

The Town of Canmore, Cougar Creek Debris Flood Retention Structure Project
Supplemental Information Request 3

Water Act File No. 00384210
NRCB Application No. 1601

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Acronyms

The following acronyms are used in this Supplemental Information Request.
EIA Environmental Impact Assessment

1 Introduction

1. Project Update, Section 1, Page 1

The Project Update report describes that the Diversion Tunnel option will be included in the final project design for Flow Control. In the report Town of Canmore states *Both of these options were described in Section 4.4 of the EIA report and were included in the assessment.* Section 4.4.4.3 (Page 4-25) of the EIA report describes the Flow Control options. However, the maximum design discharge from the Diversion Tunnel outlet at full impoundment, details on inlet and outlet erosion and scour protection are not mentioned in the EIA report for Diversion Tunnel option.

- a. Provide the maximum design discharge from the Diversion Tunnel outlet at full impoundment.
- b. Provide a description of the inlet and outlet structures for this option.
- c. Explain if there is any Debris Rake designed for the Diversion Tunnel inlet. If not, explain how the debris will be captured.
- d. Explain if any modelling and analysis were done for the Diversion Tunnel option to understand the bank erosion and bed scour potential at and around the tunnel inlet and outlet.
- e. Explain if there is any bank erosion protection and bed scour protection designed for the tunnel inlet and outlet locations.

2. Project Update, Section 1.1, Page 1

Town of Canmore states *Water will exit the structure with a different orientation than with the bottom outlet structure but the orientation does not change the results of the hydrological or hydrogeological assessment.*

- a. Explain whether during normal weather conditions water and sediment will flow unimpeded through the Diversion Tunnel as mentioned in Article 4.1.2 (Page 4-2) of the EIA report as an original intend of the structure.
- b. Explain how it will be ensured that creek flow will flow unimpeded from natural channel to the Diversion Tunnel inlet.
- c. If the creek flow does not flow unimpeded, for how long it will be stored behind the dam during normal weather condition and how it will be diverted to the inlet.