From: John Ronsley

Sent: Sunday, May 1, 2022 7:57 AM

To: Brad Smith; Dan Rogers; Jane Wolverton; Tahirih Rockafella

Cc: ALBERT GRAY; Amanda; rt Moses; Bob

Grist; Finlay Jane; Finlay, B Brett; Haydn Pritchard; Jim Humphry; Joaquin; John Ronsley; Karen Grist; Kurt Bandelow; Lindsay Williams; Martin & Christine Andrews; Pat & Ian Mayhill; Peter Barrett; Richard; Risa Smith; Serena Coutts; Sheila Pritchard; Simon Patey; Suzanne Fournier; Thorsteinsson, Ann [PH];



Subject: Crystal Mountain Water Management Plan

Attachments: Apr 30_1_NEnd Neighbours Letter Groundwater.pdf

Dear Trustees and Mr. Smith,

Please find attached a letter from 51 north Galiano neighbours demanding a new and more thorough groundwater study at Crystal Mountain.

I would also ask that this letter be posted on the Islands Trust Web Site.

Thank-you for your consideration.

Sincerely,

J Ronsley

Galiano

To: Galiano Local Trust Committee

From: 51 Residents and Owners of the North End of Galiano and Neighbours of Crystal Mountain Society

Dear Trustees Rockafella, Wolverton and Rogers,

We are 51 residents and property owners of the North End of Galiano Island and neighbours of the proposed Crystal Mountain retreat centre development. We are writing to insist that you ensure a new, more thorough groundwater study is done for the Crystal Mountain Society (CMS) property before any water management plan is approved, or the development proposal is advanced. We are concerned that:

- the aquifer has already been classified as highly vulnerable, which confirms our experience of compromised groundwater quality and quantity at the North End;
- ii) we, at the North End, have not received equal treatment from our trustees compared to groundwater concerns shown for the South End of Galiano, where the LTC required 72 h stress tests, testing of a neighbouring well (GALI), & based water consumption estimates on known accepted standards (GIGARHS and GALI);
- iii) in this time of climate crisis, decisions concerning groundwater appear to being contemplated in the absence of relevant evidence, without the highest standards of experimentation and analysis, and do not include large safety buffers, as would be expected under the climate emergency declared by the Islands Trust.

We thank Dr. Tom Mommsen for performing a detailed analysis of the Hy-Geo Consultant's 2015 pump test and hydrogeological report. Among the concerns raised by Dr. Mommsen are:

- 1. The first 2015 pump test, based on just 64.5% of nominal well production (well driller's reported yield from 1994) failed after only two hours;
- 2. The second pump test exhausted 86.7% of drawdown within 12 hours and "would not be able to sustain this rate for a period of 100 days without recharge" (Hy-Geo, 2015);
- 3. Daily sustained yield of CMS central well was then not measured, only calculated by extrapolation without anyerror or error propagation analysis;
- 4. Water use estimates for the development are seriously underestimated, which continues in the revised CMSWater Management Plan (April 2022);
- 5. Risks of saltwater intrusion are real but unexamined.

These points give rise to grave concerns. As a result we expect that you will, in response, require a new study, including new pump tests that reflect GILUB amendment standards for tests of 24 to 72 hours.

We expect the new study to examine:

1. Summer drawdown, recovery and recharge on the central well to be used by the

- proposed retreat, while also monitoring the reference well on the property;
- 2. Summer drawdown, recovery and recharge on at least two neighbouring wells, to determine whether they are drawing from the same aquifer and to assess the general health of the aquifer;
- 3. Summer 24-72-hour pump tests as is the standard not a 12 hour pump test as was conducted (and failed);
- 4. Realistic water use numbers, based on those in our Official Community Plan, taking a precautionary approach. We note that the water use estimates in the 2021 revised HGC analysis are significantly lower than required in our OCP and than estimated from provincial or national data.
- 5. The potential for saltwater intrusion at the CMS central well and at the CMS reference well, by sampling water very close to the bottom of the wells, post-stress test, while also gathering data for saltwater intrusion in neighbouring wells at the North-West end of Galiano.

We note that Dr. Mommsen has demonstrated that groundwater drawn from the central well at CMS will not support more than 10 people - while you are considering allowing CMS to have more than 35 people at the siteeach day — and the applicants are proposing to exceed that number up to six times a year.

Given the over-arching concern for groundwater sustainability and the climate crisis by the LTC and the IslandsTrust, we believe you have no choice but to agree to our request.

Sincerely,

Clementine Lane

Anthony Peirce
Bonnie Norton
Jim Humphry
Amanda Harris

5. Louise Chan

5. Louise Chan

6. Patrick Winkler

Dobson Lane

7. Pat Mayhill

8. Ian Mayhill

Porlier Pass Rd

9. Phyllis Stafford

10. Ann Thorsteinsson

11. Marilyn Thorsteinsson

12. Chris Thorsteinsson

13. Noah Powers

14. Tia Powers

15. Connie Gray

16. Al Gray

Spotlight Cove

17. Lindsay Williams

18. Peter Barrett

19. Simon Patey (POA Bill

Patey)

20. Martin Andrews

21. Christine Andrews

22. Haydn Pritchard

23. Bob Grist

24. Karen Grist

25. John Ronsley

26. Barbara Fitzgerald

27. Risa Smith

28. Tycho Mommsen-Smith

29. Madison Cappe

30. Richard McMahon

31. David Ince

32. Kurt Bandelow

33. Sheila Pritchard

Juniper Lane/Devina Dr

34. Bert Castor

35. Joaquin Karakas

36. Maxine Leask

37. Suzanne Fournier

38. Art Moses

39. Guy Miller

40. Avril Harkness

41. Serena Coutts

<u>Therah</u>

42. Andrea Russell

43. Mary Guilfoyle

44. George Maddison

45. Colleen Savage

46. Gary Moore

47. Barbara Moore

Cook Rd.

48. Donna Marben

49. Hans Bongertman

50. Brett Finlay

51. Jane Finlay