



SUNSHINE COAST REGIONAL DISTRICT

Question and Answers #2

Request for Proposal No. 2437001

Engineering Services for Cove Cay Pump Station and Treatment System Upgrade

Date: August 14, 2024

Item No.1

Question: Does this pump station currently tie into your SCADA system?

Answer: No.

Item No.2

Question: What controls are you currently using for monitoring the pump station as you do not have a SCADA system?

Answer: Currently the pumps cycle based on a pressure gauge and pumps run on a set timer. A dialler provides an alarm. Pump hours are logged manually and recorded/documented.

Item No.3

Question: Are you using an altitude valve?

Answer: Not currently on this system.

Item No.4

Question: To access the pump station is this a shared driveway?

Answer: The Regional District has a right of way agreement in place that allows us to use the road.

Item No.5

Question: How far out is the intake from the pump station?

Answer: Approx. 26 M of 150 PVC – distance approx. measured from the check valve assembly in the box outside the pump station.

Item No.6

Question: Can we have some additional water chemistry results?

Answer: See additional water testing data in Appendix 11, additional water data is required and can be provided if required to the successful Proponent.

Item No.7

Question: Do you have any additional water chemistry information besides the TMI data?

Answer: See above

Item No.8

Question: Do you have turbidity data?

Answer: See above data. This was measured on Regional District portable meters.

Item No.9

Question: Limited data was posted with the RFP – can you disclose the DWS data?

Answer: See data above.

Item No.10

Question: How do you plan on paying for this? Where are you at on the onset of the process?

Answer: We have allocated a budget for the engineering and the design and separate budget for the physical work.

Item No.11

Question: Are you hoping for grant funding or is this coming out of taxation in this area?

Answer: No, we have funding set aside, there is no grant requirements.

Item No.12

Question: Can we have the construction budget?

Answer: The Regional District has a construction budget which is not being disclosed at this time; however we have a budget of \$250,000 for this portion of the work (engineering design all the way to contract administration and contract management)

Item No.13

Question: Who is the taxation authority?

Answer: This is part of the Regional Water Area.

Item No.14

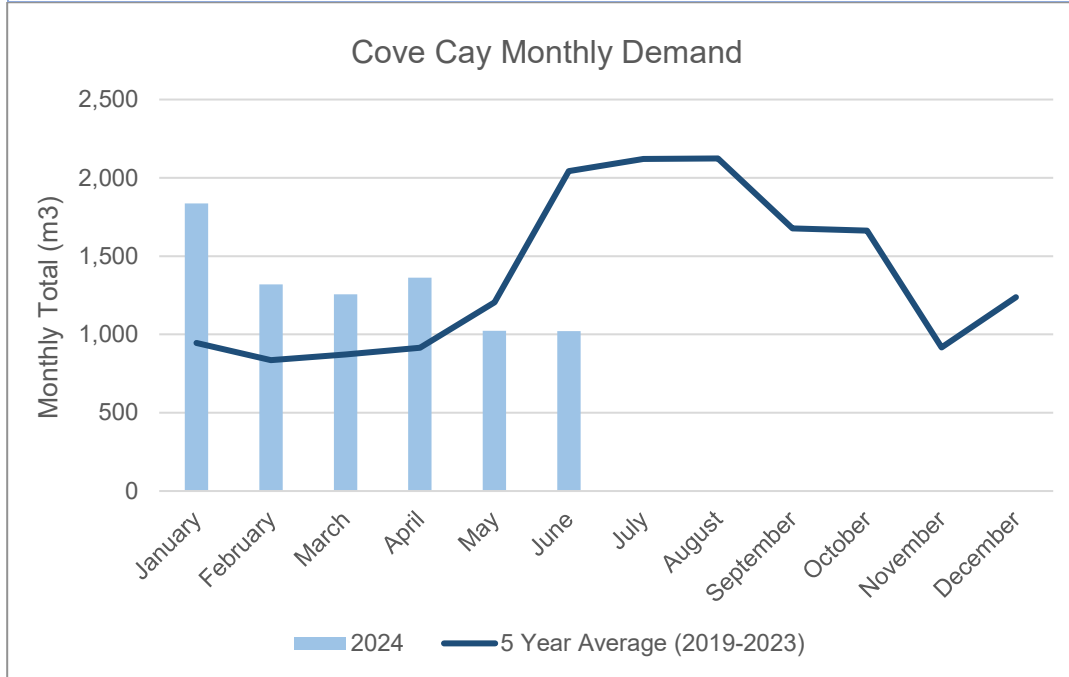
Question: What is the average daily flow of water, and do you have any records?

Answer:

Month	5 Year Average (2019-2023)		2024
January	945		1,836
February	836		1,320
March	872		1,257
April	916		1,363
May	1,206		1,024
June	2,043		1,021
July	2,121		
August	2,124		
September	1,677		
October	1,662		
November	916		
December	1,237		

Month	2017	2018	2019	2020	2021	2022	2023
January	1,553	1,382	557	755	753	1,900	759
February	1,128	1,402	1,216	496	1,119	613	735
March	1,542	1,214	1,214	664	884	835	764
April	1,075	1,264	1,060	958	1,031	786	744

May	1,243	1,732	1,330	1,135	1,185	806	1,574
June	1,655	2,372	3,972	1,250	1,444	1,073	2,477
July	3,043	2,396	1,574	1,422	3,026	1,537	3,047
August	2,821	2,612	1,686	1,475	2,465	2,227	2,766
September	966	906	1,068	1,282	1,409	2,604	2,023
October	1,937	894	2,856	1,423	1,271	1,355	1,407
November	796	725	659	773	1,393	788	968
December	900	688	1,095	825	1,779	1,287	1,199

**Item No.15**

Question: What are the number of residents serviced by this Facility?

Answer: Original system was designed for 88 lots prior to extension of the system. More data will be available, currently just about 100 residential services plus the BC ferries terminal.

Item No.16

Question: Will the online instrumentation for chlorine and turbidity be added in the near future?

Answer: Yes, it is anticipated that it will occur before project kickoff.

Item No.17

Question: What is the condition of the intake in the Regional Districts opinion?

Answer: The last inspection report for the intake has been provide with the RFP.

Item No.18

Question: For the water flow meters how often is it read? Daily?

Answer: It is a manual read that it is completed twice a week and its record by hand and then once a month we track it in excel.

Item No.19

Question: Will the SCADA upgrades be part of this project, or will it be part of a different contract?

Answer: Yes, for this pump station it will be part of this contract.

Item No.20

Question: Do you have any comms?

Answer: No, we just have an auto-dialer.

Item No.21

Question: Do you have timed pumps at the pumps station?

Answer: Yes, when the pressure hits a certain level, the pumps turn on and then they turn off after a set amount to time. Currently 180mins run time when triggered by pressure sensor.

Item No.22

Question: Do you know if you have ever done a radio path study?

Answer: At this time no information is available.

Item No.23

Question: Do the pumps start and start automatically?

Answer: Yes, once a certain pressure is met, they will start up and then run continuously on a timer before the automatically turn off.

Item No.24

Question: What do you want to see for treatment?

Answer: Ideally, we would like to see operator friendly and economical treatment solutions. With consideration to the land constraints and disposal concerns around solids.

Solution must meet VCH standards for treatment of surface water sources (4 3 2 1).
<http://www2.gov.bc.ca/assets/gov/environment/air-land-water/dwog-part-b.pdf>

"4. Treatment Objectives

These objectives provide treatment requirements that address the following microbiological parameters: enteric viruses, pathogenic bacteria, *Giardia* cysts and *Cryptosporidium* oocysts. The general objectives are as follows and described in more detail below:

4-log reduction or inactivation of viruses.

3-log reduction or inactivation of *Giardia* and *Cryptosporidium*.

Two treatment processes for surface water.

Less than or equal to (\leq) one nephelometric turbidity unit (NTU) of turbidity.

No detectable *E. Coli*, fecal coliform and total coliform. "

Item No.25

Question: Do you have any capacity considerations?

Answer: Fire flow upgrades are in considerations at this point and can be coordinated with SCRD engineering department.

Item No.26

Question: What would you like to do with any waste streams from the treatment process.?

Answer: Engineer to design the solution. (Note there is no community sewer system).

Item No.27

Question: How much space do you have down by the pump station?

Answer: Not a lot as this is under a right of way and we would need to keep it to our existing footprint, if we are unable to then we would have to attempt to modify that agreement. It is preferred that the treatment process and waste is handled at the reservoir site.

Item No.28

Question: Do you own the land that this pump house is on?

Answer: No, it is a right of way with MOTI any footprint changes we would need to apply for an occupancy permit.

Item No.29

Question: The electrical looks a bit dated, is it your intent that it is reviewed and updated with new electrical wires etc.?

Answer: Yes.

Item No.30

Question: Do you own the land by the reservoir tank?

Answer: No, it is crown land, and a Right of Way (RoW) on a private lot for the reservoir.

Item No.31

Question: Do you have any standby power at the treatment facility?

Answer: No, but we would like to have a generator hookup engineered into the pump house and treatment facilities. We have a generator that is on standby that we can bring, this site does not use a lot of energy and can last for days.

Item No.32

Question: Do both pumps currently work?

Answer: Yes, both pumps work. One is general duty; the other is on standby for fire flow needs. Fire flow pumps are regularly tested. Pumps do not cycle between duties.

Item No.33

Question: Do you want controls to monitor pressure?

Answer: Yes, system should be able to react and meet fire flow requirements in the future. Ideally a 2 or 3 pump setup with duty cycles to ensure redundancy.

Item No.34

Question: Any deadlines for the work?

Answer: No, ideally, we would like to have the preliminary design and class d estimate as soon as possible and preferred that it is no later than October / early November so we can incorporate any additional construction costs (that exceed our current budget) into our 2025 budget process which occurs in March.

Item No.35

Question: The Level of effort during construction phase can vary depending on Contractor's experience, site conditions, etc., To provide equivalent pricing from bidders, can the Regional District provide a set number of hours & construction duration to follow for the fee breakdown?

Answer: Proponents should consider the complexity of this project, and the quality of the engineering and design work they intend to produce either in house or with partners in their calculation of the required effort for Contract Administration. The Regional District expects to hire skilled competent contractors for the completion of any projects.

Item No.36

Question: Is there any power up at the reservoir location?

Answer: No, we would have to do a hydro drop or equivalent. The Regional District intends to do the hydro drop and it will be 3-phase if this is not adequate the Contractor will have to build additional hydro requirements into their design.

Item No.37

Question: Do you have any land or right of way up at the Reservoir site?

Answer: We have the rights to use the land, the Reservoir is on crown land, and we would need to apply for revisions to the permit if changes are required.

Item No.38

Question: Is the reservoir on a community sewer?

Answer: No, this area is on septic. No sewer system currently onsite.

Item No.39

Question: Do you have any requirements for operation requirements at the Reservoir site?

Answer: Ideally it would be brought up to industry standards. Upgrades to the reservoir itself are slated for a separate project. Any work being done to tie into existing infrastructure should be to current standards.

Item No.40

Question: Industry standards include washrooms which is not at this site currently, are you requiring washrooms?

Answer: The Regional District would like to have washrooms on site however with the infrequent visits to this site it is not a requirement as we have alternatives already in place.

Item No.41

Question: Who would be responsible or the crown or permit applications?

Answer: The Contractor is required to submit all permits applications as outlined in the RFP; it is understood that crown applications can take extensive time so the Proponent may put as an assumption that the Regional District would submit the crown application. However, the Contractor would be required to provide all of the necessary support and information to supplement that request.

Item No.42

Question: What are your anticipations of the reservoir if we touch it as it does not appear to meet the earthquake requirements?

Answer: Engineering review will have to be completed to discuss it and determine what improvements would be required to make it earthquake grading compliant.

Item No.43

Question: Do you have any geotechnical reports for the reservoir site?

Answer: No

Item No.44

Question: Any piping that comes up to the reservoir or out from this site and are there any requirements for us to include them as part of this project?

Answer:

Mains in place currently meet the anticipated needs for water and fire flow. Work would be limited to that necessary for the installation of the treatment system, and limited work in the immediate vicinity of the pump house.

Item No.45

Question: Is the reservoir site the preferred location of the waste/residuals handling and storage?

Answer: Yes.

Item No.46

Question: Can we have a copy of the crown land license / permit and shapefile and other relevant documents pertaining to both sites.

Answer: Right of Way (RoW) Information:

1. Reference Plan, provide in Appendix 14.
2. Land Title Act Form C Transfer document provided in Appendix 15.
3. RoW document in Appendix 16.

Item No.47

Question: Is a hydrologic assessment/analysis required as part of this project?

Answer: No

Item No.48

Question: Are there any known concerns regarding water level/availability within Ruby Lake?

Answer: No

Item No.49

Question: Does the Regional District have any other water quality testing results available? Only disinfection by-product test results (i.e., THMs and HAAs) have been provided and it would be beneficial to see metals, turbidity, total dissolved solids, hardness, etc.

Answer: Please see answers above.

Item No.50

Question: Are there any additional record drawings available beyond those included in the RFP? On for example, the pumphouse?

Answer: See Appendix 12.

Item No.51

Question: Is there a possibility of extending the proposal deadline to Sept 6th, as there are only two weeks remaining to finalize the scope of work following the site visit?

Answer: Please see Amendment No.1
