

February 3, 2014

Progress Report No.1

Assessment of Groundwater Resources in the Southern Coastal Water Province of Belize Referred to as Savannah Groundwater Province

Contracted by:

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Contractor:

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Contract No. GCCA/PS/2013/04

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Introduction:

This first progress report is presented to inform the contractor **United Nations Development Programme (UNDP)** and **National Integrated Water Resource Authority (NIWRA)** about the status of conducting an Assessment of Groundwater Resources in the Southern Coastal Water Province referred to as the Savannah province.

As agreed by GEOMEDIA and NIWRA, progress reports will be presented regularly in monthly intervals until the completion of the project, i.e. August 2014.

Data acquisition:

GEOMEDIA requested several Governmental Departments for their support in terms of providing relevant data on geology, hydrology, hydrogeology and is awaiting their replies. NIWRA issued the letter requesting the release of data from relevant ministries and letter of support for GEOMEDIA to be used within further communication regarding the data request.

Description of field works:

Field works started on January 26, 2014 after a set of official meetings in Belmopan and Belize City. The field crew consists of three representatives of GEOMEDIA: Vaclav Frydrych, Zdenek Patzelt, Emil Moravec and a local counterpart Jason Fisher. The base of the field crew is Cardie's Hotel in Independence Village.

First week of field works (January 26 – 31, 2014) was dedicated to mapping and verification of current field status.

During this week field exploratory activities were concentrated at southern part of the Savannah Province with particular focus on identification of both extraction points which were known prior this project from various reports and studies publicly available or provided by Governmental Departments as well as extraction points identified in field during this stage of

field work. In total, about 50 wells/boreholes were identified and documented. Most of them are used for groundwater extraction. Each well was localized by portable GPS and photo documented. In case of easily accessible and not secured wells the information on depth and groundwater level were directly documented and groundwater was sampled for preliminary field chemical analysis. In some cases it was possible to discuss with well owners providing additional information on the well purpose, extent of its current use, extent of pumping, chemical composition, etc.

Apart from groundwater, the field crew was also focussing on identification of surface water characteristics in the study area. Chemical characteristics of surface water were preliminary determined by field measurement tools, the same as for groundwater.

In the scope of the field work the attention is also paid to documentation of outcrops in the surrounding of studied groundwater and surface water observation points.

Field crew accompanied by local geologist Max Mohamed (Princess Petroleum) visited three petroleum wells San Juan -1,2,3 recently drilled and potentially considered to be used for aquifer testing for the project purposes. GEOMEDIA and Princess Petroleum are currently in negotiation and potential use of these deep boreholes would be further specified.

Fig. 1 displays water sampling points in the southern part of the Savannah Groundwater Province.

Further plans:

Field works will be conducted until February 13 and will be dedicated to the northern part of the Savannah Province in similar extent as in the southern part.

Upon the completion of mapping of the entire project area, the project team will make efforts to find wells/boreholes in areas with lack of information and complete the data set in order to cover the entire area with necessary data. Attention will be paid to surface water bodies in the surrounding of groundwater pumping points as well.

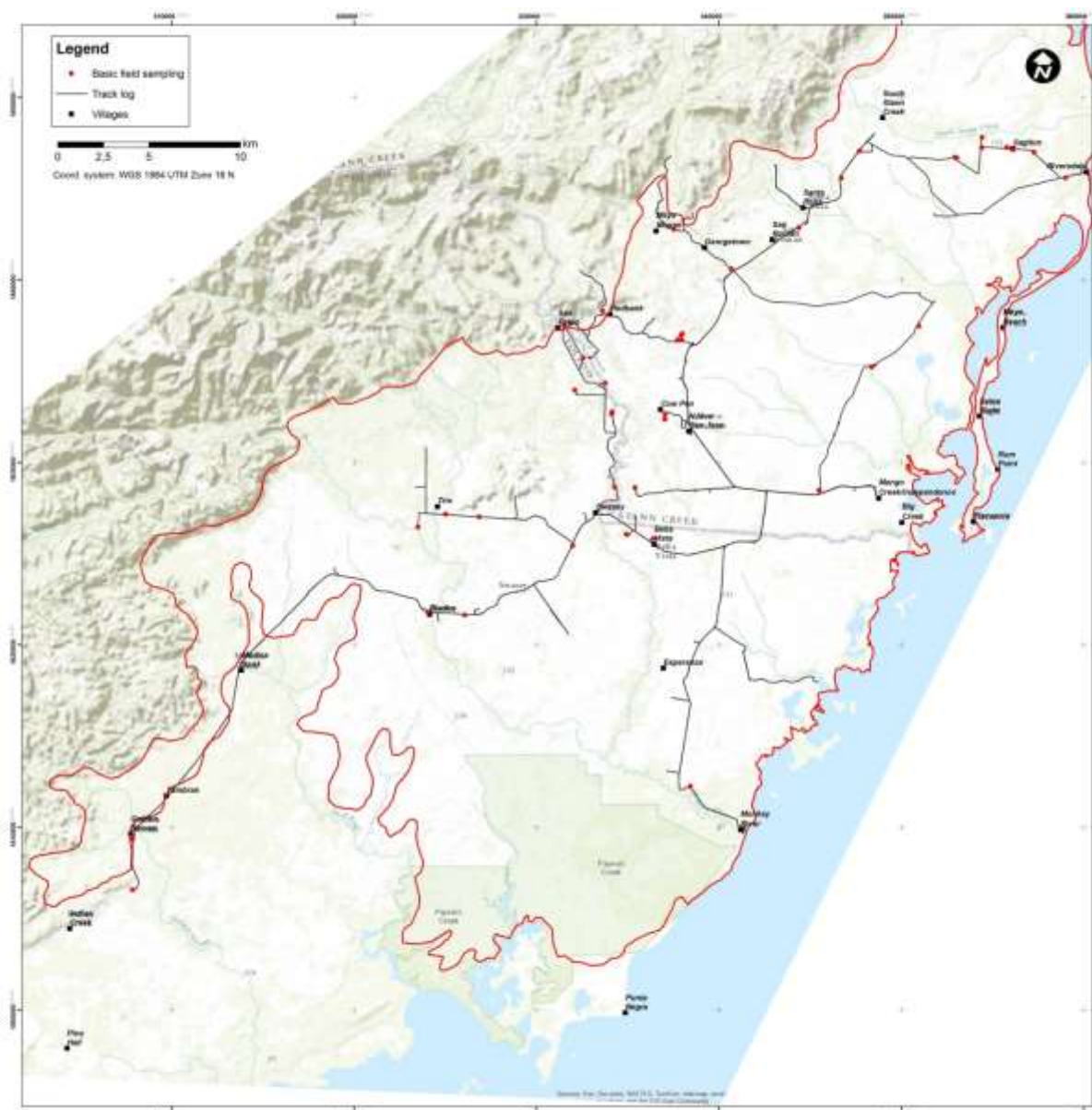


Fig. 1 Location of documented sampled points during the first week of the field works.