



10. ENVIRONMENTAL EFFECTS OF THE PROJECT

The potential negative effects to the applicable water bodies within 120 metres (see Table 1 and Table 7) by project activities relating to site preparation, construction, maintenance, operations and decommissioning are outlined in Table 8.

Some project activities will occur within 30 metres of a water body (see Figures 2a through 2d). Potential negative environmental effects of the project outlined in Table 8 are considered to be direct or indirect effects associated with the drainage area for each water body. The activities outlined in Table 8 are expected to have no residual effects or only minimal residual effects on the water bodies provided the appropriate mitigation measures are implemented.

As discussed in Section 6, realignment of a Tributary to Pine River south of Turbine 35 will be required. This section of the tributary will be moved 25 metres south. None of the activities outlined in Table 8 are expected to have any physical or functional effect on the realigned water body provided the appropriate mitigation measures are implemented and maintained.

10.1 Source Water Protection Areas

The project location is divided between the Nottawasaga Source Water Protection Area and the Grand River Source Water Protection Area. Details of these areas relating to the Project Location are discussed in the Water Assessment Report. Wind farms have not been identified as a potential threat to groundwater under the *Clean Water Act*. Construction of a wind farm may result in short-term withdrawals of water, a non-consumptive demand. These short-term activities are generally disregarded in relation to Source Water Protection and therefore have no residual effects.

10.2 Alternative Options for 230 kV Line Installation

As discussed in Section 2, alternative options for the installation of the 230 kV line have been outlined on Figures 2a through 2d and depend on pre-construction surveys to determine the significance of 15 unevaluated wetland units. Two options exist for ten waterbodies:

- a) The wetland associated with the water body is determined to be provincially significant therefore directional drilling will be used to install the 230 kV line.