

SUNSHINE COAST REGIONAL DISTRICT STAFF REPORT

TO: Infrastructure Services Committee – October 19, 2017
AUTHOR: Dave Crosby, Manager Utility Services – Special Projects
SUBJECT: GROUNDWATER INVESTIGATION TO SUPPLEMENT CHAPMAN CREEK WATER SUPPLY

RECOMMENDATION(S)

THAT the report titled Groundwater Investigation to Supplement Chapman Creek Water Supply be received;

AND THAT recommendations from the Groundwater Investigation to Supplement Chapman Creek Water Supply Report be brought forward to the 2018 Budget process.

BACKGROUND

The Groundwater Investigation project was included in the 2013 Comprehensive Regional Water Plan in order to identify possible groundwater sites that could supplement the Chapman Creek water supply. The following recommendation was put forth at the July 8, 2016 Corporate and Administrative Services Committee Meeting:

Recommendation No. 4 *Stage 1 Groundwater Investigation Scope of Work*

The Corporate and Administrative Services committee recommended that staff report to the September 2016 Infrastructure Services Committee meeting regarding the draft scope of work for the Stage 1 Groundwater Investigation project Request for Proposals.

The following resolution was adopted at the Regular Board meeting of September 22, 2016:

381/16

Recommendation No. 3 *Groundwater Investigation Scope of Work*

THAT the report titled “Regional Water Groundwater Investigation Scope of Work” be received for information.

On December 15, 2016 the Regional District awarded Contract No. 16 272 to Waterline Resources Inc. to provide hydrogeological services and subsequent report pertaining to the Groundwater Investigation study. Staff have provided regular updates to the Committee through the Budget Project Status Report and Department Quarterly Reports.

DISCUSSION

Stage 1 of the Groundwater Investigation study consisted of a hydrogeological desktop study to identify aquifers contained within the Chapman Creek Water Service area. The desktop study was supplemented by site inspections. The purpose of the Stage 1 investigation was to identify the most promising aquifer(s) to pursue with test drilling in Stage 2 of the investigation.

A Stage 1 decision matrix was developed to provide rankings for each site identified as having possible groundwater potential. The matrix is based on the following criteria:

- hydrogeological feasibility
- community need
- infrastructure requirements and costs
- land tenure
- water quality
- stakeholder concerns
- environmental impacts; and
- regulatory requirements.

Twelve potential well locations were examined. The final site rankings identified four focus areas and indicates at least one preferred drilling site in each area as follows:

- Elphinstone (West of Town of Gibsons boundary): Site 1d on Mahan Road;
- Chapman/Sechelt: Site 2b located adjacent to the District of Sechelt Operations Yard on Dusty Road;
- Gray Creek: Site 3 located on Sechelt Inlet Road near the parking area south of the Gray Creek Bridge; and,
- Soames/Granthams: Site 4; next to the Soames Point Reservoir.

Waterline Resources Inc. will be presenting their findings to the Infrastructure Services Committee at the October 19, 2017 meeting. SCRD Staff have provided this report as information to the appropriate staff at the other Sunshine Coast local governments.

Aligned with this project, Staff have and will continue to coordinate internally with other departments to identify opportunities for groundwater to serve SCRD services such as recreation facilities and parks.

Financial Implications

The estimated cost to move forward with Stage 2 of the Groundwater Investigation study, which includes drilling and well installation at four sites, hydrogeological support during the field work, 48 hour pump testing, water quality testing and a technical report is \$325,000.

STRATEGIC PLAN AND RELATED POLICIES

The Groundwater Investigation to Supplement Chapman Creek Water Supply directly links to the set of values identified in the Strategic Plan.

More specifically, the Groundwater Investigation aligns with the following Strategic Priorities:

Strategic Priority: Enhance Collaboration with shíshálh and Skwxwu7mesh Nations by respecting their review/comment process and their rights.

Strategic Priority: Embed Environmental Leadership through the responsible management of the regions' water supply.

The Comprehensive Regional Water Plan recommends to undertake a groundwater investigation (CRWP, p. 8-12).

CONCLUSION

The Groundwater Investigation study has identified 12 locations to be examined for potential groundwater production, of which four sites have been recommended by the Consultant based on the decision matrix that will require test drilling, water quality and yield testing and final assessment.

Staff will prepare a Budget Proposal for consideration to the 2018 Budget as described in the Groundwater Investigation Study.

Attachment: Report on Groundwater Investigation to Supplement Chapman Creek Water Supply Project No. 16-272 (Waterline)

Reviewed by:			
Manager	X- D. Crosby	Finance	
GM	X- M. Day	Legislative	
CAO	X- J. Loveys	Other	