Foothills Solar Project Threatens Frank Lake Wildlife

Frank Lake is a wetland complex located roughly 50 kilometres southeast of Calgary, and is currently under threat from a new solar energy development. Designated an Important Bird Area (IBA), Frank Lake has received international recognition for its significance to nesting and migrating birds. Canada's Important Bird and Biodiversity Areas Program (IBA Canada) has called Frank Lake "the most important area in southeastern Alberta for breeding waterbirds" and it is globally significant for migrating and nesting waterbirds, and for hosting important waterfowl species. Thousands of swans, ducks and shorebirds have been observed staging at the lake during spring and fall migrations, and several at-risk species have been sighted, including bank swallow, Sprague's pipit, horned grebe and ferruginous hawk. An abundance of bird and wildlife activity has been recorded in the area, and it has become a popular area for birders, photographers, and other recreational users to visit.

In late 2021, Elemental Energy – a renewable energy company based in Vancouver, BC – proposed their Foothills Solar project, a 150 megawatt (MW) solar development that is intended to span 1600 acres. The project is to the northeast of Frank Lake, barely 1000 metres from the shores of the lake at its closest point, and within the boundaries of the IBA. While AWA supports the development of responsible renewable energy development, we advocate for these projects to occur

in already developed areas, and we are concerned that the siting of this project will threaten the bird populations and biodiversity of Frank Lake.

Every year, thousands of bird deaths occur due to the development of solar energy projects. These deaths often occur from birds colliding with solar panels and transmission lines. Waterfowl, birds that spend most of their time near water, may be especially attracted to solar panels due to the "lake effect", a hypothesis that suggests birds mistake solar panels for water and attempt to land, leading to collisions, stranding, and death. Solar panels can also displace birds from preferred habitat or degrade habitat quality by changing the microclimate and hydrology of the region, and can disrupt migratory flight paths when placed near stopover or staging areas. The location of the solar development project within Frank Lake IBA poses a significant risk to the bird populations that frequent the area.

In June, Elemental Energy submitted their proposal for the project to the Alberta Utilities Commission. Responding to the proposal, concerned landowners and community members formed the Frank Lake Concerned Citizens (FLCC) group to record their opposition to this project. AWA is participating in the proceeding as a member of FLCC, and several other groups, including Canadian Wildlife Service, Calgary Field Naturalists Society and Canadian Parks and Wilderness Society Southern Alberta, have also filed statements expressing concerns with the proposed development. A petition started to oppose the project has since gained over 2500 signatures. A hearing has been scheduled for January 2023. The hearing will provide a limited opportunity to express opposition to the project and present evidence and will allow the AUC to make the appropriate decision.

- By Ruiping Luo



Solar energy development is on the rise, with open areas in the grassland and parkland regions often most at-risk of development. These projects are important for reducing carbon emissions, but must be conducted in a way that minimizes the impact to sensitive wildlife and landscapes. Photo © R. Luo