

SUNSHINE COAST REGIONAL DISTRICT

Question and Answers #2

Request for Proposal No. 2437014

Environmental Flow Needs Assessment for Chapman Creek

Date: October 17, 2024

Item No.1

Question: The RFP states that; "Through the use of aerial/satellite imagery, stratify the length of stream from the ocean to fish barrier..." Will the Contractor be provided with aerial/satellite imagery? If yes, please provide details on the extent, quality and dates of collection.

Answer: Yes, the Contractor will be provided with aerial imagery. The details are as follows:

- **Extent**: Coverage includes the Chapman watershed, from the ocean up to the boundary of Tetrahedron Provincial Park.
- **Quality**: High-resolution imagery is available at 15 cm resolution for the years 2014, 2018, and 2021. Additionally, new imagery with an even higher resolution of 7.5 cm is expected to be available in November, covering the area from the Chapman Water Treatment Plant to the ocean.
- **Delivery Options**: Imagery can be delivered on an external drive in GeoTIFF or MrSID formats, or it can be downloaded in tiles from the Open Data Portal. LiDAR data and 1-meter Digital Elevation Models (DEM) can also be provided or accessed via the Province's LiDAR Open Data Portal.

Item No.2

Question: The RFP includes establishing additional hydrometric stations as part of Task 1 and indicates these stations are to inform the EFN development. Given the proposed schedule and timing of the study deliverables, field work completed under Task 1 would be limited to winter data collection. Can you provide clarification on the extent you expect the Proponent to rely on existing hydrometric data vs newly collected hydrometric data during the initial EFN development.

Answer: The data analysis for Task 1 will be based on data retrieved from existing hydrometric stations. Any additional hydrometric stations that need to be installed will be during Task 2, based on needs and requirements established by the Senior Decision Maker (SDM) from the Ministry of Water, Lands and Resource Sustainability.

Item No.3

Question: Given field work completed under Task 1 would be limited to winter data collection, can you also expand on the extent you expect the Proponent to use previously established stream section data versus expanding the datasets to capture critical mesohabitats below the intake which are also influenced by EFN discharge.

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Answer: It is expected that the Contractor will analyse existing data, and reports completed to date. Additionally, the Contractor will be expected to make three (3) to four (4) field visits, to familiarize with the habitat and identify data gaps. These data gaps will then need to be addressed in AMP and recommendations made for Task 2. To date, the Regional District has complied extensive studies for Chapman Creek and the Contractor will be expected to review and identify data gaps based on these reports.

Item No.4

Question: Assuming a heavy reliance on existing data for the initial EFN development, can you comment on the quality of existing data and the extent you expect existing data will need to be reworked?

Answer: The Regional District has four (4) flow monitoring stations on Chapman Creek. The main hydrometric station currently used to measure EFN is a former Water Survey of Canada Station which the Regional District took over in 2015. This station has continuous flow monitoring data and is calibrated seasonally for low flows and is categorized as a Grade B station. Additionally, there is a Reach 3 flow monitoring station establish in May 2024. This station is mainly seasonal but has also been calibrated to maintain reliable data (Grade B). There are two (2), other flow monitoring data loggers at Chapman and Edwards Lake dams. These data loggers are used to monitor low flows during the summer months when the Lake stations are online. (the lake stations are offline in the winter months). In terms of salmon escapement numbers, the Regional District has completed one study for pink salmon escapement in 2023. The Chapman Creek Hatchery also keeps historical escapement numbers. The Shishalh Nation also completed yearly escapement numbers and counts in collaboration with Fisheries and Oceans Canada. In addition, the Regional District also completed annual snow surveys and has a high elevation weather station on Tetrahedron peak that logs continuous data year-round.

The Contractor will be expected to analyze the data in accordance with <u>the Provincial Environmental</u> <u>Flow Needs Policy</u> and the EFN risk assessment framework.

Item No.5

Question: Can the definition of a Qualified Environmental Professional (QEP) be adjusted to meet requirements outlined in the Riparian Areas Protection Regulation (BC Reg 178/2019).

Answer: Please see Addendum No.1

Item No.6

Question: The RFP includes training Regional District staff to maintain data and calibrate any new station as part of Task 1. Is there flexibility in the schedule for when this training could happen to allow for considerations such as flow and weather conditions.

Answer. Yes, there is room for flexibility. The training component can be moved to Task 2 depending on timelines.