



March 13, 2009

REPORT



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Implementation of the Chilliwack River Watershed Strategy

Submitted to:

Fraser Valley regional Watersheds Coalition
c/o Fraser Valley Regional District
45950 Cheam Avenue
Chilliwack, BC V2P 1N6

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1.0 BACKGROUND

The Chilliwack River watershed has a long history of fostering a stewardship ethic and undertaking watershed restoration projects. In 2003, the Chilliwack River was selected as a pilot project for Watershed-based Fish Sustainability Planning (WFSP), a planning tool jointly developed by Fisheries and Oceans Canada (DFO) and the Province of British Columbia to guide and encourage local initiatives and partnerships for protecting and restoring fish habitat and populations at a watershed level.

In 2004, a partnership was established between DFO, the Fraser Valley Regional Watersheds Coalition (FVRWC), the Fraser Basin Council (FBC), and the Fraser Valley Regional District (FVRD) to pursue development of a formal watershed strategy for the Chilliwack River. Named the Chilliwack River Watershed Strategy (CRWS), a Project Team was subsequently established. The Project Team included representatives from government agencies, First Nations, and community groups. The CRWS is designed as a multi-stakeholder and collaborative watershed planning exercise to provide a common understanding of watershed values to assist in decision making that will promote and improve the sustainability of the Chilliwack River watershed.

The CRWS identified through the early stages of its consultative process 14 separate issues or concerns to the stakeholder group regarding the natural, social and economic values in the Chilliwack watershed. These included:

- Biodiversity/Species-at-Risk;
- Fish Habitat Restoration and Enhancement;
- Fish Hatchery Production and Management;
- Invasive Species;
- Sto:lo Cultural Heritage Resource Management;
- Commercial, Institutional, and Residential Development;
- River Hazards (flooding, etc.);
- Mining;
- Forestry and Forest Management;
- Run-of-River Independent Power Producer (IPP) Projects;
- Recreation;
- Sport Angling Behaviour;
- Illegal Dumping; and
- Data & Knowledge Sharing and Management.



These issues formed the basis of the framework for further analysis and the development of recommendations through the CRWS planning process. Draft *Watershed Issues and Alternatives* reports for each issue were made available on the CRWS's website for public comment.

The CRWS used these 14 *Watershed Issues and Alternatives* reports to produce a summary document, *Watershed Issues and Recommendations –January 2009*, which includes the key recommendations of each report. Many of the recommendations are top-down, regulatory recommendations aimed at government agencies. Implementation of these recommendations by government agencies may be challenging due to several factors including:

- A lack of legislative authority on the part of the CRWS and the FVRWC;
- Many of the issues pertain to multiple government agency boundaries, jurisdictions and authorities;
- Watershed health is affected by individuals, organizations and agencies (*i.e.*, different levels of government); and
- Watershed actors all have their own frameworks, resources, positions, limitations and policies that they make decisions in accordance with.

The CRWS also recognizes that while no single government agency has jurisdiction to fully adopt all of its recommendations, they should be able to adopt specific recommendations or principles outlined in the various documents produced by the CRWS that are within their own specific jurisdiction or mandate.

2.0 OBJECTIVES

The overall objective of this Project was to meet with key government agencies and obtain their overall support of the process and their commitments to address specific issues and recommendations from the CRWS's documents and advance the implementation of the Strategy. The project goals were to:

- 1) Present an executive summary of the key CRWS's issues and recommendations relevant to specific government agencies in a concise and targeted approach tailored to their area of interest, jurisdiction, and upcoming policies and programs;
- 2) Obtain endorsements or recognition of the watershed strategy and to identify specific implementation commitments from each government agency; and
- 3) Identify any amendments to the watershed strategy that would assist with implementation success or better guide future watershed planning processes.



3.0 SCOPE OF WORK

The scope of work consisted of the following tasks:

- **Task 1 - Background Research:** The CRWS *Watershed Issues and Recommendations* report and background materials (*Issues and Alternatives* documents) were reviewed and briefing documents prepared to highlight relevant sections, recommendations and required commitments for key government agencies. Each agency's relevant programs, policies, and future initiatives were also be researched for discussions with the agency. There were seven key government agencies which the CRWS identified as the priorities to contact and included:
 - Fisheries and Oceans Canada;
 - BC Ministry of Environment;
 - BC Ministry of Forests and Range;
 - BC Ministry of Transportation;
 - BC Integrated Land Management Bureau;
 - BC Ministry of Tourism, Culture and the Arts; and
 - BC Ministry of Energy, Mines and Resources.
- **Task 2 - Coordinate Agency Meetings:** Meetings with each agency were set-up and coordinated over the February 20 through to March 9, 2009 period. An executive summary of the Draft Issues and Alternatives Document was used to focus the discussion on agency-specific issues and recommendations and identify potential agency commitments. The meetings typically consisted of Golder providing a brief overview of the CRWS history, the process used to define the 14 priority watershed issues, and a focused discussion on the key issues and recommendations contained in the Draft Issues and Alternatives Documents under discussion with the agency. Notes were taken during meetings and feedback obtained on comments and suggestions about the CRWS by the various agencies. A letter of support was requested from each agency which would outline their willingness to utilize CRWS and any commitments they intend to follow through with.
- **Task 3 - Compile Agency Database:** A concise Excel spreadsheet of the agencies contacted was compiled which summarizes the agencies' commitments and feedback.
- **Task 4 – Reporting:** The results of the 7 agency meetings and the database of agency commitments were summarized into a final report detailing how the agencies may assist with the implementation of the CRWS.



4.0 MEETING RESULTS

This section presents the summary meeting notes from each of the 7 agencies in point form.

4.1 Fisheries and Oceans Canada

Meeting Date: February 27, 2009

Time: 3:00 PM – 4:30 PM

Location: DFO Offices , 100 Annacis Parkway, Unit 3, Delta, BC

Attending: Ed Woo – Regional Manager – Resource Restoration

Matt Foy – Senior Habitat Biologist

Debra Sneddon – Resource Manager – Recreational Fisheries

Joe Tadey – Program Head – Chum, Pink and Recreational Fisheries Program

Alan Kenney, Golder Associates Ltd.

Issues Discussed:

- Sport Angling Behaviour
- Fish Habitat Restoration and Enhancement
- Hatchery Production and Management

General Comments

- The Issues and Recommendations document lists members of the Project Team in the Acknowledgement section at the front of the document which includes 6 DFO staff. There was discussion concerning the fact that the document does not clearly state that DFO staff on the Project Team were not necessarily speaking for or representing DFO management.
- It was suggested that a statement be included at the bottom of the Acknowledgement section stating that this report does not necessarily reflect the official views and opinions of the individual agencies and First Nations represented on the Project Team.
- It was also suggested that the DFO Community Advisor was in the best position in DFO to act as a facilitator between DFO and the CRWS. However, there may be a need to designate a more senior DFO representative in OHEB to officially represent DFO in this process in order to provide managerial input and oversight.



Sport Angling Behaviour

- Debra Sneddon indicated that she did not support the CRWS's Sport Angling Behaviour document. In particular, there were no representatives from key agencies / organizations including:
 - DFO's Recreational Fisheries program;
 - DFO's Conservation and Protection Branch; and
 - Sports Fish Advisory Board
- Debra also noted that DFO does not recognize "angling ethics" within its conservation and protection mandate.
- "Flossing" is also a term not used officially within DFO. DFO uses the term "bottom bouncing". These terms describe a way of catching a fish using a leader length of 6-20 feet which is cast across a stream and allowed to bounce downstream (hence the name of the weights used – Bouncing Bellies). If there are enough fish in the system, one is eventually snagged as the line is dragged through the fish's mouth as it swims upstream, operculating. One usually hooks the fish on the outside of its mouth.
- Debra thought that the Vision and Goals looked acceptable except for the references to "ethical anglers" which she recommended should be removed.
- Debra did not comment on the recommendations of the Draft Angling Behaviour Issues and Alternatives document.
- Debra did recommend that the CRWS should arrange to meet with the Sports Fish Advisory Board in order to seek their review of this document.

Fish Habitat Restoration and Enhancement

- Matt Foy indicated that he was generally supportive of the 5 recommendations in the Issues and Alternative document which included the following:
 - Recommendation 1 – Protect existing habitat in the watershed
 - Recommendation 2 – Maintain existing restoration projects
 - Recommendation 3 – Restore ecological processes in the watershed
 - Recommendation 4 – Continue to enhance and restore fish habitat
 - Recommendation 5 - Mitigate the potential impact of restoration projects on other values
- Matt indicated that he saw DFO's supportive role in fish habitat restoration continuing much as it has since the inception of the CRWS.



- Matt sees DFO's role primarily as being a facilitator in habitat restoration given the local knowledge and expertise that has been developed over the years.
- Matt recognized through this process that there are strong amphibian values in the Chilliwack watershed and was receptive to this issue, which Recommendation 5 addresses.

Hatchery Production and Management

- The recommendations from this Issues and Alternative document included:
 - Engage First Nations, stakeholders, and the local community in dialogue and decision-making regarding hatchery production levels and ways to mitigate the negative impacts of high hatchery production levels and angling effort on wild salmon populations, angling success and experience, other users and residents, local infrastructure, and other wildlife species.
 - Evaluate and adjust hatchery production levels and rearing and release strategies according to continued annual monitoring and stock assessment of both wild and hatchery populations to determine if stock assessment is successful or not and if it is helping to meet the program objectives (*i.e.*, adaptive management);
 - Investigate the relationship between hatchery production levels, escapement levels of both wild and hatchery production fish, angling effort and success, and impacts to the watershed and its native species;
 - Continue to strengthen wild salmon populations by restoring freshwater fish habitat (*e.g.*, improving access to existing fish habitat or creating new habitat).
- Joe Tadey said that he would bring this document to Timber Wighthouse's attention (Area Chief, DFO Stock Assessment, Kamloops).
- Joe indicated that Timber would want to see more clearly defined issues / questions for stock assessment to consider.

4.2 BC Ministry of Tourism, Culture and Arts

Meeting Date: February 20, 2009

Time: 10:00 AM – 11:30 AM

Location: BCMTCA Offices, 46360 Airport Road, Chilliwack, BC

Attending: Mike Peters, Recreation Officer, Chilliwack Recreation District, BCMTCA

Alan Kenney, Golder Associates Ltd.



Issues Discussed:

- Illegal Dumping
- Recreation

Issue: Illegal Dumping

- Mike has been actively engaged in a number of actions and strategies to address this significant issue in the watershed, including:
 - Participation in the Chilliwack River Valley Nuisance Use Mitigation Team while it was meeting in 2007 and 2008;
 - Implementation of a ban in overnight parking / camping on Chilliwack Lake Road between Vedder Crossing and Tamahi in May 2007. This 12 km stretch of park area is an area of concentration for illegal dumping and other activities damaging to the watershed;
 - Installation of park infrastructure along this popular stretch of park along the Chilliwack River, including signage advising of the ban in overnight parking / camping, new parking lots, and garbage cans. Total cost \$200k split between BCMTCA and the City of Chilliwack; and
 - Annual maintenance cost to the park is about \$10k per year which covers garbage tipping fees (\$5k) and RCMP overtime costs to manage people and issue tickets for non-compliance to the regulation.
- This integrated initiative resulted in a significant reduction in the volume of garbage disposed in this area.
- Mike said he would like to investigate the feasibility of the installation of a gate / information kiosk on the Chilliwack River Road. Overnight campers are being pushed further and further up this road which results in significant illegal dumping. First Nations support is required in order to advance this potentially effective option to manage access to the area and reduce illegal dumping.
- BCMTCA is funding a study this year to examine the feasibility for the upgrade of an old BC Hydro gatehouse on the Burma Road along West Stave Lake near Mission in order to manage access to this area and support invest in additional recreation infrastructure.
- Mike has applied for funding to re-build camp sites along the Bench Road and develop into “managed sites” with support staff to service campers.
- Mike has also worked with a wide variety of clubs, organizations, and other government agencies in garbage management initiatives.
- Recommendations in the CRWS Draft Issues and Alternative Illegal Dumping Document that BCMTCA would be willing to work with the Chilliwack River Watershed Strategy (CRWS) Project Team include:



- Recommendation 1: Develop / Expand an Education and Publicity Campaign
 - BCMTCA willing to discuss this issue and possible joint initiatives;
- Recommendation 2: Research the feasibility of installing a surveillance centre or an information centre on the Chilliwack River Road
 - BCMTCA also willing to discuss and investigate this issue;
- Recommendation 4: Increase / improve enforcement of illegal dumping
 - BCMTCA is already working closely with BC Environment Conservation Officers and RCMP and will continue to do so;
- Recommendation 6: Ban overnight parking / camping on the Chilliwack Lake Road between Vedder Crossing and Tamihi
 - Completed

Issue: Recreation

Recommendations in the Draft Issues and Alternative Recreation Document that Mike is either currently engaged with or willing to discuss with CRWS include the following:

- Recommendation 3: The Chilliwack River Nuisance Mitigation Planning Team (or future version of this committee), BC Parks, FVRD Parks, First Nations, the BCMTCA, and DFO should be encouraged to consider the options suggested by the community and the Project Team, as outlined in various documents generated by the CRWS. It is also recommended that Metro Vancouver be engaged in identifying and working towards solutions.
 - Mike is already engaged with planning activities with all of these organizations to varying degrees and willing to consider the recreation options suggested by the Project Team. BCMTCA agrees that it would be worthwhile to get Metro Vancouver involved in recreation planning.
- Recommendation 4: Further consultations and dialogue be conducted amongst regulatory agencies, First Nations, visitors, recreation groups, and the community regarding recreational issues in the watershed, including areas of conflict, known sources of watershed impacts, potential recreation growth sites and potential actions to manage access to the Chilliwack Lake Road.
 - This is a major area of focus with BCMTCA, especially with respect to ongoing negotiations with First Nations regarding the development of new recreation and camping sites.



- Recommendation 5: Reduce areas of conflict between recreation and non-recreation land use sectors by ensuring adequate buffer zones between conflicting land uses (e.g., between camping sites and working forest), and by exploring opportunities where each sector can work together towards shared goals (e.g., woodlot operator to provide cut wood for neighbouring camp site).
 - Some conflict resolution is already being done. BCMTCA is developing a designated motorcycle trail on Chipmunk Road.
- Recommendation 7: Capitalize on opportunities to obtain and share information about recreational uses and values within the Chilliwack River Watershed (e.g., include questions on BC Parks surveys at Cultus Lake and Chilliwack Lake to obtain information about observed watershed impacts, areas of interest, sources of conflict with other recreationalists, suggestions for improvement, etc.).
 - BCMTCA is already doing this by using BC Parks data. Many user groups already know where the best opportunities are for their recreational pursuit. These areas have not been formalized but could be for some specific user groups.

4.3 BC Ministry of Forestry and Range

Date: March 4, 2009

Time: 9:30 AM – 11:00 AM

Location: BCMFR Offices, 46360 Airport Road, Chilliwack, BC

Attending: Allan Johnsrude, District Manager, Chilliwack Forest District
Alan Kenney, Golder Associates Ltd.

Issue Discussed:

- Forestry and Forest Management

Review of Atlas

- Allan Johnsrude appreciated the level of effort that went into to develop of the CRWS Atlas. He thought that most of the information in the Atlas with respect to forest management issues would already be accessible by the forest tenure holders in Chilliwack.
- BCMoE has updated a number of their Wildlife Management areas recently for coastal giant salamander, Pacific water shrew, and tall bugbane. BCMFR have also updated their old growth management areas. These revised maps are available from BCMoE and BCMFR.



Review of Recommendations from Draft Issues and Alternative Documents

- Recommendation 1 – Information Sessions and Tours - can be held to inform the local community and stakeholders about forest practices in the watershed.
 - Allan Johnsrude knew that his staff has been previously involved with the CRWS in coordinating tours of forestry operations in the watershed and that they were helpful in educating people about current forestry management practices. He agreed that this BCMFR may be able to assist the CRWS in coordinating future information sessions and field tours.
- Recommendation 2 – Forums for Dialogue and Information Exchange – opportunities for the public to express concerns and ideas and to build trust between stakeholders.
 - Allan Johnsrude also thought that this could be another point of engagement with the CRWS.
- Recommendation 3 – Enhanced public comment and review requirements – exceeding minimum requirements to make it easier for the public to review and provide comments to forest stewardship plans.
 - BCMFR’s decision making authority is bound by legal requirements to establish a level playing field. They have no authority to force licensees to go beyond the legal requirements for consultation and could not assist with this recommendation.
- Recommendation 4 – Email or Website Notification of Review Periods – to better inform community and stakeholders about upcoming review periods and comment deadlines.
 - BCMFR are always looking for a “Win-Win” with licensees to get their information into the public realm and get public comments;
 - There may be opportunities to work collaboratively with the CRWS to get relevant information distributed more broadly to the public in a cost-effective manner (*i.e.*, website linkages).
- Recommendation 5 – Investigate Potential for Ecosystem-Based Management Principles – to learn from, follow the lead of, and build on momentum of, new legal framework for logging in BC’s central coast.
 - BCMFR in Chilliwack are not currently moving forward with EBM. This initiative is being led by ILMB. There is already a high level of integrated use in the watershed and does not see EBM as a high priority.
- Recommendation 6 – Designations or Tools to Protect Identified Sites – avoidance or low-impact practices for sites of high value or sensitivity
 - May be able to discuss this further with the CRWS. However, it will be important to manage expectations in regard to influencing decision making.



CHILLIWACK RIVER WATERSHED STRATEGY

- Recommendation 7 – Pursue Fisheries Sensitive Watershed Designation – to ensure forestry activities do not negatively impact downstream of fish populations.
 - This is a BCMoE led initiative.
- Recommendation 8 - Reduce Watershed Impacts from Forestry Roads – to mitigate past impacts and repair or speed the recovery of watershed features and functions negatively impacted from past logging.
 - Allan Johnsrude noted that the recommendations used in the Issues and Alternative document was from a 1992 Hay & Company report. He said that most of these recommendations have been brought into practice since this report was written.
 - Current logging road practices meet or exceed these recommendations.
 - BCMFR is aware that old logging roads need to be upgraded to meet the new standards of practice. Plan to focus on upgrading the Harrison East / West Roads this year pending approval of funding.
- Recommendations 9 – Habitat Restoration Projects – to mitigate and repair or speed the recovery of watershed features and functions negatively impacted from past logging.
 - Lack of BCMFR resources for this. Sometimes licensee can source external funding (FIA) to undertake these types of projects.
- Recommendation 10 - Monitoring with Environmental Indicators – to monitor the relative health of the ecosystem, to track trends over time, or to document site-specific impacts associated with a land use change or impact.
 - Lack of BCMFR resources for this. Water Stewardship Division may look at sedimentation issues in some cases.
 - Licensees may undertake some environmental monitoring through FIA projects
- Recommendation 11 - Watershed Modelling – to help determine sustainable rate of harvest for the watershed and areas of vulnerability.
 - There are a number of factors that influence the rate of harvest. Hydrology is one of those factors. In some cases, more detailed hydrologic assessments are done to assist in defining the rate of harvest. However, there is no legal requirement.
 - In community watersheds used for water supply, there is a legal requirement to define the hydrologic impacts.
- Socio-Economic Impact Assessment of Forest Industry – cost-benefit analysis of the forest industry, including watershed gains and losses to other watershed users potentially impacted by forestry activities.



- The forestry industry's intent is not to cause negative environmental impacts or diminish recreational opportunities. Forestry and outdoor recreation are not mutually exclusive industries. An integrated approach would be required in order to conduct such a study.

Priority Recommendations

- Allan thought that the best initial points of potential engagement with the CRWS Issues and Recommendations would be to focus on:
 - Recommendation 1 – Information Sessions and Tours
 - Recommendation 4 – Website notification of Forest Stewardship Plan Review Periods and Deadlines
 - Recommendation 6 – Designations or Tools to Protect Identified Sites
 - Recommendation 8 – Reduce Watershed Impacts from Logging Roads

4.4 BC Ministry of Transportation

Date: March 4, 2009

Time: 1:00 PM – 2:00 PM

Location: BCMoT Chilliwack Area Office, 45890 Victoria Avenue, Chilliwack, BC

Attending: Barry Eastman, Operations Manager, Chilliwack Area Office
Alan Kenney, Golder Associates Ltd.

Issues Discussed:

- River Hazards
- Illegal Dumping
- Invasive Species

River Hazards

- BCMoT is actively engaged in the assessment and management of river hazards as they pertain to their management of roads and highways which are within their jurisdiction.
- BCMoT has been engaged most recently with the Wilson Road Dyke Repair Project which destroyed in the 2006 flooding. This project was led by the FVRD with funding from Emergency management BC.



- BCMoT expressed a willingness to discuss river hazards further with CRWS and work collaboratively together.

Illegal Dumping

- BCMoT is engaged in the collection of garbage along their highway and road right of ways which extend 33 feet off-centre of the road (*i.e.*, 66 feet in total).
- Barry said that in general, most of the garbage problems are not on MoT's right of way, but on private land.
- Barry said that all highway contractors must conform to the performance standards detailed in Highway Maintenance Contracts – Maintenance Specifications. Garbage collection is a routine item in highway maintenance contracts. The contractor typically holds back on garbage collection as much as possible as there is no incentive to do any more than the minimum requirements.
- Illegal dumping at BCMoT's gravel pits has become more of a problem since the FVRD introduced tipping fees. BCMoT have hundreds of gravel pits all over the Fraser Valley where people illegally dump their garbage. Barry said that they typically rely on the public to inform them of garbage at their many sites, which are too numerous for BCMoT to regularly check.
- BCMoT expressed a willingness to discuss this issue further with the CRWS and work collaboratively together.

Invasive Species

- Barry said that invasive species are problematic in some areas, particularly Wild Chervil. Japanese Knotweed is also found in some areas as well as Giant Hogweed to a lesser extent.
- BCMoT does not allow the use of any herbicides and therefore cannot treat invasive species with any chemicals. BCMoT sometimes will cut back invasive plants in an area and then collaborate with the FVRD and have their crew come out to spray the worst hit areas with herbicides.
- BCMoT expressed a willingness to discuss this issue further with the CRWS and work collaboratively together.



4.5 BC Ministry of Energy, Mines and Petroleum Resources

Date: March 6, 2009

Time: 1:00 PM – 1:45 PM

Attending: Norman Marcy - Director, Lands Use Coordination Branch, EMPR
Alan Kenney, Golder Associates Ltd.

Issue Discussed:

- Mining

General Comments

- Norman had received hard copies of the *Coquitlam River Watershed Strategy: Issues and Recommendations* document as well as the *Watershed Atlas* which was couriered to him.
- Norman noted that Section 4.0 of the document states that “the overall level of community concern regarding mining in the Chilliwack River watershed appears to be relatively low at this time”. Norman attributes this to a lack of any large mining operations in the area.
- Norman also commented on the fact that the last 3 to 5 years have seen near-record commodity prices which stimulated significant mine exploration activity in many parts of BC. However, there was little influx of mineral exploration activity in the Chilliwack watershed by existing tenure holders.
- Norman therefore thought that the potential for any mine development in the watershed can be considered as low.

Review of Recommendations from Draft Issues and Alternatives Report

- Recommendation 1 – Identification of sensitive areas
 - Norman noted that much work has already been done by MoE and MFR in defining environmentally sensitive areas which mining exploration and development companies use in their baseline assessments.
- ILMB is also a repository for some of this information in regard to land use values. Their database is the Land and Resource Data Warehouse (LRDW) which EMPR uses in their referral process.
 - The CRWS should pursue having their products incorporated into ILMB’s database.
 - This recommendation is not within EMPR’s realm of responsibility.



- Recommendation 2 – Protecting sites of known ecological or cultural value
 - This recommendation highlights the potential use of a Notation of Interest which any member of the public can apply for and is free. A Notation of Interest would require a referral to the specified Provincial Ministry for any tenure application received by ILMB.
 - Norman said that in practice, this is not an efficient way to protect environmental values. It would be more efficient to work through MoE in their ecosystem planning to identify and protect environmentally sensitive areas.
 - This recommendation is also not within EMPR's realm of responsibility
- Recommendation 3 - Community-driven data collection / environmental monitoring
 - Norman said that for water quality monitoring, MoE's Water Stewardship Division would be the best point of contact as they are the permitting authority and all monitoring data would have to be sent there.
 - A community-driven environmental monitoring program such as recommended here, is outside EMPR's realm of responsibility.
- Recommendation 4 – Revisiting old/historic mine sites
 - Today, all mines which are issued development permits must first place a bond in the amount required to undertake the mine's reclamation.
 - If the mine is an abandoned / orphaned mine, there is a Trustee of Liability who will examine the history of the mine to identify the owners and their liability.
 - Two key contacts which could assist with providing information where these sites are located and what is being done regarding reclamation of these sites are:

Mike Macfarlane

Senior Manager – Land Reclamation

BC Ministry of Environment

PO Box 9342 Stn Prov Govt

Victoria, BC V8W 9M1

Tel: 250-356-0557

Email: Mike.Macfarlane@gov.bc.ca



Diane Howe

Senior Reclamation Scientist

BC Ministry of Energy, Mines and Petroleum Resources

PO Box 9320 Stn Prov Govt

Victoria, BC V8W 9M1

Tel: 250-952-0183

Email: Diane.Howe@gov.bc.ca

4.6 BC Ministry of Environment – Ecosystems Branch

Date: March 9, 2009

Time: 1:30 PM – 3:00 PM

Location: BCMoE Offices, 2nd Floor, 10470 152nd Street, Surrey

Attending: Sylvia Letay, Ecosystems Officer, Ecosystems Branch
Alan Kenney, Golder Associates Ltd.

Issue Discussed:

- Species At Risk and Biodiversity

General Comments

- Sylvia thought that the Watershed Atlas was a very useful product that could be used by stakeholders and interested parties wanting to learn more about the values of the watershed.
- Sylvia also complemented the process in doing a good job in fostering a collaborative relationship among all key watershed stakeholders and developing its products.
- She also thought that the process also did commendable job highlighting the archaeological and First Nations values in the watershed.



Review of Recommendations from Draft Issues and Alternatives Document

- Recommendation 1 – Undertake or promote species and ecosystems at risk inventories or assessments as per the *Working Draft Guidelines Dealing with Developmental Effects on Species and Ecosystems at Risk* document developed by BCMoE or per FRPA or other legislated requirements.
 - Sylvia indicated that the Working Draft Guidelines are broadly applied by a wide variety of stakeholders for their step-wise approach to identify potential occurrences of species and ecosystems at risk in developmental areas; conduct appropriate surveys to confirm presence / absence or species and ecosystems at risk; and avoid or mitigate impacts to species and ecosystems at risk.
 - The existence of this suggested approach is broadly known by most stakeholders who undertake developmental planning
 - This document will stay in a draft form for now.
 - Sylvia stressed that a “trigger” is required to apply this approach in risk assessment (*i.e.*, a development plan that will change the landscape) and is the responsibility of the developer.
 - Ecosystems Branch has a team that is studying the impacts of urbanization on biodiversity
- Recommendation 2 – Develop biological indicators (groups or types of biological resources) that can assess the biological health condition of the Chilliwack River Watershed and monitor those conditions over time.
 - Sylvia indicated that there are now Biotic Indices of Biological Integrity (BIBI) that have been developed for a variety of species for birds, fish and mammals.
 - BCMoE are in the process of implementing a pilot project to test these indices in three urban watersheds in the Lower Mainland: Northeast Coquitlam, Southwest Mission, and Clayburn / Sumas Mountain.
 - Chilliwack will not be a candidate for this pilot project as the threats from urban development are recognized in the CRWS to be low given the limited available land which has development potential.
 - Sylvia suggested that DFO’s Streamkeeper’s Module on benthic monitoring provides a very good methodology with which stewardship groups could undertake localized ecosystem monitoring over time.
- Recommendation 3 – Develop ecological monitoring programs that can provide information on local changes and desired ecosystem attributes.
 - BCMoE is conducting their urban watershed monitoring pilot program in the 3 lower Mainland watersheds mentioned above. There are no plans to expand this program at this time. Chilliwack would likely not be a candidate for this program.



- The CRWS should try to advance this recommendation at a local level through community stewards.
- Recommendation 4 - Consider and manage for the habitat requirements of all species and ecosystems at risk, and use ecological information and BMP's to facilitate land use decision making.
 - Sylvia indicated that she thought that the FVRD was enlightened and onboard with this concept as a result of the development of the CRWS.
 - There is room for improvement with other decision makers / developers.
 - This concept is extremely important and goes beyond decision makers to include all stakeholders.

4.7 BC Ministry of Agriculture and Lands – Integrated Land Management Bureau

Date: March 9, 2009

Time: 3:00 PM – 4:30 PM

Location: ILMB Offices, 200 – 10428 153rd Street, Surrey

Attending: Keith Anderson – Manager, Crown lands and Resources,
South Coast Service Centre

Kevin Walker - Land Officer, BC IPP Office

Danielle Dodd – Land Technical Officer,
Crown Lands and Resources

Alan Kenney, Golder Associates Ltd.

Issue Discussed:

Run-of-River Independent Power Producer (IPP) Projects

General Comments

- Keith said that while there have been many tenure applications for IPP development in recent years, the probability that any of them will make it to final approval is only 10%.
- The IPP application process and its various stages are well documents in the ILMB's *IPP Guidebook* available on-line at their website under "Popular Topics": <http://www.al.gov.bc.ca/clad/index.html>
- ILMB will consider putting the CRWS's documents and atlas in the Land and Resources Data Warehouse (LRDW) as well as their own internal ILMB shared website.



Recommendations from Draft Issues and Alternatives Document

- Recommendation 1 – IPP strategic Plan (or Master Plan) for Chilliwack Watershed
 - Keith said that there would be a low probability that ILMB would be involved in any such initiative because they do not conduct strategic planning for any potential power development sites. It is up to the applicant to assess and decide to go through the application process.
- Recommendation 2 – Public Forum
 - Keith said that ILMB would be able to provide a staff person if the CRWS scheduled a public forum to discuss IPP's and the application process.
- Recommendation 3 - Identify Sensitive or Valued Streams as “No Go” Streams
 - DFO and MoE would need to make this assessment and designation
- Recommendation 4 – Mandatory Eco-Logic Standards and Criteria
 - There are no regulations in the Lands Act requiring proponents to do this and highly unlikely there would ever be.
 - This would be primarily BC Hydro's responsibility as the purchaser to decide
- Recommendation 5 – Up-To-Date and Informed Community
 - Keith noted that the FVRD (David Bennett) already receives all IPP applications for referral. These applications are also posted to ILMB's website.
 - The CRWS can link to this website to inform their members of the current status IPP applications
- Recommendation 6 - Public Consultation for Tenure Renewal or Privatization
 - A Long-term Tenure Licence is granted by ILMB after BC Hydro issues the applicant an Energy License which is for 40 years.
 - After the 40 year period is up, the tenure holder would be given the opportunity to either reapply or decommission the IPP facility.
 - If any member of the public believes that an IPP is resulting in unforeseen levels or types of irreversible impacts, then MoE and/or DFO should be notified and a formal investigation requested.
- Recommendation 7 - Sensitive Stream Designation under *Fish Protection Act*
 - This recommendation would be MOE's responsibility



- Recommendation 8 – Reclamation or Restoration Requirements
 - ILMB requires that the applicant leave the land tenure “safe, clean and sanitary”. This means that all roads, transmission lines, etc. must be decommissioned as per the terms and conditions in the tenure document.
 - Decommissioning of authorized instream works under the Water Act require the approval of the Water Act engineer or a dam safety officer, if a dam is involved.
 - Security deposits are collected under the Lands Act. These deposits are at a level believed to be high enough to discourage abandonment.
- Recommendation 9 – Environmental Monitoring and Research
 - This recommendation would be MoE’s responsibility.
 - Environmental monitoring would also be part of the applicant’s Environmental Monitoring Plan which is reviewed and approved through the environmental assessment process.
- Recommendation 10 – Energy Conservation Campaign
 - This recommendation is BC Hydro’s responsibility
- Recommendation 11 - Support Community Benefit Agreements that Address Watershed Values
 - This recommendation would be primarily the FVRD’s responsibility.

5.0 SUMMARY OF AGENCY COMMITMENTS

Key commitments made by the government agencies were summarized into an Excel spreadsheet for future reference by the CRWS. The spreadsheet is presented below as Table 1. This table also shows issues the Project Team should address / consider.



CHILLIWACK RIVER WATERSHED STRATEGY

Table 1: Summary of Agency Commitments and Issues for CRWS to Address / Consider

Agency	Issue	Commitment	Issues for CRWS to Address / Consider
Fisheries and Oceans Canada	General Comments	DFO Community Advisor to continue the facilitating role between DFO and the CRWS process.	DFO suggested that a statement be included at the bottom of the Acknowledgement section stating that this report does not necessarily reflect the official views and opinions of the individual agencies and First Nations represented on the Project Team.
		DFO may designate a senior DFO representative to provide DFO managerial input and oversight.	
	Sport Angling Behaviour		DFO does not support the CRWS's Sport Angling Behaviour document. In particular, there were no representatives from key agencies / organizations in the process including: <ul style="list-style-type: none"> - DFO's Recreational Fisheries program - DFO's Conservation and Protection Branch - DFO's Sports Fish Advisory Board
			DFO does not recognize "angling ethics" within its conservation and protection mandate.
			"Flossing" is also a term not used officially within DFO. DFO uses the term "bottom bouncing".
			Recommend that the CRWS should arrange to meet with the Sports Fish Advisory Board in order to seek their review of this document and their input into the process.



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Agency	Issue	Commitment	Issues for CRWS to Address / Consider
Fisheries and Oceans Canada	Fish Habitat Restoration and Enhancement	DFO generally supportive of the 5 recommendations in the Issues and Alternative document.	DFO recognized through this process that there are strong amphibian values in the Chilliwack watershed and was receptive to this issue, which Recommendation 5 addresses.
		DFO's supportive role in fish habitat restoration to continue much as it has since the inception of the CRWS.	
	Hatchery Production and Management	Joe Tadey agreed to send this document to Timber Wighouse, Area Chief, DFO Stock Assessment for his review.	
BC Ministry of Tourism, Culture and Arts	Illegal Dumping	Recommendation 1: Develop / Expand an Education and Publicity Campaign - BCMTCA willing to discuss collaborative efforts with the CRWS.	
		Recommendation 2: Research the feasibility of installing a surveillance centre or an information centre on the Chilliwack River Road - BCMTCA also willing to discuss this issue with the CRWS.	
		Recommendation 4: Increase / improve enforcement of illegal dumping - BCMTCA already working closely with BC Environment Conservation Officers and RCMP and will continue to do so.	
		Recommendation 6: Ban overnight parking / camping on the Chilliwack Lake Road between Vedder Crossing and Tamihi – COMPLETED.	



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Agency	Issue	Commitment	Issues for CRWS to Address / Consider
BC Ministry of Tourism, Culture and Arts	Recreation	Recommendation 3: The Chilliwack River Nuisance Mitigation Planning Team, BC Parks, FVRD Parks, First Nations, the BCMTCA, and DFO should be encouraged to consider the options suggested by the community and the Project Team. BCMTCA already doing this and commits to continuing to consider options from the CRWS.	CRWS should consider getting Metro Vancouver involved in recreation planning.
		Recommendation 4: Further consultations and dialogue be conducted amongst regulatory agencies, First Nations, visitors, recreation groups, and the community regarding recreational issues in the watershed, including areas of conflict. This is already a major area of focus for BCMTCA with respect to First Nations consultations regarding new recreation sites.	
		Recommendation 5: Reduce areas of conflict between recreation and non-recreation land use sectors - BCMTCA doing some conflict resolution (e.g., developing a designated motorcycle trail on Chipmunk Road).	
BC Ministry of Forests and Range	Forestry and Forest Management	Atlas: BCMFR has new maps which they can share with CRWS. BCMoE has updated a number of their Wildlife Management areas recently for coastal giant salamander, Pacific water shrew, and tall bugbane. BCMFR have also updated their old growth management areas. These revised maps are available from BCMoE and BCMFR.	BCMFR thought that forest licensees would have access to most of the maps and information in the CRWS Atlas through BCMFR, BCMoE and ILMB.



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Agency	Issue	Commitment	Issues for CRWS to Address / Consider
BC Ministry of Forests and Range	Forestry and Forest Management	<p>Recommendation 1: Information Sessions and Tours – can be held to inform the local community and stakeholders about forest practices in the watershed. BCMFR Agreed that this would be an area that they could work with the CRWS to collaborate in organizing.</p>	
		<p>Recommendation 4: Email or Website Notification of Review Periods – to better inform community and stakeholders about upcoming review periods and comment deadlines. BCMFR said there may be opportunities to work collaboratively with the CRWS to get relevant information distributed more broadly to the public in a cost-effective manner (<i>i.e.</i>, website linkages).</p>	
		<p>Recommendation 6 – Designations or Tools to Protect Identified Sites – avoidance or low-impact practices for sites of high value or sensitivity. BCMFR may be able to discuss this further with the CRWS. However, it will be important to manage expectations in regard to influencing decision making.</p>	
		<p>Recommendation 8 - Reduce Watershed Impacts from Forestry Roads – to mitigate past impacts and repair or speed the recovery of watershed features and functions negatively impacted from past logging. BCMFR is aware that old logging roads need to be upgraded to meet the new standards of practice. Plan to focus on upgrading the Harrison East / West Roads this year pending approval of funding.</p>	



CHILLIWACK RIVER WATERSHED STRATEGY

Agency	Issue	Commitment	Issues for CRWS to Address / Consider
BC Ministry of Transportation	River Hazards	BCMoT is actively engaged in the assessment and management of river hazards as they pertain to their management of roads and highways which are within their jurisdiction. BCMoT willing to discuss this issue with the CRWS.	
	Illegal Dumping	BCMoT is engaged in the collection of garbage along their highway and road right of ways which extend 33 feet off-centre of the road (<i>i.e.</i> , 66 feet in total). BCMoT willing to discuss this issue with the CRWS.	
	Invasive Species	BCMoT is engaged in the management of invasive species in their right of way for their roads. BCMoT willing to discuss this issue further with the CRWS.	BCMoT does not allow the use of any herbicides and therefore cannot treat invasive species with any chemicals. BCMoT sometimes will cut back invasive plants in an area and then collaborate with the FVRD and have their crew come out to spray the worst hit areas with herbicides.
BC Ministry of Energy, Mines and Petroleum Resources	Mining	Recommendation 4: Revisiting old/historic mine sites - Two key contacts which could assist with providing information where these sites are located and what is being done regarding reclamation of these sites are presented in the notes.	BCMEMPR commented on the fact that the last 3 to 5 years have seen near-record commodity prices which stimulated significant mine exploration activity in many parts of BC. However, there was little influx of mineral exploration activity in the Chilliwack watershed by existing tenure holders. The potential for any mine development in the watershed can therefore be considered as low.



CHILLIWACK RIVER WATERSHED STRATEGY

Agency	Issue	Commitment	Issues for CRWS to Address / Consider
BC Ministry of Environment - Ecosystems Branch	Species At Risk and Biodiversity	<p>Recommendation 1 – Undertake or promote species and ecosystems at risk inventories or assessments as per the <i>Working Draft Guidelines Dealing with Developmental Effects on Species and Ecosystems at Risk</i> document developed by BCMoE or per FRPA or other legislated requirements. BCMoE has worked to have this document widely distributed to developers and will continue to do so. BCMoE also undertaking an assessment of 3 urban watershed to investigate impacts to biodiversity.</p>	
		<p>Recommendation 2 – Develop biological indicators (groups or types of biological resources) that can assess the biological health condition of the Chilliwack River Watershed and monitor those conditions over time. There are now Biotic Indices of Biological Integrity (BIBI) that have been developed for a variety of species for birds, fish and mammals. BCMoE in the process of implementing a pilot project to test these indices in several three urban watersheds in the Lower Mainland: Northeast Coquitlam, Southwest Mission, and Clayburn / Sumas Mountain.</p>	<p>Chilliwack will not be a candidate for this urban biodiversity assessment pilot project as the threats from urban development are recognized in the CRWS to be low given the limited available land which has development potential.</p>
		<p>Recommendation 3 – Develop ecological monitoring programs that can provide information on local changes and desired ecosystem attributes. BCMoE doing this in their urban ecosystem biodiversity pilot program.</p>	



CHILLIWACK RIVER WATERSHED STRATEGY

Agency	Issue	Commitment	Issues for CRWS to Address / Consider
BC Ministry of Agriculture and Lands - Integrated Land Management Bureau	Run-of-the-River Independent Power Producer (IPP) Projects	Recommendation 2: Public Forum - ILMB would be able to provide a staff person to attend a CRWS sponsored event.	
		Recommendation 5: Up to Date and Informed Community - ILMB will continue to send their IPP referrals to the FVRD. The CRWS can then put these on their website. Alternatively, the CRWS can use the ILMB link to their IPP applications.	
		Recommendation 8: Reclamation or Restoration Requirements - ILMB requires that the applicant leave the land tenure "safe, clean and sanitary". This means that all roads, transmission lines, etc. must be decommissioned as per the terms and conditions in the tenure document. Decommissioning of authorized instream works under the Water Act requires the approval of the Water Act engineer or a dam safety officer, if a dam is involved. DFO and MoE would be required to inspect the decommissioned site to assess any environmental risks posed by the site.	
		ILMB will consider putting the CRWS's documents and atlas in the Land and Resources Data Warehouse (LRDW) as well as their own internal ILMB shared website.	



6.0 DISCUSSION

The overall objective of the Project was to meet with key government agencies and obtain their overall support of the process and their commitments to address specific issues and recommendations from the CRWS's documents and advance the implementation of the Strategy.

The meetings with the agencies indicated that there is a general willingness to continue to engage with the CRWS and assist where possible with the implementation of specific recommendations from the strategy. Table 1 indicates that there are over 30 potential recommendations from the Draft Issues and Alternatives documents which agencies expressed the ability to potentially assist with. Key results in terms of agency commitments included the following:

- DFO will continue to use their local Community Advisor to facilitate between DFO and the CRWS. DFO may designate another DFO manager to liaise with the process to provide managerial oversight when required;
- DFO was generally supportive of the recommendations in the Fish Habitat and Restoration Draft Issues and Alternative document;
- BCMTCA has implemented a ban overnight parking / camping on the Chilliwack Lake Road between Vedder Crossing and Tamihi and has invested in additional infrastructure along this 12 km stretch;
- BCMTCA would be willing to discuss the introduction of an information / security kiosk at the entrance to the Chilliwack Valley;
- Both BCMFR and ILMB said that they would be willing to work with CRWS to conduct public information sessions on forestry and forest management practices and IPP development, respectively;
- BCMFR indicated that they would also be willing to discuss with the CRWS the possibility of website notification of Forest Stewardship Plan review periods and deadlines; designations or tools to protect identified sites; and, reduce watershed impacts from logging roads;
- BCMoT indicated that they are continuing to engage in river hazard management, illegal dumping and invasive species management and expressed a willingness to work collaboratively with the CRWS;
- BCMEMR provided 2 Provincial Government contacts for the CRWS to follow up with regarding abandoned mines in the Chilliwack watershed;
- BCMoE – Ecosystems Branch continues to direct potential developers to use *Working Draft Guidelines Dealing with Developmental Effects on Species and Ecosystems at Risk* document for conducting risk inventories;
- BCMoE – Ecosystems Branch is committed to a pilot biodiversity monitoring program in 3 Lower Mainland watersheds to better define urbanization impacts on biodiversity; and



CHILLIWACK RIVER WATERSHED STRATEGY

- BCILMB indicated that it will consider putting the CRWS's documents and atlas in the Land and Resources Data Warehouse (LRDW) as well as their own internal ILMB shared website.

There were also several issues identified in the agency meetings which CRWS representatives should follow up with as soon as possible. These issues included:

- DFO's request that a statement be included at the bottom of the Acknowledgement section stating that the watershed strategy document does not necessarily reflect the official views and opinions of the individual agencies and First Nations represented on the Project Team;
- For the Sport Angling Behaviour Draft Issues and Alternatives document, DFO had several issues with it including:
 - There were no representatives from key agencies / organizations including: DFO's Recreational Fisheries program; DFO's Conservation and Protection Branch; and the Sports Fish Advisory Board;
 - DFO does not recognize "angling ethics" within its conservation and protection mandate;
 - "Flossing" is also a term not used officially within DFO. DFO uses the term "bottom bouncing"; and
- DFO recommended that a CRWS representative meet with the Sports Fish Advisory Board to have a discussion on the *Sport Angling Behaviour* document and review its recommendations.

All agencies agreed that they would provide the CRWS with a general letter of support for the CRWS. Due to the timing of this project, these letters of support will be received after the end date for this project and cannot be included as part of this report.

In order to implement the recommendations for which there was agency willingness, it will be important for the CRWS to follow up with each individual agency and further discuss and define their specific commitments and, if possible, establish a timeline for completion.

One of CRWS recommendations in the *Issues and Recommendations* document is focussed on information distribution, awareness and publicity. Many agencies, including DFO, BCMFR and BCILMC expressed their willingness to assist in speaking at public forums to address watershed issues. It is recommended that the CRWS place a high priority in planning these public meetings which will contribute towards the information dissemination goals of both the CRWS and these agencies. These public meetings would also continue to raise the profile of the CRWS in the community and provide an "early win" for the strategy's implementation.

It is also recommended that the CRWS engage both DFO's Recreational Resource managers as well as the Sports Fish Advisory Board in regard to discussing the issues and recommendations in the Draft Issues and Alternatives Document on Angling Behaviour.



Report Signature Page

GOLDER ASSOCIATES LTD.

ORIGINAL SIGNED

Alan Kenney, P.Eng., MBA
Senior Environmental Specialist

AK/BS/asd

ORIGINAL SIGNED

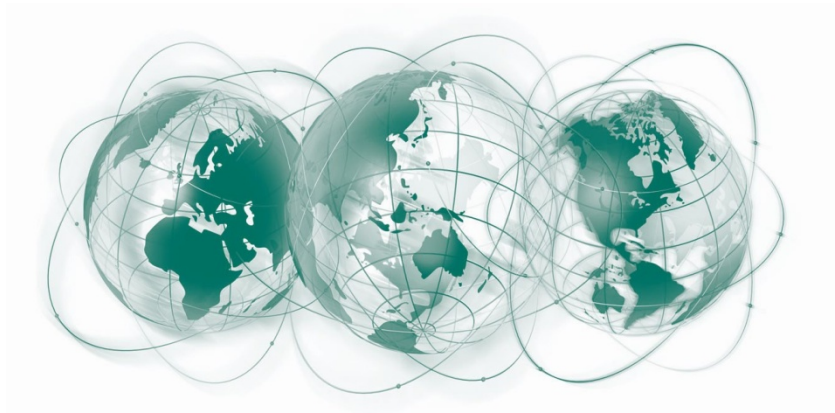
Bettina Sander, M.Sc., R.P.Bio.
Associate / Senior Aquatic Biologist

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Africa	+ 27 11 254 4800
Asia	+ 852 2562 3658
Australasia	+ 61 3 8862 3500
Europe	+ 356 21 42 30 20
North America	+ 1 800 275 3281
South America	+ 55 21 3095 9500

solutions@golder.com
www.golder.com



Golder Associates Ltd.
500 - 4260 Still Creek Drive
Burnaby, British Columbia, V5C 6C6
Canada
T: +1 (604) 296 4200

