



## INFRASTRUCTURE SERVICES COMMITTEE

Thursday, April 19, 2018  
SCRD Boardroom, 1975 Field Road, Sechelt, B.C.

### AMENDED AGENDA

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**CALL TO ORDER: 9:30 a.m.**

#### AGENDA

1. Adoption of Agenda

#### PETITIONS AND DELEGATIONS

2. Dave Newman, Director of Infrastructure Services, Town of Gibsons  
Regarding Groundwater Investigation Verbal

#### REPORTS

3. Chief Administrative Officer and General Manager, Infrastructure Services  
Phase 2 Test Drilling of the Groundwater Investigation  
**(Voting – A, B, D, E, F, Sechelt)** Annex A  
pp 1 – 9
4. Chief Administrative Officer  
Town of Gibsons Bulk Water Agreement – Terms of Reference  
**(Voting – A, B, D, E, F, Sechelt)** Annex B  
pp 10 – 15
5. General Manager, Infrastructure Services  
Raw Water Reservoir – Feasibility Study Outline  
**(Voting – A, B, D, E, F, Sechelt)** Annex C  
pp 16 – 20
6. GM, Corporate Services / Chief Financial Officer  
Universal Water Meter Installations Phase 3 Funding  
**(Voting – A, B, D, E, F, Sechelt)** Annex D  
pp 21 – 24
7. General Manager, Infrastructure Services  
Development of Water Sourcing Policy  
**(Voting – A, B, D, E, F, Sechelt)** Annex E  
pp 25 – 28
8. Water and Energy Projects Coordinator  
2018 Drought Management Plan Implementation  
**(Voting – A, B, D, E, F, Sechelt)** Annex F  
pp 29 – 33
9. Manager, Solid Waste Services  
Recycle BC Revised Program Plan – Update  
**(Voting – All)** Annex G  
pp 34 – 60

10. 2018 Q1 – Quarterly Report – Infrastructure  
(Voting – All)

Annex H  
pp 61 – 72

### COMMUNICATIONS

11. ➡ **ADD** Mayor Wayne Rowe, Town of Gibsons, dated April 17, 2018  
Regarding Pending Board Decision Regarding Proposed Mahan Road  
Exploratory Well

➡ **ADD**  
Annex I  
pp 73-78

### NEW BUSINESS

### IN CAMERA

### ADJOURNMENT



## TOWN OF GIBSONS

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## OFFICE OF THE MAYOR | WAYNE ROWE

April 17, 2018

SCRD Board  
1975 Field Road  
Sechelt, BC V0N 3A1

Attention: Bruce Milne, Board Chair

Dear Mr. Milne,



Reference: Pending Board Decision Regarding Proposed Mahan Road Exploratory Well

At the meeting of elected officials on March 12, 2018 the Town of Gibsons presented information on the Town's water strategy. As a follow up to this meeting and subsequent to the Board's recent deliberations on March 22, I would like to provide more detailed information to assist in your Committee and Board discussions on April 19 and 26 regarding the SCR D's pending groundwater investigation.

The Town has carefully tested and studied the Gibsons Aquifer for over 20 years. This long-time data is the basis of the Town's careful stewardship of this resource and of the Town's opposition to our own regional government's proposal to investigate an additional, uncoordinated draw of Gibsons Aquifer water from the Mahan Road site.

The current SCR D water crisis has prompted Council to re-examine its own strategies for servicing Zone 3. Due to significant water savings since 2009, largely through water metering, expanding the service area of the aquifer to service Zone 3 has become viable and will result in a projected 2019 draw from the aquifer for all three Town water zones that will be roughly the same as the 2012 demand of Zones 1 and 2 only.

The attached information provides a number of key positions why the proposed exploration by the SCR D at the Mahan site would be detrimental to the Town and reflects a disjointed approach to resource management. While Council appreciates the difficult position that the SCR D is in regarding securing additional water for the region, the proposal for pursuing water from the Gibsons Aquifer puts the Town's ability to service its own population in jeopardy; the Town cannot support the SCR D addressing their water crisis by creating a water crisis for the Town.

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The Town is requesting that the SCRD support the following actions to reflect a coordinated, collaborative approach to managing our Sunshine Coast watersheds.

1. That no groundwater exploration of the Gibsons Aquifer be conducted by the SCRD at this time;
2. That initiating a joint SCRD/Gibsons Groundwater Management Zone and Plan be a priority for 2018, including the sharing with the SCRD of all monitoring data collected by the Town from the Gibsons Aquifer;
3. That the SCRD Board support SCRD and Town staff to work together to explore the feasibility of a coordinated effort to complete any planned Town and SCRD drilling projects.

I have requested that staff attend your April 19, 2018 Infrastructure Services Committee meeting as a delegation to speak further on this issue and to provide an additional resource should the Committee have any further questions. Staff will also be in attendance at the April 26 meeting should the Board wish to ask any questions of Town staff.

Yours truly,



Wayne Rowe  
Mayor

cc: SCRD Infrastructure Services Committee



# TOWN OF GIBSONS MEMORANDUM

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**TO** Mayor Wayne Rowe  
**FROM** Dave Newman, Director of Infrastructure Services  
**DATE** April 13, 2018  
**SUBJECT** SCRD Groundwater Exploration

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Mayor Rowe,

As requested, the following are the key points of concern regarding the SCRD's proposal to access groundwater from the Gibsons Aquifer via a well on Mahan Road.

- 1. Any significant draw on the aquifer by outside parties would threaten the Town's ability to service and manage its own growth.**
  - Based on data used in 2013 there was adequate water supply from the Gibsons Aquifer to supply the Town's buildout of Zones 1 and 2 only, i.e., 7,300 persons.
  - Since 2008 the Town's overall consumption has been steadily decreasing due to metering and other infrastructure improvements. Using the same assumptions regarding climate change and sea level rise, the same projected draw on the aquifer would now be able to serve a population of approximately 9,400.
  - It makes it impossible for the Town to effectively plan for any length of time into the future when the SCRD has indicated an intent to draw down our primary water source at a yet-to-be-determined level. This is of immediate concern due to the number of significant development applications that are currently in progress within the Town as well as the Town's intention of supplying water to Zone 3.
- 2. The Town needs to conduct ongoing long-term monitoring to refine the accuracy of the projections in the Study.**
  - The Town's Aquifer Mapping Study repeatedly emphasizes the need to conduct ongoing long-term monitoring to determine the ultimate yield of the aquifer.
  - The capacity of the aquifer is based on data collected during the Study as well as conservative assumptions regarding climate change, sea level rise, and draw on the aquifer.
  - Actual water use, climate change, and sea level rise will all affect the ultimate yield, which may be greater than or less than projected.

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3. **The Study recommends the installation of additional monitoring wells within the Town prior to additional significant development.**
  - In order to provide the necessary monitoring data, additional wells are required to monitor saltwater intrusion and to monitor pressure. These wells need to be installed and monitoring data collected prior to imposing significant additional draw on the aquifer.
  - The Town has budgeted for the installation of monitoring wells in Lower Gibsons in 2018.
  - Although a pump test of the exploratory well would provide some information about the aquifer, there would be little value in monitoring data from the Mahan site as the Town already has a monitoring well within approximately 250 metres of the proposed site.
4. **A decision by the SCRD to pursue groundwater exploration and ultimately a production well at the Mahan site would affect the Town's proposal to service Zone 3 from the Gibsons Aquifer.**
  - The proposed 2018 SCRD groundwater investigation only contemplates drilling an investigative well at this point, however, this investigation signals a clear intent to create an SCRD supply well should testing of the investigative well result in a positive outcome.
  - Until it is known whether the SCRD will be applying for licensing from Forests, Lands, Natural Resource Operations & Rural Development (FLNRORD) it will be unclear as to the volume of water potentially being available to the Town and consequently would bring into question the length of time that the Town would be able to service Zone 3.
  - The Town's Zone 3 proposal has the potential to save the SCRD approximately 240 million litres per year. The future demand of Zone 3 is forecast to be more than double that volume.
5. **The site rankings in the SCRD Groundwater Investigation regarding stakeholder concerns can significantly skew the relative rankings of the sites.**
  - Waterline assessed and ranked 11 potential sites in their report submitted to the SCRD on October 10, 2017; SCRD staff recommended to the Infrastructure Services Committee that further exploration be conducted at the four sites with the most favourable rankings.
  - During the Groundwater Task Force meetings Darren David of Waterline admitted that the rankings for stakeholder concerns were subjective and not determined by any clear criteria.
  - The assessment by Waterline of the potential well sites resulted in the rankings on the following page. These rankings were based on hydrogeological feasibility, infrastructure requirements, water quality, regulatory requirements, and stakeholder concerns. A rating of 1 is low or unfavourable, 2 is moderate, and 3 is high or favourable. Sites 2, 3, 4, and 5 (in **bold**) were recommended for further exploration.

WATERLINE RANKINGS		
Site	Ranking	Stakeholder concerns
1) Mahan site 1C	108	2*
2) <b>Mahan site 1D</b>	<b>108</b>	<b>2*</b>
3) <b>Gray Creek</b>	<b>108</b>	<b>3</b>
4) <b>Soames Point</b>	<b>108</b>	<b>3</b>
5) <b>Sechelt Operations Yard</b>	<b>81</b>	<b>3</b>
6) Old Chapman Reservoir	72	3
7) Mahan site 1A	36	2
8) Mahan site 1B	36	2
9) Frank West Firehall	36	3
10) Chapman booster pump site	36	3
11) Reed Road pump station	12	3

- o Despite Gibsons being a stakeholder that conveyed a willingness to provide their input as to their particular concerns, prior to the Task Force meetings, no contact was made by Waterline Resources or SCR D staff to determine what stakeholder concerns the Town might have in order to determine the appropriate stakeholder scoring for the Mahan sites.
- o All sites with the Town as existing users were identified as "2"; stakeholder concerns ranked "3" included such comments as "Low, few users in the area". No stakeholder concerns were ranked "1" by Waterline Resources.
- o Mr. David verbally provided the information to the Task Force that, had a value of '1', or unfavourable, been attributed to Mahan sites 1C and 1D (which Town staff feels would have been far more reflective of the Town's concerns), the Mahan sites would have had a calculated ranking of 54 and would have scored fifth and sixth instead of one and two. The other two Mahan sites (1A and 1B) may have also warranted a stakeholder ranking of "1" however, the Task Force did not request Mr. David to provide the change to the overall ranking for these two sites.
- o The following shows the rankings should a Stakeholder Concern value of '1' be used for Mahan sites 1C and 1D:

ADJUSTED RANKINGS		
Site	Ranking	Stakeholder concerns
1) <b>Gray Creek</b>	<b>108</b>	<b>3</b>
2) <b>Soames Point</b>	<b>108</b>	<b>3</b>
3) <b>Sechelt Operations Yard</b>	<b>81</b>	<b>3</b>
4) Old Chapman Reservoir	72	3
5) Mahan site 1C	54	1*
6) <b>Mahan site 1D</b>	<b>54</b>	<b>1*</b>
7) Mahan site 1A	36	2
8) Mahan site 1B	36	2
9) Frank West Firehall	36	3
10) Chapman booster pump site	36	3
11) Reed Road pump station	12	3

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**6. Additional draw by the SCR D could increase the risk of saltwater intrusion in the Town's existing wells.**

- The Town's Aquifer Mapping Study acknowledges that, with additional draw on the aquifer, there may be a time where the Town's existing Wells 1 and 4 will need to be relocated further away from the ocean in order to avoid saltwater intrusion into the aquifer. This could occur regardless of SCR D draw on the aquifer. However, should the SCR D increase the draw through a production well at the Mahan site, there is the likelihood that the schedule for well relocation would be advanced, forcing the Town into capital costs sooner than planned.

**7. It is understood that the Town will oppose the granting of a water license to the SCR D from FLNRORD based on the reasons above.**

- The Town's opposition to an SCR D production well at Mahan could delay any issuance of a license to the SCR D which we understand from the SCR D staff would lead to delayed progress on future SCR D water supply plans.
- Under the Groundwater Sustainability Act, the SCR D currently has as much right to draw future water from the aquifer as the Town does. However, the Town currently has an application applying for enough water to supply the Town's future population. FLNRORD accepted the Town's application based on our track record of responsible groundwater stewardship and long-range planning.
- Although the SCR D's support for the Town's license through the referral process would be appreciated, it is not essential. Likewise, the Town's support of the SCR D's potential future application is not essential.
- Should the Town's FLNRORD license be granted, there will be significantly less water potentially available for long-term SCR D use.

I trust this meets your needs; please do not hesitate to request any clarification or additional information.

Respectfully submitted,



Dave Newman  
*Director of Infrastructure Services*