 2024
BC EAO provides an EA Readiness Decision with determination of whether Project will commence to an EA.	Q1 2024; EAO discretion
EA commencement and BC EAO conducts Process Planning.	Q2 2024; 120 days
Continue engagement with Indigenous nations, provincial and federal agencies, local government representatives, and other Communities of Interest during Process Planning. Public comment period.	Q2 2024
BC EAO provides Process Order.	Q3 2024; at completion of Process Planning
Prepare and submit regulatory applications	Ongoing during EA process
Prepare and submit Draft Environmental Assessment Certificate Application, seek input from Indigenous nations and EA participants.	180 days
Submit Draft Environmental Assessment Certificate Application following Notice Regarding Application	Q4 2024
Submit Final Environmental Assessment Certificate Application following EAO feedback and Notice Regarding Application	Q1 2025
Conduct effects assessment and prepare EA	Ongoing during EA process
Prepare Draft Assessment Report	Up to 150 days
BC EAO releases Draft Assessment Report and EA Certificate. Continue engagement with Indigenous nations and other Communities of Interest and public comment period.	Q4 2025
BC EAO releases a Certificate Decision and grants EA Certificate if approved	Q2 2026
Regulatory agency permit application decisions and prepare management plans	Q4 2026
Preconstruction activities and post certificate compliance and enforcement	Q4 2026
Project commissioning	Q4 2027; one year after start of construction
Project operation and maintenance	Q4 2067; 40 years
Project decommissioning	Q4 2028; one year

10.0 Closing

Through sharing this IPD with BC EAO and Communities of Interest, including Indigenous nations, Jordan Solar is providing an early design-stage overview of the Project. The IPD has been prepared to determine the requirements for review of the Project under the BC EAA and to initiate the environmental assessment process. The IPD was prepared using the guidance provided in the BC EAO's Early Engagement Policy document (BC EAO, 2019). The IPD has been prepared early in the design process prior to finalization of all Project components and layout to allow for feedback. The IPD and the Early Engagement Plan (Appendix 3) are used to initiate the Early Engagement Phase of the BC environmental assessment process. The documents will be available for review by Indigenous nations and Communities of Interest to facilitate engagement and will be used to support the development of a DPD. The DPD will present a more refined Project design based on progression of design and considerations of input received during the Early Engagement Phase.

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APPENDIX 1

PHOTOGRAPHS

Photograph 1. Overview of main access road to Project area (June 29, 2023).

Photograph 2. General vegetation density in Project area (June 29, 2023).

Photograph 3. General vegetation density in Project area (June 29, 2023).

Photograph 4. Upstream view of Project area at watercourse "A" (June 29, 2023).

Photograph 5. Upstream view of Project area at watercourse "B" (June 29, 2023).

Photograph 6. Overview of Project area at watercourse "J" (June 29, 2023).

APPENDIX 2

WILDLIFE SPECIES AT RISK

Table 1. Wildlife Species at risk

Common Name	*Scientific Name*	*BC Status*	*SARA Status*	*COSEWIC Status*	*Potential to Occur*	*Rationale*
Mammals						
Ermine, *anguinae* subspecies	*Mustela richardsonii anguinae*	Blue	-	-	Moderate-High	Use wide range of forest and woodland habitats including wet coniferous and riparian forest. Two occurrences within 10 km of project area: one on Jordan River and one on Muir River.
Fisher	*Pekania pennanti*	No status	-	-	Moderate	Use dense coniferous or mixed forests, including early successional forest with dense overhead cover. Associated with riparian areas. May use second growth if there is high canopy closure, large legacy trees and woody debris.
Grizzly Bear	*Ursus arctos*	Blue	1-SC	SC	Low	Project area outside of historic Grizzly Bear range.
Hoary Bat	*Lasiurus cinereus*	Blue	Not listed	Not listed	Moderate	Very large range; use variety of forests and woodlands including riparian areas and anthropogenically altered areas.
Little Brown Myotis	*Myotis lucifigus*	Blue	1-E	E	Moderate	Use a wide range of habitats and frequently use mesic to moist coniferous forests. One iNaturalist observation from 2021 near Jordan River.
Mountain Goat	*Oreamnos americanus*	Blue	Not listed	Not listed	Nil	No historic occurrences on Vancouver Island exist.
Northern Myotis	*Myotis septentrionalis*	Blue	1-E	E	Low	There are only three substantiated locality records for the province, including Hudson's Hope in the Peace River area, Mount Revelstoke National Park and the Revelstoke Dam. It might also occur in Glacier and Kootenay national parks.
Purple Martin	*Progne subis*	Blue	-	-	Low	Mainly uses coastal habitats, open areas near human settlements.
Roosevelt Elk	*Cervus elaphus roosevelti*	Blue	1-SC	SC	Low	Area not in known Elk range.
Townsend's Big-eared Bat	*Corynorhinus townsendii*	Blue	Not listed	Not listed	Low	Use mesic coniferous forests and buildings, forage on forest edges; no occurrences recorded on Vancouver Island.

Common Name	Scientific Name	BC Status	SARA Status	COSEWIC Status	Potential to Occur	Rationale
Western Water Shrew, *brooksi* subspecies	*Sorex navigator brooksi*	Blue	-	-	Unknown	Western water shrews found in streams of coniferous forests. Minimal data on BC habitat or distribution.
Wolverine, *luscus* subspecies	*Gulo gulo luscus*	Blue	1-SC	SC	Very Low	Rare on the coast of BC, highly sensitive to human disturbance and found in remote areas.
Wolverine, *vancouverensis* subspecies	*Gulo gulo vancouverensis*	Red	1-SC	SC	Low	Confined to central inaccessible mountain ranges of island.
Birds						
Band-tailed Pigeon	*Patagioenas fasciata*	Blue	1-SC	SC	Moderate-High	Use wet mountain coniferous forests especially with hemlock, cedar, Douglas fir. iNat observations around Jordan River.
Barn Owl	*Tyto alba*	Red	1-T	T	Very Low	Core breeding range in BC is the lower Fraser River east to Hope. Prefer dense grass fields for foraging and nesting. Typically found in agricultural areas.
Barn Swallow	*Hirundo rustica*	Blue	1-T	SC	Low	Frequently occurs near water. Nests in barns or other buildings, under bridges, in caves or cliff crevices, or on vertical surface close to ceiling (structures not present in Project area).
Bay-breasted Warbler	*Setophaga castanea*	Red	-	-	Very low	Mainly use boreal coniferous forests. All recorded occurrences are in northern BC.
Black-throated Green Warbler	*Setophaga virens*	Blue	-	-	Very low	Furthest west extend of range is in northeastern BC,
Canada Warbler	*Cardellina canadensis*	Blue	1-T	SC	Very low	Furthest west extent of range is in northeastern BC.
Common Nighthawk	*Chordeiles minor*	Blue	1-SC	SC	Low-Moderate	Frequently uses coniferous forests and wide variety of habitats. Nests on bare ground which may be present where transmission line goes through? Observations along west coast of island.
Connecticut Warbler	*Oporonis agilis*	Blue	-	-	Very low	Furthest west extent of range is in northeastern BC.

Common Name	Scientific Name	BC Status	SARA Status	COSEWIC Status	Potential to Occur	Rationale
Double-breasted Cormorant	*Nannopterum auritum*	Blue	-	-	Low	Prefer coastal habitats or wetlands.
Evening Grosbeak	*Coccothraustes vespertinus*	Yellow	1-SC	SC	Moderate	Use second growth coniferous (spruce and fir) woodland. Year-round range includes southern part of Vancouver Island.
Great Blue Heron, *herodias* subspecies	*Ardea Herodias herodias*	Blue	Not listed	Not listed	Low	Will nest in cedars and hemlocks and riparian trees within 5 km of foraging habitat - wetlands and lakes. Few observations on west coast of island.
Green Heron	*Butorides virescens*	Red	1-E	E	Low	Prefers wetlands and open riparian areas.
Lewis's Woodpecker	*Melanerpes lewis*	Blue	1-T	T	Very low	Prefer dry and open woodlands, strongly associated with Ponderosa pines. Most observations are in Interior BC.
Marbled Murrelet	*Brachyramphus marmoratus*	Blue	1-T	T	Moderate	Use wet coniferous forests for nesting within 5 km of shore (Project within 3 km), nests observed near Sooke Lake and Noyse Creek. May depend on maturity of forest as they prefer old trees.
Northern Goshawk, *laingi* subspecies	*Accipiter gentilis laingi*	Red	1-T	T	Moderate-High	Prefer dense canopy with open understory, large mature trees (>60 years) or old growth. Use mesic and wet coniferous forest and riparian forest.
Northern Pygmy-owl, *swarthi* subspecies	*Glaucidium goma swarthi*	Blue	-	-	Low	Frequently uses mesic/wet coniferous forest and riparian forest but few observations around southern Vancouver Island. (One in Duncan, BC.)
Olive-sided Flycatcher	*Contopus cooperi*	Blue	1-T	SC	Moderate	Widely distributed throughout BC. Potential to use riparian coniferous stands. Occurs in coniferous or mixed deciduous/coniferous forests.
Pine Grosbeak, *carlottae* subspecies	*Pinicola enucleator carlottae*	Blue	-	-	Moderate	Minimal data but expected to be present on Vancouver Island and frequently uses mesic and wet coniferous forests.

Common Name	Scientific Name	BC Status	SARA Status	COSEWIC Status	Potential to Occur	Rationale
Spotted Owl	*Strix occidentalis*	Blue	1-SC	SC	Low	Limited range in BC. Restricted to the western Cascades, Coast Range east of the Capilano River, and south of Birkenhead Lake and Lillooet.
Surf Scooter	*Melanitta perspicillata*	Blue	-	-	Low	Associated with marine or lake environments but may breed in wooded areas near bogs or streams.
Western Screech-Owl, *macfarlanei* subspecies	*Megascops kennicotti macfarlanei*	Blue	1-T	T	Moderate	Variety of coniferous and mixed forests but often in riparian zones with maple or cottonwood. Several occurrences recorded in 2017-2018 near the Jordan River diversion reservoir.
Yellow-billed Cuckoo	*Coccyzus americanus*	Red	-	-	Low	Nests mainly in deciduous riparian woodlands (cottonwood and willow).
Yellow-breasted Chat	*Icteria virens*	Red	1-E	E	Very Low	Range mostly restricted to the southern Okanagan, Similkameen Valleys and the Kootenay area near the Pend d'Oreille River.
Amphibians and Reptiles						
Coastal Tailed Frog	*Ascaphus truei*	Yellow	1-SC	SC	Moderate	Clear, cold swift-moving mountain streams with coarse substrates. There are several small headwater streams in the Project footprint. Primarily in older forest sites; required microclimatic and microhabitat conditions are more common in older forests.
Common Sharp-tailed Snake	*Contia tenuis*	Red	1-E	E/T	Low	Occurs in variety of habitats including relatively open Douglas-fir stands. Lay eggs on south-facing slopes.
Northern Red-legged Frog	*Rana aurora*	Blue	1-SC	SC	High	Recent recorded observations within 5 km of project area.
Painted Turtle	*Chrysemys picta*	No Status	1-T/SC	T/SC	Very Low	Require wetlands/slow moving water and there does not appear to be any in the project footprint. The closest mapped wetland is over 500 m upslope from the fence boundary.

Common Name	Scientific Name	BC Status	SARA Status	COSEWIC Status	Potential to Occur	Rationale
Painted Turtle – Pacific Coast Population	*Chrysemys picta pop. 1*	Red	1-T	T	Low	Because of multitude of forested streams, may be potential for turtles to occupy slow backwater sections or unmapped swamps. Few mapped wetlands in the area around the project.
Wandering Salamander	*Aneides vagrans*	Blue	1-SC	SC	High	Recorded observations within 5 km of the Project area.
Western Toad	*Anaxyrus boreas*	Yellow	1-SC	SC	Moderate-High	Occurs from the Rocky Mountains to the Pacific Coast, from sea level to 3660 m in a wide range of habitats.
Invertebrates						
Blue Dasher	*Pachydiplax longipennis*	Blue	-	-	Very Low	Requires ponds and lakes. No mapped ponds or lakes in the Project area.
Broadwhorl Tightcoil	*Pristiloma johnsoni*	Blue	-	-	Unknown	Minimal data available on this species but it may use the type of forest in the area.
Common Ringlet, *insulana* subspecies	*Coenonympha California insulana*	Red	-	-	Low	Associated with Garry Oak ecosystems, which are not expected in the Project area.
Common Wood-nymph, *incana* subspecies	*Cercyorilis pegala incana*	Red	-	-	Moderate	Facultative frequent use of dry conifer forests. Mapped occurrences in other parts of the southern island area.
Greenish Blue, *insulanus* subspecies	*Incaricia saepiolus insulanus*	Red	1-E	E	Low	May use riparian forest but uncertain. No recorded observations since 1979 in BC.
Puget Oregonian	*Cryptomastix devia*	Red	1-XT	XT	Low	Listed as extirpated on COSEWIC and SARA.
Watery Jumping-slug	*Hemphillia glandulosa*	Red	1-SC	SC	Moderate	Moist forest and riparian sites from low to mid-elevations. Very small, 22 mm.

Animals
AND Distribution: Native OR Endemic (Yes, Probable, or Breeding) OR Probable Endemic
AND 'Ecosections':Leeward Island Mountains
AND Habitat Subtypes: Conifer Forest - Dry,Conifer Forest - Mesic (average),Riparian Forest
AND BGC Zone, Subzone: CWHxm

APPENDIX 3

EARLY ENGAGEMENT PLAN

Jordan Solar and Energy Storage Project
Early Engagement Plan

Jordan BC Solar Project Limited Partnership

RECURRENT ENERGY
A subsidiary of Canadian Solar

98 San Jacinto Blvd.; Ste 750, Austin, TX 78701 *jordansolar@recurrentenergy.com*

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List of Abbreviations and Units

Abbreviation	*Definition*
AC	Alternating current
Jordan Solar	Jordan BC Solar Project Limited Partnership
BC	British Columbia
BC EAA	British Columbia *Environmental Assessment Act*
BC EAO	British Columbia Environmental Assessment Office
BC MOE	British Columbia Ministry of Environment
BC MFLNRORD	British Columbia Ministry of Forests, Lands, Natural Resource Operations and Rural Development
BC MOF	British Columbia Ministry of Forests
BC WLRS	British Columbia Ministry of Water, Land and Resource Stewardship
DFO	Fisheries and Oceans Canada
DPD	Detailed Project Description
EA	Environmental Assessment
EPIC	EAO Project Information Centre
GBA+	Gender Based Analysis
GHG	Greenhouse Gas
ha	Hectare
IPD	Initial Project Description
IRLL	Integrated Land and Resource Registry
LEH	limited entry hunting
MWac	megawatts of AC power
PFR	Preliminary Field Reconnaissance
PV	Photo-voltaic
RAAD	Remote Access to Archaeological Data
ROW	Right of way
The Plan	Early Engagement Plan
The Project	Jordan Solar and Energy Storage Project
UNDRIP	United Nations Declaration on the Rights of Indigenous Peoples

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1.0 Introduction and Purpose

1.1 Introduction

Jordan BC Solar Project Limited Partnership ("Jordan Solar") proposes to develop the Jordan Solar and Energy Storage Project (the "Project") for the purposes of producing clean renewable solar energy in the southern Vancouver Island region of British Columbia (BC). Jordan Solar proposes to construct, operate, and maintain the Project. The Project is anticipated to include approximately 100 megawatts of alternating current (AC) power (MWac) generation capacity and would consist of installation of solar photo-voltaic (PV) modules, battery storage system, overhead transmission lines to connect the solar array to an existing BC Hydro transmission line, and access roads. The current proposed Project area is approximately 235 hectares (ha).

1.2 Purpose

The Early Engagement Plan ("the Plan") is included as an appendix to the Project Initial Project Description (IPD). The IPD and the Plan are used to initiate the Early Engagement Phase of the environmental assessment process with the British Columbia Environmental Assessment Office (BC EAO). The BC EAO Early Engagement Policy (2019) states, in part:

"…the early engagement phase establishes an important preparatory stage during which meaningful conversations can begin about a proposed project with the project proponent, Indigenous nations, the public, local governments, provincial, and federal government agencies, and other stakeholders to identify potential interests, issues and concerns early in the EA process…"

Jordan Solar understands that this early phase of engaging and listening to Indigenous nations and various parties is meant to set the foundation for the remainder of the process and assist in the learnings of the key issues and interests of those parties to better inform the development of the approved Detailed Project Description (DPD) as well as Project design, siting, and alternative approaches to developing the proposed Project. The IPD has been prepared early in the design process prior to finalization of all Project components and layout to allow for feedback.

Jordan Solar further understands that engagement in support of environmental assessment is a living and evolving process – initial project plans are made available for review and comment using a range of methods, and the resulting comments are used to further shape the project plan to address concerns and to plan further engagement activities. Therefore, this Plan is meant to be flexible throughout the environmental assessment process and the eventual life of the Project.

Jordan Solar anticipates that key Communities of Interest including Indigenous nations, members of the public, and other stakeholders may be identified for deeper engagement and others may not express an interest other than general Project updates. Initial discussions with Communities of Interest will inform Jordan Solar of preferred method(s) for engagement. Specific meetings, distribution of Project information

packages, communications and distribution of Project materials including community presentations are examples of items that can be added to the Plan, at the request of the community.

In accordance with the afore-mentioned policy, understandings and commitments, the Plan provides a brief overview of the proposed Project, identifies the Communities of Interest including Indigenous nations, local communities and public stakeholders potentially affected by the Project, and describes the early engagement and communications that has been conducted to develop the Plan and the IPD and the continuous methods Jordan Solar will employ during the Early Engagement period, from the IPD submission through to the Detailed Project Description (the "DPD") development through the environmental assessment process.

2.0 Project Contact Information

2.1 Key Project Contacts

Jordan BC Solar Project Limited Partnership ("Jordan Solar") proposes to develop, construct, and operate the Jordan Solar and Energy Storage Project (the "Project") for the purposes of producing clean renewable solar energy on southern Vancouver Island. Jordan Solar is a subsidiary of Recurrent Energy.

Jordan BC Solar Project Limited Partnership contact information:

Jordan BC Solar Project Limited Partnership
98 San Jacinto Blvd. Ste. 750
Austin, TX
78701
URL: http://recurrentenergy.com/project/jordan-solar-and-energy-storage/

Primary Project contact:
Attention: Mr. Riley Griffin – Manager, Permitting
Email: jordansolar@recurrentenergy.com
Phone: 226-821-1045

Attention: Mr. David Marieno - Manager, Development
Email: jordansolar@recurrentenergy.com

Jordan Solar retained Triton Environmental Consultants Ltd. (Triton) to assist with preparation of the IPD and provide support during the Early Engagement Phase for the Project.

Triton contact information:

Triton Environmental Consultants Ltd.
#1- 4600 29th Street
Vernon, BC
V1T 5B9
URL: www.triton-env.com

Attention: Ms. Kellen Smith - Project Manager
Email: jordan.engagement@triton-env.com

Attention: Ms. Karen Baylis - Director of Indigenous Relations
Email: jordan.engagement@triton-env.com

3.0 General Project Information

3.1 Project Sector and Type

The Project sector is clean power generation using solar PV modules. PV panels convert light to electrical energy via the photovoltaic effect. The Project will also include a battery energy storage system (BESS).

3.2 Project Location

The Project is located on BC Crown land on southern Vancouver Island in proximity to the Jordan River approximately 20 km northwest of Sooke and 40 km southeast of Port Renfrew, BC north of Highway 14 and within the boundaries of the Capital Regional District (CRD) (Figure 1 of the IPD). More specifically, the "Project area" is within the boundaries of a BC Crown land Solar Investigative Licence and Licence of Occupation (File No. 1415020) which provides Jordan Solar the opportunity to undertake necessary studies to determine the engineering, technical, economic, and environmental viability of the Project. The land area within the boundaries of the Investigative Licence tenure area is approximately 4,133 ha. The current proposed layout and development area currently being studied by Jordan Solar (or "Project area") consists of approximately 235 ha, which represents roughly 9% of the tenured area.

Jordan Solar respectfully acknowledges the proposed Project is located within the traditional territory of the Nuu-chah-Nulth and Coast Salish nation peoples and is within the consultative boundaries of several Indigenous communities and organizations as indicated in Table 2. Additional information on Indigenous nations with traditional territories that overlap with the Project and who potentially have an interest in the Project is provided in Section 5.0 of the Plan, including proximity to the Project area. Areas of interest or value to Indigenous nations will be drawn upon further during continued communication and engagement with Indigenous nations during the Early Engagement Phase.

3.3 Project Purpose and Rationale

This Project meets the criteria for review set out under the *Environmental Assessment Act* (2018). According to Part 4(12) and Table 7 of the Reviewable Projects Regulation (BC Reg. 67/2020), proposed electricity projects are reviewable under the BC EAA if they have a total nameplate capacity of greater than 50 MW. Jordan Solar submits the IPD and this Plan for consideration by the BC EAO to support the Early Engagement Phase of the environmental assessment process. The purpose of the Project includes:

- Generation of a low-cost and greenhouse gas (GHG)-free, reliable, clean and renewable power source to help increase energy security on Vancouver Island, Victoria, and the greater Capital Region;
- Help BC meet its climate goals and commitments including GHG reduction goals;

- Advance the BC government's reconciliation objectives with BC Indigenous nations by creating economic and employment opportunities for regional Indigenous nations and rural communities; and
- Supporting BC Hydro's June 15, 2023 news release that states the intent to procure new sources of renewable and emission-free electricity to power BC. Electricity demand is expected to increase 15% between now and 2030, the news release states.

The Project rationale is compliant with the BC *Clean Energy Act* (2010), which among other things, specifies that the Province is to achieve electricity self-sufficiency with the goal of generating at least 93% of the electricity in BC from clean or renewable resources and build the infrastructure necessary to transmit that electricity. The BC *Clean Energy Act* further states that power development should encourage economic development and the creation and retention of jobs and foster the development of Indigenous nations and rural communities through the use and development of clean or renewable resources.

Additional Project details and information including potential Project benefits, historic and current Project status, potential project components and infrastructure, phases, biophysical and socioeconomic settings of the Project area, and Project location maps are provided in the Project IPD.

3.4 Communities of Interest

Jordan Solar recognizes identifying Communities of Interest and ensuring they have an opportunity to participate in a meaningful manner that is practical for them is a valuable part of meaningful engagement. Jordan Solar has identified the following initial Communities of Interest:

- Indigenous nations with a potential interest in the Project area;
- Members of the public and stakeholders including residents of nearby communities and tenure holders in the Project area;
- Members of vulnerable or under-represented groups (e.g., ethnic minorities, elderly, young, members of the disability community, unemployed, and visually or hearing impaired); and
- Local governments and federal and provincial government agencies.

4.0 General Engagement Methods

4.1 Overview

The purpose of Jordan Solar's engagement for the Project is to ensure that Indigenous nations and other Communities of Interest including local governments, provincial and federal governments, the public and other interested parties are informed about the Project, have access to information, and are encouraged to provide feedback during the Early Engagement Phase and Environmental Assessment process. Early engagement will be through the contacts identified for each of the Indigenous nations and groups, public stakeholders, and provincial, federal, and local government representatives and agencies and other interested parties. Continual coordination with each of the Indigenous nations with a potential interest in the Project or Project area or who are potentially affected by the Project, will be necessary to determine how and at what level of engagement they wish to be engaged. Jordan Solar proposes the following outline of the method and frequency of engagement with each Indigenous nation and various public and stakeholder groups (Table 1). The frequency of engagement will be dependent on how each Indigenous nation prefers to be engaged and will consider individual nation's engagement policies and protocols. Project updates will be shared on a regular basis and in timely manner. Constraints such as capacity for in person meetings, location of meetings, weather, accessibility, schedules, etc. will be considered and engagement will be tailored accordingly.

The Indigenous nations and public stakeholders identified in Tables 2 and 13 include those that Jordan Solar has shared Project information with or engaged during pre-early engagement and the development of the IPD and the Plan along with those that Jordan Solar intends to engage with on a continuous basis where the nation has expressed an engagement interest.

Table 1. General methods of engagement

Groups	*Frequency*	*Method of Engagement*
Indigenous nations	Regularly and as needed in accordance with protocols (when better understood) to provide Project updates and information.	Virtual or in-person Project discussion meetings with Chief and Council, relevant departments and band administration and community members. Project information and updates provided through emails, letters, phone calls, and referrals. Information sharing through Project website updates and marketing materials. A Project email address (jordansolar@recurrentenergy.com) is available to receive Project inquiries and provide timely responses. Paper copies of Project documents, including the IPD, will be provided upon request.
General public and stakeholders	As needed and regularly to provide Project updates and information.	Project emails, phone calls, or in-person or virtual meetings depending on individual preference. Project information and updates provided through

Groups	*Frequency*	*Method of Engagement*
		emails, letters, and phone calls. Information sharing through Project website and marketing materials. A Project email address (jordansolar@recurrentenergy.com) is available to receive inquiries and provide timely responses. Paper copies of Project documents, including the IPD, will be provided upon request.
Provincial and Federal regulatory agencies	As needed and regularly to report on regulatory milestones and provide Project updates and information.	Project emails, phone calls, or in-person or virtual meetings. Project information and updates provided through emails, letters, and phone calls. Information sharing through Project website.
Municipal and local government	As needed and regularly to provide Project updates and information.	Project emails, phone calls, or in-person or virtual meetings. Project information and updates provided through emails, letters, and phone calls. Information sharing through Project website.

4.2 Tracking and Addressing Feedback

Jordan Solar will continue to track and collect feedback received during the Early Engagement Phase in communication and engagement logs that record the dates of the engagement, correspondence and document exchanges, meeting attendees from each organization, and the feedback received in relation to the Project. The tracking record will also include Jordan Solar's responses and how issues raised will be addressed. These engagement logs will serve as a record of communication between Jordan Solar and groups identified for engagement, as well as any follow-up requirements, decisions, and commitments.

Input and feedback gathered during the Early Engagement Phase will be considered by Jordan Solar's project team and used to inform the Project, including its design and development and development of the DPD. Jordan Solar intends to proactively address questions and comments raised by Communities of Interest including Indigenous nations, the public, stakeholders, government agencies, and other affected groups through timely, open and respectful discussions.

The Plan and the IPD will be posted on the public Project website and the BC EAO Project Information Centre (EPIC) website with frequent updates by the Project team to incorporate updates based on learnings throughout the engagement process. Any updates to this Plan will be circulated via email by the project team to the key representative for each identified group in a timely and consistent manner.

5.0 Indigenous Nations Engagement

5.1 Overview

Jordan Solar is committed to working meaningfully with Indigenous nations who have an interest in the Project. As currently defined, the proposed Project area falls within the asserted traditional territory of the Nuu-chah-Nulth and Coast Salish nation peoples and the consultative boundaries of several Indigenous communities (Table 2).

Jordan Solar recognizes the importance of respectfully engaging with Indigenous nations and communities throughout the development of the Project and the environmental assessment process. Jordan Solar has a history of building positive, collaborative, and sustainable relationships with Indigenous nations and communities who are affected by its project development efforts. In support of this commitment, Jordan Solar will meaningfully engage with indigenous communities to better understand traditional land and resource use; and explore opportunities for mutual benefit with Indigenous communities throughout the development of the Project.

With those commitments in mind, Jordan Solar will continue the dialogue with Indigenous nations and groups throughout the life of the project and during the environmental assessment process. Communication may include, but is not limited to:

- Identification of communication protocols, policies, and procedural requirements of each Indigenous nation;
- Identification of further informational and engagement requirements of each Indigenous nation;
- Development of a deep understanding of the unique connection to the past and future uses of the area potentially affected by the proposed Project; and
- Assurance that each Indigenous nation has all the information required about the Project to help inform them in their decision-making process.

Where appropriate and mutually agreed upon, Jordan Solar will enter into memorandums of understanding or other agreements with Indigenous nations and organizations to define the Project relationship, the preferred engagement and information-sharing protocols, and long-term goals beyond the review of the Project.

5.2 Indigenous Nations and Contacts

The Project area is located within the southern Vancouver Island region of BC, within proximity to potentially interested Indigenous nations. Jordan Solar respectfully acknowledges the Project area is within the traditional territory of the Nuu-chah-Nulth and Coast Salish nation peoples. The Project area is on Crown land and does not overlap with *Indian Act* reserve lands, lands subject to a Treaty, or lands subject to a land claim agreement. A list of the Indigenous nations and organizations identified for engagement are summarized in Table 2, whose traditional territory overlaps with the Project area. Jordan Solar generated this list by using the provincial Consultative Areas Database (Province of BC, 2023) and preliminary feedback from the BC EAO.

Table 2. List of Indigenous nations and contact information

Indigenous Groups	*Representatives and Contact Information*
Pacheedaht First Nation	Chief and Council Box 170 Port Renfrew, BC V0S 1K0
T'sou-ke First Nation	Chief and Council PO Box 307 Sooke, BC V9Z 1G1

5.3 Indigenous Nations

5.3.1 Nuu-chah-nulth Nation

The Nuu-chah-nulth peoples are from the western side of Vancouver Island and are comprised of 14 communities with language, family, and culturally affinities. The territory stretches approximately 300 km of Vancouver Island's Pacific Coast from Brooks Peninsula in the north to Point-no-Point in the south, including island regions. Indigenous nations identified for engagement on the Project includes Pacheedaht First Nation.

5.3.2 Coast Salish Nation

The Coast Salish peoples include a variety of Indigenous nations living along the Northwest Pacific Coast in BC from the Lower Mainland and Vancouver Island south to western Washington and northwestern Oregon in the United States. Fishing is an important part of the Coast Salish culture and economy. Indigenous nations identified for engagement on the Project include T'Sou-ke First Nation.

5.3.2.1 Pacheedaht First Nation

Pacheedaht First Nation reserve lands are comprised of four land parcels totalling 178.7 ha of reserve land, centered near Port Renfrew, BC approximately 80 km northwest of Victoria and approximately 35 km northwest of the Project area (CIRNAC, 2023). Pacheedaht territory includes lands between Bonilla Point and Sheringham Point on the southwest coast of Vancouver Island and has traditional village sites in and around Port Renfrew. Pacheedaht First Nation is an independent nation and is not affiliated with any tribal councils. Pacheedaht First Nation is negotiating with Canada and the Province of BC in the BC treaty process at a common treaty table with the Ditidaht First Nation (Province of BC, 2023a). Pacheedaht First Nation and the Government of BC have the following agreements:

- Pacheedaht Amending Agreement to the Incremental Treaty Agreement – 2020 (Province of BC, 2020).
- Pacheedaht Incremental Treaty Agreement Amending Agreement – 2019 (Province of BC, 2019).
- Ditidaht and Pacheedaht Agreement-in-Principle – 2019 (Province of BC, 2019a).
- Pacheedaht Incremental Treaty Agreement – 2013 (Province of BC, 2013).

Forestry agreements:

- Pacheedaht Forest Consultation and Revenue Sharing Agreement – 2021 (Province of BC, 2021).

A summary of communications and engagement to date with Pacheedaht First Nation is provided in Table 3.

Table 3. Summary of communications and engagement with Pacheedaht First Nation

Date	*Activity/Type of Communication*	*Comments*
June 10, 2020	Email and letter	Provided early notice of proposed solar project.
June 17, 2020	Email	Pacheedaht First Nation requested a Project introduction meeting.
June 23, 2020	Virtual meeting	Project introduction meeting attended by Chief and Pacheedaht First Nation representatives.
August 11, 2021	Phone call	Communication about Project and next steps.
August 12 – 18, 2023	Emails	Communications about the Project and setting up a Project working group. Shapefiles and maps of the Project area provided.
September 8, 2021	Email	Communications about continued engagement and protocols.
February 22, 2022	Email	BC MFLNRORD notification to Pacheedaht First Nation of application for a solar Investigative Licence on Crown land approved.
March 24, 2022	Email	Communications about Project working group.
March 30, 2022	Virtual meeting	Project working group meeting.
April 27, 2022	Virtual meeting	Project working group meeting.
May 3, 2022	Virtual meeting	Project working group meeting.
May 25, 2022	Virtual meeting	Project working group meeting.
June 29, 2022	Virtual meeting	Project working group meeting.
September 28, 2022	Virtual meeting	Project working group meeting.
October 13, 2022	Email and phone call	Project updates provided.
October 26, 2022	Virtual meeting	Project updates provided to new representatives of Pacheedaht First Nation.
November 1, 2022	Email	Discussions about conducting a study on the access road to the Project site.
November 30, 2022	Virtual meeting	Project working group meeting. Project information provided to new Pacheedaht First Nation representative.
January 12, 2023	Email	Project updates provided.
January 23, 2023	Phone call	Phone call with Referrals Manager to set up a meeting with Chief.
January 26, 2023	Phone call	Meeting with Chief and Referrals Manager. Jordan Solar invited to attend in-person meeting.

Date	***Activity/Type of Communication***	***Comments***
January 30, 2023	Email	Pacheedaht First Nation provided the access road report.
February 3, 2023	In-person meeting	Project meeting at Pacheedaht First Nation office.
March 10, 2023	Phone meeting	Call with Pacheedaht First Nation and Economic Development Manager for Port Renfrew to provide Project information.
April 10, 2023	Virtual meeting	Communications about planned engagement with T'Sou-ke First Nation.
May 8, 2023	Project introduction letter	Project introduction letter and map provided.
October 5, 2023	Email	Shared the DRAFT IPD and Early Engagement Plan for review and comment. Executive Director of Pacheedaht First Nation provided updated contact information for the Project.
October 12, 2023	Email	Follow up email and Project Location Package (maps, .KMZ, and shapefiles) provided. Potential dates and times provided to set up a Project meeting to review the DRAFT IPD and Early Engagement Plan. Meeting scheduled for October 20, 2023.
October 12, 2023	Email	Confirmation from Pacheedaht First Nation that they received the DRAFT IPD, Early Engagement Plan, and Project Location Package and would review the information prior to the scheduled meeting.
October 19, 2023	Email	Meeting rescheduled to October 23, 2023 at Pacheedaht First Nation's request.
October 23, 2023	Virtual meeting	Meeting held to discuss the Project and review the DRAFT IPD and Early Engagement Plan. Feedback and comments on the DRAFT IPD provided and incorporated into Table 3 of the IPD and Table 5 of the Early Engagement Plan.
November 16, 2023	Email	Provided the revised DRAFT IPD and Early Engagement Plan and DRAFT minutes from the meeting held on October 23rd for review by Pacheedaht First Nation to confirm feedback was sufficiently incorporated. DRAFT documents were revised to incorporate feedback from Pacheedaht First Nation.
December 7, 2023	Email	Jordan Solar followed up on previous communications which provided the revised DRAFT IPD and Early Engagement Plan for

Date	*Activity/Type of Communication*	*Comments*
		review to confirm feedback was sufficiently incorporated into the DRAFT documents. Notified Pacheedaht First Nation of intention to file IPD and Early Engagement Plan.

5.3.2.2 T'Sou-ke First Nation

T'Sou-ke First Nation First Nation reserve lands are comprised of two land parcels totalling approximately 67 ha of reserve land around the Sooke Basin on the Strait of Juan de Fuca, centred near Sooke, BC approximately 30 km south of Victoria and 20 km west of the Project area (CIRNAC, 2023a). T'Sou-ke First Nation is one of 11 member bands of the Naut'sa mawt Tribal Council and the Te'mexw Treaty Association. The Te'mexw Treaty Association is negotiating with Canada and the Province of BC in the BC treaty process on behalf of its five member bands including Malahat, Scia'new (Beecher Bay), Songhees, Snaw-aw-as (Nanoose), and T'Sou-ke First Nations (Province of BC, 2023b). T'Sou-ke First Nation and the Government of BC have the following agreements:

- Te'mexw Treaty Association Agreement-in-Principle – 2015 (Province of BC, 2015).
- T'sou-ke Nation Incremental Treaty Agreement – 2013 (Province of BC, 2013a).

Other agreements:

- Douglas Treaty – 1850 and 1854.

Forestry agreements:

- T'Sou-ke Forest Consultation and Revenue Sharing Agreement – 2019 (Province of BC, 2019a).

A summary of communications and engagement to date with T'Sou-ke First Nation is provided in Table 4.

Table 4. Summary of communications and engagement with T'Sou-ke First Nation

Date	*Activity/Type of Communication*	*Comments*
February 22, 2022	Email	BC MFLNRORD notification to T'Sou-ke First Nation of application for a solar Investigative Licence on Crown land approved.
May 8, 2023	Project introduction letter	Project introduction letter and map provided.
May 19, 2023	Email	Follow up about next steps and setting up a Project introduction meeting.
May 31, 2023	Email	Follow up
June 8, 2023	Phone call	Phone call to T'Sou-ke First Nation office.
June 15, 2023	Phone calls	Communication about next steps and to set up a Project introduction meeting and potential site visit to the proposed Project area.

Date	*Activity/Type of Communication*	*Comments*
June 15, 2023	Phone call	Follow-up to phone call and provided .KMZ of the proposed Project area.
June 27, 2023	Email	Communication to set up a Project introduction meeting.
June 30, 2023	Emails	Communications about Project introduction meeting at the T'Sou-ke First Nation office and site visit scheduled for July 14, 2023.
July 14, 2023	In-person meeting and site visit	In-person meeting at T'Sou-ke First Nation office. Attended by Chief and Lands Department and Forestry staff. Site visit to the proposed Project area with representatives from the Jordan Solar team and T'Sou-ke First Nation Lands and Forestry departments.
July 24, 2023	Email	Follow-up after meeting. Provided the Project introduction meeting .ppt presentation and Project location package (Project maps, .KMZ, and shapefiles of Project area).
August 22, 2023	Email	Follow-up email to discuss next steps and set up a meeting.
October 5, 2023	Email	Shared the DRAFT IPD and Early Engagement Plan for review and comment.
October 13, 2023	Phone call	Follow-up communications.
October 13, 2023	Phone call	Follow-up communications to previous phone call about review of DRAFT IPD and Early Engagement Plan and next steps.
October 13, 2023	Phone call	T'Sou-ke First Nation called about feedback on the IPD.
October 16. 2023	Email	Additional communications about scheduling a meeting to review the DRAFT IPD and Early Engagement Plan.
October 20, 2023	Email	Additional communication about continuing discussions and to meet to review DRAFT IPD and Early Engagement Plan.
October 24, 2023	Email	Additional communications about continuing discussions and to meet to review DRAFT IPD and Early Engagement Plan.
October 25, 2023	Email	Additional communications about continuing discussions and to meet to review DRAFT IPD and Early Engagement Plan.

5.4 Indigenous Nations Locations of Interest

Jordan Solar is seeking information from Indigenous nations that are currently being engaged or will engage with and additional information will be provided based on

engagement. Potential Project interactions and impacts on Indigenous interests will be identified through further engagement.

5.5 Summary of Indigenous Nations Communication and Engagement

5.5.1 Project History

BC corporation and solar power developer Sunfield Energy Inc. (Sunfield) began engagement with Indigenous groups, government agencies, and community stakeholders in preparation of the process of the BC Crown land Investigative Licence and Licence of Occupation administered by the Ministry of Forests, Lands, Natural Resources and Rural Development (MFLNRORD). The application was submitted on May 20, 2023, which included the development plans and maps which were publicly posted online by MFLNRORD for Indigenous nations, stakeholder, and public comment. During that process various Indigenous nations and stakeholders were notified and invited to provide feedback and input to the regulatory process (see Table 3 and 4). Jordan Solar was granted BC Investigative Licence File no. 1415020. The Investigative Licence Tenure has since been assigned to and assumed by the Jordan BC Solar Project Limited Partnership.

5.5.2 Communication and Engagement to Date

Communications and pre-early engagement with Indigenous nations to date is provided in Table 3 and 4. Communications to date include the following:

- Information about the Investigative Licence application and Jordan Solar Feasibility Study was shared via phone calls, emails, and meetings with Indigenous nations.
- Jordan Solar provided Indigenous nations identified in Table 2 with a Project introduction letter via email in May 2023 which introduced Jordan Solar, the Project, and provided Project contact information (see Table 3 and 4).
- Jordan Solar followed up on the Project introduction letter with Indigenous nations via email and phone calls in May and June 2023.
- Jordan Solar has provided virtual and in-person Project information meetings. Additional meetings will be held as requested.
- Jordan Solar shared the DRAFT IPD and Early Engagement Plan with Indigenous nations in October 2023 for review and feedback.
- Communications are ongoing (see Table 3 and 4).

Jordan Solar will seek to further understand the interests of Indigenous nations during the Early Engagement Phase. Jordan Solar understands BC EAO will provide a Summary of Engagement report which will include a list of Participating Indigenous Nations and feedback received following the Early Engagement Phase.

5.6 Interests and Issues Identified by Indigenous Nations

Indigenous interests or concerns in the Project area that have been raised to Jordan Solar by Indigenous nations or groups during pre-early engagement are summarized in Table 5. These are provided in general terms and details on locations have not been provided.

Jordan Solar is seeking additional information from Indigenous nations that are currently being engaged or will be engaged with and additional information on potential Project interactions and impacts on Indigenous interests will be identified through further engagement. (Table 5 will be populated following pre-early engagement with Indigenous nations).

Table 5. Key issues raised by Indigenous nations

Indigenous interest	*Potential Issue or Concern Raised*	*Response/Potential Mitigations*
Potential impacts to wildlife and wildlife habitat	Jordan Solar heard concerns about potential impacts to wildlife and wildlife habitat which have historically been impacted in the area by forestry activities.	Jordan Solar will continue discussions about design components and potential impacts to wildlife through early engagement. Consider incorporating wildlife corridors into Project design to allow for movement through the Project area. Prepare management plans including best management practices during appropriate phases of the Project. Potential mitigation measures provided in Table 11 of the IPD. Project Environmental Assessment will include further assessments of wildlife and wildlife habitat in the Project area.
Economic opportunities and capacity building	Jordan Solar heard Indigenous nations are interested in economic and capacity building opportunities related to the Project including construction jobs, procurements opportunities, etc. Jordan Solar heard Indigenous nations are interested in participation and training opportunities during the EA field assessments as well as providing	Jordan Solar is committed to providing economic and capacity building opportunities to Indigenous nations.

Indigenous interest	*Potential Issue or Concern Raised*	*Response/Potential Mitigations*
	environmental and archaeological monitoring during the construction phase of the Project.	
Archeological and heritage resources, cultural resources	Jordan Solar heard concerns about potential impacts to archaeological resources in the Project area during construction of Project components. Project may require a Preliminary Field Reconnaissance (PFR) prior to ground disturbance. Indigenous nations are interested in conducting and participating in PFRs.	Jordan Solar is committed to working with Indigenous nations to gather further information including conducting site visits, Preliminary Field Reconnaissance (PFR), conducting appropriate archeological studies including Archeology Overview Assessments (AOA) and Archaeological Impact Assessments (AIA) prior to development.
Traditional and current land use of Project area	Jordan Solar heard that forestry activities and road building in the area have opened the area to unregulated recreational use. Concerns additional projects in the area would lead to increased road building and access by others. Jordan Solar heard concerns about potential impacts to the ability to continue to use the Project area for traditional and current land and resource use.	Jordan Solar will conduct additional engagement and continue discussions about design components that could impact use of the Project area through early engagement. Coordinate TLU studies with interested Indigenous nations to identify site-specific areas of cultural importance and inform Project design. Prepare management plans and implement best management practices during appropriate phases of the Project.
Reclamation and clean up of Project area following decommissioning.	Jordan Solar heard concerns about what will happen to the Project area at the end of the Project life.	Jordan Solar will prepare management plans which will include best management practices to follow during and following Project decommissioning. Plans could include measures for proper removal and disposal of infrastructure.
Water quality	Jordan Solar heard concerns about potential impacts to water quality of watercourses and potential water use. Potential impacts to downstream and upstream drainage basins.	Jordan Solar will continue discussions about design components that could impact water quality through early engagement. Prepare management plans and implement best management

Indigenous interest	*Potential Issue or Concern Raised*	*Response/Potential Mitigations*
	Potential impacts to salmon habitat restoration efforts undertaken on the Jordan River and other watercourses around the Project area.	practices during appropriate phases of the Project. Potential mitigation measures provided in Table 11 of the IPD. Jordan Solar will work with Indigenous nations to understand salmon habitat restoration work that has taken place. This historic information, if deemed appropriate to share with Jordan Solar, could further inform watercourse assessments and design considerations of the Project during the EA.
Cumulative impacts	Jordan Solar heard concerns raised about indirect and direct impacts to the area from the number of current and proposed projects in the traditional territory causing changes on the landscape - highways, forestry operations, access roads, transmission ROWs, etc. Potential impacts to waters, additional roads and use of the area, cultural values, traditional land and resource use of the area.	Consider cumulative effects during the EA process. Continued discussions about design components through early engagement. Prepare management plans and implement best management practices during appropriate phases of the Project.

Given the early stage of the Project design and of the environmental assessment and permitting processes of the Project, Project-specific mitigation measures are still in development. Table 11 of the IPD provides a summary of potential Project impacts and potential mitigations, including potential impacts to Indigenous interests. Specific management plans will be prepared prior to Project construction which would provide mitigation measures, guidelines, and best management practices that could be implemented during construction, operation and maintenance, decommissioning and reclamation of the Project to help the Project meet necessary legislation, regulations, and policies and to reduce the potential effects on the biological and human environmental components.

5.7 Planned Engagement with Indigenous Nations and Groups

Jordan Solar is continuing to undertake pre-early engagement activities on the Project and has prepared the Plan to ensure that key parties to the environmental assessment are identified early in the environmental assessment process and provide a common understanding of how and how frequently each party will be engaged. Jordan Solar,

working with BC EAO, will continue to understand the interests of each Indigenous nation to inform future engagement. BC EAO will provide a Summary of Engagement report to Jordan Solar which will include a list of Participating Indigenous Nations and will also outline further engagement requirements. These will further inform future engagement and the Plan including:

- Confirms Jordan Solar's approach and support for transparent information-sharing early in, and throughout, the environmental assessment process.
- Outlines Jordan Solar's approach to continuously seek out information and feedback to inform development of the DPD, subsequent environmental assessment processes, and the Project.
- Provides the methods and activities proposed for engagement with Indigenous nations throughout Early Engagement.
- Outlines how engagement processes will be developed that consider how each Indigenous nation wants to be engaged with.

Based on our preliminary communications and pre-early engagement with Indigenous nations outlined in Table 3 and 4, Jordan Solar expects to undertake continued engagement activities identified below during the Early Engagement Phase. Said engagement activities will be coordinated with the BC EAO to ensure Indigenous nations are receiving the most current information about the Project and the environmental assessment process and are provided the opportunities to engage including:

- Notify through a Project Update letter that the IPD has been filed and the Project is being reviewed under the terms of the BC EAA and discuss next steps.
- Continuous engagement with interested Indigenous nations during and beyond the BC EAO's review of the IPD and the Plan.
- Support BC EAO in the 30-day Public Comment Period on the IPD.
- Conduct in-person and virtual presentations to Indigenous nations with Project details and updates and continuous distribution of Project information to interested Indigenous nations.
- Continue to request ongoing feedback and input about the Project by follow up phone calls, email communications, correspondence, topic specific project materials and packages, in-person presentations (where possible), and video presentations with interested Indigenous nations.
- Develop additional engagement tools as requested or directed by indigenous nations.
- Continuously track and populate tracking tools of communication and engagement activities, including dates and Indigenous nation attendance and comments.

Jordan Solar will incorporate feedback and address comments received from Indigenous nations to inform the development of the DPD. Jordan Solar plans to do this through the following:

- Track feedback received during Project information sharing or on the IPD in a tracking table with Jordan Solar's response to support the development of the DPD.
- Incorporate relevant feedback into the DPD and supporting documents and address comments regarding Project and how, if applicable, feedback was incorporated into the DPD or the Project's design.
- Provide a draft DPD to Indigenous nations and continue engagement to confirm if feedback or comments have been appropriately incorporated into the DPD.

Jordan Solar will continue to seek feedback on topics of interest, point-of-contact, and identify group-specific engagement policies, protocols or preferences to better inform our engagement efforts, including confidentiality considerations.

5.8 Incorporating Indigenous Knowledge

Jordan Solar acknowledges Indigenous peoples have a long and close relationship with the land and can provide knowledge about the local environment. The BC EAO Guide to Indigenous Knowledge in Environmental Assessments (BC EAO, 2020) provides guidance to environmental assessment Participants to support the inclusion of Indigenous Knowledge in the EA process in accordance with guiding principles and requirements for confidentiality. The Government of BC recognizes inclusion of Indigenous Knowledge in the environmental assessment process is an important component in supporting the reconciliation objectives of the BC EAA including supporting the implementation of the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP, 2007) and provides Indigenous decision-makers and Participants with greater knowledge and understanding of the environment where a project is proposed, potential impacts of a project, and the significance of those impacts on Indigenous nations and communities.

Jordan Solar recognizes that Indigenous Knowledge informs the knowledge and experience of Indigenous participants in the EA and can provide meaningful input as to how to conduct an environmental assessment process, how to evaluate impacts, and how decisions are made by Indigenous nations. Building and maintaining relationships and open dialogue to ensure environmental assessments are effectively informed by Indigenous Knowledge spans all phases of conducting an environmental assessment.

Jordan Solar recognizes in addition to the guidelines provided by BC EAO, Indigenous nations will have their own governance, rights, protocols, guidelines, policies and practices regarding sharing or using their knowledge. Jordan Solar will continue to engage with Indigenous nations to learn more about the same through leadership, community representatives chosen by the nation, and knowledge holders (as appropriate and determined by the Indigenous nation), with the view of its application in the environmental assessment process. Jordan Solar will work with Indigenous nations and knowledge holders collaboratively to learn how Indigenous knowledge is considered in the environmental assessment process.

Jordan Solar will seek to understand and respect Indigenous governance, rights, protocols, policies, and practices when requesting access to Indigenous Knowledge and gaining permission to use Indigenous Knowledge. Jordan Solar will continue to work with Indigenous nations and knowledge holders to:

- Determine the community protocols and expectations regarding the conduct of Indigenous Knowledge studies to determine how the research is to be conducted and how information will be used;
- Work with the Indigenous nations and their designated representative to determine how permission will be obtained from a participating Indigenous nation or knowledge holders;
- Identify how and what Indigenous Knowledge may be useful for Project design, EA process, impact prediction and mitigation;
- Determine expectations for handling, sharing, and incorporating Indigenous Knowledge studies; and
- Identify possibilities for scoping the study in a manner that may also contribute to broader goals and priorities of the Indigenous nation.

Jordan Solar will continue to engage participating Indigenous nations and decision makers to identify knowledge holders as applicable through the Early Engagement Phase by regularly sharing information, what they have learned, and considering feedback to shape the development of the DPD.

6.0 Public and Stakeholder Engagement

6.1 Public and Stakeholder Engagement Objectives

Jordan Solar is seeking input from the public and stakeholders on the Project and potential interactions with their interests or activities in the Project area. The IPD provides information on potential Project benefits and potential socio-economic effects that are of potential interest to the general public and stakeholders. Jordan Solar's overall objective for public and stakeholder early engagement is to build relationships through transparent and responsive engagement throughout the Early Engagement Phase, the EA process, and the overall Project life with members of the public and stakeholders. As recommended by BC EAO, Jordan Solar will follow best practices for public and stakeholder engagement including:

- Ensure opportunities to engage on the Project are made apparent to the public via publicly accessible websites, local media, and/or other available and appropriate means;
- Conduct public engagement in a way that removes as many barriers to participation as possible and captures a diverse range of feedback;
- Tailor engagement to the needs of the community by asking the right questions to the right people to gain meaningful feedback;
- Help the public better understand how to provide useful feedback on the Project;
- Seek information from the public during the public comment and early engagement phase and incorporate local knowledge into the Project as applicable; and
- Show responsiveness to feedback by modifying project design, plans and/or studies and communicating results of these considerations.

6.2 List of Public Stakeholders

Public stakeholders include tenure holders and members of the general public who may be directly or indirectly affected by the Project. To ensure engagement is focused and relevant, Jordan Solar has done a search of the ILRR and other online databases and publicly available information sources and prepared a list of tenure holders and land users in the Project area who could be directly or indirectly affected by the Project. The list includes trappers, cut blocks and tree farm licences, timber licences, and other tenure holders (ILRR, 2022) (Table 6). Contact information has been withheld for privacy reasons.

Table 6. List of identified tenure holders

Tenure or Permit Number	*Interest or Rationale*	*Status*
Crown land File No. 1409695	Trapline Cabin – 2 km south of Project area	Contact information obtained.
Crown land File No. 0286243	Utility right-of-way (electric power line)	Contact information obtained.

Tenure or Permit Number	*Interest or Rationale*	*Status*
Trapline Area Identifier: TR0103T107; Trapline Area: 2764689	Trapline area - overlaps the Project area	Contact information obtained.
Various Forest Cut Blocks and Tree Farm Licences (Active and Retired)	Do not overlap Project area; overlap FSRs which could be used to access the site	Contact information obtained.
Special Timber Licence 3300P	Overlaps Project area; associated with DL 264 Renfrew District	Contact information obtained.
Special Timber Licence 3301P	Overlaps Project area; associated with DL 265 Renfrew District	Contact information obtained.
Special Timber Licence 3297P	Overlaps Project area; associated with DL 261 Renfrew District	Contact information obtained.

Jordan Solar recognizes additional members of the public and stakeholders could potentially be identified during the Early Engagement Phase.

6.3 Summary of Public and Stakeholder Engagement to Date

Pre-early engagement with tenure holders identified in Table 6 conducted to date is provided in Table 7. An initial list of potentially affected stakeholders has been developed and Jordan Solar understand additional stakeholders could be identified during the Early Engagement Phase. Additional members of the public and stakeholders including recreational and non-tenure land users, public interest groups, self-identified members of the public, businesses in the vicinity of the Project area, environmental groups, and community-based organizations will be added as they are identified. Jordan Solar will work with these groups to ensure the preferred method and frequency of engagement is identified and followed. Additional tenure holders identified will be contacted for awareness purposes of the Project.

Table 7. Summary of stakeholder engagement to date

Date	*Activity*
November 2023	Project introduction letter sent by registered mail to tenure holders identified in Table 6.

6.4 Planned Public and Stakeholder Engagement

Following acceptance of the IPD and the Plan by the BC EAO, an announcement of the commencement of the Early Engagement Phase will be posted on BC EAO's EPIC website and in local media (e.g., local print and digital newspapers and news websites). The announcement will include a brief description of the Project, a map of the Project location, information about virtual and in-person open houses, and contact information for a Project representative. The IPD will be made accessible for public and stakeholder review and comment during the Early Engagement Phase. Electronic copies of the IPD

will be available on the BC EAO EPIC website shortly after it is accepted by the BC EAO. Following approval, a 30-day public comment period begins to identify interests, issues, and concerns with the Project that will assist Jordan Solar with further refining the Project in preparation for the DPD.

Members of the public and stakeholders will be instructed to provide comments online during the public comment periods through the BC EAO website. In addition, Jordan Solar will facilitate timely and effective access to Project information and incorporate interests and concerns which will be incorporated into the development of the DPD. Engagement activities and information will be tailored, as required and feasible, to ensure all interested parties, including members of identified underrepresented groups, can participate in a manner that is suitable to them and allows them to learn about the Project and provide input during the Early Engagement Phase and EA process. Jordan Solar will seek to identify and address to the extent practicable any barriers to engagement during the Early Engagement Phase. Examples of engagement methods include:

- Schedule meetings at various times of day recognizing different schedules and commitments;
- Record meetings and make available for viewing at any time;
- Provide Project materials for discussions led by a known group leader or trusted individual and provide feedback or comments to Jordan Solar;
- Provide Project materials in digital and non-digital (printed) forms;
- Utilize accessible meetings locations as feasible for in-person meetings;
- Facilitate one-on-one discussions with Project representatives if requested;
- Provide Project representative contact information and Project email for submission of questions outside of meetings; and
- Consider gender based analysis plus (GBA+) approaches during engagement.

Jordan Solar will provide notification of the Project and Project updates to the tenure holders and other members of the public and stakeholders during the Early Engagement Phase of the Project. Notification will be provided through delivery of a Project email or letter with information about the Project and a link to the BC EAO EPIC website. A follow-up phone call will be made, and in-person or virtual meetings will be held if additional information or desire for engagement is expressed by any member of the public or stakeholder. Public stakeholders can participate in the BC EAO virtual or in-person open houses. Additional Early Engagement activities will include the following:

- Update the Project website with information and engagement opportunities;
- Advertise public engagement opportunities with local media;
- Deliver a Project email or letter via regular mail with information about the Project, a link to the Project website, and any government resources for engagement; and
- Schedule virtual or in-person open houses to present and discuss the Project and allow for public and stakeholder feedback.

Jordan Solar understands the BC EAO could hold one or more public open house or virtual information session during the Early Engagement Phase depending on the level of interest and potential effects of the Project. Jordan Solar will support the BC EAO during the Early Engagement Phase and will participate in open houses or information sessions as required and provide any presentation materials as needed. Jordan Solar will hold additional open houses or information sessions as requested and required. Feedback and comments received during the open houses or the public comment periods from members of the public and stakeholders will be recorded in a tracking table. Jordan Solar will provide a response to each comment and issue and the tracking tables will be included in the DPD.

7.0 Government Agency Engagement

7.1 Government Agency Engagement Objectives

Jordan Solar's overall objective for engagement with government agencies and regulators is to develop and maintain regulatory relationships through transparent and responsive engagement and information sharing throughout the Early Engagement Phase and the overall Project. Jordan Solar will proactively identify potential regulatory and permitting requirements during the Early Engagement Phase and the EA process to ensure a smooth process between EA and subsequent permitting should the Project be approved. Jordan Solar will follow BC EAO's best practices for engagement with provincial and federal government agencies and additional best practices including:

- Begin engagement during the Early Engagement Phase to understand capacity and information needs of provincial and federal agencies in the EA process;
- Ensure appropriate provincial and federal government agencies and subject matter experts are involved to help identify and address potential impacts from the Project;
- Provide timely access to Project information and responses to information requests;
- Work with appropriate regulators to identify and understand the Project regulatory requirements, interests, and concerns;
- Address interests and concerns and incorporate them into the development of the DPD;
- Identify required permits or approvals for the Project to be used during the development of a permitting plan as required during the EA process; and
- Reduce uncertainty during the EA process.

7.2 Regulatory Agencies

Table 8 provides a list of applicable government agencies which will likely be engaged with during the Early Engagement Phase. These agencies have been identified based on the relevant provincial and federal acts and regulations that could potentially be applicable to the Project or anticipated Project permits, approvals, and authorizations for the Project (see Section 4.0 of the IPD). Additional regulatory agencies could be identified by BC EAO during the Early Engagement Phase and the table will be updated accordingly.

Table 8. Key regulators and government agency contacts

Agency	*Representatives*	*Rationale*	*Status*
BC Environmental Assessment Office (BC EAO)	TBD	Provincial regulatory agency for the Project environmental assessment process. Contacts at BC EAO for	

Agency	*Representatives*	*Rationale*	*Status*
		Project discussions and BC EAO processes.	
BC Ministry of Forests (MOFOR) BC Ministry of Water, Lands, and Resource Stewardship MOFOR - BC Archaeology Branch	TBD	Discussions about potential Project interactions with Crown land use, forests, wildlife, and water and potential permit applications e.g., *Water Sustainability Act* or *Wildlife Act* permits).	TBD
	TBD	Discussions about potential Project interaction with archeological resources and sites	Will engage when as AOAs, AOIs, and other studies are required.
BC Ministry of Environment and Climate Change Strategy	TBD	Discussions about potential Project interaction with provincial parks and recreation sites around the Project area	TBD
BC Ministry of Transportation and Infrastructure (BC MOTI)	TBD	Discussions about potential interactions with the Project and roads administered by BC MOTI	TBD
BC Ministry of Indigenous Relations and Reconciliation (BC MIRR)	TBD	Discussions about how the Project relates to BC MIRR objectives or processes	TBD
Interior Health	TBD	Potential permits associated with drinking water and/or sanitary facilities at the Project office or offsite facilities.	TBD

7.3 Planned Government Agency Engagement

Jordan Solar understands the BC EAO will facilitate notification to appropriate regulatory agency contacts and regulators could be part of the technical advisory committee

which will be formed during the Process Planning Phase. BC EAO will seek to identify appropriate technical advisors that will likely form the technical advisory committee during the Early Engagement Phase. During the Early Engagement Phase, Jordan Solar will work with the agencies to identify Project contacts and representatives and to determine capacity and information needs. Engagement will occur on a regular basis and Jordan Solar will convey information to regulators through a variety of methods of communication including emails, telephone calls, letters, Project status updates, and in-person or virtual meetings. Feedback on the IPD and any communications, comments, or issues with or raised by regulatory agencies during the Early Engagement Phase will be recorded in the tracking tables and included in the DPD. Comments and issues will be addressed in the tracking tables.

Jordan Solar is supportive of open and inclusive engagement with regulatory agencies during the Early Engagement Phase and the following activities could be undertaken as required:

- Maintain open information flow and communication with regulatory agency representatives to identify and/or address information needs and requests early in the process and respond in a timely manner;
- Facilitate a site visit to the Project area, if requested;
- Maintain a tracking table of all communications with regulators during the Early Engagement Phase which will be included with the DPD;
- Maintain a tracking table of all issues or concerns raised by regulatory agencies during the Early Engagement Phase which will be included with the DPD; and
- Keep meeting minutes for any formal meetings held with regulatory agencies.

8.0 Local Government Engagement

8.1 Local Government Engagement Objectives

Similar to government agency engagement, Jordan Solar's overall objective for engagement with local governments is to develop and maintain relationships through transparent and responsive engagement and information sharing throughout the Early Engagement Phase and the overall Project. The objectives will be achieved following BC EAO best practices for engagement with local governments including:

- Begin engagement during the Early Engagement Phase to understand capacity and information needs of local governments in the environmental assessment process;
- Ensure appropriate local government representatives are involved to help identify and address potential impacts from the Project on local communities;
- Provide timely access to Project information and responses to information requests;
- Work with appropriate local government contacts to identify and understand the Project interests, and concerns;
- Address interests and concerns and incorporate them into the development of the DPD;
- Identify relevant health authorities, emergency service providers and/or other local and regional service organizations; and
- Identify other members of the public, local businesses, non-tenure land users, and community organizations who could have interest in the Project.

8.2 Communities and Local Governments in the Project Area

The Project area is located on Crown land in a fairly remote region within the boundaries of the CRD. The CRD is a regional government for 13 municipalities and three electoral areas on southern Vancouver Island and the Gulf Islands and serves approximately 440,000 people. The CRD provides regional decision-making on matters outside of municipal boundaries and to enable more effective service delivery and serves as a local government entity for electoral areas to facilitate and deliver services for residents living in unincorporated areas. The Project area is in the Juan de Fuca Electoral Area of the CRD (2021 population 5,132). The Juan de Fuca Electoral Area encompasses an area of approximately 222 km^2 on the southwest coast of Vancouver Island from the community of Otter Point to Port Renfrew (CRD, 2023). The closest community is the District of Sooke (population 15,086; Statistics Canada, 2021), located approximately 20 km east of the Project area. The District of Sooke is located on Southern Vancouver Island approximately 45 km south of Victoria along Highway 14. Port Renfrew (population 144; Statistics Canada, 2021) is approximately 35 km west of the Project area. It is a small unincorporated community located on the south shore of Port San Juan on the west coast of Vancouver Island.

Table 9. Key local government contacts

Organization	*Contact Name*	*Title*	*Rationale*
Capital Regional District	Al Wickheim	Director – Juan de Fuca Electoral Area	Key contact for regional district potentially affected by the Project
Capital Regional District	Jeri Grant	Alternate Director – Juan de Fuca Electoral Area	Key contact for regional district potentially affected by the Project
District of Sooke	Maja Tait	Mayor	Key contact for municipality potentially affected by the Project
District of Sooke	Gail Scott	Community Economic Development Officer	Key contact for municipality potentially affected by the Project

Local government land use plans relevant to the Project area include:

- The Vancouver Island Land Use Plan was announced by the BC government in 1994 and covers most of Vancouver Island except for the general area of the Alberni-Clayoquot Regional District. The Land Use Plan designates Protected Areas and Management Zones and summarizes the strategic directions of the region.
- Lands associated with the Project area are designated for Enhanced Forestry under the Vancouver Island Land Use Plan. These areas are managed to produce higher volumes and values of timber while respecting environmental standards and the Forest Practices Code (Province of BC, 2000).

8.3 Summary of Local Government Engagement to Date

An initial list of potentially affected local communities including the regional district (CRD) and local communities (the District of Sooke) has been developed and will be confirmed with BC EAO during the start of the Early Engagement Phase. Pre-early engagement with local government contacts identified in Table 9 conducted to date and feedback received is provided in Table 10. Jordan Solar will work with local governments to ensure the preferred frequency of engagement is identified and followed.

Table 10. Summary of local engagement to date

Date	*Activity*
November 2023	Project Introduction letter sent by registered mail to local government officials identified in Table 9.
December 2023	Capital Regional District Director sent an email to Jordan Solar requesting additional information about the Project.

8.4 Planned Local Government Engagement

Jordan Solar will provide updates on the Project to local government contacts during the Early Engagement Phase of the Project. Notification of approval of the IPD and the 90-day Early Engagement Phase will be provided through delivery a Project email and letter

with information about the Project, BC EAO's open house and virtual information sessions, contact information for a representative from Jordan Solar, and a link to the Project website. A follow-up phone call will be made, and in-person or virtual meetings will be held if additional information or desire for engagement is expressed by any local government.

During the Early Engagement Phase, Jordan Solar will work with the local governments to identify Project contacts and representatives and to determine capacity and information needs. Jordan Solar will also seek information about landowners or communities in proximity to the Project area who should be engaged about the Project. Engagement will occur on a regular basis and Jordan Solar will convey information to local governments through a variety of methods of communication including emails, telephone calls, letters, Project status updates, and in-person or virtual meetings. Feedback on the IPD and any communications, comments, or issues with or raised by local governments during the Early Engagement Phase will be recorded in the tracking tables and feedback will be considered and incorporated into the DPD. Comments and issues will be addressed in the tracking tables.

Jordan Solar is supportive of open and inclusive engagement with local governments during the Early Engagement Phase and the following activities could be undertaken as required:

- Maintain open information flow and communication with regulatory agency representatives to identify and/or address information needs and requests in a timely manner;
- Facilitate a site visit to the Project area, if requested;
- Maintain a tracking table of all communications with local governments during the Early Engagement Phase which will be included with the DPD;
- Maintain a tracking table of all issues or concerns raised by local governments during the Early Engagement Phase which will be included with the DPD; and
- Keep meeting minutes for any formal meetings held with local governments.

9.0 Closing

Through sharing the IPD and the Plan with BC EAO and Communities of Interest, including Indigenous nations, Jordan Solar is providing an early design-stage overview of the Project and engagement methodology. The IPD has been prepared to determine the requirements for review of the Project under the BC EAA and to initiate the environmental assessment process. The IPD was prepared using the guidance provided in the BC EAO's Early Engagement Policy document (BC EAO, 2019). The IPD has been prepared early in the design process prior to finalization of all Project components and layout to allow for feedback. The IPD and the are used to initiate the Early Engagement Phase of the BC environmental assessment process. The documents will be available for review by Indigenous nations and Communities of Interest to facilitate engagement and will be used to support the development of a DPD. The DPD will present a more refined Project design based on progression of design and considerations of input received during the Early Engagement Phase.

Jordan Solar will maintain a communications and engagement log to track feedback and comments received during the Early Engagement Phase. The log will be updated continuously through the public comment period and Early Engagement Phase.

10.0 References

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