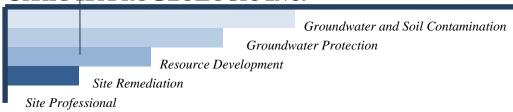
CRAIG HYDROGEOLOGIC INC.



<u>CHATHAM AREA GROUNDWATER EXPLORATION</u> <u>2015</u>

EIA REGISTRATION DOCUMENT <u>SEPTEMBER 1, 2015</u>

Prepared For: Miramichi Department of Public Works

Mr. Jay Shanahan 141 Henry Street, Miramichi, NB, E1V 2N5

September 1, 2015

CHATHAM AREA GROUNDWATER EXPLORATION

<u>2015</u>

EIA REGISTRATION DOCUMENT SEPTEMBER 1, 2015

Proponent: City of Miramichi, NB, Mr. Jay Shanahan, Director of Public Works, 141 Henry Street, Miramichi, NB, E1V 2N5. Phone 506-623-2020.

Overview: The City of Miramichi has a number of municipal groundwater wells in the former Municipality of Chatham which provide the Chatham area municipal groundwater supply. Some of these wells are older, located in developed areas, and may be nearing the end of their usefulness. The long term plan for the City is to develop a groundwater treatment plant in the general area of the Springvale, Napan Road and Industrial Park (also known as the NB Power) Wells (see attached Figure 1. In order to facilitate this development plan, the City intends to further develop this wellfield, potentially in the areas to the south or east, which, in general are undeveloped woodlands. This would allow the wells in this area to feed water to the future treatment plant prior to going into the distribution system. Groundwater exploration and development in these areas would also be consistent with minimizing impacts potentially arising from the Ground Water Protection Zone designation.

Purpose/Rational/Need for the undertaking: To provide for future groundwater supply needs in the former Municipality of Chatham area

Project Location: The potential general exploration area and two potential drill targets are indicated in Figure 1. The actual locations will be determined based on accessibility and land availability. This is complicated somewhat by the plans for the future construction of a highway bypass through the general area. We are aware of the current proposed route and will avoid potentially locating wells near it.

Siting Considerations: The exploration area is generally undeveloped forest area. Extending the wellfield into these areas should minimize potential land use conflicts.

Physical Components and Dimensions of the Project: The immediate plan is to drill two exploration boreholes in the general area shown in Figure 1, selecting the best potential well based on capacity and chemistry, pump testing the well determined to be most suitable and submitting a specific plan for development as part of the wellfield. If Potential Drill Target #1 is to be pump tested then TH2-92 will be used as an observation well. If Potential Drill Target #2 is to be pump tested then TH1-92 will be rehabilitated and used as an observation well. The physical components include the well, future well house and waterman piping to connect to future treatment plant and distribution system.

Zoning: The project is compliant with the site zoning.

Public Consultations: The public consultations will be comprised of sending out an information package to all property owners within a 500 meters radius of the new production well and accepting comments via mail, telephone and/or email. Copies of the information package will also be sent to the local MLA and MP. The information package will focus on the WSSA process and the use of the well and potential impacts. Any comments received from the public will be compiled and submitted to NBDEG.

Groundwater Testing: The groundwater testing is described in the Step One Application. The Step One Application is enclosed with this document.