



MEMORANDUM

DATE: June 2, 2016
TO: Pemberton Music Festival LP
CC: Claire Daniels, Squamish Lillooet Regional District.
FROM: Adrien Baudouin, R.P.Bio, Cascade Environmental Resource Group Ltd.
Dave Williamson, QEP, Cascade Environmental Resource Group Ltd.
RE: Pemberton Valley Music Festival ditch riparian setback assessment
FILE #: 584-01-02

Cascade Environmental Resource Group Ltd. (Cascade) was retained by Pemberton Music Festival LP to provide environmental consulting services in the assessment of the site located between the Lillooet River and the North Arm Channel (PID: 013-256-378) in Pemberton, BC. The area is proposed to be used for the Pemberton Valley Music Festival. Field work was carried out on May 3 and 11, 2016 by Cascade on the proposed Pemberton Music Festival site.

The subject property is agricultural land within the Squamish Lillooet Regional District (SLRD). The intended uses during the festival are parking, tenting and RV Camping. The riparian assessment area for this study was conducted along a section North Arm Channel.

In discussion with the SLRD, it was agreed that tent and RV camping did not constitute "development" and would not require a Development Permit. Under the Riparian Area Regulation (RAR) development means any of the following:

- Removal, alteration disruption or destruction of vegetation;
- Disturbance of soils;
- Construction or erection of buildings and structures;
- Creation of non-structural impervious or semi-impervious surfaces;
- Flood protection works;
- Construction of roads, trails, docks, wharves and bridges;
- Provision and maintenance of sewer and water services
- Development of drainage systems;
- Development of utility corridors;
- Subdivision as defined in section 872 of the *Local Government Act*.

Parking on existing pasture land will be temporary in nature and will not require any ground disturbance. Therefore, Parking does not constitute development and the requirement for RAR assessment would not be triggered. In order to provide the SLRD with a level of comfort that environmental values were being protected, Cascade was tasked with conducting the assessment and providing guideline development setbacks for



the North Arm Channel. The North Arm Channel is labelled and shown on the attached map.

The potential of direct connection to fish bearing waters was assessed on May 11, 2016. The Channel was not connected downstream during the assessment. Based on the vegetation observed and the ecosystem classification, it was determined that this section of the channel is seasonally inundated and potentially connected to downstream fish bearing waters but likely dry for most of the year. The following is a description of the field investigation activities and Table 1 provides the measurements and calculations for the Large Woody Debris (LWD) setbacks and the Streamside Protection and Enhancement Area (SPEA) setbacks. SPEA setbacks are measured horizontally from the high water mark of the ditch. The SPEA setbacks are often referred to as the riparian setbacks for development although they are presented here for guidance only, since Festival activities are not considered development. The attached map shows the SPEA for the subject property.

May 3, 2016:

Minnow traps were installed in the North Arm Channel. Measurements (top of bank, wetted width, water depth and channel depth) were taken of the North Arm Channel in order to determine the setback.

May 4 and 5, 2016:

Minnow traps were recovered from all sites. No fish were caught

May 11, 2016:

The connectivity of the North Arm Channel to upstream and downstream fish bearing water was assessed. It was determined that the channel is not connected upstream but is potentially connected to downstream fish bearing water during certain times of the year but was not connected during the assessment.

Table 1: Streamside Protection and Enhancement Area (SPEA) setback measurements

North Arm Channel	Average width (m)	23.4
	LWD (m)	15
	Shade (m)	30
	SPEA (m)	15
		30 (due south)

Recommended Measures

1. Delineate the SPEA with a temporary fence to define the extent of riparian zone and to discourage intrusions during the festival.



Should you have any questions or concerns please do not hesitate to contact the office.

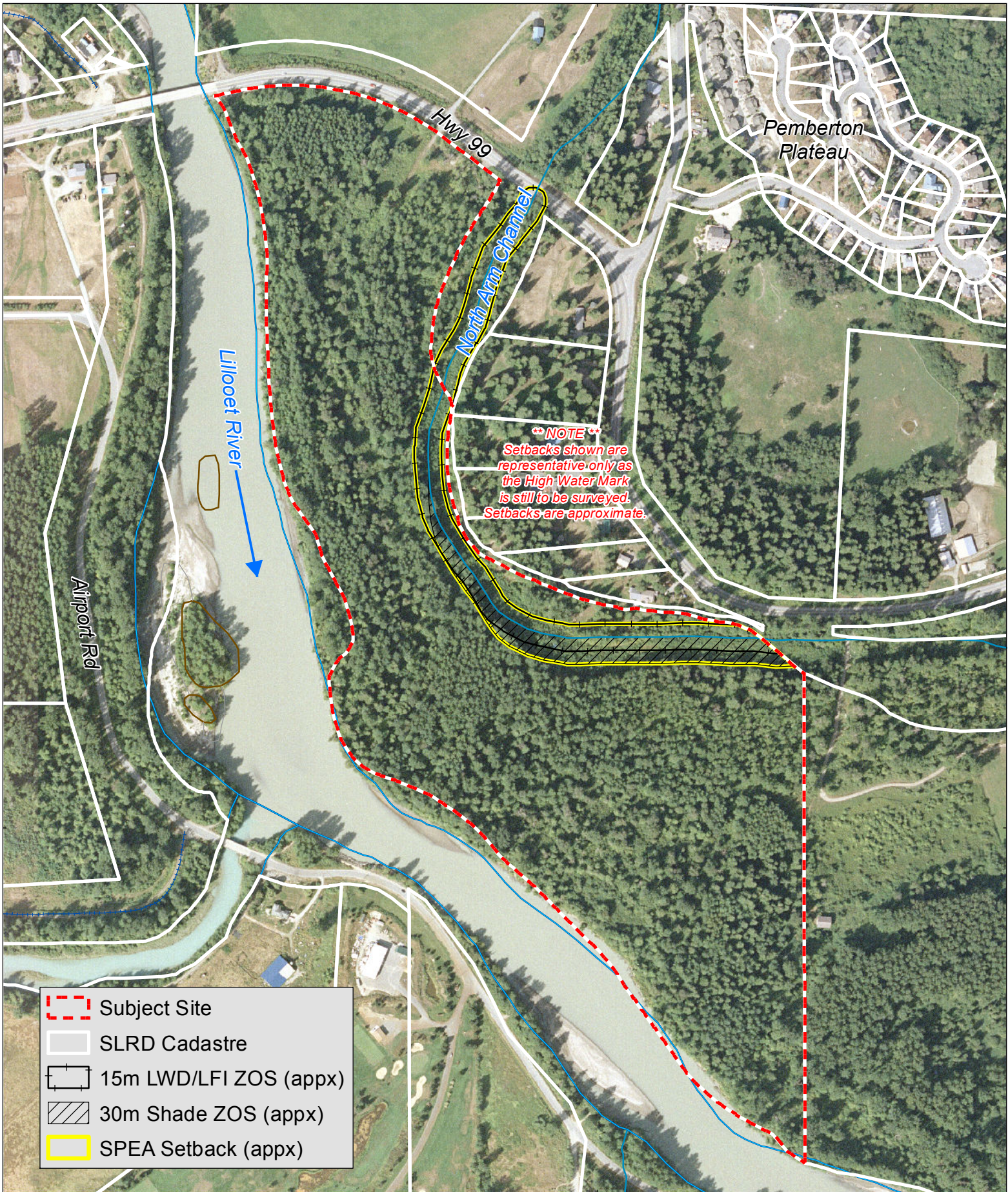
Sincerely,



Prepared by:

Adrien Baudouin, M.Sc., R.P.Bio.
Biologist
Cascade Environmental Resource Group Ltd.

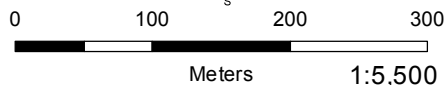
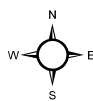
With support and review provided by:

Dave Williamson Q.E.P.
Principal
Cascade Environmental Resource
Group Ltd.



-  Subject Site
-  SLRD Cadastre
-  15m LWD/LFI ZOS (appx)
-  30m Shade ZOS (appx)
-  SPEA Setback (appx)

GIS Cartographer: Todd Hellinga
 Date: April 27, 2016
 CERF File#: 745-01-01
 Projection: UTM 10N NAD83
 Orthophoto/Base Data: SLRD/BC Gov



Map 2 - Site

Habitat Assessment
 North Arm Channel
 Pemberton, British Columbia