

SUNSHINE COAST REGIONAL DISTRICT

Question and Answers #1 Request for Proposal No. 2536601 Reservoir Replacement – Dogwood

Date: April 2, 2025

Item No.1 Model update

Question:

- a) When was the last model update completed?
- b) Is the model considered to be up to date?
- c) Is an update required to account for build-out under Bill 44?
- d) Is there anticipated to be work required to update the model prior to completing the proposed work?

Answer:

- a) The model is regularly updated, with the most recent model update on March 19th, 2025.
- b) Yes, the model is up to date, and it continues to be updated whenever new infrastructure is added.
- c) The Contractor will be provided with the most recently updated model, including Bill 44 scenario.
- d) Yes, we will require the Contractor to analyze options for the proposed reservoir to best service the water system, complete with model update for the proposed Dogwood reservoir and associated infrastructure.

Item No.2 Model report

Question: Was there a master plan report or technical memo issued with the model that could be provided to proponents for reference?

Answer: We will provide the Contractor with:

- a) An in-house preliminary technical memorandum on the Dogwood Reservoir relocation for reference.
- b) A copy of the Water Supply and Distribution System Capacity Analysis report.

Item No.3 Geotechnical

Question: The RFP does not currently mention geotechnical services. Would geotechnical services be required to assess the feasibility of reservoir siting options?

Answer: Yes, the Contractor will review the site and provide a signed and sealed geotechnical technical memorandum with the findings.

Item No.4 Cecil Hill Reservoir

Question: The RFP asks proponents to "Evaluate the impacts of a new reservoir on the Cecil Hill pump station, and other impacts to the distribution system." Please clarify this statement:

- a) Are there plans underway for a reservoir at the Cecil Hill Pump Station?
- b) Does "other impacts to the distribution system" refer to proposed developments?

c) It is unclear from the GIS what the Cecil Hill Pump Station currently does – does it directly feed upper properties on Cecil Hill Road with no reservoir for equalization?

Answer:

- a) No, Cecil Hill Pump Station currently serves approximately 20 lots, with no changes planned outside the scope of this project.
- b) No, this is entirely to determine the proposed reservoir's impact on the South Pender Harbour water distribution system, including how pressure zones may change and whether PRVs need to be adjusted, etc.
- c) Cecil Hill Pump Station provides sufficient water pressure for properties along Cecil Hill Road. There is no existing reservoir associated with this pump station. The investigations should determine if a reservoir at a higher elevation can negate the need for Cecil Hill pump station.

Item No.5

Question: Under section 5.1.2, the proposal calls for services of a Registered Professional Certified Arborist (RPCA) and a Registered Professional Biologist (RPBio) for the completion of the environmental and archeological services. Can the Regional District clarify the following:

- a) Is the RPCA referring to a "Registered Professional Consulting Archaeologist"?
- b) Is a certified arborist also required to complete the scope of work? If so, what are the tasks that would need to be completed?

Answer:

- a) Please see Amendment No.1 Item.1.
- b) Not applicable.

Item No.6

Question: Can the Regional District please provide the following documents, which can provide input and assist with the scope definition for the project:

- a) Record drawings for the existing Dogwood Reservoir, Gulfview Reservoir and local distribution system.
- b) Operational data and set points for the Reservoir (operational / alarm levels etc.).
- c) Any previous studies / reports relating to the Dogwood Reservoirs, Gulfview Reservoir and local distribution system.
- d) Geotechnical information related to the areas arounds the Dogwood and Gulfview Reservoir.

Answer:

- a) Unfortunately, due to the age of this reservoir, no record drawings can be provided.
- b) The operational data and set points will be provided to the Contractor.
- c) The Water Supply and Distribution System Capacity Analysis will be provided to the Contractor.
- d) No geotechnical information is available.

Item No.7

Question: Section 3.3 refers to a "half day optioneering workshop" to identify preliminary reservoir design options:

- e) Is this workshop intended to be in-person or virtual?
- f) Who should be in attendance?

g) What is the difference between this workshop and the 50% draft predesign review meeting mentioned under Section 3.3.2?

Answer:

- a) In person only.
- b) The workshop is between key members of the Contractor's project team and Regional District engineering and operation personnel.
- c) This workshop is intended to review design options, such as reservoir locations, various connection points, etc. Once the preferred design option is selected, the Contractor will submit the design package (report, design drawings, etc.) at the 50% stage to Regional District for review, followed by the 50% review meeting with Regional District.

Item No.8

Question: Is it the Regional District's intention to award the detailed design and construction services to the selected Proponent of this RFP, or will this work be issued separately through BC Bid?

Answer: This procurement is for the pre-design services. At the Regional District's discretion, the contract may be extended to include detailed design and construction services.

Item No.9

Question: Is the 90% draft predesign meeting also to be held in person?

Answer: In person or virtual is acceptable.

Item No.10

Question: In Section 3.3.2, to clarify, is it just the final predesign report that the Regional District wants sealed, or the preliminary design drawings as well?

Answer: The predesign report will need to be signed and sealed by a Professional Engineer.

Item No.11

Question: Is part of the Arborist scope of work a windthrow assessment? Or just a tree risk assessment?

Answer: We do not require Arborist, but we do require the RP Bio. to complete the Environmental Impact Assessment, which includes a tree risk assessment.

Item No.12

Question: In Section 3.3 of the RFP, it mentions determining archaeological and environmental requirements. Could you please clarify if this refers to a comprehensive Environmental Impact Assessment or more of an Environmental Overview Assessment?

Answer: Environmental Impact Assessment.

Item No.13

Question: Are Indigenous engagement activities expected to be included as part of the base scope of work, or will they be considered as an additional service?

Answer: The Contractor will be required to undertake any Indigenous engagements required for the Archaeological Overview Assessment. A Preliminary Field Reconnaissance is not required at this time but may be required as additional work at a later stage, separate pricing should be provided.

Item No.14

Question: Regarding geotechnical and survey services, please confirm if these shall be carried out as part of the predesign scope? If so, then

- a) Will the Regional District retain these services separately through a cash allowance where the consultant is expected to prepare an RFQ for the bidders?
- b) Is the Contractor expected to carry the services as part of the base scope?

Answer:

The Contractor will be responsible for providing and coordinating the geotechnical and survey services in the predesign scope.

Item No.15

Question: Could you provide a map or diagram showing the existing pressure zones and which zones are serviced by the current reservoirs? If the new reservoir is intended to serve the same zones as the existing floating reservoir, please confirm this.

Answer: Attached to this Q&A we have included the pressure zones in South Pender Harbour Water System which include Cecil Hill (118 m), South Pender Harbour (123 m), and Gulfview (152 m).

Item No.16

Question: Would the fire flow requirements be provided by the Regional District to the Contractor or is it anticipated that the fire flow be estimated by the Contractor?

Answer: The fire flow requirements will be provided by the Regional Distirct to the Contractor.

Item No.17

Question: In terms of the water modeling component, the RFP states that a previous study was completed. Will the Regional District provide the existing water model of the system for the Proponent's use?

Answer: Yes, a WaterCAD model will be provided to the successful proponents.

Item No.18

Question:

- a) How recently has the existing water model been updated/calibrated/validated?
- **b)** Does the scope include updating the model such as demands, new infrastructure, etc.
- **c)** Also, please confirm whether a model calibration is required. If yes, should the proponent include field test services such as hydrant flow testing for model validation and perhaps to determine the current available fire flow within the area?

Answer:

- 1. The existing water model was calibrated and validated in 2023 by through hydrant flow tests. The model is continuously updated by the Regional District as new infrastructure is added, and the most recent model will be provided to the Contractor
- 2. The scope includes updating the model with the proposed reservoir and any recommended system changes identified to best support the new reservoir's ability to provide water to the South Pender Harbour water system.
- 3. Yes, a model calibration and field hydrant flow testing maybe required (only in SPH area) if the Contractor deems it necessary to validate fire flow and ensure the new reservoir setting is safe for the SPH water system operation.

Item No.19

Question: What are the planning years that need to be considered for the water modeling under future conditions?

Answer: The planned horizon year is 2046

Item No.20

Question: Section 3.1 refers to a "recent hydraulic analysis" which identified multiple fire flow deficiencies. Can this analysis be made available to proponents?

Answer: The Water Supply and Distribution System Capacity Analysis will be made available to the successful proponent.

Item No.21

Question: Section 3.1 also references flows below 30 L/s in Madeira Park, and below 60 L/s in Francis Peninsula. Is the intent to achieve 30 L/s as a minimum (rural standard) and 60 L/s (MMCD minimum for residential) if possible?

Answer: The Regional District requires a minimum of 60 L/s for single-family residential lots.

Item No.22

Question: Is there a report or document that documents the preliminary sizing (1500 m3) and HGL (120 m) of the proposed reservoir? Can this be made available?

Answer: An in-house model and technical memorandum (without seal) can be made available to the Contractor. However, the Contractor will still need to confirm the appropriate new reservoir size, elevations, connection points, and other details based on the investigation and assessment.

Item No.23

Question: Section 3.3 mentions "future fire flow needs". Is there a development plan which might inform future plans for the area that might affect fire flows? The pipe network is currently quite small, and that accommodating MMCD fire flows for other land uses (commercial/industrial) would likely involve quite a bit of work.

Answer: The Regional District is currently working on an in-house Fire Flow Action Plan for the entire water system, with completion expected by the end of 2025. No other development plans are available at this time. If any public developments request water service, the Regional District will require water modelling to assess whether infrastructure upgrades are needed. However, there are few developments in the SPH area. Additionally, the Regional District is considering a long-term plan to connect SPH with North Pender Harbour (NPH) water system and the Regional Water System, which may benefit available fire flow in the SPH water system.

Item No.24

Question: Can we please have a one (1) week extend to the closing date and time?

Answer: Please see Amendment No.1 Item.2





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