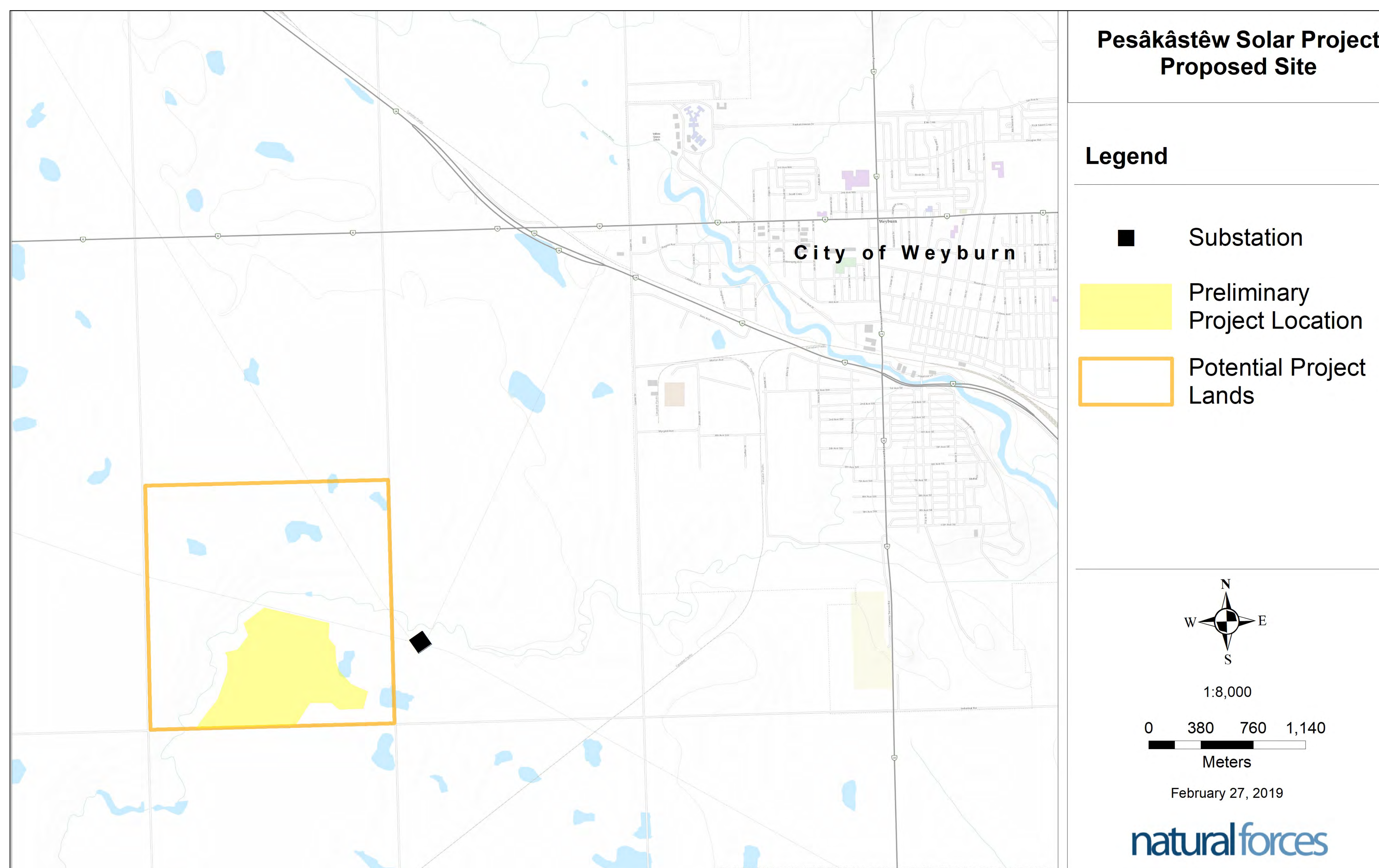


# The Proposed Project



The project being proposed by the Pesâkâstêw Solar Limited Partnership is an array of photovoltaic solar panels that would generate 10 MW of clean and sustainable energy for the Saskatchewan electrical grid. The project is planned to be constructed and commissioned by December 2020. The project will use approximately 90 acres of land with low environmental sensitivity in the RM of Weyburn, just southwest of the City of Weyburn.



## What are the benefits?

- Provide clean electricity to approximately 2,400 homes
- Displace 18,860 tonnes of CO<sub>2</sub> equivalent annually
- Provide long-term revenue to the economic development corporations of two Saskatchewan First Nations
- Contribute to SaskPower's target of 50% renewable energy by 2030



# Project Proponents



The project is being developed by Natural Forces on behalf of Pesâkâstêw Solar Limited Partnership, the proponent and owner of the Pesâkâstêw Solar Project. The Pesâkâstêw Solar Limited Partnership is a partnership between George Gordon Developments Ltd., Red Dog Holdings Ltd., and Natural Forces.



**George Gordon Developments Ltd.** (GGDL) is the economic development branch of George Gordon First Nation. By establishing important business partnerships, GGDL has become a regional First Nation leader in business development. Through these partnerships, GGDL has assembled the capacity and capability to successfully enter high quality bids on major projects related to resource development with renowned North American companies.



**Red Dog Holdings Ltd.** (RDHL) is the economic development branch of Star Blanket Cree Nation. One of the main goals of RDHL is to develop long term partnerships with companies that have shared values and objectives. RDHL also strives to provide opportunities for sustainable employment, training, wealth creation, and community development.

**Natural Forces** is a private independent power producer that delivers renewable energy projects in partnership with local communities across Canada. Natural Forces develops, constructs, owns, and operates wind, solar, and hydro projects with First Nation communities, universities, municipalities, and local community funds.





# Environmental Studies



A project of this size requires a Technical Proposal to be submitted to the Saskatchewan Environmental Assessment and Stewardship Branch. The preliminary environmental studies and surveys necessary to produce this proposal are currently underway on the proposed site. These studies began in Spring 2018 and will continue through Spring 2019. Once submitted, the technical review committee will review the proposal to determine whether an Environmental Impact Assessment will be required.



Conducting public consultation early in the process allows the proponent to fully address questions or concerns brought forward. This then allows for the incorporation of stakeholder concerns into the scope of the studies and in project design.



## What studies are being done?

- Soil mapping
- Migratory and breeding birds
- Vegetation and weeds
- Wetland delimitation
- Sharp-tailed Grouse Lek
- Amphibian auditory
- Raptor nest and owl surveys
- Common Night Hawk
- Noise studies
- Heritage resource review



# How does solar power work?

## **Step 1: Solar panels collect sunlight and convert it to DC electricity**

The sunlight is absorbed by the material of the panel, which produces a direct current (DC) by knocking electrons out of the atoms. This is called the photovoltaic effect.



### **What is a solar panel?**

A solar panel is made up of a series of solar modules, which are made up of a series of solar cells. Each solar cell has a glass lens covering the conductor material that absorbs the sunlight to produce an electrical current, which is most often crystalline silicon.

## **Step 2: An inverter converts the DC electricity to AC electricity**

The DC electricity produced by the panels is not compatible with the electrical grid and the electronics in your home, which are all alternating current (AC) compatible. The inverter remedies this issue.

## **Step 3: The AC electricity is fed into the power grid**

The AC electricity is sent into the power grid through nearby electrical infrastructure, which transforms the electricity to the proper voltage for the system. Here, the electricity reduces our reliance on non-renewable energy sources.

### **Facts About Solar**

- Solar farms produce virtually no noise, since they have no moving parts
- Solar panels are still productive on cloudy, rainy, and cold days
- Solar panels can last up to 30 years without any significant output reduction
- Solar farms are a reversible land use - the land can be fully restored after the lifecycle