

CRWS Project Team Meeting Minutes



Chilliwack River
Watershed Strategy

Date: August 30, 2006 1:15 p.m.
Location: FVRD, Room 224

Facilitator: Krista Englund, Fraser Valley Regional District/F.V.R. Watersheds Coalition

Present: Kevin Walker, Ministry of Agriculture and Lands
Dave Lamson, Electoral Area E, CRAC
Graham Daneluz, Fraser Valley Regional District
Bob Stanton, Fisheries and Oceans Canada
Nelson Kahama, Soowahlie First Nation
Matt Foy, Fisheries and Oceans Canada
Barry Eastman, Ministry of Transportation and Highways

The meeting commenced at 1:15 pm.

1.0 Introduction and Acceptance of Agenda

The agenda was accepted as written.

2.0 Review and Acceptance of Minutes

Dave Lamson commented on discussion that occurred at the end of the July meeting regarding the Nonie Creek project after he had left the meeting. Dave noted that the project team was made aware of the project in excess of a year [see January CRWS minutes] and that Nonie Creek is extensively used by coho, chum and pink salmon in addition to trout.

Action item review:

Action item 1: Krista to write thank-you letter for the Ford Mountain Correctional Centre and keep the newspaper article for scrapbook.

Krista to do.

Action item 2: The group generally agreed that we should have a session on visioning, goals and indicators. To be discussed by the communications sub-committee.

Agenda item for September meeting.

Action item 3: Once the website transfer is complete, Krista will do a web-launch via an email. It is requested that members of the committee forward the email to respective organizations and networks.

Coming soon!

***Action Item 4:** Krista to send out more information about the proposed Nonie Creek project, the River Fertilization project and any others.*

Emailed August 1, 2006 and distributed at the meeting (**see Appendix A**).

***Action item 5:** Marian asked Krista if she will be making a list of the “white guys”, as she has with the bands. Krista agreed to send out a list.*

Krista to do.

***Action item 6:** Project team to discuss the suggestion of doing a Nisqually Watershed Audit at a later date.*

Agenda item for September meeting.

***Action item 7:** Nelson to inform the project team of the Coastal Salish gathering for species at risk and the environment, which is to be held in Duncan this September.*

The meeting has been put off until November – Nelson is to email information when available.

3.0 Business Agenda

3.1 Upcoming Events – please mark these on your calendar!

- Sunday, September 24 (River’s Day): River cleanup beginning at Thompson Park and River’s Day celebration to follow!
- Friday, October 6: All-day tour of Chilliwack River Watershed projects.
- Saturday, October 14: Chilliwack River Action Committee’s Help Habitat Fundraiser. They will be hosting a salmon BBQ and a social.
- Tuesday, October 17: Cultus Lake Sockeye Forums (e.g. educational dialogue about parasites, milfoil, pike minnow). An event for the community will be held at the community hall from 1-4 and a dinner by invitation will be held at the school from 7-9.

Action Item 1: Email Nelson by September 28 if you would like to attend the Cultus Lake Sockeye Forum and dinner on the evening of Tuesday October 17.

3.2 Review of Past Projects

Lovely Pond/Thompson Park

- It was noted that Lovely Pond is now almost dry except for a creek channel because the beaver dam was removed during the project last year. Lovely Pond is naturally progressing through succession and will continue to fill in with vegetation over time.
- The additional pond that was created at Thompson Park last year will not dry up because it is groundwater fed.

- While it is not a problem at this site, it was noted that altering water levels near residences can cause a health concern due to septic backup.

3.3 Review of Current Projects

Updates on the following projects are contained in **Appendix A:**

- Nonie Creek Rearing Ponds (page 6)
- Pierce Ponds (page 7)
- Salwein Creek (page 8)
- Hope Slough (page 9)
- Slesse Slide Stabilization (page 10)
- Chilliwack River Fertilization (page 11)
- Chilliwack River Gravel Extraction (page 12)
- Soowahlie Hatchery (page 12)
- Wilson Road Dike (page 12)

3.4 Beaver Management

During our discussion about projects, it became clear that the issue of beaver management needs to be addressed. Bob Stanton may be willing to take the lead on this issue. The following points were made during the discussion:

- Bob Stanton and the hatchery staff regularly monitor beaver activity at fisheries restoration sites during spawning season (e.g. to ensure that adult salmon can access the sites). However, activities are not monitored at other times of the year or at other sites.
- Private landowners and other agencies could assist monitoring other sites and at other times of the year.
- It may be desirable to develop guidelines about how to manage beavers in the watershed. These guidelines would take into account the various impacts (e.g. impacts on road, residences, fish access, etc). It is necessary that these guidelines are accepted by all agencies and the public.
- There is also a need to coordinate and communicate activities.
- Soowahlie has a 3-4' culvert that could use a beaver box. DFO regularly makes beaver boxes and recommended that Soowahlie First Nation check out the box placed over a culvert at Anderson Pond.

3.4 Future Projects

Krista noted that funding deadlines are fast approaching for fisheries restoration projects. Although there is a working group set up for restoration projects, it is unlikely that this working group will be able to identify priority projects for next year in time for the fall round of deadlines. As a result, Krista asked all project team members to send a list of projects for which individual agencies will be seeking funding and the project team will be notified of these projects so that the appropriate partnerships can be established and interests can be addressed.

Action Item 2: Project Team to email their 2007 projects ideas to Krista by September 8th.

The working group for restoration projects will meet in the near future. Krista has begun to summarize the EBA Engineering Restoration Plan written in 2001 (see **Appendix B on page 13**). Using the 2001 plan as a starting point the restoration working group will determine the following:

- Which priority projects outlined in 2001 have already been completed
- Which projects still need to be completed
- Whether there are additional projects that should be added to the list
- Who would be appropriate leads and funders for the priority projects
- What process should be followed to ensure that all interests are addressed during projects

Action Item 3: Project Team members to review the summary of EBA’s priority restoration projects and notify Krista if a project has already been completed (by whom and when) and add additional projects that your organization considers important.

4.0 Wrap Up

4.1 Next Meeting Dates/Locations

Wednesday, September 27 th	1-4 pm	FVRD 4 th Floor Boardroom
Wednesday, October 25 th	9-4 pm	FVRD 4 th Floor Boardroom
Wednesday, November 29 th	9-4 pm	FVRD 4 th Floor Boardroom

The meeting adjourned at 3:15 pm.

5.0 Summary of Action Items

Action Item 1: Email Nelson by September 28th if you would like to attend the Cultus Lake Sockeye Forum and dinner on the evening of Tuesday October 17.

Action Item 2: Project Team to email their 2007 projects ideas to Krista by September 8th.

Action Item 3: Project Team members to review the summary of EBA’s priority restoration projects and notify Krista if a project has already been completed (by whom and when) and add additional projects that your organization considers important.

Appendix A: Project Update

***Please note that the photos contained in this section were taken DURING project construction and do not represent how the project will look once fully completed.**



Chilliwack River Watershed Strategy Project Update – 2006 08 30

Nonie Creek Off Channel Rearing Ponds

Location: Nonie Creek, tributary of the Chilliwack River adjacent to Slesse Park

Lead: Chilliwack River Action Committee (CRAC)

Funder(s): Funding has been raised by the Help Habitat Fundraiser and grants received from the Fraser Valley Regional District, the BC Gaming Commission and the Pacific Salmon Foundation.

Description of Project: This project will involve the construction of two off channel rearing ponds next to Nonie Creek, which currently supplies spawning habitat for coho salmon. The purpose of this project is to increase over wintering habitat for salmon and trout fry and build stewardship with local residents. It is expected that construction will take place during August.

Contact: David Lamson (Chilliwack River Action Committee) - dflamson@shaw.ca

August 30 Meeting Update:

- Jack Mussell is the project manager and is responsible for arranging contractors.
- Construction will be beginning shortly.
- Peter Morgan and Shawn from Golder and Associates have been on site and have reviewed the project design.
- Barry inquired about whether the ROW would be affected and indicated that a 10 ft buffer is preferred. Dave Lamson indicated that no ROW would be affected.
- Dave noted that no large trees will be removed during the project, the pond edges will not be straight, and debris will be put back into the pond.
- Vince Busto (DFO) reviewed the plans and expressed concern about using excavated material from the pond to raise the height of the existing berm. Vince recommended that material from the pond be spread on low spots or hauled away. These recommendations will be followed.

Pierce Ponds Off Channel Habitat Project

Location: Pierce Creek, upstream of the Chilliwack River Hatchery

Lead: Fraser Valley Regional Watersheds Coalition in partnership with Fisheries and Oceans Canada

Funder(s): Funding for this project is being provided by the Pacific Salmon Commission, the Fraser Salmon and Watersheds Program (aka Living Rivers Program) and the Ministry of Transportation and Highways.

Description: Several berms are being constructed to impound water (e.g. create several ponds) within a relic 2km long side channel of the Chilliwack River. The ponds will be connected to each other and Pierce Creek by several short spawning channels. An island will be created within the centre of one pond to provide a refuge for other species.

Contact: Krista Englund (FVRWC) - kenglund@fvrd.bc.ca

August 30 Update: Three berms have already been constructed and the spawning channel has been 'roughed in.' We will be returning to the site in September to place gravel in the channel and to install culverts to connect the ponds and spawning channel.



Site of proposed berm and spawning channel - before and now



New spawning channel - roughed in

Getting gravel and creating habitat - the borrow pit

Salwein Creek Off Channel Habitat Project

Location: Salwein Creek, at the Horse Pasture, Great Blue Heron Nature Reserve on the Vedder portion of the River

Lead: Great Blue Heron Nature Reserve Society in partnership with Fisheries and Oceans Canada and Fraser Valley Regional Watersheds Coalition

Funder(s): Funding for this project is being provided by the Pacific Salmon Foundation, the Fraser Salmon and Watersheds Program (aka Living Rivers Program), and the Ministry of Transportation and Highways.

Description: This project involves creating new fish habitat adjacent to previously restored habitat on the Great Blue Heron Nature Reserve. Several deep ponds will be excavated within an existing 'horse pasture' and these ponds will be connected by a short spawning channel.

Contacts: Debora Soutar (GBHNRS) - herons@shawbiz.ca or Krista Englund (FVRWC) - kenglund@fvrd.bc.ca

August 30 Meeting Update: Construction of the ponds is now complete and the spawning channel has been created. The project is expected to wrap up in the fall with revegetation efforts.



Early stages of construction at Salwein Creek



Surveying at Salwein Creek - W side of site facing S



Short spawning channel



Channel along E side of site facing S

Hope Slough Enhancement

Location: Hope Slough at Kinsmen Park, City of Chilliwack

Lead: Fraser Valley Regional Watersheds Coalition in partnership with Fisheries and Oceans Canada

Funder(s): Funding for this project is being provided by the Fraser Salmon and Watersheds Program (aka Living Rivers Program) and Fisheries and Oceans Canada.

Description: Building on the success of the project completed last year at Hope River-Corbould Park, a similar project will be undertaken this year upstream at Kinsmen Park. As with last year's project, a ~100m long riffle will be created to provide spawning habitat for chinook as well as chum and coho. The project is expected to begin in late August and wrap up in the fall with rehabilitating the stream bank and installing an interpretive sign.

Contact: Krista Englund (FVRWC) - kenglund@fvrd.bc.ca

August 30 Meeting Update: The instream works has just been completed and bank rehabilitation efforts and an open house are being planned for the fall.



Pre-project photo



Gravel being hauled to the site and an access road being created along the stream edge



A berm being constructed along the edge of the spawning channel to create the appropriate flow conditions over the spawning gravel



Getting close to completion...

Slesse Creek Stabilization

Location: Slesse Creek, tributary of the Chilliwack River

Lead: Chilliwack River Action Committee (CRAC)

Description: The purpose of this project is mainly to control eroding clay banks on Slesse Creek to reduce downstream siltation of habitat of Slesse Creek and the Chilliwack River. The engineering design is to use groynes placed at twenty meter intervals along the slide toe to prevent further erosion and the resulting clay slumps. Groynes replicate natural stabilizing processes found in old growth forests as they not only reduce erosion but also provide resting areas for fish during flood events. This project includes rewatering of a dry side channel to increase spawning and rearing capacity. Due to limited funding, the project will be phased over several years with the first phase beginning this year.

Contact: David Lamson (Chilliwack River Action Committee) - dflamson@shaw.ca

August 30 Meeting Update: This year's project will focus on rewatering the abandoned side channel and placing groynes on the bank upstream of the slide. After visiting the Cowichan work this September, CRAC may pursue the work on the actual slide next year.

A concern was raised about the potential impact of this project on traditional swimming sites. Dave noted that Jack Mussell is the project manager and that the project was reviewed by the Ch-ihl-kway-uhk Tribe Society. Dave will follow up again with Jack about this to make sure that Frank Malloway is aware of the project.



The slide in the distance



Abandoned side channel



The far bank is where groynes will be placed using boulders from the abandoned side channel

Chilliwack River Fertilization

Location: Chilliwack River (downstream of Post Creek), Foley and Centre creeks

Lead: BC Conservation Foundation in partnership with the Ministry of Environment

Funder(s): Funding for this project is being provided by the Fraser Salmon and Watersheds Program (aka Living Rivers Program) and the Habitat Conservation Trust Fund.

Description: Slow release liquid fertilizer is being released into the mainstem of the Chilliwack and slow release solid fertilizer into two tributaries, Foley and Centre creeks. The purpose is to promote algal growth, thereby enhancing insect productivity, which will benefit steelhead and native chinook in the upper river.

Contacts: Sheldon Reddekopp (BCCF) - 604-576-1432 local 310, sreddekopp@bccf.com or Greg Wilson (MOE) greg.wilson@gov.bc.ca

August 30 Meeting Update:

The liquid fertilizer drip has been in place since July 10th and is expected to remain in place until September. Although all testing has shown the fertilizer to be safe, the mainstem drip is located downstream of residential water intakes near Post Creek. The solid fertilizer was placed in Foley and Centre creeks on July 5 and effects will be monitored into September as well.

Matt noted that due to the geology of the watershed, nutrients are lower above Slesse Creek (granite) than below (sedimentary). Matt recommends reading the conference book "Nutrients and Salmon Streams" and is willing to lend his copy to the project team. Please contact Krista to arrange to borrow this book.

Nelson noted that the Soowhalie First Nation and DFO have discussed fertilizing Chilliwack Lake to benefit sockeye salmon and harvesting the excess fish produced through these efforts. Conversations continue to date but no concrete decisions or plans have been made yet.



Location of drip at Post Creek



Liquid fertilizer drip machine

Chilliwack River Gravel Extraction (Soowahlie Reserve)

Location: At the junction of Chilliwack River and Sweltzer Creek (near the Soowahlie Reserve)

Lead: Soowahlie First Nation

Description: Soowahlie First Nation is interested in extracting gravel from the Chilliwack River near the reserve in order to move the main channel back into a previously occupied channel and away from the eroding river bank along the Soowahlie Reserve and access road.

Contacts: Nelson Kahama (Soowahlie First Nation) - councillor1@soowahlie.ca

August 30 Meeting Update: Soowahlie First Nation still needs to meet with the UMA, the Fraser Valley Regional District and City of Chilliwack, and the Vedder River Management Committee. They are still in the planning phase and will likely shoot for the next fisheries window.

Soowahlie Hatchery

Location: On Sweltzer Creek (on the Soowahlie Reserve)

Lead: Soowahlie First Nation

Description: Soowahlie First Nation and DFO are interested in establishing a hatchery on the Soowahlie Reserve for chum, coho and Cultus Lake sockeye.

Contacts: Nelson Kahama (Soowahlie First Nation) - councillor1@soowahlie.ca

August 30 Meeting Update: Soowahlie First Nation is still in discussions with DFO about this and will be meeting in the near future.

Wilson Road Dike

Location: Wilson Road, off of Chilliwack Lake Road

Lead: Fraser Valley Regional District

Description: FVRD recently awarded a \$50,000 contract to Hay and Company (an engineering consulting firm) to develop a plan for upgrading the Wilson Road dike.

Contacts: Graham Daneluz (FVRD) - gdaneluz@fvrd.bc.ca

August 30 Meeting Update: The terms of reference specified the consultant to consider both fish habitat and flooding in their plan. A survey has been completed and the consultant is now considering options. A draft of the report will be distributed to the project team for comment prior to the plan being completed. Compensation will likely be required for any work that gets done and the project team might be able to help identify an appropriate project.

Appendix B. Review of Priorities from EBA Engineering Restoration Plan (2001)

Priority Watersheds

- Chilliwack River Mainstem (score = 95)
- Centre Creek (score = 77)
- Slesse Creek (score = 62)
- Airplane/Foley Creek (score = 56)

Limiting Factors

- Off channel refugia & rearing habitat
- Instream LWD
- Instream pool complexes
- Stable spawning beds

Priority Works

A. Instream Works

Prior. Level	Name	Location	Project Type	Spp.	Status
High	Pierce ponds	Adjacent to CR mainstem at Pierce Creek	Expand ponds, construct spawning channels	CO, TR	In progress
High	Millenium Pond enhancement	Adjacent to CR mainstem upstream of Nesakwatch	Spawning channel to connect ponds, expand existing pond (est \$15,000)		
High	Camp side channel	N side of CR mainstem bw Nesakwatch & Centre	200m ² side channel (est. \$5,000)	ST, PK	
High	Deer Creek	Downstream of Tamihi	Construct low flow intake		
Low	Tamihi Creek off channel	S side of CR mainstem downstream of Tamihi Crk	Off channel	CO, ST	
Low	Kayak off channel	S side of CR mainstem near Tamihi bridge	Off channel	CO	
Low	Railroad side channel	S side of CR mainstem bw Nesakwatch & Centre	Side channel	ST, PK	
Low	Williams side channel	N side of CR mainstem upstream of Centre Crk	Road rehab, side channel	CO, ST	
Low	Centre Creek side channel	S side of CR mainstem at Centre Creek			
Low	Seven Mile off channel	S side of CR mainstem upstream of Centre Creek	Reactivate abandoned side channel	CO, ST	
Low	Paleface off channel	S side of Paleface close to entrance to Lake		CO, ST	
Low	Slesse Creek off channel	E side of Slesse Creek 4km upstream from CR			

B. Riparian Assessment and Restoration

Prior. Level	Location	Polygon #	Disturbance History	Status
High	Liumchen creek	23	Logged (no date)	
High	Near LWD placements in CR mainstem upstream of slides	79	Logged (no date)	
High		1	Logged 1987	
High	Pierce ponds	17	Burned 1938	
High	Pierce ponds	27	Burned 1938	
High	Pierce ponds	31	Burned 1938	
High	Pierce ponds	40	None indicated	
High	Near Foley creek side channel and LWD placement	98	Burned 1938	
High	Adjacent to Millenium and Angelwing pond complex	135	Burned 1938	
High	Immediately upstream of Millenium off channel	161	Burned 1938	
High	Adjacent to potential Railroad side channel project	166	Burned 1938	
High	Near CR LWD site at Centre Creek, adjacent to proposed Williams side channel	193	None indicated	
High	Adjacent to proposed Williams side channel	199	None indicated	

C. Road Deactivation

Prior. Level	Location	Length (km)	Notes	Status
High	Tamihi Creek	10.5	Planned for 2002/2003	
High	Airplane/Foley Creek	8.7	2001 workplan	
High	Centre Creek	3.3	2001 workplan	
High	Liumchen Creek	5.6	No access due to slide	
High	Depot Creek	0.2	No machine access	
High	Paleface Creek	5.5	No machine access	

D. Landslides

Prior. Level	Location/Name	Number of High Priority Slides + Gullies	Notes	Status
High	Chilliwack Mainstem	7	Tolmie Slide Slesse Park Slide Willow Run	
High	Tamihi Creek	5		
High	Airplane/Foley	3 + 2		
High	Centre Creek	9 + 5		

E. Evaluation and Monitoring

Site #	Location	Project Type	Year Completed	Past Monitoring	Recommended Monitoring				Status
					Dwnstrm Trapping	Adult Escape.	Vegetat. Establish.	Effect. Eval.	
1	Little Tamihi Crk	Riffle pool sequencing	1998-99	None				<input checked="" type="checkbox"/> 3yrs	
2	Anderson Creek	Side channel & pond	1995-96	Yes					
3	Borden Creek	Side channel & pond	1997-98	Yes	<input checked="" type="checkbox"/>				
4	Slesse Creek	Road Deactivation	1999-00				<input checked="" type="checkbox"/>		
5	Slesse Creek	Pond	1998-99		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			
6	Slesse Creek	Road & Pond	1999-00		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
7	Slesse Creek	Bar stabilization	1998-99				<input checked="" type="checkbox"/>		
8	Slesse Creek	Groundwater channel	1996-98	Yes					
9	Slesse Creek	Pond	1997-98		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			
10	Slesse Creek	Large woody debris	1999-00					<input checked="" type="checkbox"/>	
11	Foley Creek	Side channel/LWD	1998-99		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
12	Angelwing complex	Side channel & ponds	1997-99	Yes	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			
13	Millenium-15 Mile Cr	Side channel & ponds	1998-00	Yes	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			
14	Centennial channel	Side channel & ponds	1997-98	Yes	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			
15	Post Creek	Side channel & ponds	1997-98	Yes	<input checked="" type="checkbox"/>				
16	Chilliwack Lk outlet	Gravel placement	1995-96	Yes					
17	Young Creek	RP and pond	1998-99		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>	
18	Chilliwack River	LWD placement 1	1998-99					<input checked="" type="checkbox"/>	
19	Chilliwack River	LWD placement 2	1999-00					<input checked="" type="checkbox"/>	
20	Deer Creek	Side channel/pond	1999-00		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			
21	Camp channel	Side channel/pond	1999-00		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>			
22	Borden Creek	Road and riparian	2001				<input checked="" type="checkbox"/>		
23	Deer Creek (lower)	Road, instream, rip	2001				<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	
24	Slesse Creek	Road and pond	2001		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		
25	Chilliwack River	LWD placement 3	2001					<input checked="" type="checkbox"/>	
26	Slesse Creek	Riparian work	2001				<input checked="" type="checkbox"/>		
Number of Sites					10*	8*	7	8	

*only one trap/count location would be needed for all Slesse Creek sites

In addition to the above activities, the following are recommended:

<ul style="list-style-type: none"> • Full mark recapture study for the Chilliwack River 	<ul style="list-style-type: none"> • Establish \$10,000-\$15,000 maintenance fund
<ul style="list-style-type: none"> • Evaluate effectiveness of 25% (random) road deactivations 	<ul style="list-style-type: none"> • Report status of watershed health – after 5 years of project