



Date: 2020-01-13
Date of Meeting: 2020-01-17
To: Salt Spring Watershed Protection Alliance Steering Committee
From: Coordinator

Re: Fault Zone Hydrogeology – Fulford Hbr, by Professor Gleeson, U Vic

PURPOSE: The purpose of this memo is to summarize for SSIWPA-SC the basic elements of a project by Professor Tom Gleeson, University of Victoria.

RECOMMENDATION:

THAT the Salt Spring Island Watershed Protection Alliance Steering Committee direct the Technical Working Group to regularly discuss any updates, data, review requests from Professor Gleeson about the Fault Zone Hydrogeological Project in Fulford Harbour.

BACKGROUND:

At the suggestion of SSIWPA-SC member Sylvia Barroso (Hydrogeologist, FLNR), Professor Tom Gleeson reached out to SSIWPA Chair Laura Patrick regarding a meeting to discuss his planned hydrogeological project investigating the permeability of the geological fault zone in Fulford Harbour. Coordinator Cowan organized the meeting and it was held January 13, 2020 with Professor Gleeson on a web-conference with SSIWPA Chair Patrick, Vice-Chair Holman, Freshwater Specialist William Shulba and TWG Chair John Millson.

Summary of Project:

- Drill two monitoring/research wells on MOTI Right-Of-Way (Fulford Harbour)
- Directional drilling to investigate Fault Zone estimated by Greenwood's Geology Map to be located under Fulford Creek.
 - o Detailed characterization of the geological landforms - Fault Zone
 - o Intended potential for data-sharing with related water, or other, projects on SSI
- Funded by Canadian Foundation for Innovation (CFI) as an equipment grant. Equipment may remain in perpetuity.

Potential overlap or benefits of this project to SSIWPA Workplan:

- Addresses one of Golder Associates (2018) report recommendations for more groundwater monitoring, especially re: saltwater intrusion in coastal regions and happens to be very near to automated Fulford Creek hydrological monitoring station. (FLNR)
- Potential for inclusion in either provincial groundwater well monitoring network and/or community groundwater level monitoring network at completion of study
- Allows a potential third monitoring well completed in the granite bedrock that can generate data needed for a 3-point problem (Groundwater Monitoring Network, Islands Trust - FLNR)