

## SECTION 15 GROUNDWATER

### A. Location and Maps

The Project is located within the Harmony and Canaan United States Geological Survey quadrangles. The Maine Geological Survey online database<sup>53</sup> Significant Sand and Gravel Aquifer Maps (Figure 15-1) show that there are no mapped significant sand and gravel aquifers or aquifer recharge areas in the Project Area. The nearest mapped aquifer is located approximately 3.8 miles southwest of the Project.

According to the Maine Drinking Water Program there are no known public drinking water supply wells within 100 feet of the Project Area. The closest public drinking water supply well is approximately 1.8 miles northeast of the Project. There are no United States Environmental Protection Agency (USEPA)-designated sole source aquifers located in the Project Area.<sup>54</sup>

### B. Quantity

No new groundwater extraction is anticipated as part of the Project.

### C. Sources of Contamination

Potential sources of groundwater contamination during construction include fuel, and hydraulic and lubricating oils used in the operation of vehicles and construction equipment. Any spills of these materials from construction vehicles or equipment are typically small and of very short duration. Spills will be properly contained, controlled and cleaned up in a timely manner so should not pose a risk to groundwater quality. Procedures for handling these materials and preventing spills will be provided in a Construction Spill Prevention Control and Countermeasure (SPCC) prepared by the Engineering Procurement and Construction contractor. The construction SPCC Plan will be submitted to the Department for review and approval prior to the start of construction. The basic elements of the SPCC Plan will provide descriptive procedures, emergency contact telephone numbers (including state and federal environmental agencies), and oil spill cleanup guidelines. These procedures will establish a set of requirements for spill prevention and response during construction. The procedures will incorporate measures developed and fine-tuned from experience gained during construction of other solar projects and will address input received from MDEP and other review agencies. The procedures to be incorporated into the SPCC Plan have proven successful for preventing spills and addressing cleanup of spills if they occur. Both contractors and environmental inspectors employed on the Project will ensure that all personnel working on site are appropriately trained to follow these procedures.

Substations and transmission line facilities constructed as part of the Project will include equipment that contains fuels and lubricants, as well as oil-filled electrical components. The substation will be constructed with engineered perimeter and/or subsurface oil containment to minimize the potential for oil releases to groundwater or adjacent natural resources. Procedures for handling these materials and preventing spills will be outlined in a site-specific Operations SPCC Plan to be prepared in accordance with the requirements of 40 C.F.R. Part 112. The Operations SPCC Plan will be submitted to the MDEP for review prior to the commercial operation date of the facility.

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<sup>53</sup> Maine Geological Survey, Department of Agriculture, Conservation and Forestry, 93 State House Station, Augusta, ME 04333-0093. Available online at: <https://www.maine.gov/geolib/catalog.html>.

<sup>54</sup> USEPA, Designated Sole Source Aquifers in EPA Region 1. Available online at: [http://www.epa.gov/region01/eco/drinkwater/pc\\_solesource\\_aquifer.html](http://www.epa.gov/region01/eco/drinkwater/pc_solesource_aquifer.html).

The maintenance building adjacent to the Project substation is anticipated to be used solely for storage of replacement solar array components. There will be no subsurface wastewater disposal system associated with the maintenance building.

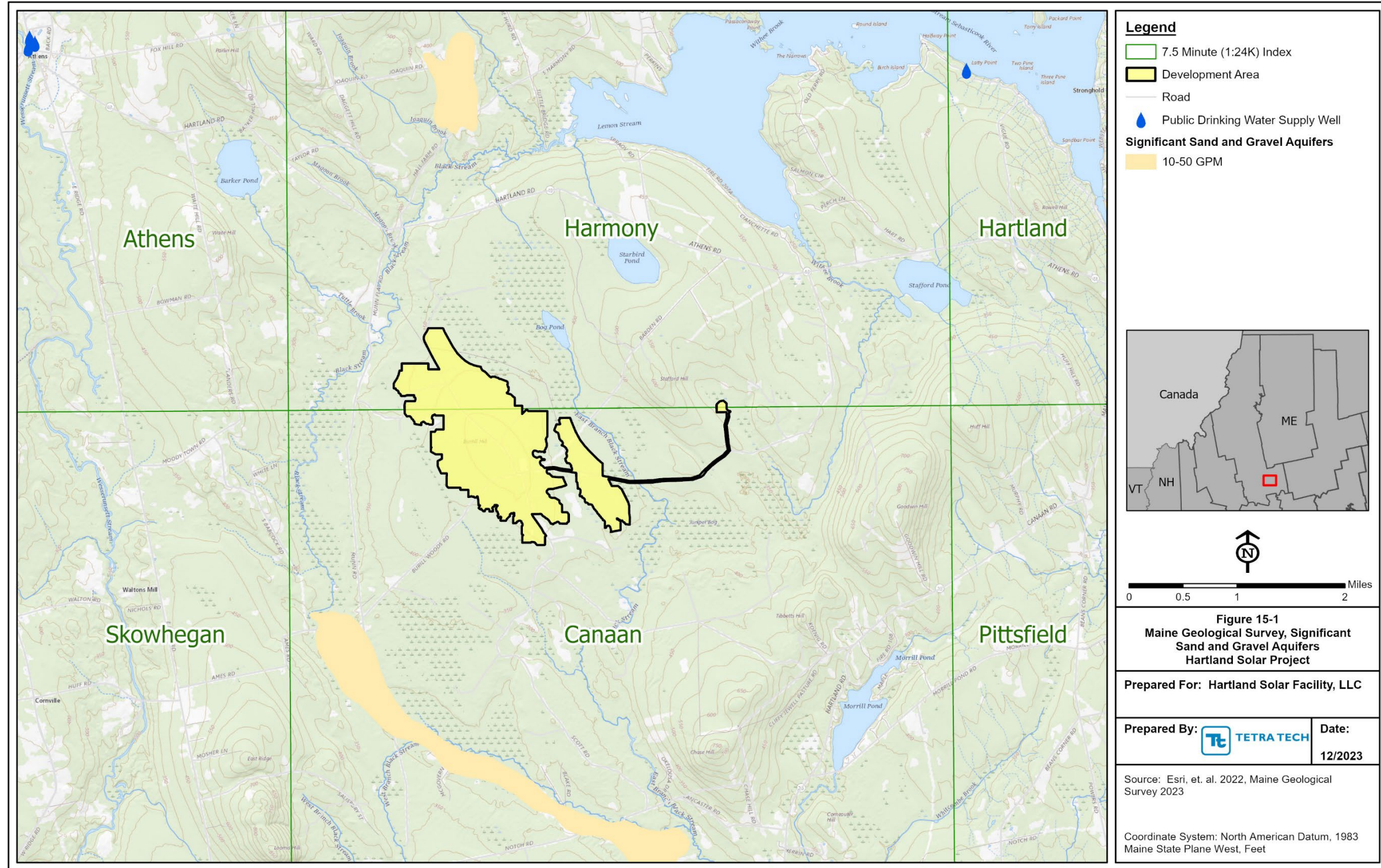
The solar array area, vegetation management areas, and access roads will be maintained as necessary for Project operations. The ground cover surrounding the solar panels will be mowed no more than twice per year. Vegetation management and maintenance will be conducted in accordance with the VMP provided in Section 10 (Buffers), Exhibit 10-1 of this application. Herbicide use is not anticipated; however, if herbicide use is needed, herbicides will be of low toxicity with low soil mobility that are registered with the USEPA and approved by the Maine Board of Pesticide Control. If herbicide use is required, herbicide application will be implemented in accordance with the product label and approved guidelines and will, therefore, prevent adverse impacts on groundwater quality. Additionally, herbicides will not be mixed, transferred, or stored on the Project site to further prevent potential impacts on groundwater quality.

#### D. Conclusion

The Project will not significantly alter existing surface water drainage characteristics, as described in Section 12 (Stormwater Management) and a detailed construction Stormwater Pollution Prevention Plan (SWPPP), as described in Section 14 (Basic Standards) will be implemented. Further, measures to prevent and address potential impacts to both surface water and groundwater will be included in the construction and operation SPCC Plans to be submitted a to the Department for review and approval prior to the start of construction and commercial operation respectively. Measures to protect existing surface and groundwater are also included within the VMP attached as Exhibit 10-2 to Section 10 (Buffers). These documents and adherence to the design and procedural requirements they contain represent the groundwater protection and monitoring plans for the Project. Accordingly, the construction or operation of the Project is not expected to adversely affect groundwater resources.

#### Figures

- Figure 15-1 Maine Geological Survey, Significant Sand and Gravel Aquifers



Not for Construction

Figure 15-1 Maine Geological Survey, Significant Sand and Gravel Aquifers.