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Restoration Streams in the Lower  
Mainland Region

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22 March 1994

## Restoration Streams in the Lower Mainland Region

### Watershed Restoration Program - River Projects List

Virtually every major forested stream in Region 2 has suffered logging related impacts to fish habitat and watershed restoration opportunities exist on all of them. The attached list of watershed restoration candidate projects only highlights some of the more obvious opportunities in this region. A comprehensive, region-wide assessment with the specific objective of identifying stream damage and restoration opportunities in important wild fish systems is obviously, still required as part of this program.

### Hope Area

#### **Coquihalla River \***

- This watershed has flooding/sedimentation problems some of which are directly related to forestry activity.
- Log debris was a major problem for cleanup after recent major floods. North West Hydraulics recently completed a study of the flooding problems on this river.
- The Coquihalla supports one of only two wild summer steelhead stocks in the lower Fraser watershed. Fisheries branch considers this steelhead stock endangered in light of extremely low returns to the Coquihalla in recent years. Bull char are also present.

#### **Sowaqua Creek**

- Sowaqua Creek is a tributary to the Coquihalla River. Lower Sowaqua supports both rearing steelhead and bull char. Upper Sowaqua supports a wild rainbow trout stock.
- Sowaqua has a chronic erosion problem, contributing large quantities of silt to the Coquihalla even at low flows. Primary productivity, as well as spawning and rearing habitat, has been impacted.

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\* high-use or high-profile rivers / \*\* exceptional perturbation



Bruce Reid, Head  
Land Use Section, HMS

Matthew Foy  
Restoration Biologist, SEP

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| Your File - Votre reference                          |                |
| Date   | April 11, 1994 |

**STREAM IMPROVEMENT 1994**

The Department of Fisheries and Oceans, is planning to undertake a number of stream improvement works in the Lower Mainland area during 1994. A list of the potential projects in the Lower Mainland area that will be carried by the Resource Restoration Division of the Salmonid Enhancement Program for 1994 are included with a brief description of the planned activity and expected benefits and costs.

We are requesting that these projects be reviewed to ascertain those that will require a Section 7 approval under the Water Act and those that will require only a review by the Fisheries Agencies.

For those that require a Section 7 approval we are requesting that a single meeting be arranged prior to May 1, 1994 to complete the required Section 7 documents and to reach agreements on what level of detail will be required in terms of plans, drawings and site visits prior to beginning construction.

*Handwritten signature: Matt Foy*  
Matthew Foy  
Biologist

cc: Bob Edwards, MoELP  
Glen Carlson, MoELP

## **Chilliwack Area**

### **Chilliwack/Vedder River and tributaries (including Foley, Chipmunk, Middle, Tamihi, Slesse, Liumchen) \***

- This watershed has flooding/sedimentation problems which can be directly related to forestry activity.

#### **Chilliwack River**

- Gravel and log debris have caused some of the flooding and erosion problems. Hayco recently completed a study of the flooding problem.

#### **Slesse Creek**

- Slesse Creek is a major tributary to the Chilliwack River, an extremely important winter steelhead and salmon stream. Slesse also supports steelhead and salmon species.
- It is apparent that Slesse is a major source of large sediment/bed material to the Chilliwack River, contributing to channel aggradation and instability which has necessitated major flood control works. Fish habitat has suffered. As well, poor water transparency has often negatively impacted angler use and primary production.
- Historic logging in the Slesse drainage has resulted in increased erosion and bedload movement. At least one clay slide is present.
- A program of road deactivation, slope stabilization and erosion control within the Slesse watershed would result in major benefits to recreational, First Nations, and commercial fisheries, and could also reduce flooding risk within the Chilliwack valley. There may also be potential instream rehabilitation projects that would further increase fish production in Slesse Creek.

#### **Other Chilliwack River tributaries & Chilliwack River mainstem**

- Other Chilliwack tributaries, including Liumchen, Tamihi, Borden, Chipmunk, Foley, Nesakwatch, Centre, Post, Depot and Paleface, have also suffered logging related habitat degradation. Programs of road deactivation, slope stabilization and erosion control within these drainages would have positive benefits similar to those discussed for Slesse Creek. These drainages also offer an opportunity for experimental design involving paired treatment sets. Pacific Giant Salamanders (a red-listed species), bull char and kokanee are present in some of these drainages and would also benefit.
- Liumchen has domestic water supply concerns.

- Fish production in the Chilliwack River between Slesse Creek and the Vedder Canal could greatly benefit from the addition of LOD structures in order to increase rearing habitat. These structures would have to be designed in a manner that meets flooding/water management concerns.

### **Nevin, Dunville, Elk, Marblehill and Semihault Creeks**

- These small streams flow into Chilliwack or Hope Slough between Chilliwack and Rosedale. All support cutthroat trout and coho salmon. These streams display unusually productive water chemistry for coastal streams, suggesting that rehabilitation measures would be highly cost effective in terms of fish produced. Some of these streams provide domestic water to the Chilliwack area. Semihault Creek is within a zone of Salish sucker/longnose sucker hybridization and is biologically very important.
- These streams all show evidence of instability, pool in-filling and channel aggradation. Fish habitat has been severely impacted.
- Historic logging in all these drainages has resulted in increased erosion and bedload movement.
- A program of old road deactivation, slope stabilization and erosion control would result in major benefits to both fish and domestic water values. There are numerous opportunities for instream rehabilitation projects, particularly LOD placement and pool creation, in the lower reaches of these streams. These drainages also offer an opportunity for experimental design involving paired treatment sets.

### **Sumas River - international**

- This watershed has flooding/sedimentation problems which can be directly related to forestry activity.

### **Frost Creek - international**

- This watershed has flooding/sedimentation problems which can be directly related to forestry activity.

### **Harrison Area**

### **Chehalis River (Statlu Creek, Maisal Creek \*\*, Eagle Creek)\***

#### **Maisal Creek**

- Maisal Creek is a tributary to the Chehalis River, an important steelhead and salmon stream. The lower kilometre of Maisal supports steelhead and coho salmon. A major DFO hatchery is situated on the lower Chehalis and uses river water.

- Maisal Creek is extremely unstable, extremely sensitive to rainfall, and is the major source of sediment and bedload material to the Chehalis River. Maisal is extremely aggraded and shows evidence of torrenting. Downstream of Maisal, the Chehalis has suffered from sedimentation and pool in-filling for its entire length (about 12km). Steelhead and salmon habitat has suffered. The Chehalis Hatchery water supply is impacted by heavy silt and sand recruitment.
- Historic logging in the Maisal watershed has resulted in destabilization, increased erosion and bedload movement.
- A program of road deactivation, slope stabilization and erosion control within the Maisal watershed would result in major benefits to recreational, First Nations, and commercial fisheries, and could also reduce flooding risk within the lower Chehalis valley. There may also be potential instream rehabilitation projects that would further increase fish production in the lower reach of Maisal Creek.

#### **Weaver Creek (Sakwi Creek\*\*)**

- Weaver Creek downstream of Weaver Lake is an important cutthroat, steelhead, and salmon stream. Sakwi Creek is its major tributary. A major DFO sockeye spawning channel is located below the confluence of Weaver and Sakwi and draws water from both streams.
- Sakwi Creek is unstable, extremely sensitive to rainfall, and a major source of sediment and bedload material. Downstream of the Sakwi confluence, Weaver Creek is severely aggraded and unstable. Instream flood control work occurs on a regular basis in order to protect the spawning channel and stream-side properties. Fish habitat has been severely impacted in Sakwi and in Weaver downstream of the confluence. Morris Lake (into which Weaver Creek flows) is often discoloured for extended periods due to silt inputs from Sakwi, which impacts both fish production and angling opportunity in the lake.
- Historic logging in the Sakwi drainage has been a major factor in increased erosion and bedload movement.
- A program of road deactivation, slope stabilization and erosion control within the Sakwi watershed would result in major benefits to recreational, First Nations, and commercial fisheries, and could also reduce flooding risk. Instream rehabilitation in both Sakwi and lower Weaver, particularly LOD placement and pool creation, would greatly benefit fish production and suitability for angling.

## **Hatzic Prairie Area**

### **Cascade Creek**

- This watershed has flooding/sedimentation problems which can be directly related to forestry activity.

### **Pattison Creek**

- This watershed has flooding/sedimentation problems which can be directly related to forestry activity.
- In 1992 Associated Engineering completed a major study of the flooding problems in the Hatzic valley. A particular part of the study was a detailed look at the watershed of Pattison Creek. It was found that the old logging roads may have contributed to slides which are providing the source of sediment. This sediment has caused blockage of the channel and debris flows which cause flooding problems downstream on the alluvial fan.
- The Hatzic Valley streams have potentially high fisheries values.

### **Legace Creek**

- This watershed has flooding/sedimentation problems which can be directly related to forestry activity.

## **Pemberton Area**

### **Lillooet River and tributaries**

- This watershed has flooding/sedimentation problems which can be directly related to forestry activity.
- The Lillooet River requires moose habitat recovery.

### **Sloquet Creek**

- Flows into the Lillooet River and has high fisheries values. Much of the Sloquet Creek drainage was logged many years ago and we believe the gradient of the mainstem is fairly low. The opportunity for an instream, LOD placement, enhancement project may be very good in this system. Apparently the old M/L has been washed away by the creek in several spots. If so then opportunities for improving the stream's bank also exists.

**Suicide (Norrish) River**

- This watershed has flooding/sedimentation problems which can be directly related to forestry activity.
- Domestic water supply concerns.

**Big Silver River (Hornet Creek \*\*)**

- Hornet Creek is a tributary to Big Silver Creek, which flows into the east side of Harrison Lake. Both Hornet and Big Silver support wild winter steelhead, adfluvial-lacustrine cutthroat and rainbow trout, and several salmon species, including an important stock of sockeye. Hornet is the main spawning and rearing area for Big Silver steelhead. Upper Big Silver supports a resident rainbow trout population. The Big Silver system is the subject of a fisheries research stream fertilization experiment with the goal of creating a high quality stream trout fishery close to Vancouver.
- Hornet has a chronic erosion problem, contributing quantities of silt to the Big Silver even at low flows. Primary productivity, as well as spawning and rearing habitat, has been impacted in Hornet. Hornet also contributes larger sediments and bed materials to Big Silver at higher discharges. Excessive sediment and bed material recruitment from the upper watershed of Big Silver has impacted fish habitat throughout the stream.
- Historic logging and road construction in the Hornet and Big Silver drainages has resulted in increased erosion, siltation and bedload movement.
- A program of road deactivation, slope stabilization and erosion control within the Hornet drainage would result in major benefits to recreational, First Nations and commercial fisheries. There are also be potential instream rehabilitation projects present in lower Hornet to further increase steelhead production.

**Cogburn Creek**

- This stream has a steelhead population that appears to have declined considerably as a result of habitat changes.

**West-side Harrison Lake tribs**

- Historically had high cutthroat trout values.

**Birkenhead River**

- This watershed has flooding/sedimentation problems which can be directly related to forestry activity.

**Soo River**

- Intensive logging continues in this watershed.

**Whistler Area****Fitzsimmons Creek**

- This watershed has flooding/sedimentation problems which are directly related to forestry activity.

**Nineteen Mile Creek**

- This watershed has flooding/sedimentation problems which are directly related to forestry activity.

**Squamish Area****Mamquam River**

- High fisheries values in its anadromous reaches. Most of the system's tributaries have suffered from logging related slides and old logging roads threaten further slide activity. At least six new slides in the lower half of Raffuse Creek occurred this past winter. Skookum Creek and some of its tributaries have also suffered slide problems. Slide stabilization and road deactivation are required.

**Mashiter & Stawamus Watersheds**

- These watersheds have flooding/sedimentation problems which can be directly related to forestry activity.
- Water source for Squamish, moderate fisheries values. These drainages have had slide activity in the past and existing roads threaten more. Much deactivation has occurred in the Mashiter. Despite this, recent slides need stabilizing. In the Stawamus, much deactivation is required and the mainline needs a overhaul to prevent it from becoming one with the river!

### **Squamish River \***

- This watershed has flooding/sedimentation problems which can be directly related to forestry activity.
- High fisheries values. Many enhancement opportunities have been identified for the Squamish River (though not all are to ameliorate the effects of logging). These are outlined in a report prepared by Triton Environmental Consultants. The report, entitled Shop Creek restoration and opportunities for habitat improvement in Squamish River tributaries, was prepared for the Steelhead Society of B.C.

### **Elaho River**

- The Elaho River requires moose habitat recovery.

### **Ashlu Creek**

- Ashlu Creek is a large tributary to the Squamish River. The lower Ashlu (length approximately 4km) supports wild winter steelhead and several salmon species, as well as char. The upper Ashlu has been stocked with steelhead fry in past years. Some of these fry have residualized and a self-perpetuating resident rainbow population is now present.
- Excessive bedload and sediment recruitment from the upper watershed has resulted in a severely aggraded and unstable channel in the lower reaches. Fish habitat has suffered.
- Historic logging in the Ashlu drainage has been a major factor in increased erosion and bedload movement.
- A program of road deactivation, slope stabilization and erosion control within the Ashlu watershed would result in major benefits to recreational, First Nations and commercial fisheries. Instream rehabilitation in the lower Ashlu, particularly stable side channel construction, would benefit fish production.

### **Cheakamus/Cheekeye River and tribs \***

- This watershed has flooding/sedimentation problems which can be directly related to forestry activity.

### **Shovelnose Creek**

- Currently has a BC21 stream restoration project in place.

## **Highfalls Creek**

- Highfalls Creek is a small tributary to the Squamish River. Lower Highfalls (length approximately 3km) supports wild winter steelhead and several salmon species, as well as char.
- Excessive bedload and sediment recruitment from the upper watershed has resulted in a severely aggraded, braided, unstable and wandering channel in the lower reaches. Fish habitat has suffered.
- Historic logging in the Highfalls drainage has been a major factor in increased erosion and bedload movement.
- A program of road deactivation, slope stabilization and erosion control within the Highfalls watershed would result in major benefits to recreational, First Nations and commercial fisheries. Instream rehabilitation in the lower Ashlu, particularly LOD placement and pool construction, would benefit fish production.

## **Vancouver Area**

### **Capilano, Seymour, Coquitlam (Or) Rivers \***

**(Seymour Demonstration Forest provides an excellent opportunity to develop, demonstrate and market WRP)**

#### **Or Creek**

- Or Creek is the major tributary to the Coquitlam River, contributing more than 80% of the flow at the confluence. The lower section of Or supports winter steelhead, coho, and some cutthroat. Upper Or supports a headwater char population. Or Creek is within the GVRD watershed.
- Or Creek shows evidence of torrenting. The stream channel is degraded and movement of larger substrates has resulted in pool infilling. Gravel sized substrate moves through the system very quickly and is scarce. Fish habitat has suffered.
- Historic logging in the Or Creek drainage has been a major factor in increased erosion and bedload movement.
- A program of road deactivation, slope stabilization and erosion control within the Or Creek watershed would result in major benefits to a wild steelhead stock and a headwater char stock. Instream rehabilitation in lower Or Creek, particularly LOD placement and pool construction, would benefit fish production.

**Alouette River**

- Historic logging, hydroelectric and urbanization impacts have severely degraded habitat in this stream.

**Indian River**

- High fisheries values in anadromous reaches. Many of this systems tributaries have suffered from logging related slides and old logging roads threaten further slide activity. Stabilization of old slides and road deactivation required throughout.

**Pitt River/Widgeon Creek**

- Historic logging impacts are present in this valuable trout and salmon watershed.

**Sechelt Area****Chapman Creek**

- Extensive slides, IWMP, water quality problems. High level of road rehabilitation/deactivation required.
- Domestic water supply concerns.

**Gray Creek**

- Domestic water supply concerns.

**Rainy River****Deserted River****Vancouver River**

- Requires wildlife estuarine damage remedial works.
- Requires grizzly bear oriented riparian improvements.

**McNab Creek/McNair Creek**

- Continuing harvesting, extensive slides.

## Powell River Area

### **Theodosia River**

### **Eldred River**

- Extensive past harvesting, slide occurrences, moderate wildlife use, high resident fish values.

### **Lang Creek**

- Ongoing harvesting, very high fish values, rehabilitation of estuary required due to log sort activity. Extensive past harvesting, slide occurrences, moderate wildlife use, high resident fish values.

## Remote Inlets

### **Brem & Quatum Rivers**

- The Brem River flows into Toba Inlet. The Quatum flows into Ramsay Arm. Both are within the Toba Provincial Forest. Both streams support important wild populations of summer steelhead (relatively few coastal streams have summer steelhead). Winter steelhead, cutthroat trout, char and salmon species are also present in these watersheds. These streams provide an economically important fishery for guided anglers accessing these remote streams by helicopter.
- Excessive bedload and sediment recruitment from the upper watersheds has resulted in aggraded, unstable channels in both streams. Fish habitat has suffered.
- Historic logging in both drainages has been a major factor in increased erosion and bedload movement.
- A program of road deactivation, slope stabilization and erosion control within both drainages would result in major benefits to rare summer steelhead stocks and recreational fisheries. There may also be the potential for instream rehabilitation projects in order to further benefit fish production.
- The Quatum River requires wildlife estuarine damage remedial works and grizzly bear oriented riparian improvements.

### **Skwawka/Hunaechin River**

#### **Hunaechin River**

- High level of past harvesting; moderate wildlife and fish values.

- The Skwawka River requires wildlife estuarine damage remedial works and grizzly bear oriented riparian improvements.

#### **Phillips River**

- Currently active; high number of old slope failures in area. Very high fisheries and wildlife values. Potential for "regrowing" of biodiversity via establishment of no activity zones next to creeks and slide chutes. Mainstem of Phillips and Clearwater Rivers of primary concern.
- The Phillips River requires wildlife estuarine damage remedial works and grizzly oriented riparian improvements.

#### **Homathko River**

- Jewawkwa/Heakamie River have very high fish and wildlife values; high old slide occurrences, past harvesting encroachment upon SMZ's and slide tracks.
- The Homathko River requires wildlife estuarine damage remedial works and grizzly oriented riparian improvements.
- The Homathko-Cumsack requires wildlife estuarine damage remedial works.

#### **Whitemantle Creek**

- Slides/ wildlife values.

#### **Scar Creek**

- Slides/wildlife values.

#### **Moh Creek**

- Old harvesting encroached upon SMZ's. Potential for regrowing of SMZ's.

#### **Orford River**

- The Orford River requires grizzly bear oriented riparian improvements.

#### **Brittain River**

- The Brittain River requires wildlife estuarine damage remedial works and grizzly bear oriented riparian improvements.

**Southgate River**

- The Southgate River requires wildlife estuarine damage remedial works and grizzly bear oriented riparian improvements.

**Toba River**

- The Toba River requires wildlife estuarine damage remedial works and grizzly bear oriented riparian improvements.

**Little Toba River****Tahumming River**

- The Tahumming River requires wildlife estuarine damage remedial works and grizzly bear oriented riparian improvements.

**Klite River****Watershed Restoration Program - Lake Projects List**

Most lake watersheds in the Region have experienced fish habitat degradation as a result of logging activities. Most impacts have been to tributary streams but some direct impacts on lakes have resulted. Rehabilitation opportunities exist in most watersheds but we have little information on the nature of impacts or specific prescriptions for restoration. An assessment program for priority systems is needed to identify specific problems and restoration opportunities.

Following is a preliminary project list for lake systems. The list is incomplete and includes only the more obvious problems/opportunities.

**Powell Lake**

- Past logging activities in the Powell and Goat Lake watersheds have impacted on many/all of the tributaries to the lakes. Historically, these streams were important trout, char and kokanee recruitment areas for the lake. An assessment of the system is required to identify specific restoration options.
- The Eldred River is the major spawning and rearing stream for wild coastal cutthroat trout, rainbow trout, Dolly Varden/bull trout and kokanee salmon in Powell and Goat Lakes. Intensive logging has resulted in unstable channels, bedload movement, unstable LWD. Critical fish habitat has been severely degraded.

- The Powell River and its tributary, the Daniels, flow into the head of Powell Lake. A chute at the outlet likely precludes access of trout from the lake. Both rivers contain wild populations of rainbow trout and Dolly Varden/bull trout. Years of logging activity have degraded stream habitat but the specifics and extent is unknown.

### **Horseshoe, Dodd, Windsor, Khartoum, Lewis, Nanton and Freda Lakes**

- This complex of lakes contains endangered stocks of native coastal cutthroat trout and Dolly Varden char. The Powell River area is one of the last refuges of indigenous coastal cutthroat trout in the south coastal mainland and has the only known significant populations of these fish within reasonable distance of the major population centres of the Lower Mainland. Also, the Dolly Varden char found in these lakes may be bull char which are rare and believed endangered.
- Recent biophysical surveys on the lakes identified significant stream degradation such as bedload movement and channel instability resulting from past and present logging activity. The studies did not prescribe restoration measures.

### **Phelix Creek**

- Flows into Birkenhead Lake and has high fisheries values (kokanee spawning habitat). The lower portions of the Phelix M/L are in bad shape. Poor road design and water management have caused serious erosion problems which (we believe) has led to elevated sediment loading in Phelix Creek and its tributaries.

### **Fitzsimmons Creek**

- Fitzsimmons Creek is the major Dolly Varden/bull char recruitment stream for Green Lake in Whistler.
- Historic logging in the drainage has created slope instability resulting in major slumps into the stream and bedload movement.
- The stream experiences excessive bedload movement and sedimentation, particularly in the lower reaches where fish habitat has been devastated. Gravel deposition and channel instability annually threaten the BC Rail crossing near the lake.
- The municipality regularly mines gravel from the channel in an attempt to improve channel stability and reduce flooding (as well as a convenient gravel source). This further impacts on spawning and rearing habitat.

- Restoration should include road deactivation and slope stabilization. Instream rehabilitation should consider channel stabilization, pool creation and LWD placement.

### **21 Mile Creek**

- This tributary of Alta Creek (tributary to Green Lake) has recently broken through its banks necessitating bank stabilization using rip-rap. The impacts are believed to be logging related.

### **Alouette Lake**

- Tributaries to Alouette lake have suffered as a result of historic logging activities. Particularly hard hit have been small tributaries on the east side of the lake and Mayer Creek. These streams are important to wild populations of rainbow and cutthroat trout, kokanee salmon and Dolly Varden char.
- Most impacts result from changed hydrological cycles resulting in bedload movement, unstable channels, loss of spawnable gravel and loss of pool habitat. Opportunities include channel stabilization, pool creation and placement of LWD.

### **Weaver Lake**

- Two small tributaries to Weaver Lake experience severe swings in their hydrological cycle as a result of upstream logging. The channels are now ephemeral and frequently change course. Bedload movement is excessive.
- These creeks were believed historically important to rainbow production in the lake, particularly since the Salmon Commission dammed the outlet to supply water to the Weaver Creek Spawning Channel. They provided the only spawning for the lake until gravel was placed immediately upstream of the outlet dam. The streams presently are not useable by trout.

### **Wahleach Reservoir**

- Wahleach Reservoir recently suffered two events of mass wasting as a result of upslope logging and associated road building. Further events are likely if the situation is not remedied.
- Road deactivation, slope stabilization and erosion control is required.
- Boulder Creek also shows evidence of an unstable hydrological cycle, due to upstream logging. An assessment of the creek is required.

### **Depot and Paleface Creeks**

- These two tributaries to the east side of Chilliwack Lake are important kokanee and sockeye spawning streams (up to 6,000 kokanee per year). Bull char also likely spawn and rear in these streams. Chilliwack Lake contains a population of large bull char believed to be at risk from habitat degradation and over fishing.
- Fish production from these creeks has been severely impacted by logging related habitat destruction. Road deactivation and slope stabilization is indicated, however, a pre-treatment assessment is required.

### **Frost Creek**

- Frost Creek is a critical bull char and cutthroat trout recruitment stream for Cultus Lake.
- Logging activity in the upper reaches has had a destabilizing effect on the stream. Flood events have caused excessive bedload movement resulting in a paucity of spawning gravel in some of the upper reaches and major deposition in the lower reaches.
- Water Management has dyked and dredged the lower reaches to protect private property. This has severely impacted what may have historically been some of the best habitat in the stream.
- This creek has also caused flooding because of sediment supply from landslides. The stream originates in the USA and this is where much of the problem logging has occurred. In fact, a US forestry company paid some compensation to B.C. for cleanup of log debris after the 1989 flood. Hayco have been recently retained by Fraser Cheam Regional District to review the flooding problem

### **Stave Lake**

- Tributaries to this large hydro reservoir have had suffered extensive logging activity in the past. Needs assessment.

### **Foley Creek**

- Foley Creek is a tributary to the Chilliwack River. It is the only stream available to Dolly Varden/bull trout in Foley Lake. This high use lake is stocked annually with rainbow trout. Angler use is high.
- The stream is very flashy and unstable due to logging activity and road construction. Problems are slope and channel instability, bedload movement and siltation. There are downstream impacts on the Chilliwack River due to siltation.

### **Maselpanic Creek**

- The Maselpanic is the major tributary to the Klesilkwa River which flows into the Skagit River. The creek is important for rainbow trout and bull trout. The Skagit is the best summer trout fishery in the Lower Mainland. Angler use is high.
- Extensive logging has impacted fish habitat in the creek as well as downstream areas of the Klesilkwa and possibly the Skagit. Specific problems and restoration prescriptions must be assessed.

### **South Creek**

- Low fisheries values, however, it flows into the upper Lillooet River. This drainage has much slide prone terrain and (not surprisingly) two rather large slides have occurred along the south creek M/L. These slides should be stabilized through seeding and some rip-rap placement may be required.

### **Sumallo River**

- The Sumallo is the major tributary to the Skagit River. Contains rainbow trout and bull trout.
- Logging and road construction in the upper reaches has degraded habitat and caused siltation and bedload movement downstream. Must be assessed.

### **Klesilkwa River**

- This logged watershed is part of the recreationally important Skagit Lake/River system.

This document has been compiled from submissions by the following; Marvin L. Rosenau - Fisheries, Poul Bech - Fisheries, Ross Neuman - Fish & Wildlife, Marion Jamieson - Water, Ron Henry - Water, Steve Gordon - Habitat, Jeff Morgan - Habitat/FES, Bob Forbes - Wildlife, Brian Clark - Planning & Assessment

Sincerely,



Brian J. Clark, R.P.Bio.  
Chair  
Integrated Management Committee

/jac



To: Bruce Reid, Head  
Land Use Section, HMS

From: Matthew Foy  
Restoration Biologist, SEP

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| Security Classification - Classification de sécurité |                |
| Our File - Notre référence                           |                |
| Your File - Votre référence                          |                |
| Date   | April 11, 1994 |

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