



Upper Lillooet Hydro Project

Weekly Environmental Monitoring Report #47

Reporting Period: November 9 – November 15, 2014

Upper Lillooet River Hydroelectric Facility (Water File No. 2002561, Water licence No. C130613), Boulder Creek Hydroelectric Facility (Water File No. 2003049, Water licence No. C129969) & Transmission Line (TX Line)

Distribution List		Prepared By
Name	Organization	
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Nathan Braun	BC Environmental Assessment Office	
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Harriet VanWart	Lil’wat Nation	

Owner Construction Permits and Approvals

Environmental Assessment Certificate No. E13-01 (Amendment 1, 2, 3, 4 & 5)
 Fisheries Act Subsection 35(2)(b) Authorization No. 09-HPAC-PA2-000303 (Amendment 1, 2)
 Letter of Advice for the Transmission Line No. 09-HPAC0-PA2-000303
 Leave To Commence Construction (ULRHEF) File No. 2002561
 Leave To Commence Construction (BDRHEF) File No. 2002453
 Leave To Commence Construction (TX Line) File No. 2002561/2002453
 Conditional Water Licence (ULRHEF C130613) File No. 2002561
 Conditional Water Licence (BDRHEF C129969) File No. 2002453
 Conditional Water Licence (BDRHEF C131153) File No. 2003601
 Licence of Occupation (ULRHEF #232384) File No. 2409871
 Licence of Occupation (BDRHEF #232386) File No. 2409998
 Licence of Occupation (TX Line #2423386) File No. 2410654
 Occupant Licence to Cut (ULRHEF Amendments 1, 2, 3, 4, 5) No. L49717
 Occupant Licence to Cut (BDRHEF – KM 38 laydown) No. L49698
 Occupant Licence to Cut (BDRHEF Amendments 1, 2, 3) No. L49816
 Occupant Licence to Cut (TX Line Amendment 1, 2, 3, 4, 5) No. L49697
 General Wildlife Measure Exemption Approval Letter (TX Line & BDRHEF) File No. 78700-35/06 UWR and 39585-20 WHA
 Heritage Conservation Act – Alteration Permit (ULRHEF) File No. 11200-03/2014-0033
 Road Use Permit No. 6123-13-02 (Lillooet River FSR); 5673-13-01 (Rutherford Creek FSR); 7977-13-01 (Lillooet South FSR); 8015-13-01 (Ryan River); 8188-13-01 (Pemberton Creek FSR); and 9717-13-01 (Miller Bench FSR)
 Junction Permit (ULRHEF & BDRHEF) File No. 11250-32/6123 (Amendment 1)
 Aeronautical Obstruction Approval (Tx Line - Lillooet River Crossing) File No. 2013-004
 Aeronautical Obstruction Approval (Tx Line - Ryan River) File No. 2013-005
 Aeronautical Obstruction Approval (Tx Line - North Miller) File No. 2013-006
 Aeronautical Obstruction Approval (Tx Line - South Miller) File No. 2013-007
 Aeronautical Obstruction Approval (Tx Line - Pemberton Creek) File No. 2013-008
 Aeronautical Obstruction Approval (Tx Line - Lillooet River near Pemberton) File No. 2013-009
 Aeronautical Obstruction Approval (Tx Line - Lillooet River near Meager Creek) File No. 2013-010
 Navigable Water Protection Act (ULRHEF) File No. 8200-2009-500434-001
 Navigable Water Protection Act (BDRHEF) File No. 8200-2012-501-032-001
 Navigable Water Protection Act (Tx Line – North Creek) File No. 8200-2013-500103-001
 Navigable Water Protection Act (Tx Line – Lillooet River) File No. 8200-2013-500101-001
 Navigable Water Protection Act (Tx Line – Lillooet River) File No. 8200-2013-500102-01
 Navigable Water Protection Act (Tx Line – Ryan River) File No. 8200-2013-500104-001
 Navigable Water Protection Act (Tx Line – South Miller River) File No. 8200-2013-500100-001
 Navigable Water Protection Act (Tx Line – Boulder Creek) File No. 8200-2013-500099-001
 Navigable Water Protection Act – Extension Approval (ULRHEF, BDRHEF, Tx Line)
 Navigable Water Protection Act (Bridge – Ryan River) File No. 8200-2013-500381
 Navigable Water Protection Act (Bridge – Upper Lillooet Side Channel; Extension Approval) File No. 8200-2013-500383
 Section 57 Authorization (ULRHEF) File No. 16660-20/REC202717
 SLRD Temporary Use Permit No. 34 – Boulder Creek HEF
 SLRD Temporary Use Permit No. 35 – Upper Lillooet River HEF
 Works Permit for Construction within FSR Right-of-Way No. 6123-14-01
 Section 52(1)(b) FRPA Authorization for Ryan River Wet Crossing File No. FOR-19400-01/2014

Contractor Construction Permits and Approvals

Magazine Licence File No. UL76018

*Section 8 Approval – Short Term Use of Water File (Lillooet River and Tributaries) No. A2006123 (Amendment 1)
Waste Discharge under the Code of Practice for the Concrete and Concrete Products Industry under the Environmental
Management Act (Authorization No. 107204) Tracking No. 326969*

*Wildlife Act Permits – Pacific Tailed Frog Salvage Permit # SU14-95304 & SU13-90538, Fish Salvage Permit # SU14-
95329*

*Section 52 of the Fisheries (General) Regulations – Fish Salvage Licence # XR 139 2014
BC Safety Authority – Temporary Construction Electrical Service Permit EL-140698-2014*

Municipal Wastewater Regulation - Authorization # 107032

Water Supply System Construction Permits – VCH-14-613 for Main Camp

Water Supply System Permit to Operate Issued July 30th, 2014 for Main Camp

Section 6(3) and Schedule 3 Wildfire Regulations Fire Exemption for Ryan River Bridge File No. 14350-07

SLRD Building Inspection Report dated August 13, 2014 - Construction Camp Building Permit No. 10830

Lillooet River FSR Temporary Road Closures Approval File No. 11250-32/6123 (Amendment 1, 2)

Lillooet South FSR Temporary Road Closures Approval File No. 11250-32/7977

ACRONYMS:

AMBNS	Active Migratory Bird Nesting Survey	INX	Innergex Renewable Energy Inc.
ASMP	Archaeological Sites Management Plan	ISW	Instream Works
ARD/ML	Acid Rock Drainage and Metal Leaching	ITM	Environmental Issue Tracking Matrix
BCEAO	British Columbia Environmental Assessment Office	JEM	JEM Energy Ltd. (Delegate Independent Engineer)
BCWQG	British Columbia Water Quality Guidelines	LTC	Leave to Construct
BDRHEF	Boulder Creek Hydroelectric Facility	MFLNRO	Ministry of Forests, Lands and Natural Resource Operations
BG	Background	MOE	Ministry of Environment
BKL	BKL Consultants Ltd.	NCD	Non Classified Drainage
CE	CRT-ebc Construction Inc.	OLTC	Occupational License to Cut
DFO	Fisheries and Oceans Canada	PAG	Potentially Acid Generating
DS	Downstream	RoW	Right of Way
Ecofish	Ecofish Research Ltd.	RVMA	Riparian Vegetation Management Area
Ecologic	Ecologic Consulting	SES	Sartori Environmental Services
EDI	Environmental Dynamics Inc.	TX Line	Transmission Line
EIR	Environmental Incident Report	ULRHEF	Upper Lillooet Hydroelectric Facility
ESC	Erosion and Sediment Control	UWR	Ungulate Winter Range
FAM	Field Advice Memorandum	VC	Valued Component
FSR	Forest Service Road	WEL	Westpark Electric Ltd.
GWR	Mountain Goat Winter Range	WEMR	Weekly Environmental Monitoring Report
Hedberg	Hedberg and Associates Ltd.	WHA	Wildlife Habitat Area
IE	Independent Engineer (True North Energy)	WQ	Water Quality
IEM	Independent Environmental Monitor		

1.0 Summary of Site Inspections for Reporting Period

The table presented below summarizes the IEM team site presence, weather and monitoring locations by component:

Date	IEM Team Personnel	Weather Conditions	Key Monitoring Locations & Activities
Sunday, November 9	BA, VD, AS, KM	Sun	<p>ULRHEF Intake Diversion Channel – South Side</p> <ul style="list-style-type: none"> • Formwork clean-up and installation of final Obermeyer Weir components • Cleaning of downstream end of diversion channel <p>ULRHEF Intake Open Cut – North Side</p> <ul style="list-style-type: none"> • Spoil pile winterization works <p>ULRHEF Downstream Tunnel Portal</p> <ul style="list-style-type: none"> • Winterization works <p>ULRHEF Penstock</p> <ul style="list-style-type: none"> • Fill slope stabilization works at 2+750 • Bulk excavation at 4+000 <p>ULRHEF Powerhouse</p> <ul style="list-style-type: none"> • Continued rebar installation and formwork <p>BDRHEF Intake, Crane Pad and Access Road</p> <ul style="list-style-type: none"> • Drilling, blasting and stabilization for intake diversion tunnel <p>BDRHEF Downstream Tunnel Portal</p> <ul style="list-style-type: none"> • Drilling, blasting and tunnel stabilization • Dewatering settling ponds with active water treatment system <p>BDRHEF Powerhouse</p> <ul style="list-style-type: none"> • Continued rebar installation and formwork • Backfill works <p>TX-Line</p> <ul style="list-style-type: none"> • Segment 5 <ul style="list-style-type: none"> ➢ Stringing structures 105–123 • Segment 9 <ul style="list-style-type: none"> ➢ Road upgrades on Zorro Rd.
Monday, November 10	TH, KM, BA, DA	Sun	<p>ULRHEF Intake Diversion Channel – South Side</p> <ul style="list-style-type: none"> • Formwork clean-up and installation of final Obermeyer Weir components • Cleaning of downstream end of diversion channel <p>ULRHEF Intake Open Cut – North Side</p> <ul style="list-style-type: none"> • Spoil pile winterization works <p>ULRHEF Downstream Tunnel Portal</p> <ul style="list-style-type: none"> • Winterization works <p>ULRHEF Penstock</p> <ul style="list-style-type: none"> • Fill slope stabilization works at 2+750 • Blasting at 4+000 • Bulk excavation at 4+000 <p>ULRHEF Powerhouse</p> <ul style="list-style-type: none"> • Continued rebar installation and formwork <p>BDRHEF Intake, Crane Pad and Access Road</p> <ul style="list-style-type: none"> • Drilling, blasting and stabilization for intake diversion tunnel <p>BDRHEF Downstream Tunnel Portal</p> <ul style="list-style-type: none"> • Drilling, blasting and tunnel stabilization • Dewatering settling ponds with active water treatment system <p>BDRHEF Powerhouse</p> <ul style="list-style-type: none"> • Continued rebar installation and formwork <p>TX-Line</p>

Date	IEM Team Personnel	Weather Conditions	Key Monitoring Locations & Activities
			<ul style="list-style-type: none"> • Segment 5 <ul style="list-style-type: none"> ➢ Framing structures 95–100 ➢ Stringing structures 105–123 • Segment 9 <ul style="list-style-type: none"> ➢ Road upgrades on Zorro Rd.
Tuesday, November 11	KM, BA, DA	Sun	<p>ULRHEF Intake Diversion Channel – South Side</p> <ul style="list-style-type: none"> • Formwork clean-up and installation of final Obermeyer Weir components • Cleaning of downstream end of diversion channel <p>ULRHEF Intake Open Cut – North Side</p> <ul style="list-style-type: none"> • Spoil pile winterization works <p>ULRHEF Downstream Tunnel Portal</p> <ul style="list-style-type: none"> • Winterization works <p>ULRHEF Penstock</p> <ul style="list-style-type: none"> • Fill slope stabilization works at 2+750 • Bulk excavation at 4+000 <p>ULRHEF Powerhouse</p> <ul style="list-style-type: none"> • Continued rebar installation and formwork <p>BDRHEF Intake, Crane Pad and Access Road</p> <ul style="list-style-type: none"> • Drilling, blasting and stabilization for intake diversion tunnel <p>BDRHEF Downstream Tunnel Portal</p> <ul style="list-style-type: none"> • Drilling, blasting and tunnel stabilization • Dewatering settling ponds with active water treatment system <p>BDRHEF Powerhouse</p> <ul style="list-style-type: none"> • Continued rebar installation and formwork <p>TX-Line</p> <ul style="list-style-type: none"> • Segment 5 <ul style="list-style-type: none"> ➢ Framing structures 96 and 97 • Tensioning and clipping structures 105–123 • Segment 8 <ul style="list-style-type: none"> ➢ Road upgrades on road 197.2 • Segment 9 <ul style="list-style-type: none"> ➢ Clearing near structure 206 ➢ Road upgrades on Zorro Rd. • Segment 14 <ul style="list-style-type: none"> ➢ Winterization works on road 371.1
Wednesday, November 12	KM, BA, TJ, DA	Sun	<p>ULRHEF Intake Diversion Channel – South Side</p> <ul style="list-style-type: none"> • Formwork clean-up and installation of final Obermeyer Weir components • Cleaning of downstream end of diversion channel <p>ULRHEF Intake Open Cut – North Side</p> <ul style="list-style-type: none"> • Spoil pile winterization works <p>ULRHEF Downstream Tunnel Portal</p> <ul style="list-style-type: none"> • No activity <p>ULRHEF Penstock</p> <ul style="list-style-type: none"> • Fill slope stabilization works at 2+750 • Bulk excavation at 4+000 <p>ULRHEF Powerhouse</p> <ul style="list-style-type: none"> • Concrete works <p>BDRHEF Intake, Crane Pad and Access Road</p> <ul style="list-style-type: none"> • Drilling, blasting and stabilization for intake diversion tunnel <p>BDRHEF Downstream Tunnel Portal</p> <ul style="list-style-type: none"> • Drilling, blasting and tunnel stabilization

Date	IEM Team Personnel	Weather Conditions	Key Monitoring Locations & Activities
			<ul style="list-style-type: none"> • Dewatering settling ponds with active water treatment system BDRHEF Powerhouse • Continued rebar installation and formwork TX-Line • Segment 5 <ul style="list-style-type: none"> ➢ Clipping structures 105–123 • Segment 8 <ul style="list-style-type: none"> ➢ Road upgrades on road 197.2 • Segment 9 <ul style="list-style-type: none"> ➢ Clearing near structure 208 ➢ Road upgrades and culvert installations on Zorro Rd. • Segment 14 <ul style="list-style-type: none"> ➢ Clearing at the end of road 371.1
Thursday, November 13	KM, VD, TH, BA, AA	Sun	<ul style="list-style-type: none"> ULRHEF Intake Diversion Channel – South Side • Formwork clean-up and installation of final Obermeyer Weir components • Cleaning of downstream end of diversion channel ULRHEF Intake Open Cut – North Side • Spoil pile winterization works ULRHEF Downstream Tunnel Portal • No activity ULRHEF Penstock • Fill slope stabilization works at 2+750 • Bulk excavation at 4+000 ULRHEF Powerhouse • Continued rebar installation and formwork BDRHEF Intake, Crane Pad and Access Road • Drilling, blasting and stabilization for intake diversion tunnel BDRHEF Downstream Tunnel Portal • Drilling, blasting and tunnel stabilization • Dewatering settling ponds with active water treatment system BDRHEF Powerhouse • Continued rebar installation and formwork TX-Line • Segment 5 <ul style="list-style-type: none"> ➢ Framing structure 96 ➢ Clipping structures 105–123 • Segment 7 <ul style="list-style-type: none"> ➢ Ground works near structures 177–179 • Segment 8 <ul style="list-style-type: none"> ➢ Hand falling near structure 186 ➢ Road upgrades on road 197.2 • Segment 9 <ul style="list-style-type: none"> ➢ Slashing near structure 208 ➢ Culvert installation on Zorro Rd. • Segment 14 <ul style="list-style-type: none"> ➢ Clearing at the end of road 371.1
Friday, November 14	KM, TH, AA, VD	Sun	<ul style="list-style-type: none"> ULRHEF Intake Diversion Channel – South Side • Formwork clean-up and installation of final Obermeyer Weir components • Cleaning of downstream end of diversion channel ULRHEF Intake Open Cut – North Side • Spoil pile winterization works

Date	IEM Team Personnel	Weather Conditions	Key Monitoring Locations & Activities
			<p>ULRHEF Downstream Tunnel Portal</p> <ul style="list-style-type: none"> • No activity <p>ULRHEF Penstock</p> <ul style="list-style-type: none"> • Fill slope stabilization works at 2+750 • Bulk excavation at 4+000 <p>ULRHEF Powerhouse</p> <ul style="list-style-type: none"> • Continued rebar installation and formwork <p>BDRHEF Intake, Crane Pad and Access Road</p> <ul style="list-style-type: none"> • Drilling, blasting and stabilization for intake diversion tunnel <p>BDRHEF Downstream Tunnel Portal</p> <ul style="list-style-type: none"> • Drilling, blasting and tunnel stabilization • Dewatering settling ponds with active water treatment system <p>BDRHEF Powerhouse</p> <ul style="list-style-type: none"> • Continued rebar installation and formwork <p>TX-Line</p> <ul style="list-style-type: none"> • Segment 7 <ul style="list-style-type: none"> ➢ Ground works near structures 173-174 • Segment 8 <ul style="list-style-type: none"> ➢ Road upgrades on road 197.2 • Segment 9 <ul style="list-style-type: none"> ➢ Slashing near structure 208 ➢ Culvert installation on Zorro Rd.
<p style="text-align: center;">Sunday, November 9</p>	<p style="text-align: center;">BA, VD, AS, KM</p>	<p style="text-align: center;">Sun</p>	<p>ULRHEF Intake Diversion Channel – South Side</p> <ul style="list-style-type: none"> • Formwork clean-up and installation of final Obermeyer Weir components • Upstream diversion channel excavation • Cleaning of downstream end of diversion channel <p>ULRHEF Intake Open Cut – North Side</p> <ul style="list-style-type: none"> • Spoil pile winterization works <p>ULRHEF Downstream Tunnel Portal</p> <ul style="list-style-type: none"> • No activity <p>ULRHEF Penstock</p> <ul style="list-style-type: none"> • Fill slope stabilization works at 2+750 • Bulk excavation at 4+000 <p>ULRHEF Powerhouse</p> <ul style="list-style-type: none"> • Continued rebar installation and formwork <p>BDRHEF Intake, Crane Pad and Access Road</p> <ul style="list-style-type: none"> • Drilling, blasting and stabilization for intake diversion tunnel <p>BDRHEF Downstream Tunnel Portal</p> <ul style="list-style-type: none"> • Drilling, blasting and tunnel stabilization • Dewatering settling ponds with active water treatment system <p>BDRHEF Powerhouse</p> <ul style="list-style-type: none"> • Continued rebar installation and formwork <p>TX-Line</p> <ul style="list-style-type: none"> • Segment 7 <ul style="list-style-type: none"> ➢ Ground works near structures 173-174 • Segment 8 <ul style="list-style-type: none"> ➢ Road upgrades on road 197.2 • Segment 9 <ul style="list-style-type: none"> ➢ Slashing near structure 208

IEM Team Personnel: TH – Tom Hicks; KM – Kathy Mai; SS – Stephen Sims; BA – Blake Aleksich; VD – Vanessa Dan; AA – Anthony Andrews; AS—Anne Sutherland; DA – Danita Abraham; TJ – Tammie Jenkins

2.0 Administrative Summary

Key communications and meetings the IEM team had with the licensees, contractors and/or environmental authorities:

Date	Communication Type	Participants	Issues Discussed	ITM ID No.
November 10, 2014	<i>Email notification</i>	INX, CE, SES, JEM, MFLNRO, DFO, EAO, Lil'wat Nation	INX notified all interested parties that CE would be delaying the start of instream works associated with the ULRHEF intake cofferdam construction and Lillooet River diversion to November 20, 2014.	-
November 11, 2014	<i>Site inspection and follow-up emails</i>	SES, JEM, INX, CE	The IEM and CE inspected all ESC installations completed since CE committed to remediating all ESC deficiencies onsite. Significant progress was noted and communicated in the follow-up email. The remaining issues to address include the ULRHEF intake spoil piles and the penstock fill remediation works from 2+800 – 3+090. The IE requested that winterization measures completed by CE be reviewed and improved in the short term and requires that a permanent design be developed if these spoil piles are permanent.	-
November 12, 2014	<i>Email</i>	INX, MFLNRO, DFO, SES, JEM	On behalf of CE, INX submitted a request to extend the timing window associated with construction activities at the BDRHEF intake, from November 15 to November 30, 2014 to support the construction of the temporary diversion channel tunnel.	-
November 13, 2014	<i>Email</i>	MFLNRO, INX, CE, SES, JEM	MFLNRO granted approval to extend the timing window associated with construction activities, including blasting, in Mountain Goat UWR u-2-002 UL12 from November 15 to up to November 30 according to the restrictions outlined in Section 3.0.	-
November 14, 2014	<i>Email</i>	INX, SES, CE	Three CE pick-up trucks were observed traveling through the Mountain Goat migration corridor during spot checks of the sunset shutdown period. CE implemented additional measures to ensure this was prevented from happening in the future. One CE employee will be stationed on either side of the migration corridor during both the sunrise and sunset shutdown period for the remainder of November to prevent travel through the corridor during the daily shutdowns. Any future unauthorized travel during the shutdown period will be reported as an environmental incident.	-

3.0 Current Work Restrictions and Timing Windows

The table presented below outlines work restrictions applicable during the reporting period for each active Project component location:

Component	Location	Wildlife/Archeology Concern	Construction/Timing Restrictions & Mitigations
Tx-Line	Segments 1 –11, & 14	Within 150m of wetlands or 100m of Coastal Tailed-Frog Streams	IEM presence is required when clearing within 150m of wetlands or 100m of Coastal Tailed-Frog Streams, to ensure clearing area is minimized.
		Riparian Vegetation Management Areas (RVMA)	IEM monitoring is required during clearing within RVMAs.
		Old Growth Management Areas (OGMAs)	IEM monitoring is required when clearing within legally designated OGMAs, to ensure clearing area is minimized.
		Ungulate Winter Range (UWR)	IEM monitoring is required when clearing within identified deer and moose UWR, to ensure clearing area is minimized.
		Suitable Class 1 & 2 Grizzly Bear forage habitat	IEM monitoring is required when clearing within identified Class 1 & 2 Grizzly Bear forage habitat, to ensure clearing area is minimized. Blasting mats (or other noise reduction methods) are to be employed within 500m of Class 1 and Class 2 grizzly bear forage habitat during critical seasonal foraging periods (fall, September – October).
		Salmon Migration Period and Bald Eagle Roosts	Construction of the transmission line within 500m of Alena Creek, 29.2 km Tributary, South Creek, Rohb Creek must be conducted outside of October 15 – December 31 and Sampson Creek and Railroad Creek must be conducted outside of August 15 to December 31.
	Wildlife Habitat Area (WHA) 2-399	Construction of the transmission line within the Grizzly Bear WHA 2-399 must be construction outside of April 1 to June 1 and October 15 to December 31 to minimize disturbance to Grizzly Bears expected to use the WHA during spring and fall.	
	Segment 5 & 7	Ungulate Winter Range (UWR)	According to EAC #E13-01 Amendment 5 and the General Wildlife Exemption Measures Approval dated October 28, 2014, the following mitigation measures must be enacted to extend Tx-line construction activities beyond November 1 and up to December 15 within Moose Winter Range Forest Management Zone u-5-002 J55/54-204-RE in Segment 5 & up to December 31 within MWRFMZ u-5-002 J55/54-204-RO in Segment 7: <ul style="list-style-type: none"> • The IEM must oversee all construction activities in Segment 5 & 7. • Helicopter flight paths must be determined by a QP in order to avoid, as much as possible, wildlife and wildlife habitat within the vicinity of proposed works. • Snow fall accumulation within the Moose Winter Range Forest Management Zone (u-5-002 J55/54-204-RO; Segment 7) must be monitored daily along the Lillooet South FSR. If snow depth exceeds 30

Component	Location	Wildlife/Archeology Concern	Construction/Timing Restrictions & Mitigations
			cm and remains at that depth for 8 hours, construction must be suspended immediately and may not resume in 2014.
ULRHEF powerhouse, and Intake diversion channel	Within 50m of identified archeologically significant area	Archaeologically significant site EdRu-3	The ASMP recommends that an archaeological technician from the Lil'wat Nation be present to monitor initial ground-disturbance activities within 50m of the EdRu-3 site boundaries.
	Within 30m of the Upper Lillooet River	Riparian area and fish bearing streams	IEM presence is required when working within 30m of the Upper Lillooet River. Instream acoustic pressure monitoring required when blasting within 30m of the Upper Lillooet River.
Lillooet River FSR; ULRHEF downstream tunnel portal and penstock alignment	Access roads above the lower limit of the 200m buffer Truckwash Creek Migration Corridor to the ULRHEF intake; including FSR realignment at Truckwash Creek	Mountain Goat UWR and Migration Corridor	<p>IEM was onsite to oversee daily construction equipment shutdowns (November 1 - 30) beginning one hour before and two hours after sunrise as well as two hours before and one hour after sunset.</p> <p>Noise monitoring equipment was installed to monitor background noise levels and exceedances of the 75dbA noise level maximum resulting from blasting activities. Initial data will be analyzed during the following reporting period and, if required, adaptive drilling/blasting noise mitigation strategies will be implemented.</p> <p>Daily snow depth monitoring will commence within the Truckwash Creek Migration Corridor once snow fall accumulations persist according to the Project's Mountain Goat Management Plan. A two week shutdown of work activities will occur once a significant snowfall is recorded (average snow depth of 10cm in forested habitat or 30cm in open terrain).</p> <p>Mountain Goat monitoring activities commenced on October 31, at three established observation stations (MG-OBS01, MG-OBS02 & MG-OBS03). Stations are established to monitor three Mountain Goat critical winter habitats (UL 11, UL 19, and Migration Corridor), and each station was visited for a minimum of two hours daily on a rotating schedule.</p> <p>If a goat is observed within 500m line of sight of construction operations, construction must cease for at least 48 hours. The IEM must record and submit all goat observations to FLNR within 48 hours.</p>
BDRHEF intake	Portion of intake access road and crane pad within UWR	Mountain Goat UWR	<p>IEM monitoring is required when clearing within UWR to ensure that clearing areas are minimized.</p> <p>During winter months (November 1 – April 30), access to BDRHEF intake must be gated at least 500 m from UWR to restrict motorized use within the UWR, unless otherwise directed by MFLNRO.</p> <p>On November 13, 2014 MFLNRO granted approval to delay the timing restrictions associated with construction activities, including blasting, in Mountain Goat UWR u-2-002 UL12 from November 15 to up to November 30 according to the following restrictions:</p> <ul style="list-style-type: none"> The Contractor must cease construction works and demobilize if snow fall accumulation exceeds 10 cm depth within the forested portion of UWR u-2-002

Component	Location	Wildlife/Archeology Concern	Construction/Timing Restrictions & Mitigations
			UL12, and may not recommence in 2014. Snow depth within the UWR will be evaluated as an average depth from five sample sites selected by a QP that will be monitored daily by the IEM. <ul style="list-style-type: none"> • No helicopter flights will be permitted in or within 1,500 m of UWR u-2-002 UL12 If a goat is observed within 500m line-of-sight of construction operations, construction must cease for at least 48 hours. The IEM must record and submit all goat observations to MFLNRO within 48 hours.

4.0 Upper Lillooet River HEF – Monitoring Results

4.1 Intake (North & South Sides), Access Roads and Upstream Tunnel Portal

Construction Activities:

- Installation of final Obermeyer Weir components (Photo 1, Photo 2 and Photo 3).
- Excavation of the upstream end of the diversion channel (Photo 4).

Environmental Summary:

- Cleaning occurred in the downstream end of the diversion channel in preparation for diversion works (Photo 5). A mini-excavator was used to load material into crane baskets and out of the diversion channel excavation.
- Winterization works were completed at the upstream tunnel portal excavation. The excavation is filling due to seepage inputs but no water is at risk of entering the Upper Lillooet River (Photo 6).
- The north side spoil pile winterization works were inspected by the IEM during this reporting period and observed to be deficient. Woody debris and organic material were added to the top of the slope as far as the excavator could reach leaving the majority of the pile exposed (Photo 7) and in some sections silt fencing was installed midway up the slope which may channel and/or hold water creating erosion issues (Photo 8). The IEM included these deficiencies as part of an ESC measures update email sent to the contractor on November 11, 2014 (Section 2.0). ITM item *ULR#20* will remain open until works are complete and slopes are stabilized.
- The IEM was onsite for works within 30m of the Lillooet River.

Photos:



Photo 1 – Current conditions at ULRHEF intake (November 10, 2014).



Photo 2 – Installation of final Obermeyer Weir components at the ULRHEF intake diversion channel (November 15, 2014).

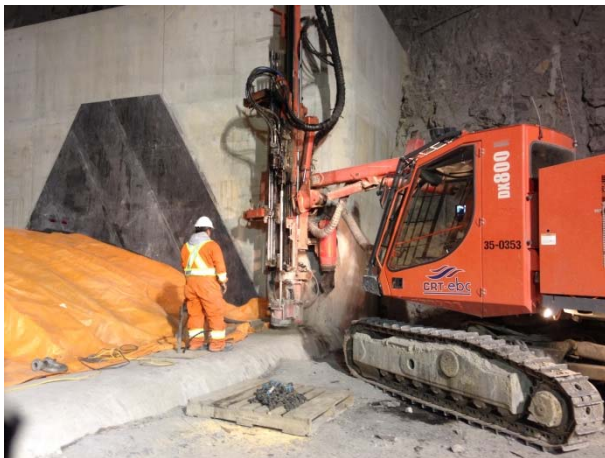


Photo 3 – Installation of final Obermeyer Weir components for the ULRHEF intake diversion channel (November 14, 2014).



Photo 4 – Excavation for upstream end of ULRHEF intake diversion channel (November 15, 2014).



Photo 5 – Cleaning of downstream end of ULRHEF intake diversion channel (November 10, 2014).



Photo 6 – Current conditions at ULRHEF upstream tunnel portal excavation (November 9, 2014).



Photo 7 – Woody debris and organic material placed on top of north side spoil pile slopes (November 10, 2014).



Photo 8 – Silt fencing installed midway up slope on north side spoil pile (November 10, 2014).

4.2 *Downstream Tunnel Portal*

Construction Activities:

- Winterization works (Photo 9, Photo 10 and Photo 11).

Environmental Summary:

- Cross ditching, re-grading and slope armoring were completed on the ULRHEF downstream tunnel portal access road (Photo 10 and Photo 11).
- The PAG stockpile located at KM 44.5 on the Lillooet River FSR was re-graded and covered with an impermeable tarp to prevent rain water infiltration according to the ARD/ML Monitoring and Control Plan (Photo 12 and Photo 13).
- No surface discharge from the sediment ponds was observed this week; therefore no WQ measurements were taken by the IEM.

Photos:



Photo 9 – Conditions at ULRHEF downstream tunnel portal (November 9, 2014)



Photo 10 – Re-grading and armoring of slope at bottom of access road (November 9, 2014)



Photo 11 – Cross ditching on ULRHEF access road (November 9, 2014).



Photo 12– Re-grading of PAG stockpile at KM 44.5 on the Lillooet River FSR (November 9, 2014).



Photo 13– PAG stockpile covered with tarp at KM 44.5 on Lillooet River FSR (November 14, 2014).

4.3 *Penstock*

Construction Activities:

- Stabilization works continued at the 2+800 fill slope (Photo 14 and Photo 15).
- Blasting works occurred to remove a large boulder near station 3+900 (Photo 16).
- Bulk excavation continued from stations 3+090 to 4+095m (Photo 17).

Environmental Summary:

- Slope stabilization works continued including re-grading, benching, ditching and rock armouring (Photo 14 and Photo 15).
- Ditching was completed and a sediment basin was excavated at drain #6 near station 3+875 (Photo 18).
- Silt fencing was installed at the ASTR03 and ASTR04 crossings to prevent mobilization of sediment to the watercourses (Photo 19 and Photo 20).

Photos:



Photo 14 – Re-grading and rock armouring works at 2+800 fill slope (November 9, 2014).



Photo 15 – Stabilization works at 2+800 fill slope (November 9, 2014).



Photo 16 – Bulk excavation and preparation for blasting works at 4+000 (November 11, 2014).



Photo 17 – Bulk excavation at 4+000 (November 12, 2014).



Photo 18 – Sediment basin at drain #6 near station 3+875 (November 12, 2014).



Photo 19 – Silt fencing installed around ASTR03 (November 10, 2014).



Photo 20 – Silt fencing installed around ASTR04 (November 10, 2014).

4.4 Powerhouse & Access Road

Construction Activities:

- Continued rebar installation and formworks for the powerhouse structure. A structure pour was completed on November 12 (Photo 21).
- Two pumps (6" and 10") continued to convey water to the ULRHEF powerhouse settling ponds (Photo 22). No flowing surface water was observed within the excavation and pump capacity appears to be adequate to maintain isolation from active work areas.

Environmental Summary:

- Hydroseeding was conducted on the slope above the ULRHEF powerhouse (Photo 23).
- Dewatering of the ULRHEF powerhouse continued without environmental concerns. The IEM will continue to monitor the works area to confirm that future concrete pours are adequately isolated from flowing waters and protected from precipitation during curing.
- Silt fencing was repaired and additional fencing was installed from KM 41 to KM 42 on the Lillooet River FSR (Photo 24).

Photos:



Photo 21 – Continued concrete works at ULRHEF powerhouse (November 12, 2014).



Photo 22 – Current conditions at ULRHEF powerhouse settling ponds (November 15, 2014).



Photo 23 – Hydroseeding completed on slope above ULRHEF powerhouse (November 11, 2014).



Photo 24 – Silt fencing repaired and installed from KM 41 to KM 42 on the Lillooet River FSR (November 10, 2014).

4.5 Water Quality Results

The following table presents the results of the routine water quality sampling program for the ULRHEF. The IEM is undertaking a weekly monitoring program according to the conditions outlined in the Surface Water Quality Protection Plan. The regular monitoring sites have been selected to quantify WQ conditions within the Lillooet River upstream and downstream of active construction areas. The IEM acknowledges the natural variability of instream WQ conditions in the Lillooet River due to seasonal melt fluctuations and large tributary inputs. In the event that an exceedance of in-situ water quality (turbidity or pH) is deemed to be caused by project-related activities, the IEM will highlight the exceedance, discuss the cause, and outline measures undertaken by the Contractor to correct the issue. When an exceedance cannot be attributed to project related activities, the exceedance will be marked by an asterisk (*).

Date	Time	Sample Location Description	pH	Turbidity (NTU)	Cond (µS)	Temp (°C)
Routine Water Quality						
November 12, 2014	10:10	ULR Background – ULRHEF Intake	7.7	9.3	97	1.0
	10:25	ULR #0.5 – Downstream of ULRHEF intake at Keyhole Bridge	7.8	11.1	101	1.0
	10:50	ULR # 1 – Upstream of ULRHEF Powerhouse	7.8	7.5	89	1.0
	11:00	ULR #2 – Downstream of ULRHEF Powerhouse between 40.5k and 41k	7.9	8.2	95	1.0
	11:20	ULR #3 – Lillooet River FSR KM 38 Laydown – D/S of Boulder confluence	7.7	11.0	92	1.0
	10:30	ULR #4 – Lillooet River FSR 24km – D/S of all works and Meager confluence	6.9	12.4	70	1.0

4.6 Recommendations

IEM recommendations for the ULRHEF are as follows:

- The IEM recommends that CE continue to stabilize and protect the north intake spoil pile slopes from sloughing and mobilizing sediment outside project approved boundaries. Short

term winterization measures should be reviewed and improved and a permanent design should be developed if these spoil piles are permanent.

4.7 Upcoming Works

The following new and/or environmentally sensitive construction activities are scheduled to occur at the ULRHEF in the upcoming reporting period(s):

- Installation of final intake Obermeyer weir components.
- Cleaning of intake diversion channel.
- Diversion works.
- Continued stabilization works and bulk excavation along the ULRHEF penstock alignment.

5.0 Boulder Creek Hydroelectric Facility – Monitoring Results

5.1 Intake Access Road & Crane Pad

Construction Activities:

- BDRHEF intake diversion tunnelling works including drilling, blasting, mucking and stabilization (Photo 25, Photo 26 and Photo 27)

Environmental Summary:

- Tunnelling works continued at the BDRHEF intake diversion tunnel with all wastewater contained and transported to the BDRHEF downstream tunnel portal settling ponds.
- Construction activities occurred at the BDRHEF intake with the IEM onsite for construction activities within 30m of Boulder Creek. No environmental issues were observed.

Photos:



Photo 25– BDRHEF intake diversion tunnelling works (November 9, 2014).



Photo 26– Stabilization works above BDRHEF intake diversion tunnel (November 10, 2014).



Photo 27 – Conditions inside BDRHEF intake diversion tunnel (November 11, 2014).

5.2 *Downstream Tunnel Portal and Powerhouse*

Construction Activities:

- Rebar installation and formworks at the powerhouse continued throughout the reporting period.
- Backfill works were completed at the powerhouse (Photo 28).
- Drilling, blasting, mucking and stabilization (anchoring and shotcrete application) continued within the tunnel (Photo 29).

Environmental Summary:

- An active treatment system was used to treat all water from the downstream portal sediment ponds prior to discharge (Photo 30).
- No environmental issues were observed during this reporting period at the BDRHEF powerhouse or downstream tunnel portal.

Photos:



Photo 28 – BDRHEF powerhouse following backfill works (November 9, 2014).



Photo 29– Current conditions in BDRHEF downstream portal tunnel (November 15, 2014).



Photo 30– Current conditions at BDRHEF portal settling ponds (November 9, 2014).

5.3 *Water Quality Results*

The following table presents the results of the routine water quality sampling program for the BDRHEF. The IEM is undertaking a weekly monitoring program according to the conditions outlined in the Surface Water Quality Protection Plan. The regular monitoring sites have been selected to quantify WQ conditions within the Lillooet River upstream and downstream of active construction areas. The IEM acknowledges the natural variability of instream WQ conditions in Boulder Creek due to seasonal fluctuations in snowmelt. In the event that an exceedance of *in-situ* water quality (turbidity or pH) is deemed to be caused by project-related activities, the IEM will highlight the exceedance, discuss the cause, and outline measures undertaken by the Contractor to correct the issue. When an exceedance cannot be attributed to project related activities, the exceedance will be marked by an asterisk (*).

Date	Time	Sample Location Description	pH	Turbidity (NTU)	Cond (uS)	Temp (°C)
Routine Water Quality						
November 6, 2014	9:05	BDR BG – Upstream of BDRHEF intake	7.5	39.9	52	-
	-	BDR #1 – Downstream of BDRHEF intake *not currently accessible*	-	-	-	-
	10:40	BDR #2 – Upstream of BDRHEF Powerhouse	7.5	33.9	48	-
	10:30	BDR #3 – Downstream of BDRHEF Powerhouse at Pebble Creek Bridge	7.6	35.3	55	-

5.4 Recommendations

IEM recommendations for the BDRHEF are as follows:

- The IEM has no recommendations at this time.

5.5 Upcoming Works

The following new and/or environmentally sensitive construction activities are scheduled to occur at the BDRHEF in the upcoming reporting period(s):

- BDRHEF intake diversion tunnel works will continue.

6.0 Transmission Line – Monitoring Results

6.1 Transmission Line Construction Activities

Right-of-Way Clearing:

- ROW clearing occurred in Segment 9 and Segment 14.

Existing Road Upgrades and Access Road Construction

- Transmission line access road upgrades/construction (including brushing, ballasting and drilling/blasting where necessary) were conducted in Segment 8 (road 197.2), Segment 9 (Zorro Rd.) and Segment 14 (road 371.1, Photo 31).

Transmission Line Pole Installation, Line Stringing and Clipping

- Foundation construction (ground works including blasting and use of heavy machinery) was conducted in Segment 7.
- Structure framing, steel hanging and stringing occurred in Segment 5.

Environmental Summary:

- The IEM was present as required when clearing activities occurred within 150m of wetlands, 15m RVMAs (30m for CTF streams), 100m of Coastal Tailed Frog Streams, Class 1 & 2 suitable Grizzly Bear WHA and/or suitable forage habitat, moose and deer UWR, and within

legally designated Old Growth Management Areas (OGMAs). All flagged boundaries were respected during clearing activities. No environmental issues were observed.

Photos:



Photo 31 – Road upgrade and winterization works on road 371.1 (November 13, 2014).

6.2 Water Quality Results

Date	Time	Sample Location Description	pH	Turbidity (NTU)	Cond (uS)	Temp (°C)
Routine Water Quality						
No WQ measurements were recorded at active Tx-line work areas during this reporting period. Construction and clearing activities had no visual effect on WQ.						

6.3 Recommendations

- The IEM has no recommendations at this time.

6.4 Upcoming Works

The following new and/or environmentally sensitive construction activities are scheduled to occur along the Tx line in the upcoming reporting period(s):

- Road upgrades will continue in Segments 8.
- Hand falling will be conducted in Segment 8.

7.0 Wildlife Sightings

As per the CEMP, a wildlife sightings record has been implemented and will be updated regularly by Project Personnel. It is mandatory for all personnel to report wildlife sightings including, but not limited to bears, cougars, mountain goats and deer. Wildlife sighting will be reported and recorded by the contractor(s). Wildlife Observation forms will be included in first reporting period

following month end. Observation or detection of the following species will trigger notification to identified parties according to the following table.

Species Observed or Detected	Notification Period	Agencies to be Notified
Northern Rubber Boa	Immediately	IEM, Owner
Grizzly Bear	24hrs	IEM, Safety Officer, Conservation Officer, Owner
Wolverine Den	24hrs	IEM, MFLNRO, Owner
Spotted Owls	24hrs	IEM, MOE, Owner
Mountain Goats	48hrs	IEM, MFLNRO, Owner

8.0 Mountain Goat Monitoring Program

The following mitigation measures were implemented for work activity within the Migration Corridor during this monitoring period:

- Daily dawn and dusk shutdowns as outlined in the Mountain Goat Management Plan were followed.
- Noise level monitoring to ensure that the 75db noise level threshold is not exceeded as outlined in the Mountain Goat Management Plan.
- As of October 31st, the IEM or designate was on site to monitor Mountain Goat activity within 500m of construction activities at the ULRHEF intake and the ULRHEF downstream tunnel portal. Mountain Goats were monitored from three sites:
- Truckwash Creek viewing river right of the Migration Corridor– MG-OBS01 (10U 467955 5612773);
- Keyhole Falls viewing the south side u-2-002 UL11 – MG-OBS02 (10U 466593 5613988); and,
- Garibaldi Pumice mine site viewing u-2-002 UL 19 – MG-OBS03 (10U 467388 561408).

Monitoring effort was split between all three sites between sunrise and sunset, unless safety concerns or weather conditions precluded monitors from doing so. The order of site visits rotated daily. Construction activities need to cease if a goat(s) are observed moving towards the ULRHEF intake and/or if a goat(s) are observed within a 500m line of site of a construction activity. No goats were observed within 500m line of sight of construction activities and no work stoppages were required.

Please refer to the attached Mountain Goat Monitoring Daily Observation Forms for a summary of observations from this reporting period.

9.0 Environmental Issues Tracking Matrix (ITM)

9.1 Hydroelectric Facilities (ULRHEF & BDRHEF)

ITM Tracking Legend:		<i>Work Item Open</i>						
		<i>Work Item Complete</i>						
		<i>Issue Closed</i>						
Issue Tracking		Environmental Issue		Mitigation Measures				
ID No.	Status	Location	Issue Description	Action Taken/Recommended	Date of Identification	Targeted Date for Completion	Date Completed	
ULR#20	Open	Various location at ULRHEF, BDRHEF and along the Lillooet FSR	FAM04 was issued to the contractor to address ESC concerns at HEF component sites. Since the issuing of FAM04 additional ESC concerns have been identified and added by the IEM.	<ol style="list-style-type: none"> 1. ULRHEF Intake (north and south sides) <ol style="list-style-type: none"> a. Ditch installation/maintenance b. Slope protection c. Spoil area winterization (plan submitted October 17, 2014) 2. ULRHEF Powerhouse <ol style="list-style-type: none"> a. Slope protection 3. BDRHEF Intake Access Road <ol style="list-style-type: none"> a. Slope protection 4. Upper Lillooet FSR <ol style="list-style-type: none"> a. KM 48 box culvert - reinstallation of silt fence and grading b. KM 43.5 - stabilization of failing material c. KM 39.7 box culvert – reinstallation of silt fence and grading 	September 29, 2014	October 17, 2014	-	
<i>next ITM – ULR#23</i>								

9.2 Transmission Line

ITM Tracking Legend:		<i>Work Item Open</i>						
		<i>Work Item Complete</i>						
		<i>Issue Closed</i>						
Issue Tracking		Environmental Issue		Mitigation Measures				
ID No.	Status	Location	Issue Description	Action Taken/Recommended	Date of Identification	Targeted Date for Completion	Date Completed	
<i>No outstanding environmental issues (next ITM – Tx#2)</i>								

MOUNTAIN GOAT DAILY OBSERVATION FORM

UPPER LILLOOET HYDRO PROJECT

Goat Monitor's Name(s):

Date (YYYY-MM-DD):



106-185 forester street, north vancouver, bc v7h 2m9
office tel 987.5588 fax 987.7740

Weather (cloud cover, precipitation and temperature):

Please submit **Mountain Goat Daily Observation Form** in person to a representative of Sartori Environmental Services (**Tom Hicks** or **Stephen Sims**) or by email to steve@sartorienv.com following each day of monitoring.

Mountain Goat Observation Site	UWR/Migration Corridor - Location	UTM Coordinates <i>(approximate center of observation area)</i>	Daily Start Time <i>(24hr clock)</i>	Daily End Time <i>(24hr clock)</i>	Daily form #	1	of
MG - OBS01	Migration Corridor - East side of Truckwash Creek	10U 467898 5612845	13:00				
MG - OBS02	UWR u-2-002 UL 11 - Keyhole Falls	10U 466760 5613967	09:00	10:55			
MG - OBS03	UWR u-2-002 UL 19 - Garibaldi Pumice	10U 469155 5614960	11:10	12:50			

If more space is needed in the below table, please fill out additional daily forms and indicate total number of forms above.

Observation Site <i>(indicate if location other than OBS site)</i>	Time <i>(use 24hr clock)</i>	UTM Coordinates or Waypoint <i>(10U)</i>	Species Observed <i>(indicate Mountain Goat or other species)</i>	Observations <i>(be specific - visual sign, track, other sign)</i>	# of Animals	Age <i>(if known - refer to attached info sheet)</i>	Sex <i>(if known - refer to attached info sheet)</i>	Description of Activities <i>(feeding, moving, etc.)</i>	Comments <i>(habitat, snow conditions, etc.)</i>	Photo #s
MG-OBS02	09:50	10U 46676056 13967	No species observed	NA	0	NA	NA	NA	Heard rock truck coming down from above	
MG - OBS03	11:15	10U 469155 5614960	MG	Visual	1	Adult	Male	Laying down	In the usual spot on the rocky cliff in the tree line to the right.	63-65
MG - OBS01		10U 467898 5612845	MG	Visual	3	Adults	Unknwn	Foraging, kept moving out of view	Lower right side. Rocky, little shrub river right	78-62

MOUNTAIN GOAT DAILY OBSERVATION FORM

UPPER LILLOOET HYDRO PROJECT

Goat Monitor's Name(s):

Date (YYYY-MM-DD):

Weather (cloud cover, precipitation and temperature):



106-185 forester street, north vancouver, bc v7h 2m9
office tel 987.5588 fax 987.7740

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Mountain Goat Observation Site	UWR/Migration Corridor - Location	UTM Coordinates <i>(approximate center of observation area)</i>	Daily Start Time <i>(24hr clock)</i>	Daily End Time <i>(24hr clock)</i>	Daily form #	1	of	2
MG - OBS01	Migration Corridor - East side of Truckwash Creek	10U 467898 5612845	12:55	14:30				
MG - OBS02	UWR u-2-002 UL 11 - Keyhole Falls	10U 466760 5613967	11:45	12:35				
MG - OBS03	UWR u-2-002 UL 19 - Garibaldi Pumice	10U 469155 5614960	09:30	11:20				

If more space is needed in the below table, please fill out additional daily forms and indicate total number of forms above.

Observation Site <i>(indicate if location other than OBS site)</i>	Time <i>(use 24hr clock)</i>	UTM Coordinates or Waypoint <i>(10U)</i>	Species Observed <i>(indicate Mountain Goat or other species)</i>	Observations <i>(be specific - visual sign, track, other sign)</i>	# of Animals	Age <i>(if known - refer to attached info sheet)</i>	Sex <i>(if known - refer to attached info sheet)</i>	Description of Activities <i>(feeding, moving, etc.)</i>	Comments <i>(habitat, snow conditions, etc.)</i>	Photo #s
MG - OBS03	09:35	10U 469155 5614960	MG	Visual	1	Adult	Male	Laying down	Same place as yesterday, moved into trees before I could get a picture	0
MG - OBS03	9:50	10U 469155 5614960	MG	Visual	1	Adult	Male	Laying down, than stood up for a little bit and than laid down	On a rock bluff surrounded by trees	1-4
MG - OBS03	10:07	10U 469155 5614960	MG	Visual	3	Adult sub-adult?	Unknown	Laying down, foraging.	Rocky area In the snow above the last one spotted on bluff	5-15

MOUNTAIN GOAT DAILY OBSERVATION FORM

UPPER LILLOOET HYDRO PROJECT

Goat Monitor's Name(s):

Date (YYYY-MM-DD):

Weather (cloud cover, precipitation and temperature):



106-185 forester street, north vancouver, bc v7h 2m9
office tel 987.5588 fax 987.7740

Please submit **Mountain Goat Daily Observation Form** in person to a representative of Sartori Environmental Services (**Tom Hicks** or **Stephen Sims**) or by email to steve@sartorienv.com following each day of monitoring.

Mountain Goat Observation Site	UWR/Migration Corridor - Location	UTM Coordinates <i>(approximate center of observation area)</i>	Daily Start Time <i>(24hr clock)</i>	Daily End Time <i>(24hr clock)</i>	Daily form #	1	of	2
MG - OBS01	Migration Corridor - East side of Truckwash Creek	10U 467898 5612845	11:15	13:15	If more space is needed in the below table, please fill out additional daily forms and indicate total number of forms above.			
MG - OBS02	UWR u-2-002 UL 11 - Keyhole Falls	10U 466760 5613967	09:45	11:05				
MG - OBS03	UWR u-2-002 UL 19 - Garibaldi Pumice	10U 469155 5614960	13:30	15:00				

Observation Site <i>(indicate if location other than OBS site)</i>	Time <i>(use 24hr clock)</i>	UTM Coordinates or Waypoint <i>(10U)</i>	Species Observed <i>(indicate Mountain Goat or other species)</i>	Observations <i>(be specific - visual sign, track, other sign)</i>	# of Animals	Age <i>(if known - refer to attached info sheet)</i>	Sex <i>(if known - refer to attached info sheet)</i>	Description of Activities <i>(feeding, moving, etc.)</i>	Comments <i>(habitat, snow conditions, etc.)</i>	Photo #s
MG-OBS02	10:20	10U 466760 5613967	None	N/A	0	N/A	N/A	N/A	N/A	25
MG - OBS01	11:40	10U 467898 5612845	MG	Visual	7	Adult	Unk	Foraging	Rocky cliff halfway down mountain, same area in creek ravine	27-44
MG - OBS01	12:30	10U 467898 561245	MG	Visual	3	Adult, 2 yearlings	Nanny, unknown	Laying down	Way below the ones above on mt Meager.	45,46,78-85

