Field Notes for Coldwater

Dec 1/98 dw/bh Objective to find access trib 30 flag main road every 50m Trib 30 av depth 0.38m ww 4.6 2degrees 16.2 bfw discharge 0.41m2/sec rocks mineralized - water test needed uk fry observed 1 very small, 1 150mm 300m on road upst trib 30 608m road eroded channel eroded 1.6m from top of road to bottom of channel bed is highly compacted 695m 120mm fish observed Coldwater divides into two channels at pot of fhs site s branch 4m ww, 0.32 wd discharge 0.96 m2/sec 70% of flow n branch 3.5ww, 0.1wd discharge 0.13 m2/sec walked out on south channel from junction 70m ponds 300m fry observed 5mww,0.3mwd

Dec 2/98 dw/bh Johnstone creek from lakelse fsr bridge upstr to old growth 1 km looks like good habitat for spawning salmon and raring no barrier except 1 log jam 1m high 1 salmon carcass observed in jam shouldn't be a problem in high water stream appears stable in old growth section some mature timber has fallen across stream 25m obs fry salmon carcass 143m s bank old culvert on trib 174m observed salmon carcass in log jam

below bridge

a beaver dam at 30m has been breached adult carcass observed bed material is all fines trib 710c enters n bank here 100m upst impassable beaver dam 1 m high in confined area trib has good rearing habitat too many fines for good spawning

Dec 3/98 dw/bh walked Johnstone from bridge main FSR to coldwater 137 log jam s bank eroded, log dump at top of bank part of jam from logs rolling down hill bank 10m high pools riffles in old growth section

walked 150m up trib 710B 654m trib 710B join johnstone at 60m slope 8 degrees much small woody debries but probable juvenile access bed mainly fines lower 50m slope 2 degrees ww 1.2m, wd 0.05m discharge 0.04m2/sec possible anadromous spawning in first 10m probable valued juvenile rearing

775m carcasses observed deep plunge pool 5ww,5m long 2m deep 810m old road crosses some erosion problems on n bank crib logs should be pulled back

983m braiding of creek

flood channel 100m wide riparian includes old growth including huge spruce 1140 junction of Johnstone and coldwater note elevated bar in coldwater creek

walked coldwater from Johnstone junction approx 400m downstream not bad habitat compaction of gravel because of fines infilling gravels noted

100m s of FSR bridge over johnstone ne bank of road piled sawed timber falling down bank into stream causing log jam

Dec 12/98 dw/bh upstream of train bridge high water event coldwater and silvertip in flood

Dec 19/98 dw/gg

snowmobile into upper silvertip area

middle creek ponds at lakelse FSR pond bigger than before logging stumps in pond probably enlarged because of road crossing outlet

pond gravels washed out have graveled first 10 m of sample site after that bed is fines beaver dam complex with veg in stream and channel

logging has occurred right in stream channel plus wind blown conifers with stumps and logs right in creek have been robbed logs have been cut off and taken away 95m stump 1.25m

barrier falls bedrock 4m high at 300m edge of cut block

prescription plant in streambed with conifers and deciduous stabilize road bank and anchor plants if needed

keep out beavers or they could easily change upper area into a series of dams new logging to edge of swamp

Jan9/99 dw/gg

parked snowmachine at 3 km before west lake road and walked to coldwater walked coldwater to end creek

90 root wad perched on mid channel bar 2m above water level

Om block off entrance to s side channel with rock and big wood

20 put tree revetment onto n bank to stop bank erosion200 s side channel had wtter in channel but would benefit from cover

lots of granitic substrate in the sample site generall this blown out section needs big wood on mid channels and side channel bars to allow regen to get started. the bars are 2m higher than today's water level. Channel starts to turn north widens out. Looks like the old channel was 40m to n and 100m further ds was 60m further nw in bend 330m flagged on s side of side channel went into bush s and e channels flowing se from head erosion the flag was hung at a incipient breach through existing bank into one of these 3 channels suspect they are flowing toward pond at end of end creek

old channel passing through alders riparian mostly deciduous and cot. to 30cm

Jan 13/99 dw/sg

Trib 700A walked from FSR culvert downstream through old growth 294 junction with 700B Trib 700 continued in old growth stream included pools to 0.5m deep overstream veg. ww 4m stream confined to channel with riparian intact at 800m riparian changes logged to stream bank, alder dominates with conifer regen including remnant old growth cedar, spruce 940 trib 700 joins Johnstone creek note map error

coldwater walked upstream to main bridge chan w 30-35m ww 7-10 mainly riffle and glides with few pools for 900m riparian is old growth some bank erosion with falling trees and recruitment of lwd side channels mainly in channel unvegetated bars

log jam at 900m probably not a barrier

Jan 15/99 dw/sg

Walked upstream on tributaries 700A and 700B above the Lakelse FSR 700B below FSR old growth Hw, S alders along creek LWD functioning cutbanks pool looks in good cond.

upstream

38m bank failure south bank, n bank old growth Cw, Hw alder

s bank some old growth but logged to stream bank in places new alder 10m and conifer to 4m

logging related bank failure steep slope s bank 36-71 m inplanting of conifers needed check when snow gone for regen

209 stream divided into 2 channels flows in valley bottom with old growth lwd looks ok some sediment deposits steep sides have been logged but regen 2-4 m looks ok 450m creek still flowing in valley bottom with lwd pools enters canyon

700A

creek in valley bottom old growth Hw Cw Hw regen logging stops at top of slope creek looks ok much lwd pools present

Coldwater upstream of Lakelse Main FSR bridge long riffles, few pools lacking functional lwd 200m old growth in valley bottom south slope logged to top of slope small alder thick along sides of stream slope 2 %

400m stream more confined alder on banks old growth riparian s bank includes regen thick and growing well

420m log jam slope 2% extensive riffles boulder cobble

600m channel narrows enters canyon with few good pools

Jan 16/99 dw/sg snowmobile to trib 720C upper silvertip road has been water barred couldn't cross 720C 1m beaver dam immediately upstr from road at crossing n bank of crossing eroding part of stream flows thru a water bar and part through a culvert 10m below road bed rock falls 2m high creek 1mww,0.15wd in confined channel riparian 6-8m very thick along creek but thins out on bank away from creek

walked 720C to Silvertip creek is confined in a narrow channel logged to creek side alders, conifers growing well in channel creek is steep and rocky slope 15% very steep noted falls 500m pools riffles 1wd present looks in good shape bed rock falls 4m high deep plunge pool 1000m old growth alder Hw 1wd present pools 1100 joins Silvertip at a beaver pond

walked up Silvertip 400m slough like flowing deep runs beaver dams old growth riparian functioning

Upper Johnstone road and bridge alder slide into creek from road alders growing back well walked upstream from bridge logged to bank in places has lwd pools regenerating new forest looks ok some remnant old growth in stream channel noted many fines coming from upstream location unknown riparian mixed conifers alder along steam satisfactory

Jan 19/99 dw/sg snowmobile problems walked coldwater from coldwater main washout to canyon 100m s bank new conifers to 10m good stocking channel wide lacking lwd n bank some old Hw, Act, S s bank steep in places stream wandering in channel up to 60m wide 200m stream entering old growth lwd log jam on s bank 311

Jan 20/99 dw/sg

Upper Johnstone Creek down stream from upper bridge stream ok pool lwd new forest coming back possible inplant conifers along banks to encourage conifer forest

Pond at end of upper Johnstone road

map wrong should drain into 710F but doesn't ,creek flows into Johnstone above upper bridge can't tell if box culvert or? should be removed could for dam and blow out sending road debrie downstream 2.5 m from water level to road top access road from johnstone bridge to pond has been water barred

75m from road waterfall 10m high creek flowing through well stocked 10m conifers looks ok

Jan 21/99 dw/sg Middle Johnstone road area upper 710C 100m up road landing needs planting no ditch water on road 210m creek flowing under road may be a box culvert gully in snow indicates possible water bar some erosion of road materials needs to be fixed recommend water bar wide banks pulled back to stop erosion 283 creek crossing abandoned culvert bank erosion pull back road remove culvert road appears to have collapsed 2m wide gulley abandoned winch 3x4m on n side of road no motor, oil visible

Tributary 710E

creek in old growth both sides of road

road elevated 8m above creek bed rock at site appears to be a canyon with box culvert and fill to make road 12m wide

flowing in steep sided gulley confined in old growth on n side of road some old growth with alders and new conifers on s side of road

Middle Johnstone road section dropping down to creek needs to be water barred

Johnstone Creek box culvert 6m fill on top 12m wide

Johnstone road from crossing needs water bars ditched water flowing down road 300m small creek cutting across road with much erosion pull back banks and armour steep bank at end of road drops into Johnstone recommend water bar at top of road and bottol armour sides of road to stop erosion problem road is in a gulley whole road should be pulled back and reditched

tributary 710F slope 14% riparian conifer regen to 10m some old growth remnants looks ok lwd, riffles cut banks waterfall 4m high a nd continues very steeply down to Johnstone

tributary 710C narrow bridge over creek water on road from bridge erosion needs water bar both sides

tributary 710B riparian needs inplanting logged to bank 1m high regen conifers

Jan 23/99 dw/sg

Lakelse main FSR between Boot crk road and silvertip 1m deep ditch will need water bars wen put to bed

Middle Creek

small trib off spur road just north of boot crk road junction in new regen 1m conifer alder in stream veg no recommendation ww 0.5 wd 0.1 middle creek in old growth off spur in old growth lwd, pools looks ok 1.5ww 0.1wd

2-3 channels in old growth

one channel of creek flows along cut block on left logged too close to creek and windfalls inplant site in conifers some conifers to 2m present fallen trees performing lwd function looks ok in old growth beaver activity below road ford ne riparian logged in riparian regen in conifers thick 2m needs thinning

Silvertip Creek

walked downstream 400m to old growth beaver activity looks ok logged to bank of channel with some old growth remnants conifer regen 4-8m thick in old growth lwd slough like beaver activity looks ok in logged area blowdown provides much cover beaver ponds no high dams no recommendations except thin riparian regen

walked upstream 400m beaver ponds, sloughs looks ok 14m beaverdam 0.7 m high 100m middle creek junction beaver ponds, sloughs, riparian some old growth thick regen conifer to 8m

Lakelse FSR north of silvertip crossing 150m old culvert in bush beside stream overflowing ditch and running water down road wate crossing road needs culvert water bar at first junction road on left 500m water crossing road snowmobiled to upper silvertip road overgrown with alder

upper old road crossing of silvertip cw 24m, ww24m alders to 20cm dia 15m high on road bank looks ok stable no visible erosion

beaver dam 1.5m high east of road crossing old culvert under road needs to be removed some water in culvert

Lower Coldwater Bridge site

erosion of road material observed riparian upstream old growth downstream old growth and new alder

east leave looks ok w side erosion pull crib logs put in stream pull back bank looks like major erosion problems both upstream and downstream from site

Jan 26/99 dw/sg

Boot creek road

road needs to be water bared - 3 creeks crossing as road descended to coldwater water was running down road 3rd crossing was eroding road

Boot road bridge site

cribbing still in place giving some bank stability some erosion of road materials on east side

recommend plant site remove timbers and pull back road material

coldwater from second bridge site downstream

riparian intact old growth along channel channel confined bed rock cliffs along stream lots of deep pools canyon area ends 500m downstream

10653 log jam across channel causes stream to divide into two channels

channel is wider not confined anymore remnant old growth along stream but logging

evident from channel on both sides looks satisfactory regen conifers some alders

854m down east channel the minor channel gaining more water from branches entering from main channel showing extensive log jams

969m trib 10 enters east bank

60m up trib 10 slope 13% riparian alders to 12m 15cm in channel well stocked with conifer on bank to 10m

road crossing looks ok alder growing on banks

trib 1-2m channel width 0.1 wd no barriers lwd present

east side channel much lwd, root wads windfalls much cover braiding of channel cw 10-30m filled with log jam

340 dst from trib 10 junction n and e channels

walked up n channel

lwd present but no log jams in old growth forest