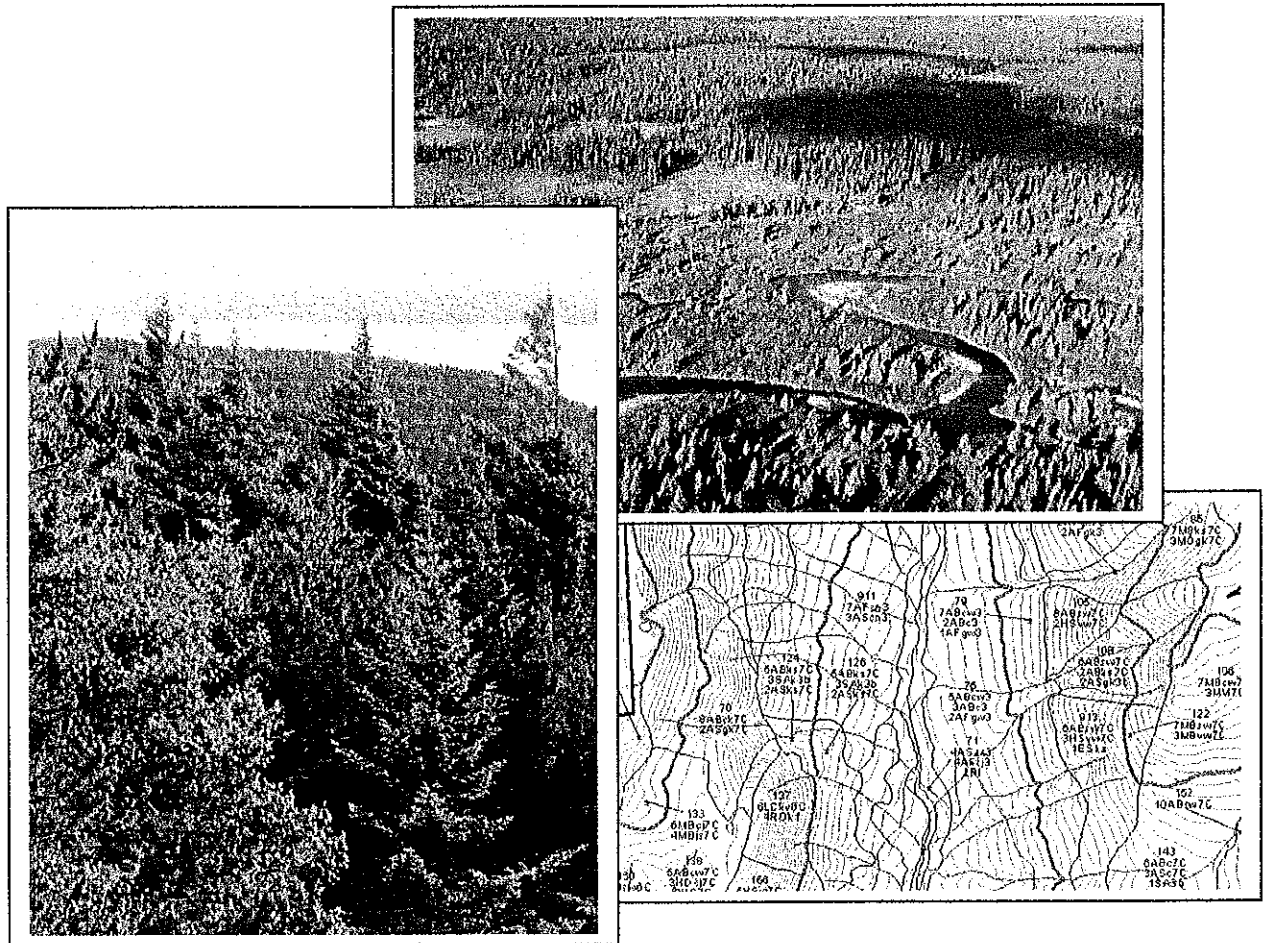


Analysis of Low Flows in Five Selected Watersheds within the Peace-Liard Area Phase 2



Submitted to:

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Introduction

At the request of Diversified Technical Services, an analysis of low flows in an additional five selected watersheds within the Peace-Liard area was undertaken as Phase 2 of this project. The watersheds selected were: Beatton River, Etthithun River, Kotcho River, Maxhamish Creek (including D'Easum Creek) and Petitot River. Low flows from November to March were analysed to determine the probability of meeting or exceeding a minimum flow rate of 0.056 m³/s. The basis for this analysis is the data and methodologies described in the British Columbia Streamflow Inventory¹ (BCSI) and Streamflow in the Omineca-Peace Region².

Information regarding the methods used in the analysis are provided in the Phase 1 report, submitted June, 2003.

The results of the analysis are provided in the following tables and figures, and in the accompanying maps.

Table 1. Gauged Watersheds Used in Analysis

Subject Watershed	Gauged Watershed
Beatton	Beatton
Etthithun, Kotcho, Maxhamish, Petitot	Fort Nelson

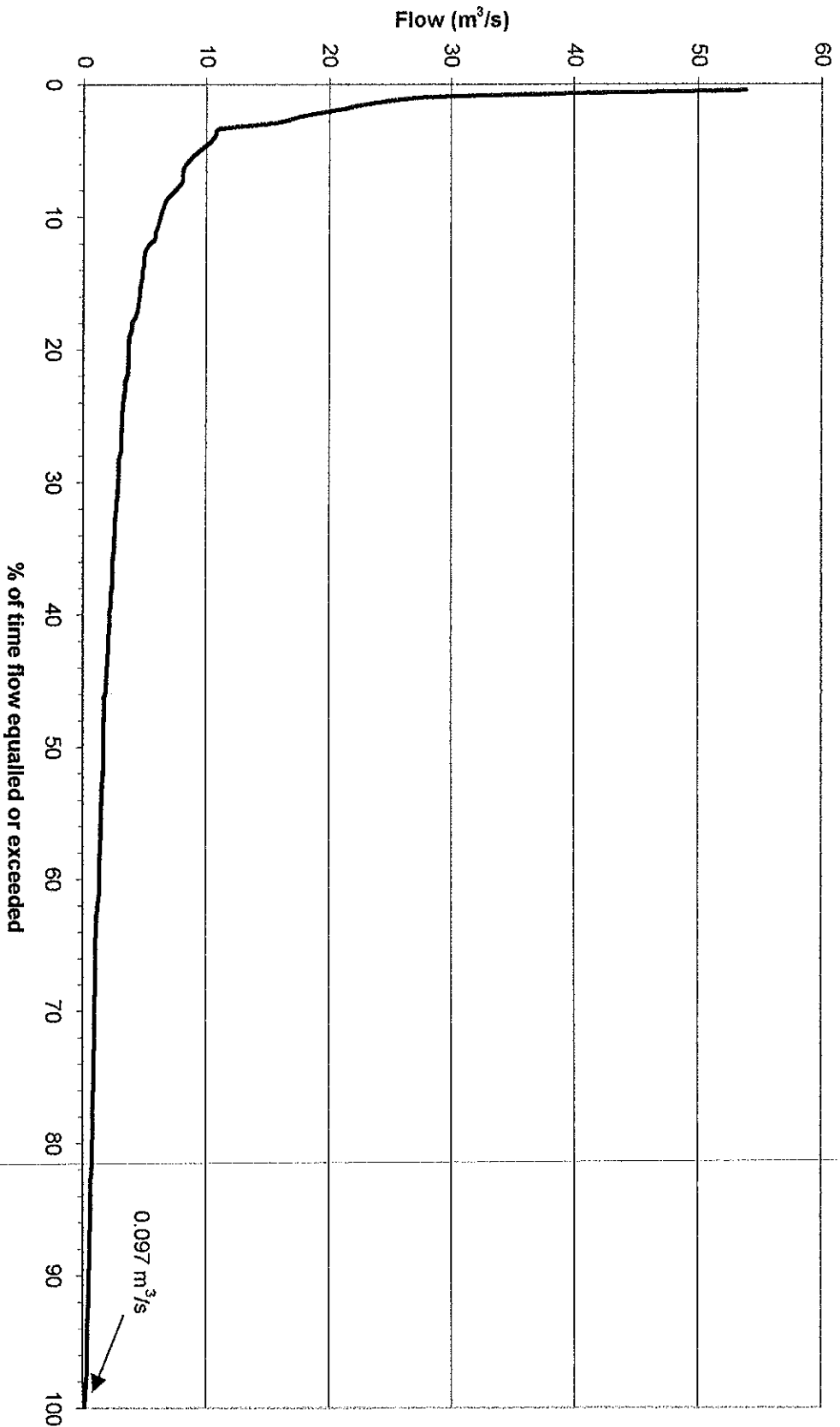
Table 2. 7-Day Average Low Flows (m³/s)

Watershed	Return Period		
	2-Year	5-Year	10-Year
Beatton River	0.536	0.235	0.134
Etthithun River	0.002	0.001	0.001
Kotcho River	0.140	0.100	0.080
Maxhamish Creek	0.002	0.001	0.001
Petitot River	7.260	5.190	4.150

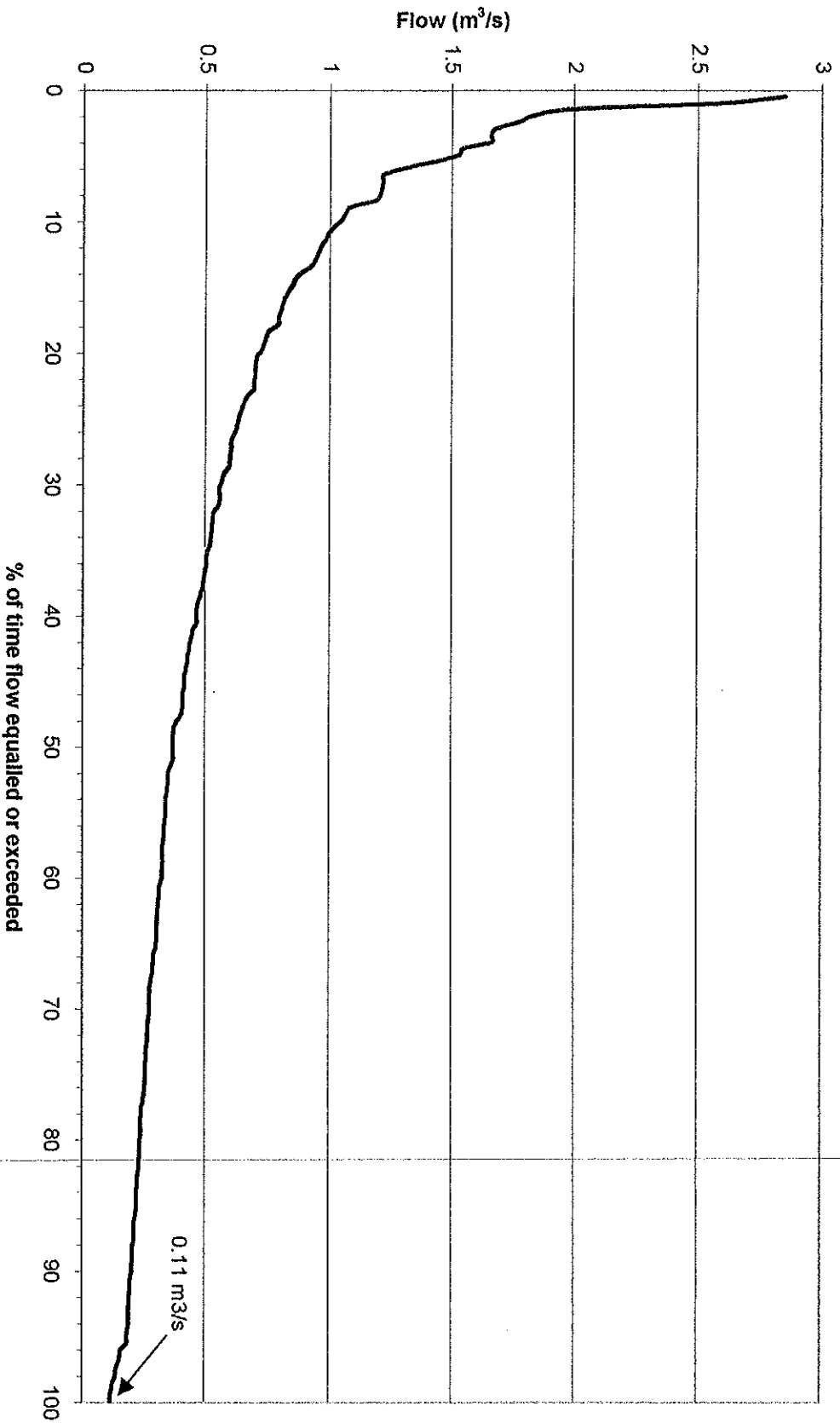
¹ Coulson, C.H. and W. Obedkoff. 1998. British Columbia Streamflow Inventory. Ministry of Environment, Lands and Parks, Water Inventory Section.

² Obedkoff, W. 2000. Streamflow in the Omineca-Peace Region. Ministry of Environment, Lands and Parks, Water Inventory Section.

**Fig. 1 Flow Duration Curve - Beaton River - November to March
(based on Beaton River monthly flow data)**



**Fig. 2 Flow Duration Curve - Etthithun River - November to March
(based on Fort Nelson River monthly flow data)**



**Fig. 3 Flow Duration Curve - Kotcho River - November to March
(based on Fort Nelson River monthly flow data)**

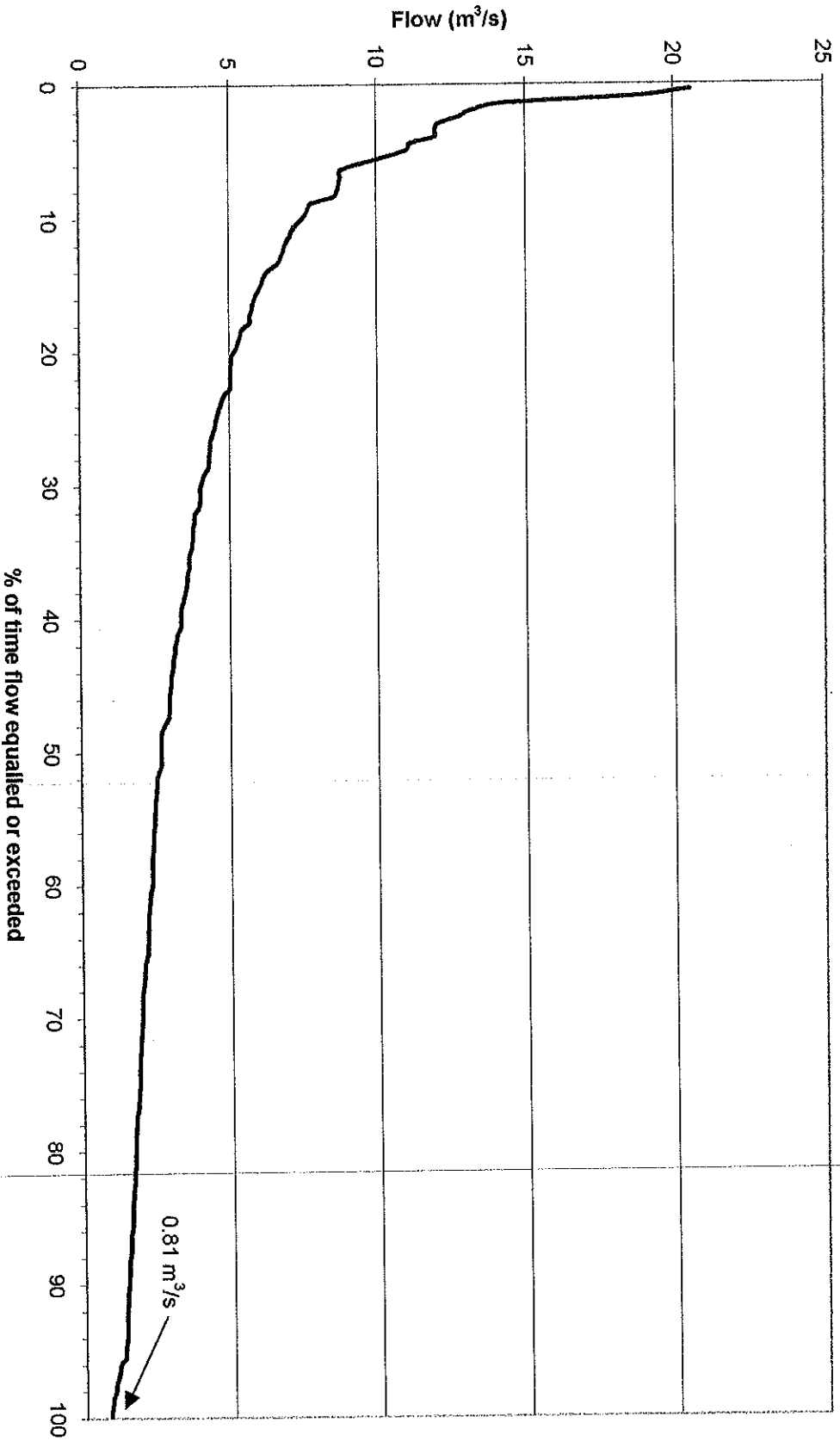
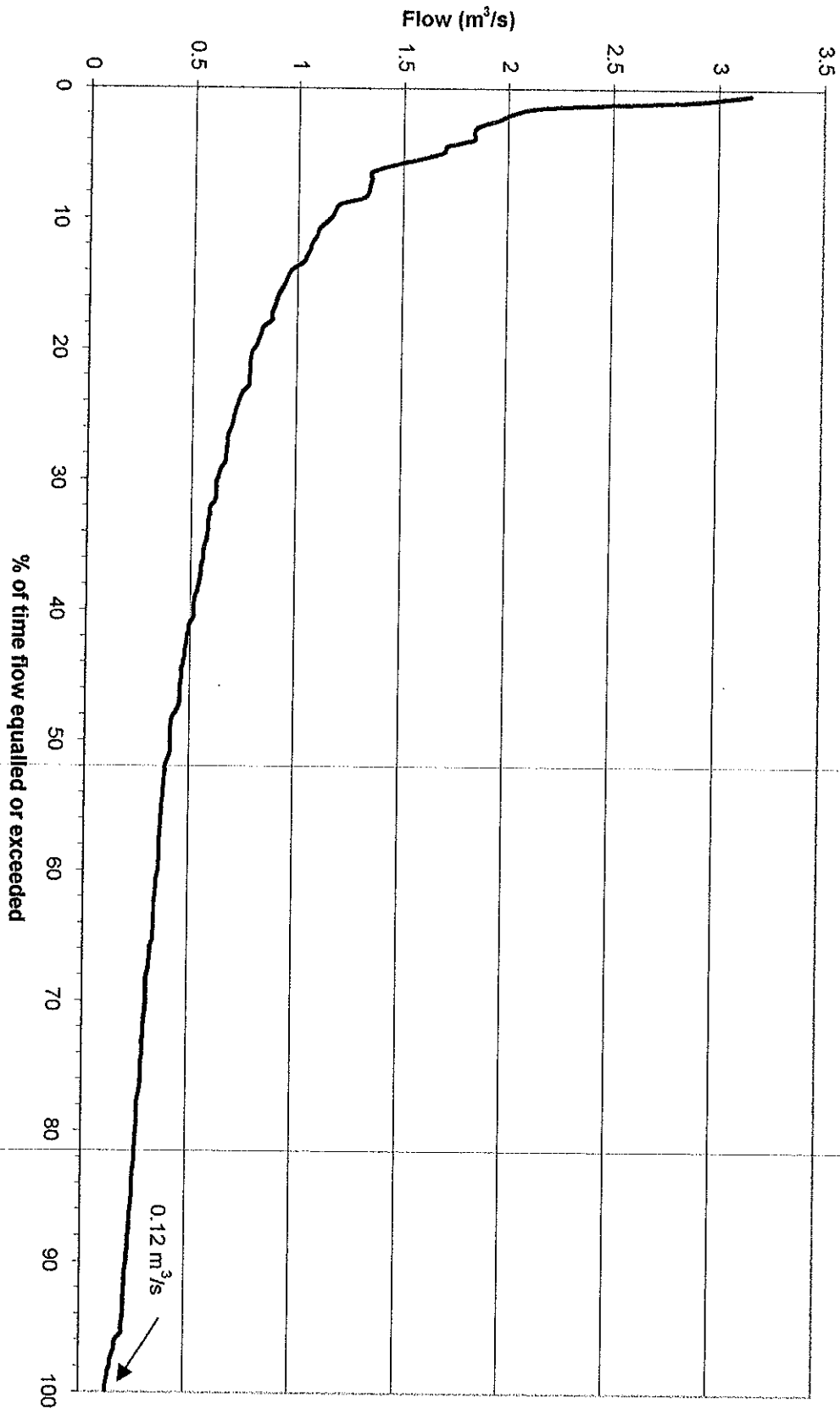


Fig. 4 Flow Duration Curve - Maxhamish Creek - November to March
(based on Fort Nelson River monthly flow data)



**Fig. 5 Flow Duration Curve - Petitot River - November to March
(based on Fort Nelson River monthly flow data)**

