From: Sent: Stewart, Rodger W FLNR:EX Monday, August 15, 2011 4:05 PM

To:

Arcand, Michelle X FLNR:EX: Youds, John A FLNR:EX

Cc:

McLeod, Joanne FLNR:EX

Subject:

RE: DFO response to: Outstanding Safety Issue

Meanwhile, if the DFO Officer or a Conservation Officer does in fact request your assistance, and that assistance includes entry to a mine...... I do not think we can say no. We would need to document all of that in case push-back becomes shove. By document, I mean get the request in writing etc.

Rodger Stewart
Director, Resource Management
Ministry of Natural Resource Operations
Cariboo Region
400 - 640 Borland Street
Williams Lake, BC
V2G 4T1
cell (250) 305 8536, desk (250) 398 4549
fax (250) 398 4214

From: Arcand, Michelle X FLNR:EX Sent: Monday, August 15, 2011 4:00 PM

To: Stewart, Rodger W FLNR:EX; Youds, John A FLNR:EX

Cc: McLeod, Joanne FLNR:EX

Subject: FYI: DFO response to: Outstanding Safety Issue

FYI, DFO officer Brian Murland has extended the support of his staff in Quesnel to accompany me in attending on mine sites should I have an urgent need.

He is entirely certain that DFO officers have authority to enter mine sites under federal legislation and to be accompanied by whoever they see fit. Nice to know we have this support!

Regardless, I will continue to adhere with the protocol we discussed this morning, notifying MEM and asking permission of the Mine Manager before entry onto a known mine site.

**From:** Stewart, Rodger W FLNR:EX **Sent:** Friday, August 12, 2011 12:37 PM

To: Hupman, C Bruce MEM:EX; Arcand, Michelle X FLNR:EX

Cc: Seguin, Joe MEM:EX; Youds, John A FLNR:EX; McLeod, Joanne FLNR:EX

**Subject:** RE: Outstanding Safety Issue

Have you issued the same directive to the Conservation Officer Service and the federal Department of Fisheries and Oceans?

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Ministry of Natural Resource Operations
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Williams Lake, BC
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cell (250) 305 8536, desk (250) 398 4549
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**From:** Hupman, C Bruce MEM:EX **Sent:** Friday, August 12, 2011 11:43 AM

**To:** Arcand, Michelle X FLNR:EX

Cc: Seguin, Joe MEM:EX; Stewart, Rodger W FLNR:EX; Youds, John A FLNR:EX; McLeod, Joanne FLNR:EX

**Subject:** Outstanding Safety Issue

Importance: High

Michelle,

Please consider this quote from section 37 of the *Mines Act*, R.S.B.C. 1996, c.293 [Updated to 2007] A person who contravenes a provision of this *Act*, the regulations, the code or an order made under any of them commits an offence

As mines are an industrial site, they can pose different industrial safety issues than those you are accustom to. The Health, Safety and Reclamation Code for Mines in British Columbia is a Provincial Regulation and looks to protect workers, public and the environment. To this means, the *Code* is clear regarding entry to a mine site and states: Other than an inspector, only persons authorized by the manager shall enter or be permitted to enter a mine.

I have provided this information to you prior to your August 8, 2011 inspection of mine # 1101292 which you refer to as placer lease 362505. As part of the responsibilities assigned to me as an Inspector of Mines, I am serving you written notice that by entering a mine site without authority, you are in contravention of the *Code*. By way of this e-mail I am also alerting your co-workers/supervisors of your continuing contravention of the *Code*.

I am concerned that you continue to place yourself in situations where you are at risk of injury and instruct you to cease entering a mine site at once unless authorized by the mine manager to do so.

Bruce Hupman Senior Mines Inspector

From: Arcand, Michelle X FLNR:EX

Sent: Thursday, August 11, 2011 4:19 PM

To: MMD Kamloops EMPR:EX; Hupman, C Bruce MEM:EX; Feldinger, Grant M MEM:EX

Cc: Seguin, Joe MEM:EX; Stewart, Rodger W FLNR:EX; Youds, John A FLNR:EX; McLeod, Joanne FLNR:EX

**Subject:** placer mining continues in wetland

Greetings,

On August 8, 2011 I did a follow-up inspection of placer lease 362505 to view reclamation work which was ordered as a result of an MOE inspection conducted last summer.

Last summer works included excavation, deposit of material, and discharge into watercourses and excavation of a wetland. The proponent did not hold a current work permit at the time. He was subsequently ordered by MEMPR to stop work and reclaim the present disturbance. (See attached email correspondence).

During my follow-up inspection I found that the reclamation undertaken was inadequate, as the "reclaimed area" was simply levelled and grass seeded but is so compacted and lacking in topsoil it will take likely take decades to recover and support vegetation.

The wetland area which was excavated last year has not been reclaimed at all and the proponent is continuing work in the wetlands. I have reviewed the NOW submitted this year and see that the proponent plan is to continue excavating this wetland area over the next 3 years. This is unacceptable. Wetlands provide high value wildlife habitat and ecosystem services. Mining in wetlands is not in keeping with the Placer Mining Activities in Riparian Ecosystems MOU which required a minimum 10 m setback from riparian ecosystems nor is it in accordance with guidance regarding placer standards provided to MEMPR by our Section last spring (draft attached): Page 2

FNR-2012-00238

I would like to know how MEM intends to address this situation.

Regards,

Michelle Arcand Habitat Biologist phone: 250-991-7252

mailing address: 322 Johnston Ave. Quesnel BC V2J 3M5

From:

Arcand, Michelle X FLNR:EX

Sent:

Tuesday, August 16, 2011 10:21 AM

To:

Stewart, Rodger W FLNR:EX; McIntyre, Ryane ENV:EX; Butler, Len ENV:EX

Cc:

Youds, John A FLNR:EX

Subject:

RE: Question: COS authority for entry to a mine

Rodger, Please keep the COS advised of any response from MEM to your question below of authority for entry onto a mine site.

And Ryane and Len please let us know if you have any legal advice on your authorities for entry onto mine sites. Thanks all,

Michelle Arcand Habitat Biologist phone: 250-991-7252

mailing address: 322 Johnston Ave. Quesnel BC V2J 3M5

From: Stewart, Rodger W FLNR:EX Sent: Friday, August 12, 2011 12:37 PM

To: Hupman, C Bruce MEM:EX; Arcand, Michelle X FLNR:EX

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**To:** Arcand, Michelle X FLNR:EX

Cc: Seguin, Joe MEM:EX; Stewart, Rodger W FLNR:EX; Youds, John A FLNR:EX; McLeod, Joanne FLNR:EX

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To: MMD Kamloops EMPR:EX; Hupman, C Bruce MEM:EX; Feldinger, Grant M MEM:EX

Cc: Seguin, Joe MEM:EX; Stewart, Rodger W FLNR:EX; Youds, John A FLNR:EX; McLeod, Joanne FLNR:EX

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Regards,

Michelle Arcand Habitat Biologist phone: 250-991-7252 mailing address: 322 Johnston Ave. Quesnel BC V2J 3M5

From:

Stewart, Rodger W FLNR:EX

Sent:

Wednesday, September 21, 2011 2:15 PM

To: Subject: MacDougall, Gerry L FLNR:EX RE: Response to MoE Audit

We must talk. The work was supposed to be done as a collaboration between John Youds and Bruce Hupman. Bruce continually failed to engage with John. Same with Joe to me. There is a deep systemic problem here Gerry!!

I am dismayed that this response by Hupman was not brought to my attention earlier. Secondly, the content is not particularly helpful – does not serve to address the types of matters that we expected per Bruce's commitment to us back in the spring.

Rodger Stewart
Director, Resource Management
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400 - 640 Borland Street
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V2G 4T1
cell (250) 305 8536, desk (250) 398 4549
fax (250) 398 4214

From: MacDougall, Gerry L FLNR:EX

Sent: Wednesday, September 21, 2011 2:05 PM

**To:** Stewart, Rodger W FLNR:EX **Subject:** FW: Response to MoE Audit

Hi Rodger,

Thank you for following up on the placer report.

I didn't send MEM's response around earlier because I was actually hoping to get more detail on it, as described below.

Ken made some calls but Bruce was away for much of August. So far, this is all I've got.

I've reviewed the September version by Michelle and Joanne.

I'm waiting to get some input from Joe Seguin.

Please have a read of this and then give me a call.

Gerry

From: MacDougall, Gerry L FLNR:EX Sent: Thursday, August 4, 2011 3:13 PM

To: Seguin, Joe MEM:EX

Cc: Hupman, C Bruce MEM:EX; Vanderburgh, Ken FLNR:EX

Subject: FW: Response to MoE Audit

Hi Joe,

I just got back from holidays and had a read of this.

Thanks Bruce, for putting it together.

It provides useful context with some specifics on inaccuracies.

As per your request for comments, it would be helpful to have a more complete summary of errata that the authors could use to ensure that the report is objective and accurate.

My hope is that we'll see several positive outcomes from this:

- · better relationships between our ministries' staff
- · better understanding of our respective businesses and
- a factually correct report that includes collaboratively defined measures that address currently outstanding infractions.

I've asked Ken to give you a call on this and have forwarded your document to him as part of this email. Again, thank you for helping us with this.

Gerry

From: Hupman, C Bruce MEM:EX Sent: Tuesday, July 26, 2011 10:50 AM

To: MacDougall, Gerry L FLNR:EX; Seguin, Joe MEM:EX

**Subject:** Response to MoE Audit

### Hi Gerry and Joe

I have crafted a response to the 2010 MoE audit of placer operations in the Quesnel Area. Please review the attached and if possible provide feedback. I have not forwarded this document beyond you and await your response.

Thanks Bruce

> Part 1 Page 7 FNR-2012-00238

From: Sent:

Stewart, Rodger W FLNR:EX Tuesday, June 7, 2011 12:00 PM MacDougall, Gerry L FLNR:EX

To: Subject:

FW: follow-up on placer inspection discussion

Gerry, information for our ongoing discussions with Bruce. Have a close look at the part about C/E on mine sites.....

Rodger Stewart Director, Resource Management Ministry of Forests, Lands and Natural Resource Operations Cariboo Region 400 - 640 Borland Street Williams Lake, BC V2G 4T1 cell (250) 305 8536, desk (250) 398 4549 fax (250) 398 4214

From: Arcand, Michelle X FLNR:EX Sent: Tuesday, June 7, 2011 11:42 AM

To: Stewart, Rodger W FLNR:EX

Cc: Youds, John A FLNR:EX; McLeod, Joanne FLNR:EX **Subject:** follow-up on placer inspection discussion

Hi Rodger,

I've done some follow up with C&E staff and found out that in 2009 MEMPR branch in Prince George requested that C&E staff undertake inspections of placer mines to assess reclamation responsibilities and recommend whether or not bonds be returned. They were provided 2 days training in order to undertake this work, which was done in 2009/2010 – doesn't sound like safety was a major component of the training at all. I now have a hard copy of the training manual from C&E which provides pretty good detail on what is required for reclamation under the code and this manual could provide a reference for our discussions with mines staff on what constitutes reclamation... I believe we have been consistent and accurate in what we consider acceptable reclamation. I'm still trying to track down if C&E were granted any special authorities by the Chief Inspector of Mines to carry out this work, but it sounds like it may have just been a RMC agreement...good enough for them but not for us?

Note that in 2010 mines jurisdiction in Quesnel area was transferred to Kamloops branch. Working with PG prior to that I had made some inroads and built relationships with the PG MEMPR staff; We'd gone out on joint inspections, and I even recall being requested by PG staff to go out to a site without them. Unfortunately this has not been the case with Kamloops staff. There is apparently a very different interpretation between the MEMPR staff in PG and in Kamloops as to who should be allowed to conduct inspections on mine sites, what constitutes reclamation etc.

I've had another look through my photos from mine inspections for the placer report. I am very confident that I could inarguably demonstrate with the use of these photos that every one of the streams (which mines staff apparently question) is in fact a stream by Water Act and FRPA (FPC guidebook) definitions, and for that matter would be considered such by most lay persons. I would welcome an opportunity to present such photo documentation to mines staff.

Michelle Arcand Habitat Biologist phone: 250-991-7252

mailing address: 322 Johnston Ave. Quesnel BC V2J 3M5

From: Sent:

To:

Stewart, Rodger W FLNR:EX Tuesday, May 24, 2011 3:22 PM MacDougall, Gerry L FLNR:EX

Subject:

Placer EWN

Attachments:

EWN (2010 placer inspections).docx

Gerry, this any closer to the standard we discussed?

Rodger Stewart
Director, Resource Management
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fax (250) 398 4214

Pages 10 through 11 redacted for the following reasons:

Not responsive Not responsive

From:

Stewart, Rodger W FLNR:EX

Sent:

Wednesday, August 24, 2011 11:26 AM

To:

Youds, John A FLNR:EX

Subject:

INFO from Skeena -Outstanding safety & non-compliance issue - placer mining

From: Diemert, Karen FLNR:EX

Sent: Tuesday, August 23, 2011 05:01 PM

To: Stewart, Rodger W FLNR:EX

Subject: RE: like to resolve Outstanding safety & non-compliance issue - placer mining

### Hi Rodger:

You know we have never had an issue with Mines staff saying we can't go on the sites. We do inform MEM when we are planning to make a visit based on our values on monitoring. They have not said No you can't go but accept we are going there, mark the dates and away we go. We have run into problems with MEM staff sending the Mine operations a heads up we are going to be there, but nothing on what you have below. I have made many placer inspections without notifying MEM and they have not complained. We stick to what we are going for and that's it. I generally think our MEM staff are fine with us being there adn we are safety careful.

What is happening in your area gives me the uncomfortable feeling that they are hiding things. Maybe you need to insist that your staff notify MEM staff they are going out and keep everything in the open.

Sorry I didn't respond sooner - I was away last week and now trying to catch up.

Give me a call if you want to talk more. Cheerios/karen

Karen A Diemert BSc RPBio A/Director Resource Management Skeena Region Ministry of Forests, Lands & Natural Resource Opeartions

Phone: 250 847 7300 Fax: 250 847 7728 cell: 250 847 1137 Mail: 3726 Alfred Avenue PO Bag 5000 Smithers BC VOJ

2N0

**From:** Stewart, Rodger W FLNR:EX **Sent:** Monday, August 15, 2011 9:50 AM

To: Diemert, Karen FLNR:EX

Subject: FW: like to resolve Outstanding safety & non-compliance issue - placer mining

Karen, please hold this confidential for now. I would like to know how it is that you may be able to carry out inspections of placer mining operations in your region. Here, we are running into challenges, and the issues we identified during last summers work remain sidelined by MEM's preference to question safety of staff that do that work, rather than engage with us on initiatives to encourage improved outcomes for placer mining operations

Rodger Stewart
Director, Resource Management
Ministry of Natural Resource Operations

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From: Hupman, C Bruce MEM:EX
Sent: Monday, August 15, 2011 8:50 AM

**To:** Stewart, Rodger W FLNR:EX

Subject: like to resolve Outstanding safety & non-compliance issue

### Rodger

### Please consider my situation and information below:

On one hand there could be an offense being reported however on the other hand there is clearly an offense being committed by your staff. Currently I have hard evidence that your staff are and continue to contravene the Code. They somehow feel that their options/findings justify their actions. How am I expected to apply one part of the Code while overlooking another. As their supervisor, you appear to support the continuing contravention of existing regulations by not addressing the contravention. Public service employees are held to a different standard than the public and if staff feel they can break laws then anarchy rules. Hopefully you see the spot I am in, how do I go to industry and enforce the *Act* And *Code* when some staff act in such a manner.

### For your consideration:

From what your staff have provided there is a continuing blatant disregard of some of the Provincial Regulations. Of course ignorance of a Regulation is not a defence, and there is clear evidence that I have communicated the requirements of the Regulation to all those involved.

The Mines Act states the following:

## Offence and penalty

- **37** (1) A person who obstructs, impedes or otherwise interferes with an inspector in carrying out the inspector's duties under this Act commits an offence.
- (2) A person who contravenes a provision of this Act, the regulations, the code or an order made under any of them commits an offence.
- (3) A person who commits an offence is liable to a fine of not more than \$100 000 or to imprisonment for not more than one year or both.
- (4) If an inspector serves a written notice on a person alleging a contravention of this Act, the regulations or the code, or an order under any of them, that person, on conviction, is liable to a penalty, in addition to the penalties provided under subsection (3), not more than \$5 000 and not less than \$500 for every day during which the offence continues to be committed after receipt of the notice.

As you and your staff are new to the world of Mines, I refer to WorkSafe regulation which apply to you and your staff. From WorkSafe BC Regulations:

#### 2.8 Contravention

- (1) A contravention of this Regulation will be deemed to be a contravention by the employer and will make that employer liable for any penalty prescribed by the <u>Workers Compensation Act.</u>
- (2) A contravention of this Regulation by a **supervisor** or a worker will be deemed to be a contravention by the **supervisor** and will make that **supervisor** liable for any penalty prescribed by the <u>Workers Compensation</u> Act.
- (3) A contravention of this Regulation by a worker will make that worker liable for any penalty prescribed by the <u>Workers Compensation Act.</u>
- (4) A contravention of this Regulation by a person working in or contributing to the production of an industry within the scope of the <u>Workers Compensation Act</u> will make that person liable for any penalty prescribed by the Act.

#### 3.10 Reporting unsafe conditions

Whenever a person observes what appears to be an unsafe or harmful condition or act the person must report it as soon as possible to a supervisor or to the employer, and the person receiving the report must investigate the reported unsafe condition or act and must ensure that any necessary corrective action is taken without delay.

And from our discussions last November on the safety of your staff you stated:

"Please be assured that I am in no way debating the safety requirements that you have specified. Rather, I am seeking business efficiency in support of the job functions of my staff. Please also respect that we are not without our own safety procedures".

Based upon this I in-correctly assumed that you would action this outstanding safety item right away last November.

#### From the Standards of Conduct:

Employees have a duty to report any situation relevant to the BC Public Service that they believe contravenes the law, misuses public funds or assets, or represents a danger to public health and safety or a significant danger to the environment. Employees can expect such matters to be treated in confidence, unless disclosure of information is authorized or required by law (for example, the *Freedom of Information and Protection of Privacy Act*). Employees will not be subject to discipline or reprisal for bringing forward to a Deputy Minister, in good faith, allegations of wrongdoing in accordance with this policy statement.

## **Pending Actions:**

So considering the legal requirements of employees and supervisors under WorkSafe, evidence of an offense being committed under the *Mines Act*, Standards of Conduct for employees, and my notification to you last November that unsafe act was being performed by your staff and that an offense is being committed. An investigation will require that I collect the following:

- 1) Address the offense being committed, and steps put in place to prevent the re-occurrence,
- 2) What actions and training were provided to address the safety of your staff working near a mine site,
- 3) What steps you plan on taking regarding the continuation of the un-safe act and
- 4) What corrective steps you have taken now that you are aware of this offence continuing.

S14

I seek your assistance to immediately resolve these 4 issues so that together we can move forward with coordinated, integrated and sustainable management and development of our natural resources. I also request your direct intervention to correct your staffs actions in regards authority to enter a mine site.

We need to check our own backyard first, then united wade into compliance of industry.

From: Stewart, Rodger W FLNR:EX Sent: Friday, August 12, 2011 12:36 PM

**To:** Hupman, C Bruce MEM:EX; Arcand, Michelle X FLNR:EX

**Cc:** Seguin, Joe MEM:EX; Youds, John A FLNR:EX; McLeod, Joanne FLNR:EX **Subject:** RE: Outstanding safety and apparent non-compliance issues

Bruce, we have urgent need to know the manner in which this apparent non-compliance issue is being addressed.

I appreciate your concern for safety of my staff, and thanks for the communication. That said, there is a substantive and continuing concern that this regulatory provision is being used to prevent monitoring of placer mines, which are seeming to be the source of increasing challenge respecting appropriate stewardship practices.

But at the same time, I have an equal concern that the safety matter is deflecting you from the substance of this and other non-compliance issues. There is growing concern that you remain silent on this apparent non-compliance issue.

Further, you have yet to engage with us respecting the placer inspection report, as you committed to do last spring.

Joe, you did not yet let me know if you had time for a call before I leave on Tuesday next week......

Rodger Stewart
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Importance: High

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**Subject:** placer mining continues in wetland

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Regards,

Michelle Arcand Habitat Biologist phone: 250-991-7252 mailing address: 322 Johnston Ave. Quesnel BC V2J 3M5 Pages 17 through 26 redacted for the following reasons:

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S14

From:

Youds, John A FLNR:EX

Sent:

Monday, August 15, 2011 9:21 AM

To:

Stewart, Rodger W FLNR:EX

Subject:

RE: like to resolve Outstanding safety & non-compliance issue

I'm available any time today to talk about this. Bruce is alleging that Michelle did not have the permission of the mine manager to enter the site – I will be checking with Michelle on this.

From: Stewart, Rodger W FLNR:EX Sent: Monday, August 15, 2011 9:10 AM

To: Youds, John A FLNR:EX

**Subject:** FW: like to resolve Outstanding safety & non-compliance issue

John, we should talk about this. Need to maintain some calm and get past this. Do not circulate this.

I most certainly wonder at his propensity to ignore the issues we raise but rather deflecting to the allegations respecting our staff.......

Rodger Stewart
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On one hand there could be an offense being reported however on the other hand there is clearly an offense being committed by your staff. Currently I have hard evidence that your staff are and continue to contravene the Code. They somehow feel that their options/findings justify their actions. How am I expected to apply one part of the Code while overlooking another. As their supervisor, you appear to support the continuing contravention of existing regulations by not addressing the contravention. Public service employees are held to a different standard than the public and if staff feel they can break laws then anarchy rules. Hopefully you see the spot I am in, how do I go to industry and enforce the *Act* And *Code* when some staff act in such a manner.

#### For your consideration:

From what your staff have provided there is a continuing blatant disregard of some of the Provincial Regulations. Of course ignorance of a Regulation is not a defence, and there is clear evidence that I have communicated the requirements of the Regulation to all those involved.

The Mines Act states the following:

#### Offence and penalty

- **37** (1) A person who obstructs, impedes or otherwise interferes with an inspector in carrying out the inspector's duties under this Act commits an offence.
- (2) A person who contravenes a provision of this Act, the regulations, the code or an order made under any of them commits an offence.
- (3) A person who commits an offence is liable to a fine of not more than \$100 000 or to imprisonment for not more than one year or both.

  Part 1 Page 27
  FNR-2012-00238

(4) If an inspector serves a written notice on a person alleging a contravention of this Act, the regulations or the code, or an order under any of them, that person, on conviction, is liable to a penalty, in addition to the penalties provided under subsection (3), not more than \$5 000 and not less than \$500 for every day during which the offence continues to be committed after receipt of the notice.

As you and your staff are new to the world of Mines, I refer to WorkSafe regulation which apply to you and your staff. From WorkSafe BC Regulations:

#### 2.8 Contravention

- (1) A contravention of this Regulation will be deemed to be a contravention by the employer and will make that employer liable for any penalty prescribed by the *Workers Compensation Act*.
- (2) A contravention of this Regulation by a **supervisor** or a worker will be deemed to be a contravention by the **supervisor** and will make that **supervisor** liable for any penalty prescribed by the <u>Workers Compensation</u> Act.
- (3) A contravention of this Regulation by a worker will make that worker liable for any penalty prescribed by the *Workers Compensation Act*.
- (4) A contravention of this Regulation by a person working in or contributing to the production of an industry within the scope of the <u>Workers Compensation Act</u> will make that person liable for any penalty prescribed by the Act.

### 3.10 Reporting unsafe conditions

Whenever a person observes what appears to be an unsafe or harmful condition or act the person must report it as soon as possible to a supervisor or to the employer, and the person receiving the report must investigate the reported unsafe condition or act and must ensure that any necessary corrective action is taken without delay.

And from our discussions last November on the safety of your staff you stated:

"Please be assured that I am in no way debating the safety requirements that you have specified. Rather, I am seeking business efficiency in support of the job functions of my staff. Please also respect that we are not without our own safety procedures".

Based upon this I in-correctly assumed that you would action this outstanding safety item right away last November.

#### From the Standards of Conduct:

Employees have a duty to report any situation relevant to the BC Public Service that they believe contravenes the law, misuses public funds or assets, or represents a danger to public health and safety or a significant danger to the environment. Employees can expect such matters to be treated in confidence, unless disclosure of information is authorized or required by law (for example, the *Freedom of Information and Protection of Privacy Act*). Employees will not be subject to discipline or reprisal for bringing forward to a Deputy Minister, in good faith, allegations of wrongdoing in accordance with this policy statement.

## **Pending Actions:**

So considering the legal requirements of employees and supervisors under WorkSafe, evidence of an offense being committed under the *Mines Act*, Standards of Conduct for employees, and my notification to you last November that unsafe act was being performed by your staff and that an offense is being committed. An investigation will require that I collect the following:

- 1) Address the offense being committed, and steps put in place to prevent the re-occurrence,
- 2) What actions and training were provided to address the safety of your staff working near a mine site,
- 3) What steps you plan on taking regarding the continuation of the un-safe act and
- 4) What corrective steps you have taken now that you are aware of this offence continuing.

I have provided to you a legal option from the AG's office prior to this offense occurring and would like to prevent this awkward position from occurring. I seek your assistance to immediately resolve these 4 issues so that together we can move forward with coordinated, integrated and sustainable management and development of our natural resources. I also request your direct intervention to correct your staffs actions in regards authority to enter a mine site.

Part 1 Page 28 FNR-2012-00238 We need to check our own backyard first, then united wade into compliance of industry.

**From:** Stewart, Rodger W FLNR:EX **Sent:** Friday, August 12, 2011 12:36 PM

To: Hupman, C Bruce MEM:EX; Arcand, Michelle X FLNR:EX

**Cc:** Seguin, Joe MEM:EX; Youds, John A FLNR:EX; McLeod, Joanne FLNR:EX **Subject:** RE: Outstanding safety and apparent non-compliance issues

Bruce, we have urgent need to know the manner in which this apparent non-compliance issue is being addressed.

I appreciate your concern for safety of my staff, and thanks for the communication. That said, there is a substantive and continuing concern that this regulatory provision is being used to prevent monitoring of placer mines, which are seeming to be the source of increasing challenge respecting appropriate stewardship practices.

But at the same time, I have an equal concern that the safety matter is deflecting you from the substance of this and other non-compliance issues. There is growing concern that you remain silent on this apparent non-compliance issue.

Further, you have yet to engage with us respecting the placer inspection report, as you committed to do last spring.

Joe, you did not yet let me know if you had time for a call before I leave on Tuesday next week......

Rodger Stewart
Director, Resource Management
Ministry of Natural Resource Operations
Cariboo Region
400 - 640 Borland Street
Williams Lake, BC
V2G 4T1
cell (250) 305 8536, desk (250) 398 4549
fax (250) 398 4214

From: Hupman, C Bruce MEM:EX Sent: Friday, August 12, 2011 11:43 AM

To: Arcand, Michelle X FLNR:EX

Cc: Seguin, Joe MEM:EX; Stewart, Rodger W FLNR:EX; Youds, John A FLNR:EX; McLeod, Joanne FLNR:EX

**Subject:** Outstanding Safety Issue

Importance: High

Michelle.

Please consider this quote from section 37 of the *Mines Act*, R.S.B.C. 1996, c.293 [Updated to 2007]

A person who contravenes a provision of this Act, the regulations, the code or an order made under any of them commits an offence

As mines are an industrial site, they can pose different industrial safety issues than those you are accustom to. The Health, Safety and Reclamation Code for Mines in British Columbia is a Provincial Regulation and looks to protect workers, public and the environment. To this means, the *Code* is clear regarding entry to a mine site and states: Other than an inspector, only persons authorized by the manager shall enter or be permitted to enter a mine.

I have provided this information to you prior to your August 8, 2011 inspection of mine # 1101292 which you refer to as placer lease 362505. As part of the responsibilities assigned to me as an Inspector of Mines, I am serving you written notice that by entering a mine site without authority, you are in contravention of the *Code*. By way of this e-mail I am also alerting your co-workers/supervisors of your continuing contravention of the *Code*.

I am concerned that you continue to place yourself in situations where you are at risk of injury and instruct you to cease entering a mine site at once unless authorized by the mine manager to do so.

Bruce Hupman Senior Mines Inspector

From: Arcand, Michelle X FLNR:EX

Sent: Thursday, August 11, 2011 4:19 PM

To: MMD Kamloops EMPR:EX; Hupman, C Bruce MEM:EX; Feldinger, Grant M MEM:EX

Cc: Seguin, Joe MEM:EX; Stewart, Rodger W FLNR:EX; Youds, John A FLNR:EX; McLeod, Joanne FLNR:EX

Subject: placer mining continues in wetland

Greetings,

On August 8, 2011 I did a follow-up inspection of placer lease 362505 to view reclamation work which was ordered as a result of an MOE inspection conducted last summer.

Last summer works included excavation, deposit of material, and discharge into watercourses and excavation of a wetland. The proponent did not hold a current work permit at the time. He was subsequently ordered by MEMPR to stop work and reclaim the present disturbance. (See attached email correspondence).

During my follow-up inspection I found that the reclamation undertaken was inadequate, as the "reclaimed area" was simply levelled and grass seeded but is so compacted and lacking in topsoil it will take likely take decades to recover and support vegetation.

The wetland area which was excavated last year has not been reclaimed at all and the proponent is continuing work in the wetlands. I have reviewed the NOW submitted this year and see that the proponent plan is to continue excavating this wetland area over the next 3 years. This is unacceptable. Wetlands provide high value wildlife habitat and ecosystem services. Mining in wetlands is not in keeping with the Placer Mining Activities in Riparian Ecosystems MOU which required a minimum 10 m setback from riparian ecosystems nor is it in accordance with guidance regarding placer standards provided to MEMPR by our Section last spring (draft attached).

I would like to know how MEM intends to address this situation.

Regards,

Michelle Arcand Habitat Biologist phone: 250-991-7252 mailing address: 322 Johnston Ave. Quesnel BC V2J 3M5

## McLeod, Joanne FLNR:EX

From:

Arcand, Michelle X FLNR:EX

Sent:

Thursday, August 11, 2011 4:19 PM

To: Cc: MMD Kamloops EMPR:EX; Hupman, C Bruce MEM:EX; Feldinger, Grant M MEM:EX Seguin, Joe MEM:EX; Stewart, Rodger W FLNR:EX; Youds, John A FLNR:EX; McLeod,

Joanne FLNR:EX

Subject:

placer mining continues in wetland

Attachments:

P8080114.jpg; P8080115.jpg; P8080117.jpg; P8080118.jpg; P8080120.jpg; P8080125.jpg; P8080128.jpg; P8080132.jpg; RE: placer property 362505 Tex Enemark; PL 362505, Mine

no. 1101292, Tex Enemark; MEMPR Placer Standards.doc

## Greetings,

On August 8, 2011 I did a follow-up inspection of placer lease 362505 to view reclamation work which was ordered as a result of an MOE inspection conducted last summer.

Last summer works included excavation, deposit of material, and discharge into watercourses and excavation of a wetland. The proponent did not hold a current work permit at the time. He was subsequently ordered by MEMPR to stop work and reclaim the present disturbance. (See attached email correspondence).

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I would like to know how MEM intends to address this situation.

Regards,

Michelle Arcand Habitat Biologist phone: 250-991-7252

mailing address: 322 Johnston Ave. Quesnel BC V2J 3M5



















File: 58000-30/Mines

May 26, 2010

Regional Director Ministry of Energy, Mines and Petroleum Resources 162 Oriole Road Kamloops BC V2C 4N7

Dear Joe Seguin:

As a result of decreased staffing capacity within the Cariboo Region Ecosystems Section, in conjunction with the increase in placer mine referrals that are being received at our office, we will no longer be able to review and respond to all placer NOW referrals. We are expecting that MEMPR will continue to refer placer NOWs to our office for information purposes. It is our intention to allocate available resources this field season to monitoring and reporting out on placer activities within the region.

In order to reduce impacts to high value habitats that we consider to be at greatest risk from placer operations it is our expectation that the following minimum standards be followed:

## Ungulate Winter Ranges and Wildlife Habitat Areas

Placer tenure operations located within Wildlife Habitat Areas (including Caribou WHAs) or Ungulate Winter Ranges should conduct activities consistent with the General Wildlife Measures designated by GAR Order under FRPA. Where activities are proposed in an UWR or WHA that are not consistent with the GWMs, placer tenure holders are required to apply for an exemption from the Ministry of Environment, and should provide such an exemption to Ministry of Mines prior to issuance of a work permit.

## Riparian, Old Growth, and Fish Habitat Protection

All placer mine activities must comply with the *Federal Fisheries Act* and the *Water Act*. In stream works and works less than 10 m from the high water mark of any watercourse (including seasonal streams, wetlands, lakes and rivers) should not be permitted. For water bodies which

provide fish habitat, greater setback distances may be required in order to ensure compliance with the *Fisheries Act*.

Camps, road access, and settling ponds should be developed at least 30 m from the high water mark of watercourses, to minimize long-term disturbance and impacts within riparian areas.

Areas designated as Critical Fish Habitat under the Cariboo-Chilcotin Land Use Plan have been identified in consultation with Ministry of Environment and Fisheries and Oceans Canada, as requiring additional riparian setbacks to adequately protect valuable fish habitat. This should be reflected in the placer permit conditions for operations in these areas. At a minimum, 30 m setbacks from the high water mark should be required in these areas.

Timber harvesting should be avoided in areas identified in the CCLUP as Critical Fish Habitat or Old Growth Management Areas. These digitally mapped layers are available through the Land and Resource Data Warehouse.

Mining activities must not result in sediment delivery into fish bearing waters, or harmful alteration, destruction, or disruption to fish habitat. This includes sediment delivery resulting directly from mining activities, or indirectly such as from runoff erosion on disturbed areas or roads.

Settling ponds must not be allowed to connect or discharge into natural waterbodies at any time, as this may result in fish migration into settling ponds. Where there is any indication that settling ponds have been breached or that fish may be present in settling ponds, an assessment and fish salvage conducted by appropriately qualified environmental professionals should be required prior to allowing further works.

In the absence of complete fish inventory data, streams should be considered fish bearing unless proven otherwise by an accepted methodology conducted by appropriately qualified professionals.

Stream crossings utilized for access to placer operations must be constructed and maintained consistent with the *Federal Fisheries Act*, the *Water Act*, and *FRPA*. The Forest Practices Code *Fish Stream Crossing Guidebook* 

(http://www.for.gov.bc.ca/tasb/legsregs/fpc/FPCGUIDE/FishStreamCrossing/FSCGdBk.pdf) must be utilized for best management practices regarding construction of stream crossings. Stream crossing structures must provide for fish passage during all flow conditions. In general, only open bottomed structures should be utilized for crossing fish streams. Where stream crossings are required, a Notification for Changes In or About a Stream application must be submitted to MOE (available at

http://www.env.gov.bc.ca/wsd/water\_rights/licence\_application/section9/index.html).

Given the vicinity of many placer tenures to fish bearing lakes and streams, bald eagle and osprey nests may be present. Bald eagle, osprey nests and any occupied bird nest are protected under the BC *Wildlife Act* and should not be removed or disrupted.

## Site Disturbance and Reclamation

Site disturbance should be limited to the minimum area required to carry out placer activities and topsoil and organic matter should be stockpiled for reclamation. Reclamation activities should be carried out promptly and effectively utilizing conserved topsoil to establish site stability, minimize surface erosion, and prevent sediment delivery.

Reclamation activities should include recontouring of disturbed areas similar to pre-disturbance shapes with re-establishment of natural gullies and swales so that surface drainage patterns are re-established. Compacted surfaces should be ripped to allow normal water infiltration and growth of vegetation.

Once the disturbed sites have been regraded, soil materials salvaged prior to the construction of the site should be replaced. Applied soils should:

- be rough and loose with many microsites (small depressions) for seeds to lodge in and germinate;
- be keyed into the materials under the soils so that they do not slide or slump off;
- incorporate roots, stumps and other woody debris to reduce erosion and create greater biological diversity; and
- be revegetated promptly.

Revegetation should include grass seeding with a non-sod forming seed mix to establish a quick ground cover, and prevent erosion and weed invasion. In addition, native trees and shrubs should be planted to establish a suitable, self-sustaining vegetation cover such as existed prior to disturbance.

### General

For general guidance and best management practices regarding mining activities we recommend that placer operators refer to the *Handbook for Mineral and Coal Exploration in British Columbia*.

http://www.em.gov.bc.ca/Subwebs/mining/Exploration/MX\_Handbook\_April\_12\_06%20ver.pdf

Yours truly,

John Youds, section head Ecosystems Branch Cariboo Region

Cc: Rodger Stewart, Regional Manager, Cariboo, Thompson, Okanagan Bruce Hupman, Ministry of Energy, Mines and Petroleum, Kamloops Region Byron Nutton, Fisheries and Oceans, Prince George

From: Stewart, Rodger W FLNR:EX

Sent: Tuesday, August 2, 2011 10:27 AM

To: Youds, John A FLNR:EX

Cc: Arcand, Michelle X FLNR:EX; McLeod, Joanne FLNR:EX; MacDougall, Gerry L FLNR:EX;

Vanderburgh, Ken FLNR:EX

Subject: NOTE: Actions respecting the 2010 placer inspection report - inability of MEM to engage.

Thanks for this progress report John. I will discuss with Gerry and Ken, and from that we will determine a course of action for the report, to be effected this month.

Rodger Stewart
Director, Resource Management
Ministry of Natural Resource Operations
Cariboo Region
400 - 640 Borland Street
Williams Lake, BC
V2G 4T1
cell (250) 305 8536, desk (250) 398 4549
fax (250) 398 4214

From: Youds, John A FLNR:EX

Sent: Tuesday, August 2, 2011 10:02 AM

To: Stewart, Rodger W FLNR:EX

Cc: Arcand, Michelle X FLNR:EX; McLeod, Joanne FLNR:EX

Subject: FW: Actions respecting the 2010 placer inspection report.

Rodger, As you are aware, Bruce cancelled on the planned meeting last week to review the draft placer report. As an alternative he said that he would provide something in writing by Friday, July 29, however nothing was provided on that date. Now I've checked back with Bruce this week s.22 So, Rodger, I just wanted to make you aware that the follow-up that you described in your e-mail around review of the report prior to it being finalized is not able to occur in a timely fashion. I think that we need to make a decision on moving forward with the report. Outside parties have requested to see the report and these requests date back several months. As well, the quarterly meeting with the Northern Shuswap is next week (Aug 9<sup>th</sup>) and the issue of obtaining this report is likely to come up

S.22 Let's discuss our next steps this week, if possible.

From: Hupman, C Bruce MEM:EX Sent: Tuesday, August 2, 2011 9:49 AM.

To: Youds, John A FLNR:EX

**Subject:** Out of Office: Actions respecting the 2010 placer inspection report.

s.22

From:

Youds, John A FLNR:EX

Sent: To: Tuesday, May 17, 2011 9:28 AM Stewart, Rodger W FLNR:EX

Subject:

Placer audit report and NS/MOE Communication Protocol Meeting May 19th, 2011

Attachments:

may 19 2011 agenda ns moe.docx; NS MOE Action Items feb 8 2011 2.doc

Rodger, The placer audit report will be a topic at the NS/MOE meeting on Thursday as it is on a list of outstanding action items. Do you know if the RMT has determined if it can be shared at this point?

Not Responsive

Pages 45 through 52 redacted for the following reasons:

Not responsive

From: Stewart, Rodger W FLNR:EX

Sent: Wednesday, September 7, 2011 11:32 AM

To: Youds, John A FLNR:EX; Arcand, Michelle X FLNR:EX; McLeod, Joanne FLNR:EX

Subject: RE: Placer report

Still nothing back from Joe Sequin on actions by MEM to support our initiative. So, seems we need to move on ourselves. I shall review with Gerry.... but meanwhile, our edits should include consideration of how we might best set out comment in our document that MEM may have different interpretations on a site by site basis. We would state that our interpretations are based on definitions employed by applicable statutes.

Rodger Stewart
Director, Resource Management
Ministry of Forests, Lands and Natural Resource Operations
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400 - 640 Borland Street
Williams Lake, BC
V2G 4T1
cell (250) 305 8536, desk (250) 398 4549
fax (250) 398 4214

From: Youds, John A FLNR:EX

Sent: Wednesday, September 7, 2011 11:29 AM

To: Arcand, Michelle X FLNR:EX; McLeod, Joanne FLNR:EX

Cc: Stewart, Rodger W FLNR:EX

Subject: FW: REQUEST: Sharing of information supporting the continued placer reserve over the Horsefly River

watershed

FYI- Michelle and Joanne, it would be good to move forward to complete the edits on the placer compliance report. Rodger, have you any guidance in terms of next steps in relation to report finalization and release.

From: Down, Ted ENV:EX

**Sent:** Wednesday, September 7, 2011 10:52 AM

To: Stewart, Rodger W FLNR:EX; Witt, Andy FLNR:EX; Youds, John A FLNR:EX

Cc: Ramsay, Mike K FLNR:EX; 'Lawrence, Don'; Diemert, Karen FLNR:EX; MacDougall, Gerry L FLNR:EX

Subject: RE: REQUEST: Sharing of information supporting the continued placer reserve over the Horsefly River

watershed

Thanks for the summary Rodger- I was wondering when this one would reappear. Given the amount of time I've had to put in responding to Cohen Commission requests- it would be timely to link the discussion with MEM to the high level of scrutiny currently being applied to all things that can potentially affect Fraser River salmon stocks (especially sockeye).

I will reach out to DFO Pacific Region staff in Vancouver and in their Science group and see what expertise – support they may be able to provide.

#### Ted Down

Aquatic Conservation Science 250-387-9715

From: Stewart, Rodger W FLNR:EX

Sent: Wednesday, September 7, 2011 8:45 AM

To: Down, Ted ENV:EX; Witt, Andy FLNR:EX; Youds, John A FLNR:EX

**Cc:** Ramsay, Mike K FLNR:EX; 'Lawrence, Don'; Diemert, Karen FLNR:EX; MacDougall, Gerry L FLNR:EX **Subject:** REQUEST: Sharing of information supporting the continued placer reserve over the Horsefly River

watershed

The placer mining sector is continuing its efforts to have the Ministry of Energy and Mines remove the placer no staking reserve over the Horsefly River watershed. Representatives of the placer sector have been very active in communications with provincial government ministers respecting the removal of the reserve, or at least alteration of it to allow for case by case adjudication of placer mining proposals. Comment was made about reducing the reserve to a 15 meter buffer along the length of the mainstem Horsefly River, which (curiously) is the same provision proposed by MEM in their 2010 proposal to remove the reserve.

I spent a long time on the phone yesterday afternoon with a representative of the sector who is seeking the science and technical information that government is using to inform decisions to maintain the reserve. The person I spoke to alleged that over a period of at least two years, no government representative (including ministers) has yet responded in a material way to requests to provide the science and technical information that justifies the continuance of the reserve. Claims were made that available information and science indicates that placer mining would have no impact on groundwater flows that are critical to productivity of the aquatic environment. There were other questions asked about why placer mining is allowed along other streams of the Quesnel River watershed, but not the Horsefly.

Comment was also made that every other land use is allowed to continue operating in the Horsefly River watershed, and that placer mining is being unduly blocked from reasonable mining development opportunities evident in the watershed. It would appear that the sector or its representatives are not that well informed about the unique risks and consequences posed by placer mining adjacent to a watercourse as significant as the Horsefly or its tributaries.

Colleagues, I would like to share information we have available with the sector in this region in an attempt to build clear understanding of the risks and consequences of placer mining in a watershed such as the Horsefly. I am aware that we have certain references and assessments that would be relevant. So, my request......:

Please forward to my attention any information that might be useful in building understanding within the
placer sector of the basis for government concerns respecting placer mining in a watershed of such
significance.

**Don Lawrence** ..... we really have need for DFO representatives to take a active role in assisting provincial government staff in initiatives to inform decisions about continuing the no staking reserve. One initiative that would be of considerable value would be formal communication from Pacific Region to the Ministry of Energy and Mines (Mineral Titles Branch) making specific comment on the need to maintain the reserve, and the reasons behind such requirement. Don, can you please call me about this?

**Ted and Andy,** do we have an established avenue of dialogue with DFO Pacific Region that we could employ to acquire support from DFO on this matter?

From:

Stewart, Rodger W FLNR:EX

Sent:

Wednesday, June 29, 2011 11:53 AM

To:

Youds, John A FLNR:EX; Arcand, Michelle X FLNR:EX; McLeod, Joanne FLNR:EX

Subject:

NOTE: Placer inspection report

John, yesterday you mentioned that you will be trying to contact Bruce Hupman to carry out the review of the document. Gerry has stated that this review cannot get continually delayed. Gerry and I would appreciate you keeping up a steady course of action to invite Bruce to the table. Keep a documented record of these attempts and his responses. If we cannot get timely attention to this report, we will have to act on it ourselves. Should they baulk at our initiative, your documentation will be our record of diligence in trying to get MEM involved.

Let's be as accommodating as might be reasonable, such as travelling to Kamloops for that work. But we really need to nail down a date soon, and not put this off into the depths of summer.

Rodger Stewart
Director, Resource Management
Ministry of Forests, Lands and Natural Resource Operations
Cariboo Region
400 - 640 Borland Street
Williams Lake, BC
V2G 4T1
cell (250) 305 8536, desk (250) 398 4549
fax (250) 398 4214

From: Youds, John A FLNR:EX

**Sent:** Monday, June 27, 2011 1:43 PM

To: Stewart, Rodger W FLNR:EX; Arcand, Michelle X FLNR:EX; McLeod, Joanne FLNR:EX

Subject: RE: Placer inspection report

Rodger, Just checking on the status of the placer report, as requests for the report from FNs and DFO are still outstanding. On June 7 when we last discussed this, there was going to be some follow-up with Bruce H regarding review of accuracy of the report content. Has this step occurred?

**From:** Stewart, Rodger W FLNR:EX **Sent:** Thursday, June 2, 2011 8:04 AM

To: Youds, John A FLNR:EX; Arcand, Michelle X FLNR:EX; McLeod, Joanne FLNR:EX

Subject: Placer inspection report

Soon as we have time, I have information to share from a meeting that Gerry, Steve Dodge, Ken Vanderburgh and I held with Bruce Hupman of MEM on the placer file.

From: Sent:

Stewart, Rodger W FLNR:EX

To:

Monday, June 27, 2011 2:29 PM Youds, John A FLNR:EX; Arcand, Michelle X FLNR:EX; McLeod, Joanne FLNR:EX

Subject:

RE: Placer inspection report

No yet and I am scrambling to get commitment from him to do that. Gerry will not let this matter sit idle, which suggests if we cannot get Bruce to engage in a reasonable time, then we proceed on our own diligence.

Rodger Stewart
Director, Resource Management
Ministry of Forests, Lands and Natural Resource Operations
Cariboo Region
400 - 640 Borland Street
Williams Lake, BC
V2G 4T1
cell (250) 305 8536, desk (250) 398 4549
fax (250) 398 4214

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Sent: Monday, June 27, 2011 1:43 PM

To: Stewart, Rodger W FLNR:EX; Arcand, Michelle X FLNR:EX; McLeod, Joanne FLNR:EX

Subject: RE: Placer inspection report

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From: Stewart, Rodger W FLNR:EX Sent: Thursday, June 2, 2011 8:04 AM

To: Youds, John A FLNR:EX; Arcand, Michelle X FLNR:EX; McLeod, Joanne FLNR:EX

Subject: Placer inspection report

Soon as we have time, I have information to share from a meeting that Gerry, Steve Dodge, Ken Vanderburgh and I held with Bruce Hupman of MEM on the placer file.

From:

Stewart, Rodger W FLNR:EX

Sent: To: Monday, June 6, 2011 11:19 AM Youds, John A FLNR:EX; Arcand, Michelle X FLNR:EX; McLeod, Joanne FLNR:EX

Subject:

RE: Placer inspection report

0830 tomorrow as I am away on Thursday.

Rodger Stewart
Director, Resource Management
Ministry of Forests, Lands and Natural Resource Operations
Cariboo Region
400 - 640 Borland Street
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V2G 4T1
cell (250) 305 8536, desk (250) 398 4549
fax (250) 398 4214

From: Youds, John A FLNR:EX

Sent: Monday, June 6, 2011 10:52 AM

To: Stewart, Rodger W FLNR:EX; Arcand, Michelle X FLNR:EX; McLeod, Joanne FLNR:EX

Subject: RE: Placer inspection report

Rodger, The possible dates for a discussion on this are 8:30 am Tuesday or 9:30 am Thursday this week. Let us know what works for you. Thanks.

From: Stewart, Rodger W FLNR:EX Sent: Thursday, June 2, 2011 8:04 AM

To: Youds, John A FLNR:EX; Arcand, Michelle X FLNR:EX; McLeod, Joanne FLNR:EX

**Subject:** Placer inspection report

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Page 58 redacted for the following reason:

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Not responsive

From:

McLeod, Joanne ENV:EX

Sent:

Friday, April 1, 2011 4:12 PM

To:

Youds, John A ENV:EX; Packham, Roger M ENV:EX; Stewart, Rodger W ENV:EX Arcand, Michelle X ENV:EX

Cc: Subject:

Summary of 2010 placer mining audit

During the summer of 2010, Michelle and I conducted an environmental audit of 27 placer mining operations in the Quesnel and Likely area. A report of the audit will be prepared shortly, and a quick summary of the results and possible recommendations are outlined below. Michelle and I plan to present the result to the Cariboo Regional Management Team on May 11<sup>th</sup>, 2011.

- Out of 27 inspections, 17 were not in compliance with their Notice of Work, 4 were not yet in operation and 6 were in compliance. Of the claims inspected, 63% were not in compliance and only 22% were in compliance.
- Results included unauthorized in-stream works including works within fish habitat, discharge to water courses, large disturbance areas, inadequate reclamation and encroachment into the 10 metre riparian reserve.
- Salmonids were located within one settling pond, and indication that placer mining within 10 metres of large, fish bearing rivers and streams does not provide enough setback; four operators were working inside the 10 metre setback in areas designated as Critical Fish Habitat.
- Compliance issues from an earlier audit of the Likely area, conducted by Fisheries and Oceans Canada in 2001, highlighted similar results on several of the same claims and operators, indicating that operators do not realize the impact of the non-compliance.
- The following recommendations are included in the report:
  - Dedicate resources for a more detailed and comprehensive 2011 compliance inspection of placer claims in the Cariboo Region, especially in sites identified on the Fisheries and Oceans Canada 2001 inspection.
  - 2. Implement a five year monitoring program to measure whether placer mining compliance is improving.
  - 3. Recommend the development of provincial standards and guidelines for the placer mining industry, in conjunction with Fisheries and Oceans Canada.
  - 4. The issue of placer mining within 10 metres of large river systems must be assessed; recommend extending the riparian setback to 30 metres in the Cariboo Region, in areas designated under the CCLUP as critical habitat for fish or along streams and river larger than 5 metres.
  - 5. Given the poor performance documented in this audit, and considering the sensitivity and high provincial fisheries values in the Horsefly watershed, recommend extending the no placer staking reserve around the Horsefly River for a period of 10 years.

#### Joanne McLeod

Habitat Biologist Fish, Wildlife and Habitat Management Ministry of Natural Resources Operations 400-640 Borland Street Williams Lake, BC V2G 4T1 Ph: (250) 398-4256

Fx: (250) 398-4214

From:

McLeod, Joanne FLNR:EX

Sent:

Monday, May 9, 2011 3:05 PM

To: Cc: Stewart, Rodger W FLNR:EX Arcand, Michelle X FLNR:EX

Subject:

Placer presentation - FYI

Karen was asking whether the RMT meeting was the best venue for this presentation, since it doesn't look like it applies to the whole region. I told her that placer tenures existed throughout the region, but are concentrated in the Quesnel and Likely area, and that this is where our audit took place.

She is also asking for a copy of the report to send out with the agenda, so managers can read it over before the meeting. I told her we were presenting our results and would like feedback in the recommendations be next month.

#### Joanne McLeod

Habitat Biologist Fish, Wildlife and Habitat Management Ministry of Forests, Lands and Natural Resources Operations 400-640 Borland Street Williams Lake, BC V2G 4T1

Ph: (250) 398-4256 Fx: (250) 398-4214 Pages 61 through 96 redacted for the following reasons:

Not responsive

From:

Stewart, Rodger W FLNR:EX

Sent:

Wednesday, September 7, 2011 11:34 AM

To:

Seguin, Joe MEM:EX

Subject:

RE: QUESTION: 2010 FLNRO placer mine inspection report

Joe, any possibility of this rising to top of your list? We now face the prospect of having to complete the document without benefit of Bruce's engagement, as he committed to in our meeting last spring.

Rodger Stewart
Director, Resource Management
Ministry of Forests, Lands and Natural Resource Operations
Cariboo Region
400 - 640 Borland Street
Williams Lake, BC
V2G 4T1
cell (250) 305 8536, desk (250) 398 4549
fax (250) 398 4214

From: Seguin, Joe MEM:EX

Sent: Wednesday, August 10, 2011 2:39 PM

To: Stewart, Rodger W FLNR:EX

Subject: RE: QUESTION: 2010 FLNRO placer mine inspection report

Rodger:

It's been hectic to say the least. I hope to firm up a date for next week if possible.

Joe Seguin
Regional Director
Ministry of Energy and Mines

P: (250) 828-4448 C: (250) 318-7003



**From:** Stewart, Rodger W FLNR:EX **Sent:** Tuesday, August 9, 2011 4:26 PM

**To:** Seguin, Joe MEM:EX

Subject: QUESTION: 2010 FLNRO placer mine inspection report

Joe, might you have 5 minutes to review a file with me? My staff have been unable to engage with Bruce Hupman following upon a joint commitment to review our 2010 placer mine inspection report.

We are facing some considerable pressure to release the report to federal authorities and First Nations, but respect that MEM has need to join us in a final review before that happens. That said, we cannot continue to let this matter slide, as has been the case since RED Gerry MacDougall, Ken Vanderburgh and myself met with Bruce this past spring.

From:

Stewart, Rodger W FLNR:EX

Sent:

Wednesday, August 31, 2011 10:17 AM

To:

Seguin, Joe MEM:EX

Subject:

2010 placer mine inspection report

Joe, I had contacted you about this late July and early last month you indicated an intent to call me to discuss how we can move forward with completion of the 2010 place mine inspection report. This is becoming a very long standing issue since the time of Bruce's meeting with Gerry MacDougall, Ken Vanderburgh and I respecting this report some months ago. There remains strong inter-agency and stakeholder interest in the final report, and it is getting increasingly difficult to keep putting off sharing this report with groups like DFO.

We need to bring some closure to finalisation of this report, per the commitments Bruce has made to us. We know he is swamped, so per my previous call, we have need to decide how to advance the work.

Please let me know what is possible. If nothing can be done, then at least let us know what riders or condition statements that MEM would like attached to the report.

I am on the road the next two days, but will follow e-mail and may be able to respond to cell calls from time to time.

From:

Stewart, Rodger W FLNR:EX

Sent:

Wednesday, August 10, 2011 3:28 PM

To:

Seguin, Joe MEM:EX

Subject:

RE: QUESTION: 2010 FLNRO placer mine inspection report

s.22

Rodger Stewart
Director, Resource Management
Ministry of Natural Resource Operations
Cariboo Region
400 - 640 Borland Street
Williams Lake, BC
V2G 4T1
cell (250) 305 8536, desk (250) 398 4549
fax (250) 398 4214

From: Seguin, Joe MEM:EX

Sent: Wednesday, August 10, 2011 2:39 PM

To: Stewart, Rodger W FLNR:EX

Subject: RE: QUESTION: 2010 FLNRO placer mine inspection report

Rodger:

It's been hectic to say the least. I hope to firm up a date for next week if possible.

Joe Seguin
Regional Director
Ministry of Energy and Mines
P: (250) 828-4448

P: (250) 828-4448 C: (250) 318-7003



From: Stewart, Rodger W FLNR:EX Sent: Tuesday, August 9, 2011 4:26 PM

To: Seguin, Joe MEM:EX

Subject: QUESTION: 2010 FLNRO placer mine inspection report

Joe, might you have 5 minutes to review a file with me? My staff have been unable to engage with Bruce Hupman following upon a joint commitment to review our 2010 placer mine inspection report.

We are facing some considerable pressure to release the report to federal authorities and First Nations, but respect that MEM has need to join us in a final review before that happens. That said, we cannot continue to let this matter slide, as has been the case since RED Gerry MacDougall, Ken Vanderburgh and myself met with Bruce this past spring.

On counsel from Gerry, I am looking for advice from you as to how we can move this along.

Page 102 redacted for the following reason:

Not responsive - date range

From: Sent: MacDougall, Gerry L FLNR:EX Monday, May 16, 2011 12:47 PM

To:

Stewart, Rodger W FLNR:EX

Subject:

FW: placer

Stay tuned.

From: Seguin, Joe MEM:EX

**Sent:** Monday, May 16, 2011 12:44 PM **To:** MacDougall, Gerry L FLNR:EX

Subject: RE: placer

Certainly, but Bruce is in the Field today. If he calls in while out I will advise him to call Rodger otherwise I will do so tomorrow morning.

Joe Seguin Regional Director Office of the Chief Inspector Ministry of Energy and Mines 3<sup>rd</sup> Fl. 441 Columbia St., Kamloops

P: (250) 828-4448 C: (250) 318-7003



From: MacDougall, Gerry L FLNR:EX Sent: Monday, May 16, 2011 12:41 PM

To: Seguin, Joe MEM:EX

Cc: Vanderburgh, Ken FLNR:EX; Stewart, Rodger W FLNR:EX; Dodge, Steve J FLNR:EX

Subject: RE: placer

Thanks Joe,

Is it ok for Rodger to contact Bruce Hupman to line up the meeting?

Gerry

From: Sequin, Joe MEM:EX

**Sent:** Monday, May 16, 2011 12:39 PM **To:** MacDougall, Gerry L FLNR:EX

Cc: Vanderburgh, Ken FLNR:EX; Stewart, Rodger W FLNR:EX; Dodge, Steve J FLNR:EX

Subject: RE: placer

#### Gerry:

There are just too many people with the same name, to clarify; Bruce Madu will be acting on my behalf s.22 while Bruce Hupman will work on the placer issue.

Joe Seguin
Regional Director
Office of the Chief Inspector
Ministry of Energy and Mines
3rd Fl. 441 Columbia St., Kamloops

P: (250) 828-4448 C: (250) 318-7003

<< OLE Object: Picture (Device Independent

Bitmap) >>

**From:** MacDougall, Gerry L FLNR:EX **Sent:** Monday, May 16, 2011 12:11 PM

To: Stewart, Rodger W FLNR:EX

Cc: Vanderburgh, Ken FLNR:EX; Dodge, Steve J FLNR:EX; Seguin, Joe MEM:EX

Subject: placer

Hi Rodger, Joe and I had a positive conversation.

S22

He's interested in the discussion of how we can work together on placer issues, going forward. He does see an opportunity to further define the draft MEM – FLNRO MoU, possibly including inspection training (subject to Chief Inspector's discretion on that part).

Joe will tag Bruce Madu and possibly Grant Feldinger to come up for a briefing next Tuesday and a discussion on next steps.

Rodger, could you please make contact with Bruce to book a mutually workable time/venue with Bruce? It might be a good idea to check with Joe to confirm that he's been able to give Bruce a heads-up. Thank you,

#### Gerry MacDougall, RPF, MBA

Ph 250-398-4355 Regional Executive Directar, Cariboo Region Ministry of Forests, Lands and Natural Resource Operations s.22

Pages 105 through 109 redacted for the following reasons:

Not responsive

From: Arcand, Michelle X FLNR:EX

Sent: Monday, August 15, 2011 10:35 AM

To: Stewart, Rodger W FLNR:EX; Youds, John A FLNR:EX

Cc: McLeod, Joanne FLNR:EX
Subject: RE: Outstanding Safety Issue
Attachments: follow up on mining damage

Importance: High

This response from MEM is absolutely ridiculous! Thanks Rodger for your follow-up with them – right to the point and much appreciated.

Currently any member of the public has access to this site. I did not even leave the main road, which also happens to be under current road permit to West Fraser Mills for harvesting of TFL 52 CP54U-2. If I was inspecting the cutblock I would have to travel the same road...

By definition of a mine under the Mines Act (see below), every time we drive on the highways, FSRs or any other recreational roads within the Cariboo region we pass through hundreds of mines. In this particular case I encountered no gate or sign restricting access or indicating this was an active mine site. For all we know there may not even be a current mine permit on this site (there wasn't last year even though a NOW had been submitted).

Furthermore, one of the reasons I visited this site in the first place last year, and again this year was in response to questions raised by Wells residents about the works in the wetlands. (see attached email).

#### **Mines Act:**

#### "mine" includes

- (a) a place where mechanical disturbance of the ground or any excavation is made to explore for or to produce coal, mineral bearing substances, placer minerals, rock, limestone, earth, clay, sand or gravel,
- (b) all cleared areas, machinery and equipment for use in servicing a mine or for use in connection with a mine and buildings other than bunkhouses, cook houses and related residential facilities,
- (c) all activities including exploratory drilling, excavation, processing, concentrating, waste disposal and site reclamation,
- (d) closed and abandoned mines, and
- (e) a place designated by the chief inspector as a mine;

#### Application

2 This Act applies to all mines during exploration, development, construction, production, closure, reclamation and abandonment.

#### Health, Safety and Reclamation code:

**Authorization 1.3.1** Other than an inspector, only persons authorized by the manager shall enter or be permitted to enter a mine.

Posting 1.3.2 Notice to this effect shall be posted at all road entrances to the mine by the manager and, for non-operating mines, the contact information of a qualified person shall be included in the notice.

#### Unauthorized

#### Access

**1.3.3** Unless authorized by the manager, no persons shall enter or leave a mine except by a recognized means of entry or exit.

From: Hupman, C Bruce MEM:EX Sent: Friday, August 12, 2011 11:43 AM

To: Arcand, Michelle X FLNR:EX

Cc: Seguin, Joe MEM:EX; Stewart, Rodger W FLNR:EX; Youds, John A FLNR:EX; McLeod, Joanne FLNR:EX

Subject: Outstanding Safety Issue

Importance: High

Michelle,

Please consider this quote from section 37 of the Mines Act, R.S.B.C. 1996, c.293 [Updated to 2007]

A person who contravenes a provision of this Act, the regulations, the code or an order made under any of them commits an offence

As mines are an industrial site, they can pose different industrial safety issues than those you are accustom to. The Health, Safety and Reclamation Code for Mines in British Columbia is a Provincial Regulation and looks to protect workers, public and the environment. To this means, the *Code* is clear regarding entry to a mine site and states: Other than an inspector, only persons authorized by the manager shall enter or be permitted to enter a mine.

I have provided this information to you prior to your August 8, 2011 inspection of mine # 1101292 which you refer to as placer lease 362505. As part of the responsibilities assigned to me as an Inspector of Mines, I am serving you written notice that by entering a mine site without authority, you are in contravention of the *Code*. By way of this e-mail I am also alerting your co-workers/supervisors of your continuing contravention of the *Code*.

I am concerned that you continue to place yourself in situations where you are at risk of injury and instruct you to cease entering a mine site at once unless authorized by the mine manager to do so.

Bruce Hupman Senior Mines Inspector

From: Arcand, Michelle X FLNR:EX

Sent: Thursday, August 11, 2011 4:19 PM

To: MMD Kamloops EMPR:EX; Hupman, C Bruce MEM:EX; Feldinger, Grant M MEM:EX

Cc: Seguin, Joe MEM:EX; Stewart, Rodger W FLNR:EX; Youds, John A FLNR:EX; McLeod, Joanne FLNR:EX

Subject: placer mining continues in wetland

Greetings,

On August 8, 2011 I did a follow-up inspection of placer lease 362505 to view reclamation work which was ordered as a result of an MOE inspection conducted last summer.

Last summer works included excavation, deposit of material, and discharge into watercourses and excavation of a wetland. The proponent did not hold a current work permit at the time. He was subsequently ordered by MEMPR to stop work and reclaim the present disturbance. (See attached email correspondence).

During my follow-up inspection I found that the reclamation undertaken was inadequate, as the "reclaimed area" was simply levelled and grass seeded but is so compacted and lacking in topsoil it will take likely take decades to recover and support vegetation.

The wetland area which was excavated last year has not been reclaimed at all and the proponent is continuing work in the wetlands. I have reviewed the NOW submitted this year and see that the proponent plan is to continue excavating this wetland area over the next 3 years. This is unacceptable. Wetlands provide high value wildlife habitat and ecosystem services. Mining in wetlands is not in keeping with the Placer Mining Activities in Riparian

Ecosystems MOU which required a minimum 10 m setback from riparian ecosystems nor is it in accordance with guidance regarding placer standards provided to MEMPR by our Section last spring (draft attached).

I would like to know how MEM intends to address this situation.

Regards,

Michelle Arcand Habitat Biologist phone: 250-991-7252

mailing address: 322 Johnston Ave. Quesnel BC V2J 3M5

Page 113 redacted for the following reason:

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Not responsive

From:

Arcand, Michelle X FLNR:EX Friday, June 10, 2011 12:59 PM

Sent: To:

McLeod, Joanne FLNR:EX; Youds, John A FLNR:EX

Cc: Subject: Stewart, Rodger W FLNR:EX placer reclamation Inspection form

Attachments:

Inspection form.pdf

FYI, here is the form provided to C&E by MEMPR for conducting reclamation bond inspections on placer mines.

Michelle Arcand 250-991-7252

----Original Message----From: Groll, Calvin FLNR:EX

Sent: Tuesday, June 7, 2011 10:21 AM

To: Arcand, Michelle X FLNR:EX Subject: Emailing: Inspection form

Your message is ready to be sent with the following file or link attachments:

Inspection form

Note: To protect against computer viruses, e-mail programs may prevent sending or receiving certain types of file attachments. Check your e-mail security settings to determine how attachments are handled.

# RECLAMATION BOND RETURN REQUEST FIELD INSPECTION SUMMARY

DATE OF INSPECTION:	A(	GENCY						
INSPECTION BY:	TITLE/POSITION:							
SIGNATURE:	ACCOMPANIED BY:							
	SITE INFORMATION							
SITE ID#:	OWNER/OPERATOR:							
FILE #:	PERMIT #:							
MINE #:	SECURITY AMOUNT:							
TENURE/CLAIM #:	DATE OF RELEASE REQUEST:							
MINE LOCATION:	MINE TYPE:	MINE TYPE: P (placer) MX (mineral exploration) G (sand & gravel) Q (quarry) CX (coal) M (mine)						
	P (placer) MX (mineral							
SITE LOCATION/ACCESS:								
UTM COORDINATES OF WORKSITE:	Northing	Easting						
ISSUES TO RESOLVE (notes from file):								
ADDITIONAL COMMENTS (from file):	;							
INSPECTION SUMMARY:		·						
		•						
	NDATION TO MEMPR INS led of reclamation work with w	PECTOR OF MINES vritten/signed inspection report)						
RECLAMATION COMPLETE – RECOMM	END BOND RETURN							
RECLAMATION INCOMPLETE – RECOM	IMEND NOTIFICATION TO	OWNER TO COMPLETE WORK						
RECLAMATION ALL OUTSTANDING – F (30 day bond seizure warning letter followed		_						

FIELD INSPECTION										
EQUIPMENT, BUILDINGS, AND	yes)	(no)	(n/a)	,				(yes)	(no)	(n/a)
STRUCTURES REMOVED:				ADEQU.	ATE FINAI	L PIT SLOPI	E:			
FUEL CONTAINERS REMOVED:				EXCESS	O/B PILES	S RESLOPE	D:			
SEPTIC/SEWAGE SYSTEMS REMOVED:				STABLE	& NON-E	ROSIVE:				
CONCRETE FOUNDATIONS BURIED:				SPOIL P	ILES RESL	OPED:				
GARBAGE/REFUSE BURNED/BURIED:				STABLE	& NON-E	ROSIVE:				
NON-FLAMM. REFUSE REMOVED:				SLOPED	AREAS G	RADED:				
HAZARDOUS WASTE REMOVED:				STABLE	& NON-E	ROSIVE:				
BATTERIES REMOVED:				BRUSH/	ORGANIC	S SPREAD:				
VISIBLE CONTAMINATED SOIL:				SOIL/PO	ND SILT S	PREAD:				
CAMPSITE CLEAN OF DEBRIS:				DISTUR	BED AREA	S REVEGE	TATED:			
CORE/CORE RACKS REMOVED:				VEGETA	ATION SEL	F-SUSTAIN	ING:			
SCRAP METAL REMOVED:				TREE SE	EDLINGS	PLANTED:				
ROADS/TRAILS DEACTIVATED:				ADEQUA	ATE STOC	KING STAN	IDARD:			
ACCESS STABLE & NON-EROSIVE:				WATER	CONTROL	STRUCTU	RES:			
CULVERTS/BRIDGES REMOVED:				WATER	CONTROL	FUNCTION	NING:			
PULL BACK SIDE CAST:				RIPARIA	N ZONE R	ESTORATI	ON:			
RESLOPED CUT & FILL SLOPES:				RIPARIA	N ZONE F	UNCTION	NG:			
CROSS DRAINS/WATER BARS :				LANDSC	APE REST	ORATION:				
PONDS BREACHED & DRAINED:				LANDSC	APE FUNC	CTIONING:				
PONDS CONTOURED:				STREAM	DIVERSI	ONS:				
WORKINGS BACKFILLED:				STREAM	I DIVERSI	ONS FUNCT	TIONING:			
WORKINGS CONTOURED:				NATURA	AL DRAINA	AGE RESTO	RED:			
ADEQUATE FINAL PIT FACE HEIGHT:				NATURA	AL DRAINA	AGE FUNCT	TIONING:			
IN THE EVENT THAT NO RECLAMATION ACTIVITY HAS OCCURRED (PHOTOS REQUIRED WITH UTMS AND DESCRIPTION):										
HAS ANY NATURAL REVEGETATION OCCURRED TO UNRECLAIMED PITS, TRENCHES DRILL PADS OR CAMPS?										
HAS ANY NATURAL REVEGETATION OCCURRED TO UNRECLAIMED ACCESS TRAILS OR ROADS OR OTHER DISTURBED AREAS?										
WOULD RECLAMATION ACTIVITIES TO NATURALLY REVEGETATED SITE BE WARRENTED? YES NO										
NATURAL POTENTIAL FOR MASS WASTING (based on previous events):										
RATING:	HIGH	Oased	MEDIUM	):	LOW		UNKNO	WN		
PROBABILITY FOR PIT SLOPE FAIRATING:	ILURE: HIGH		MEDIUM		LOW		UNKNO	WN		
PROBABILITY OF SOIL EROSION: RATING HIGH		MEDIU	м 🗆	LOW		UNKNO	WN			
PROBABILTY OF STREAM SEDIM. RATING:	ENTATI HIGH	ON:	MEDIUM		LOW		UNKNO	WN		
PROBABILITY OF RISK TO PUBLIC RATING:	C OR WO	ORKER SA	AFETY: MEDIUM		LOW		UNKNO	WN		•
PROBABILITY OF DAMAGE TO W	ILDLIFE HIGH	LIVESTO	OCK: MEDIUM		LOW		UNKNO	WN		
OTHER RISKS (PLEASE DESCR		<b>—</b>								

# FIELD INSPECTION

FIELD OBSERVATIONS: (eg: Settling Pond Full of Water)
COMPLIANCE ISSUES: (eg: Mine Workings Unreclaimed)
REQUIREMENTS FOR RECLAMATION: (eg: Settling pond to be drained, backfilled/recontoured and revegetated to a self-
sustaining state)
1
,

# FIELD INSPECTION

#### MAP STATION DESCRIPTIONS

PHOTOS ARE REQUIRED FOR ALL SITES OF RECLAMATION TO ENABLE AN INSPECTOR OF MINES IN DETERMINING IF REQUIREMENTS HAVE BEEN MET (attach printed photo sheets)

MAP STATION	NORTHING	EASTING	DESCRIPTION	РНОТО#
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		,		

From: Sent: Arcand, Michelle X FLNR:EX Tuesday, May 17, 2011 1:16 PM Stewart, Rodger W FLNR:EX

To: Cc:

Youds, John A FLNR:EX; McLeod, Joanne FLNR:EX

Subject:

RE: use of the term audit

#### Thanks Rodger,

I've just had a glance at a course binder left behind by Charlotte, from a 2004 course entitled *Introduction to Methods of Environmental Compliance Assessment*, prepared for Environmental Stewardship division by I.D. Cuthbert RPBio. It appears to me from a cursory look at the material that we would be best to stay away from the term audit as you suggest Rodger.

I quote from the course material:

"The term audit is often misused when referring to evaluation activities such as assessment or reviews. Certain elements (generally accepted principles and practices) must be present for an assessment to be termed an 'audit', and these are discussed briefly in this Guide. These include, but are not limited to the roles, qualifications and processes of the Audit team, the involvement of the Auditee, the establishment of audit scope and criteria, procedures for evidence collection, evaluation and documentation, and the key principles of independence and objectivity. An assessment or review *can* have all of the same elements as an audit, and may be just as rigorous or more so."

Apparently there are actually Guidelines for environmental auditing produced by the ISO.

Seems to me best we don't open this can of worms...and just use another term.

Michelle Arcand 250-991-7252

**From:** Stewart, Rodger W FLNR:EX **Sent:** Tuesday, May 17, 2011 12:10 PM

To: Youds, John A FLNR:EX; McLeod, Joanne FLNR:EX

**Cc:** Arcand, Michelle X FLNR:EX **Subject:** RE: Placer report

Some definitional phrases from the Web.

The general definition of an **audit** is an evaluation of a person, organization, system, process, enterprise, project or product. The term most commonly refers to audits in accounting, but similar concepts also exist in project management, quality management, and energy conservation.

Audits are performed to ascertain the validity and reliability of information; also to provide an assessment of a system's internal control. The goal of an audit is to express an opinion on the person / organization / system (etc.) in question, under evaluation based on work done on a test basis. As a general rule, audits should always be an independent evaluation that will include some degree of quantitative and qualitative analysis whereas an assessment infers a less independent and more consultative approach.

The purpose of an *assessment* is to measure something or calculate a value for it. Although the process producing an assessment may involve an audit by an independent professional, its purpose is to provide a measurement rather than to express an opinion about the fairness of statements or quality of performance.

Rodger Stewart
Director, Resource Management
Ministry of Forests, Lands and Natural Resource Operations
Cariboo Region
400 - 640 Borland Street
Williams Lake, BC
V2G 4T1
cell (250) 305 8536, desk (250) 398 4549
fax (250) 398 4214

From: Youds, John A FLNR:EX

Sent: Tuesday, May 17, 2011 11:48 AM

To: McLeod, Joanne FLNR:EX; Stewart, Rodger W FLNR:EX

**Cc:** Arcand, Michelle X FLNR:EX **Subject:** RE: Placer report

Likewise, I don't have a problem with calling it an inspection report (or compliance inspection report). Just out of curiosity, where are you finding a formal definition for an audit?

From: McLeod, Joanne FLNR:EX

Sent: Tuesday, May 17, 2011 11:31 AM

To: Stewart, Rodger W FLNR:EX; Youds, John A FLNR:EX

**Cc:** Arcand, Michelle X FLNR:EX **Subject:** RE: Placer report

I can't speak for Michelle, but I'm not concerned about calling it an inspection report. Here is the most recent copy, Rodger.

**From:** Stewart, Rodger W FLNR:EX **Sent:** Tuesday, May 17, 2011 11:23 AM

To: Youds, John A FLNR:EX

Cc: McLeod, Joanne FLNR:EX; Arcand, Michelle X FLNR:EX

Subject: Placer report

Which copy should I work with if I were to be reviewing and offering comments?

I am considering whether we can rightly call this an audit (thinking of the true definition of the word) or whether we call this an inspection or monitoring report. I am worried about calling is an audit, as the project was not set up as an "audit" in the manner that the term is typically used. If it was set up that way, then we need to set out in the report the questions that were to be examined, and the means by which the examination of each of the questions was undertaken. Might be better to call it what it more correctly was.'I am interested in thoughts on this point. We do not want people dismissing the report on such grounds (which can happen no matter how relevant the work), so let's consider what best to call it.

From: Sent: Arcand, Michelle X FLNR:EX Tuesday, May 17, 2011 11:47 AM

To:

Stewart, Rodger W FLNR:EX

Cc:

Youds, John A FLNR:EX; McLeod, Joanne FLNR:EX

Subject:

FW: Placer report

Attachments:

Placer Audit Final Draft.docx

We should call it whatever is most accurate by definition. Whether that is an inspection or monitoring report let us know what you think and we'll make the change. The title page and photos were last minute additions so expect will need refining anyway.

I've also noted one change that needs to be made in the Exec Summary which I've tracked in blue on the attached copy.

Michelle Arcand 250-991-7252

From: McLeod, Joanne FLNR:EX

Sent: Tuesday, May 17, 2011 11:31 AM

To: Stewart, Rodger W FLNR:EX; Youds, John A FLNR:EX

**Cc:** Arcand, Michelle X FLNR:EX **Subject:** RE: Placer report

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To: Youds, John A FLNR:EX

Cc: McLeod, Joanne FLNR:EX; Arcand, Michelle X FLNR:EX

Subject: Placer report

Which copy should I work with if I were to be reviewing and offering comments?

I am considering whether we can rightly call this an audit (thinking of the true definition of the word) or whether we call this an inspection or monitoring report. I am worried about calling is an audit, as the project was not set up as an "audit" in the manner that the term is typically used. If it was set up that way, then we need to set out in the report the questions that were to be examined, and the means by which the examination of each of the questions was undertaken. Might be better to call it what it more correctly was. I am interested in thoughts on this point. We do not want people dismissing the report on such grounds (which can happen no matter how relevant the work), so let's consider what best to call it.

Pages 122 through 161 redacted for the following reasons:

Not responsive
S14

From:

Seguin, Joe MEM:EX

Sent: To: Cc: Tuesday, May 22, 2012 4:15 PM Stewart, Rodger W FLNR:EX MacDougall, Gerry L FLNR:EX

Subject:

RE: Meeting date?

Rodger:

s.22

I think it important that we have the right

people at the table, in that regard I was looking at Bruce Hupman, Grant Feldinger and Stephen Rothman as well as myself. I have had a look at the timing of a meeting and note that the best time is the second week of June. I would have liked to do this earlier however, I am in Cranbrook next week and the first week of June is relegated to the Provincial Mine Rescue Competition. Does June 13<sup>th</sup> 1:00 pm work for you and your group?

Joe

Joe Seguin Regional Director Ministry of Energy and Mines P: (250) 828-4448 C: (250) 318-7003



**From:** Stewart, Rodger W FLNR:EX **Sent:** Tuesday, May 22, 2012 2:32 PM

**To:** Seguin, Joe MEM:EX

Cc: MacDougall, Gerry L FLNR:EX; Youds, John A FLNR:EX

Subject: Re: Meeting date?

Joe, anything to share? How might I be able to contact you on this matter?

Rodger

From: Stewart, Rodger W FLNR:EX Sent: Monday, May 14, 2012 04:54 PM

To: Seguin, Joe MEM:EX

Cc: MacDougall, Gerry L FLNR:EX; Youds, John A FLNR:EX

**Subject**: Meeting date?

Joe, when we last spoke, we were looking to you to lock down a date in late May in which to advance our joint agenda on placer mining.

Any progress?

Rodger Stewart
Director, Resource Management
Ministry of Forests, Lands and Natural Resource Operations

Cariboo Region 400 - 640 Borland Street Williams Lake, BC V2G 4T1 cell (250) 305 8536, desk (250) 398 4549 fax (250) 398 4214

From:

Youds, John A FLNR:EX

Sent: To: Monday, June 18, 2012 4:09 PM Stewart, Rodger W FLNR:EX

Subject:

Placer Report

Hi Rodger, At the last quarterly meeting with NSTC (on May 22/12), I was asked whether we can share the Placer Report. Apparently it was on the minutes from the previous meeting that it was to be shared by the May quarterly meeting. However, I indicated that I would need to check with you. Please be aware that this will come up at the next quarterly meeting.

From:

Youds, John A FLNR:EX

Sent:

Monday, June 11, 2012 3:54 PM

To: Cc: Stewart, Rodger W FLNR:EX Higgs, Karen E FLNR:EX

Subject:

MEM meeting - June 13

Hi Rodger, Just checking on the status of our meeting with MEM planned for June 13<sup>th</sup>. I'm assuming that it is still a go (if not, we need to let Michelle know as she is travelling down for it). Who is to chair? Has a meeting room been identified? Thanks.

From:

Youds, John A FLNR:EX

Sent:

Monday, October 17, 2011 9:44 AM Stewart, Rodger W FLNR:EX

To:

Subject:

placer report

Rodger, Have you got some time today that we could talk about finalizing on this report?

#### PROVINCE OF BRITISH COLUMBIA

# Ministry of Energy and Mines

Response to 2010 Placer AUDIT conducted by Ministry of Environment Ecosystem staff-Williams Lake

Bruce Hupman PAg - Senior Inspector of Mines 7/26/2011

#### **Executive Summary**

In the 2009 operational year, the BC government realigned operational boundaries of Ministries regulating the natural resource sector. As a result of this realignment the Ministry of Environment (now MFLNRO) - Cariboo Region experienced a substantial increase in the number of placer Notices of Work referred to them from the Ministry of Energy, Mines and Petroleum Resources — South-Central Region. The rationale for these referrals was twofold; to seek out local information not readily available in existing documents and to cultivate a positive working relationship with Environment in another region.

As a result of this perceived increase in activity and the potential environmental impacts associated with placer mining, staff from the Ministry of Environment-Ecosystems conducted site visits during the summer of 2010 and summarized their findings in a placer audit. The study area was within the Cottonwood and Quesnel Rivers watersheds.

Very tight constraints were applied during this exercise and as a result of these constraints there is limited value in the conclusions and recommendations delivered. Ecosystems Branch staff relied only on the supplied Notice of Works. Their opinions were formed without conducting file reviews, consulting with a Mine Inspector or the Mines Act, seeking advice on mining methods, having mine site reclamation experience and others.

The Health, Safety and Reclamation Code for Mines in British Columbia states that...."Other than an inspector, only persons authorized by the manager shall enter or be permitted to enter a mine". Some of the authors of the MoE audit were informed of the authority needed to enter a mine site several months prior to any field work being conducted. Not only did staff neglect Regulation, they placed themselves and their guests in harm's way in doing so. As neither they nor their guests from local First Nation communities have any authority or the necessary training to enter a mine site, these inspections un-necessarily placed all attendees at risk.

Some of the noted offenses within the MoE audit go beyond the authority of the Mines Act. For example the spread and control of noxious weeds at the mine site is a permit condition and a requirement of the Mine Act permit. The audit notes the occurrence of noxious weeds on site, yet failed to mention that the weeds could be tracked from the forest roads to the mine site indicating the invasion route and seed source.

Adding another layer of complexity to the MoE audit report was the referring to non-permitted works within the report and works conducted prior to the acceptance of certain standards. Clearly any mechanical disturbance made without approval for the intent of mineral exploration is not in compliance with regulations. Works which were permitted prior to the Forest Practices Code (FPC) clearly cannot meet those requirements and the FPC was never intended to be applied to placer mining. Inclusion of these findings into the reports created bias. The

Comment [jay1]: This is an interesting explanation for the increase in placer mining activity in the region however the increase is likely also related to other factors such as the increased market value of gold.

Comment [jay2]: No data from MEM but indicates bias. The main reason the inspections were done was to check to see whether guidance provided by MOE was being used in operations.

Comment [jay3]: Meaning what? The inspections spanned several weeks and the write-up was done over several months.

**Comment [jay4]:** The inspection report deals with observations, not opinions.

Comment [jay5]:

S14

Comment [jay6]: The inspection report talks about non-compliances with the NOW permit, but doesn't refer to offenses.

Comment [jay7]: Bruce may be missing the point here: regardless of source, the spread and control of noxious weeds such as knapweed is a permit condition which is not being followed in at least one case

Comment [jay8]: I think that Bruce has misinterpreted here. The inspection report (p. 4) clearly states that the FRPA designations do not apply directly to placer mining.

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corporate image of the BC government is impacted by uninformed comments; resolution of this issue requires full commitment and teamwork by agencies within and outside of government.

As demonstrated during a meeting with members of the Caribou Managers Committee not all assumptions made by the Ecosystems team were accurate. It was understood that the report required adjustments before being discussed or released to the public. The May 31, 2011 meeting and this document are part of that established agreement.

Comment [jay9]: Which assumptions is Bruce referring to here? This is not very helpful

Notwithstanding this agreement, First Nation communities continue to demand meetings with the Ministry of Energy and Mines (MEM), quoting compliance numbers derived within the original draft MoE audit. Ongoing and new consultations related to mineral exploration and development within the Williams Lake Indian Band asserted traditional territory are being influenced by statements contained within the original draft MoE audit.

Comment [jay10]: The draft table of results were shared with the Northern Shuswap with DRM approval but the report has not been shared.

When considering the impact of mineral exploration and development in the Cottonwood and Quesnel Rivers watersheds, we must separate the historical practices from those permitted under current regulations. Indeed the damming of streams for and the use of hydraulic mining, dredging of water channels, diversion of streams and other outdated practices did impact riparian zones, fish habitat and hydrology of streams. Today none of these activities would likely be authorized, or if so under considerable review and oversight.

It cannot be argued that placer mining does not contribute to the cumulative effects on the environment. However one must consider that permitted operations must, maintain riparian setbacks, have zero discharge and reclaim the site. Provincially the footprint of mining is around 0.5% of the landmass within British Columbia and is concentrated around localized outcroppings of mineralization.

Comment [jay11]: But the inspection results clearly show this not to be the case

Comment [jay12]: This statement is not helpful, particularly when a large portion of the placer mining activity is concentrated in the eastern Cariboo. This is like saying there is no impact if you look at the provincial scale.

#### 1.0 Background

The MEM was supplied a draft of the MoE Placer Audit May 2009 after it was presented and discussed at the Caribou Managers Committee. As a draft, the report was an internal document not for distribution.

Referrals continue to Ministry of Environment, Williams Lake seeking improved intergovernment co-operation thus strengthening the Crown's commitment to enhanced stewardship of the natural resources.

As a result of these referrals, Ministry of Environment-Ecosystems staff continues to provide comments on placer applications. Not all comments submitted by MoE are developed into permit conditions. Some issues such as, the control of noxious weeks, are not solely specific to MoE, but are Code requirements under the *Mines Act* and are often included in responses from

Comment [jay13]: Bruce must not be up to-date on this because in 2010 we requested that MEM not do this but instead incorporate our guidance into their permitting process.

Comment [jay14]: Inaccurate; definitely NO

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the Ministry of Forests. Comments such as these are included without prompting from MoE. Other suggested permit conditions go beyond existing regulations or are not supported by regulation. When considering these MoE suggestions an Inspector may have to mitigate the issue without creating a provincial standard. Riparian setbacks are a prime example of this management of issue and regulation. Rather than neglecting regulation and placing staff at risk by conducting on site inspections it is suggested that a discussion with MEM staff on whether the MoE suggested condition was applicable to a Mines Act permit could remain the simplest method to assess whether MoE recommendations were being passed on to proponents or incorporated into permit conditions.

A recent request made to a Mines Inspector was for the proponent to manage and replace the old growth timber "logged" by a mineral exploration company. The area in question had been harvested by a forest company the previous winter. As companies conducting mineral exploration and development are generally small scale operators on a landscape and do not control the harvesting of timber, requests such as this cannot be entertained. An important point should be noted; miners typically see timber and the disposal of the trees and stumps as a liability and generally attempt to avoid any timber extraction.

The definition of "mine" includes; a place where mechanical disturbance of the ground or any excavation is made to explore for or to produce coal, mineral bearing substances, placer minerals, rock, limestone, earth, clay, sand or gravel, all cleared areas, machinery and equipment for use in servicing a mine or for use in connection with a mine and buildings other than bunkhouses, cook houses and related residential facilities, all activities including exploratory drilling, excavation, processing, concentrating, waste disposal and site reclamation, closed and abandoned mines, and a place designated by the chief inspector as a mine. A "mining activity" means any activity related to, the exploration and development of a mineral, a placer mineral, coal, sand, gravel or rock, or the production of a mineral, a placer mineral, coal, sand, gravel or rock, and includes the reclamation of a mine. The Inspector of Mines applies the Mines Act, the Health, Safety and Reclamation Code For Mines in British Columbia and other documents like the Handbook for Mineral and Coal Exploration in British Columbia to manage impacts of exploration activities on other resource values including timber, fish and wildlife and their habitat; water quality and cultural heritage resources. Placer mines are not exempted from the Mines Act or its related regulation.

The General Wildlife Measures (GWMs) associated with the Wildlife Habitat Areas (WHAs) apply to forestry activities. The Crown has recognized that mineral exploration and development cover a limited area of the landbase, and therefore, in keeping with the two-zone land use system for mineral exploration and mining, the GWMs do not apply for the purpose of exploration, development and production activities when those activities have been authorized

Comment [jay15]: I don't understand why Bruce is so defensive on the noxious weed issue

**Comment [jay16]:** Which suggestions is he referring to here?

Comment [jay17]: I disagree, a paper review process can never replace field inspections; the inspection has shown that many conditions of permit are not being followed

Comment [jay18]: Not sure of the specifics of this story but it does not appear to be directly relevant to the inspection report

Comment [jay19]: This is acknowledged in the report.

under the Mineral Tenure Act, Coal Act, the Mines Act, the Petroleum and Natural Gas Act or the Geothermal Resources Act.

This concept is further enhanced within the Quesnel Sustainable Resource Management Plan. This resource management plan is one of seven resource management plans developed to support the Cariboo-Chilcotin Land Use Plan. The QSRMP ensures access to 100 percent of the plan area for mineral and aggregate exploration and potential development, excluding protected areas and Goal 2 areas within the plan. This is consistent with government's two-zone approach to mineral exploration and development. The comprehensive nature of the QSRMP objectives will assist the mineral sector in making informed choices. Mine development is addressed under the Environmental Assessment Process. In general developed mines are a very small part of any strategic planning area; they are however an important economic driver for the province.

Comment [jay20]: Bruce has raised a major point of concern here. He suggests that all land use planning objectives can be overridden by 100% mineral access. FLNRO preference is that NOW permit needs to contain conditions that protect these important habitat elements.

#### 2.0 Observations:

The on-site inspections were:

- 1) Conducted by people without the necessary training and experience to enter a mine site.
- 2) Skewed due to very limited familiarity with mining operations,
- 3) Did not acknowledge time lines and the introduction and repeal of Acts/Regulations,
- 4) Did not consider other resource values. The core values and mandates of the two Ministries' may appear opposing as the "audit" appears to favour one value above another
- 5) Preformed with at least one Mines Act regulation violated

#### General observations conclude:

- · Non-permitted works are occurring on Crown land,
- Some contraventions of the Mines Act are occurring,
- Of the 26 sites reviewed and the 14 possible contraventions sent to MEM for decisions;
   5 resulted in actions by MEM,
- Of the 90+ concerns expressed in Appendix 1, only 5 have resulted in orders (implies 94% compliance rate),
- Although the audit highlights the destruction of fish habitat, it also comments on fish accessing mine associated workings.

Comment [jay21]: This suggests that they are untrained staff - poor wording

Comment [jay22]: Bruce needs to provide some evidence or drop the allegation

**Comment [jay23]:** Perhaps the report title should acknowledge that these were environmental inspections

Comment [jay24]: This is not true, as usually the Mine Manager was talked to when on site.

**Comment [jay25]:** Appendix 1 is a DFO audit result from 2001.

Comment [jay26]: This is not a good thing; I think that Bruce has misinterpreted

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#### 3.0 Recommendations:

MEM continues to outreach to our client group. As part of the extension, we have approached the Williams Lake MoE group to join us in one of our sessions with the Caribou Placer Miners. During this brief introduction of the regulations concerning placer miners, MoE staff are requested to listen to other presentations and then to present a brief overview of their issues to the placer miners. It is expected that this interaction will begin to remove the; us and them situation which appears to be part of the issue here.

MEM provides a "Protecting Values above and below the WaterLine" training sessions to our client groups

MoE staff in the Kamloops and Penticton areas has experience with mines and mines inspectors. Perhaps a temporary assignment for staff from one region to another might help in information flow, applications on the ground, and crafting permitting suggestions in a manner acceptable under the Mines Act.

As MEM has developed a Placer Best Management Handbook, perhaps the MoE audit may speed up its review, acceptance and release.

MEM is preparing to develop and deliver a training package for various groups. Staff from the Ministry of Environment-Ecosystems could be included in this training. The training component could include site visits to placer operations, mineral exploration and sand and gravel operations.

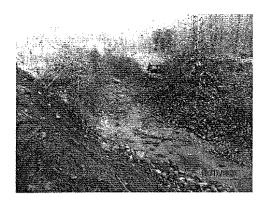
Comment [jay27]: I chatted to Bruce about this but there has been no follow-thru from Bruce

Comment [jay28]: This is strictly Bruce's opinion; frankly, I think that the defensiveness of MEM on these issues reflects that they have not gotten past this.

**Comment [jay29]:** The results of the inspections show that these sessions alone are not working

Comment [jay30]: Interesting comment because Kamloops staff are using our guidance. This comment verges on slander against my staff – completely not called for.

Comment [jay31]: Both of these recommendations are already incorporated into the recommendations of the inspection report



Man made channel



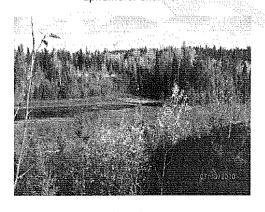
1980's un reclaimed workings



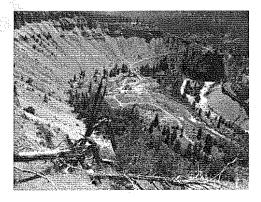
Ephemeral Channel



Permitted Works pre 1995



Permitted Works pre 1970



Placer mining creating habitat

Pages 174 through 175 redacted for the following reasons:

S14

#### Not Responsive

From: Stewart, Rodger W FLNR:EX

Sent: Tuesday, August 16, 2011 12:00 PM

To: Arcand, Michelle X FLNR:EX; Youds, John A FLNR:EX

Subject: Fw: Outstanding Safety Issue

Michelle, possible that the COS may wish to follow up with Hupman re his work as inferred below.

Rodger

From: Hupman, C Bruce MEM:EX

**Sent**: Monday, August 15, 2011 01:25 PM

**To**: Stewart, Rodger W FLNR:EX **Subject**: RE: Outstanding Safety Issue

Ok, I will investigate this and take the necessary steps to rectify the problem(s)

From: Stewart, Rodger W FLNR:EX Sent: Monday, August 15, 2011 12:21 PM

**To:** Hupman, C Bruce MEM:EX; Arcand, Michelle X FLNR:EX

Cc: Seguin, Joe MEM:EX; Youds, John A FLNR:EX; McLéod, Joanne FLNR:EX

**Subject:** RE: Outstanding Safety Issue

Bruce, you might take care to know that this inspection was carried out without need to set foot on the mine. You should not assume that just because an inspection was carried out that entry was gained to a mine without authorisation. There are means to carry out required observations in cases where either an inspector is not available to accompany, or a mine manager is not available or does not grant approval to access.

When a publicly accessible and actively used forest road passes through the site, as is the case below, it is easy to carry out the required observations from the road right of way. It is not at all difficult to accurately differentiate old from new placer workings, particularly at this specific mine site.

By the way, we continue to receive public complaints about this specific operation. I trust you will response to our requests respecting what might be done about the alleged non-compliance being observed by the public.

We await your promised engagement on the placer report, or at least the comments you had more recently promised to John Youds.

Rodger Stewart
Director, Resource Management
Ministry of Natural Resource Operations
Cariboo Region
400 - 640 Borland Street
Williams Lake, BC
V2G 4T1
cell (250) 305 8536, desk (250) 398 4549
fax (250) 398 4214

**From:** Hupman, C Bruce MEM:EX **Sent:** Friday, August 12, 2011 11:43 AM

To: Arcand, Michelle X FLNR:EX

Cc: Seguin, Joe MEM:EX; Stewart, Rodger W FLNR:EX; Youds, John A FLNR:EX; McLeod, Joanne FLNR:EX

Subject: Outstanding Safety Issue

Importance: High

Michelle,

Please consider this quote from section 37 of the *Mines Act*, R.S.B.C. 1996, c.293 [Updated to 2007] A person who contravenes a provision of this Act, the regulations, the code or an order made under any of them commits an offence

As mines are an industrial site, they can pose different industrial safety issues than those you are accustom to. The Health, Safety and Reclamation Code for Mines in British Columbia is a Provincial Regulation and looks to protect workers, public and the environment. To this means, the *Code* is clear regarding entry to a mine site and states: Other than an inspector, only persons authorized by the manager shall enter or be permitted to enter a mine.

I have provided this information to you prior to your August 8, 2011 inspection of mine # 1101292 which you refer to as placer lease 362505. As part of the responsibilities assigned to me as an Inspector of Mines, I am serving you written notice that by entering a mine site without authority, you are in contravention of the *Code*. By way of this e-mail I am also alerting your co-workers/supervisors of your continuing contravention of the *Code*.

I am concerned that you continue to place yourself in situations where you are at risk of injury and instruct you to cease entering a mine site at once unless authorized by the mine manager to do so.

Bruce Hupman Senior Mines Inspector

From: Arcand, Michelle X FLNR:EX

Sent: Thursday, August 11, 2011 4:19 PM

To: MMD Kamloops EMPR:EX; Hupman, C Bruce MEM:EX; Feldinger, Grant M MEM:EX

Cc: Seguin, Joe MEM:EX; Stewart, Rodger W FLNR:EX; Youds, John A FLNR:EX; McLeod, Joanne FLNR:EX

Subject: placer mining continues in wetland

Greetings,

On August 8, 2011 I did a follow-up inspection of placer lease 362505 to view reclamation work which was ordered as a result of an MOE inspection conducted last summer.

Last summer works included excavation, deposit of material, and discharge into watercourses and excavation of a wetland. The proponent did not hold a current work permit at the time. He was subsequently ordered by MEMPR to stop work and reclaim the present disturbance. (See attached email correspondence).

During my follow-up inspection I found that the reclamation undertaken was inadequate, as the "reclaimed area" was simply levelled and grass seeded but is so compacted and lacking in topsoil it will take likely take decades to recover and support vegetation.

The wetland area which was excavated last year has not been reclaimed at all and the proponent is continuing work in the wetlands. I have reviewed the NOW submitted this year and see that the proponent plan is to continue excavating this wetland area over the next 3 years. This is unacceptable. Wetlands provide high value wildlife habitat and ecosystem services. Mining in wetlands is not in keeping with the Placer Mining Activities in Riparian Ecosystems MOU which required a minimum 10 m setback from riparian ecosystems nor is it in accordance with guidance regarding placer standards provided to MEMPR by our Section last spring (draft attached)1 Page 177

FNR-2012-00238

I would like to know how MEM intends to address this situation.

Regards,

Michelle Arcand Habitat Biologist phone: 250-991-7252

mailing address: 322 Johnston Ave. Quesnel BC V2J 3M5

Pages 179 through 199 redacted for the following reasons:

S14 S14

# Stewart, Rodger W FLNR:EX

From:

Youds, John A FLNR:EX

Sent:

Tuesday, April 12, 2011 8:49 AM

To: Cc: Lishman, Peter FLNR:EX Stewart, Rodger W FLNR:EX

Subject:

RE: Placer

Hi Peter, Here is the regional guidance document from Cariboo and some background info in the email. This



RE: Draft Placer Mining BMP Re...

guidance was provided to MEMPR in spring 2010.

From: Stewart, Rodger W FLNR:EX Sent: Monday, April 11, 2011 5:34 PM

**To:** Lishman, Peter FLNR:EX **Cc:** Youds, John A FLNR:EX

Subject: RE: Placer

I will have John Youds send you our guidelines.

Rodger Stewart
Director, Resource Management
Ministry of Forests, Lands and Natural Resource Operations
Cariboo Region
400 - 640 Borland Street
Williams Lake, BC
V2G 4T1
cell (250) 305 8536, desk (250) 398 4549
fax (250) 398 4214

From: Lishman, Peter FLNR:EX

**Sent:** Monday, April 11, 2011 3:36 PM **To:** Stewart, Rodger W FLNR:EX

Subject: Placer

Rodger

Do you have any guidelines for Placer miners operating within riparian areas that you expect people to follow

Peter Lishman RPF
Director,Resource Authorizations
Thompson Okanagan Region
Ministry of Natural Resource Operations
250-828-4239

Pages 201 through 207 redacted for the following reasons:

Not responsive - date range

Pages 1 through 89 redacted for the following reasons:

Not Responsive Not responsive Not responsive - time frame

From:

Youds, John A FLNR:EX

Sent:

Thursday, September 15, 2011 3:17 PM

To:

Arcand, Michelle X FLNR:EX

Subject:

RE: question RE: Final edits Placer report

I was thinking of May 2011.

From: Arcand, Michelle X FLNR:EX

Sent: Thursday, September 15, 2011 9:17 AM

To: Youds, John A FLNR:EX
Cc: McLeod, Joanne FLNR:EX

Subject: question RE: Final edits Placer report

I like your edits, thanks John. With regard to the date on the title page are you thinking May 2011 (distributed draft date) or Sept 2011?

Michelle Arcand 250-991-7252

From: Youds, John A FLNR:EX

Sent: Wednesday, September 14, 2011 12:00 PM

**To:** Arcand, Michelle X FLNR:EX

Cc: McLeod, Joanne FLNR:EX; Stewart, Rodger W FLNR:EX

Subject: FW: Final edits Placer report

Michelle, I have reviewed and done some edits on this version – please have a look at these. I think that what you added definitely helps the report. Rodger, expect a final version to be coming your way soon.

From: Arcand, Michelle X FLNR:EX

Sent: Tuesday, September 13, 2011 1:45 PM

**To:** Youds, John A FLNR:EX **Cc:** McLeod, Joanne FLNR:EX **Subject:** Final edits Placer report

Hi John,

We've made some final edits to the placer report. Comments welcome. Not sure where this goes from here...

- 1. See under Methods added paragraphs to address definitions of stream and reclamation as utilized during the assessments.
- 2. Replaced the term audit throughout document generally refer simply to inspections or inspection project.
- 3. Revamped title page
- 4. Photos named, added a couple and referred to them all in text
- 5. Recommendations altered a little in response to comments made by RMT during our May presentation but we never received any written comments from the RMT members.

Michelle Arcand Habitat Biologist

phone: 250-991-7252 mailing address: 322 Johnston Ave. Quesnel BC V2J 3M5

Pages 92 through 93 redacted for the following reasons:

\_\_\_\_\_

Not responsive

From:

Youds, John A FLNR:EX

Sent:

Monday, December 5, 2011 3:37 PM

To: Cc: Arcand, Michelle X FLNR:EX

Subject:

McLeod, Joanne FLNR:EX FW: placer report updated edits

Attachments:

Dec 1st Working Placer Report with Objectives.docx

Michelle, You've done a great job! I put a few edit comments on the document for your review — hope you can find them with all the comments listed.

From: Arcand, Michelle X FLNR:EX

Sent: Thursday, December 1, 2011 2:38 PM

**To:** McLeod, Joanne FLNR:EX **Cc:** Youds, John A FLNR:EX

Subject: placer report updated edits

Got through the Exec summary and conclusion/recommendation on this so thought I would send updated version for your review Jo.

As I said yesterday I have lost perspective on this so please be callous in your review - I just want to get it done right-whatever it takes.

Michelle

Pages 95 through 118 redacted for the following reasons:

Not responsive
Not responsive - date range

From:

Arcand, Michelle X FLNR:EX

Sent:

Thursday, September 15, 2011 9:40 AM

To:

McLeod, Joanne FLNR:EX

Subject: Attachments:

need your input outstanding placer edits Sept 15 Placer Audit Final Draft.docx

Hi Joanne,

Sorry to bug you on this again...I know you're busy on other stuff.

But I've gone through John's edits and incorporated all except a few that I need your input on. Here's the version with just the last few outstanding issues.

Thanks, M

From:

Youds, John A FLNR:EX

Sent:

Friday, June 17, 2011 10:37 AM

To: Subject: McLeod, Joanne FLNR:EX; Arcand, Michelle X FLNR:EX

FW: NOTES: Meeting with MoEM mining inspectors next week.

FYI

**From:** Stewart, Rodger W FLNR:EX **Sent:** Friday, June 17, 2011 8:28 AM

To: Youds, John A FLNR:EX

Cc: 'Warren.Fortier@williamslakeband.ca'

Subject: NOTES: Meeting with MoEM mining inspectors next week.

John and Warren, the report on the inspection of placer operations is not yet complete. Our Regional Executive Director and myself have reviewed the document with the Ministry of Energy and Mines (MEM) which has started a process of detailed examination of the document. This work needs to be complete before the document can be released. Part of the reasons for the examination is to confirm interpretation of our findings relative to applicable standards, and most importantly to establish the specific means by which our ministry and MEM will direct the placer mining sector to deliver more appropriate outcomes respecting environmental stewardship.

It is important to respect that the table used to support the discussion at our quarterly meeting is still in draft form. While it may well be useful as a basis for discussion, I would not at this time attempt to get involved in dealing with any specific site-specific indications of non-compliance. It is appropriate at this time to open dialogue with MEM on the general theme that there is a high degree of apparent non-compliance, and we must implement means to ensure that this trend id effectively reversed.

It is important that all of us build and maintain effective lines of communication and business relationships in matters such as this. Engagement of the WLIB with FLNRO and MEM will ensure that we clearly understand, and respond to, the deep concerns of First Nations communities in protection of environmental values, which is very closely related to protection of aboriginal rights.

Rodger Stewart
Director, Resource Management
Ministry of Forests, Lands and Natural Resource Operations
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400 - 640 Borland Street
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V2G 4T1
cell (250) 305 8536, desk (250) 398 4549
fax (250) 398 4214

From: Youds, John A FLNR:EX

**Sent:** Thursday, June 16, 2011 3:42 PM

To: Stewart, Rodger W FLNR:EX

**Subject:** FW: Meeting with MoEM mining inspectors next week.

Rodger, What's your advice on this since we are not at the stage of report release yet?

**From:** Warren Fortier [mailto:Warren.Fortier@williamslakeband.ca]

Sent: Thursday, June 16, 2011 3:04 PM

To: Youds, John A FLNR:EX

Cc: Aaron Higginbottom; Chris Wycotte

Subject: RE: Meeting with MoEM mining inspectors next week.

Hello John:

We will be meeting with Grant Feldinger & Larry Henry (MoEM Inspector of Mines) and would like to discuss with them the "draft" spreadsheet you presented at our quarterly MoE meeting a few weeks ago. Are there any reports on placer exploration project monitoring in complete form for our use in addressing our concerns regarding the "non-compliance" issues. Would you be available or willing to join us at a meeting with the mine inspectors; if so, we are meeting at 10:00 AM next Thursday, June 23<sup>rd</sup> at the CJL Boardroom here at the WLIB.

**S**16

At the minimum, is it ok for us to discuss/photocopy the "draft" spreadsheet on the non-compliance findings?

I look forward to your response.

Regards,

Warren.

Warren C. Fortier; BNRS Natural Resource Coordinator Ph: 250-296-3507 (ext. 130)

Fax: 250-296-4750

Williams Lake Indian Band 2627 Indian Drive, Williams Lake, BC V2G 5K9

Web: www.williamslakeband.ca

From:

Arcand, Michelle X FLNR:EX

Sent:

Wednesday, April 20, 2011 3:24 PM

To:

McLeod, Joanne FLNR:EX

Subject:

for review

This report has highlighted several factors which indicate that the risks associated with placer mining operations in the Cariboo region under the current regulatory framework are very high.

- 1. Placer mine operations in this region are strongly associated with highly valued fish and wildlife habitats.
- 2. Placer mine activities within these high value habitat areas are often not being conducted in compliance with NoW permit conditions.
- 3. Our review of previous audits within the region suggests noncompliance is an ongoing problem.
- 4. The placer mining industry lacks a regulatory framework providing clear standards adequate for the protection of critical ecosystem components.
- 5. The extent, duration and of level of impacts related to placer mining in the Cariboo region appear to be potentially much higher than recognized.

Michelle Arcand Habitat Biologist phone: 250-991-7252

mailing address: 322 Johnston Ave. Quesnel BC V2J 3M5

From: Sent:

Arcand, Michelle X FLNR:EX Friday, April 29, 2011 8:57 AM

To:

Youds, John A FLNR:EX

Subject:

details on Horsefly no staking reserve

Hi John,

Do you have any emails you could pass on that describe the issue of the no staking placer reserve on the Horsefly river? We're referring to it in the placer audit and not sure on some details like when it came into effect, by whom, why, for how long, current status... those sorts of things.

If you have something you could pass on that gives some of this info that would be great - I just want to write a sentence or two about it in the report.

Thanks Michelle

From: Sent:

Arcand, Michelle X FLNR:EX Monday, April 18, 2011 3:29 PM McLeod, Joanne FLNR:EX

To:

Subject:

Remind me: placer draft to DFO

Hi Jo,

I've been talking with DFO as they are following up on a couple of the placer audit sites. as one site is under investigation and another outstanding

s.16

Cheers, M

Pages 125 through 126 redacted for the following reasons:

Not responsive

# Youds, John A FLNR:EX

From:

McLeod, Joanne FLNR:EX

Sent: To: Monday, December 19, 2011 2:31 PM

Youds, John A FLNR:EX

Subject:

Dec 19 version of placer report



Dec19th Working Placer Report ...

# Joanne McLeod

Habitat Biologist
Fish, Wildlife and Habitat Management
Ministry of Forests, Lands and Natural Resources Operations
400-640 Borland Street
Williams Lake, BC V2G 4T1

Ph: (250) 398-4256 Fx: (250) 398-4214

#### Youds, John A FLNR:EX

From:

Youds, John A FLNR:EX

Sent:

Thursday, December 8, 2011 3:25 PM

To:

Moe, James W FLNR:EX

Subject:

RE: Placer inspection report

James, My promise of "soon" has turned into longer than I thought because, based on input from Rodger and Gerry, my staff have been working on a new version of the report. The new version will be going back to Rodger and Gerry for their review in the early new year. I'll let you know when it is available for distribution.

From: Moe, James W FLNR:EX

Sent: Thursday, December 8, 2011 3:07 PM

To: Youds, John A FLNR:EX

Subject: FW: Placer inspection report

Any progress ???

From: Youds, John A FLNR:EX

Sent: Wednesday, October 12, 2011 11:57 AM

To: Moe, James W FLNR:EX

Subject: RE: Placer inspection report

Hi James, I'm not certain at this time. Rodger and Gerry would like further discussion on it. I'm hopeful that a final version will be available soon.

From: Moe, James W FLNR:EX

Sent: Wednesday, October 12, 2011 8:44 AM

To: Youds, John A FLNR:EX

Subject: RE: Placer inspection report

Thanks, any idea when that may be ??

James Moe, RFT
District Engineering Officer
Ministry of Forests, Lands and Natural Resource Operations
Cariboo-Chilcotin Forest District
Field Services, Engineering Section
(250) 398-4782 phone
(250) 398-4790 fax
mailto:james.moe@gov.bc.ca

From: Youds, John A FLNR:EX

Sent: Friday, October 7, 2011 10:03 AM

To: Moe, James W FLNR:EX

**Cc:** Stewart, Rodger W FLNR:EX **Subject:** Placer inspection report

Hi James, Thanks for your interest in the 2010 placer mining inspection report done in the Cariboo. I've talked with Rodger and since the report is still considered draft it is not yet available for distribution. When the report is final, I'll let you know.

### Youds, John A FLNR:EX

From:

Arcand, Michelle X FLNR: EX

Sent:

Tuesday, December 6, 2011 4:13 PM

To:

McLeod, Joanne FLNR:EX

Cc:

Youds, John A FLNR:EX

Subject:

Placer report all yours Jo - Thanks!

Attachments:

Dec 6th Working Placer Report with Objectives.docx

Here is the document with edits from you and John incorporated – thanks to you both for your review (again...).

Joanne as discussed outstanding items have comments attached in the document and include:

- 1. Decide on appropriate date for document title page
- 2. Review of the citations and references which I've added
- 3. Maps 4-6 of placer overlap with OGMAs, MDWR, and Mtn Caribou WHA's (we have a map 3 overlap with critical fish habitat already)
- 4. Citation change possibly for the John Youds personal communication page 19
- 5. Addition possibly of wording around wind/evaporation page 17
- 6. Results section pages 11, 12, 13: details of % and or # hectares of overlap between placer and UWR, OGMA, Critical fish, WHAs
- 7. Review Table 1 page 14
- 8. Check formatting stuff for page breaks, page numbers, headings etc I've tried to do this but with adjustments may need to be done one last time...

Thanks!

@ Michelle

Pages 5 through 52 redacted for the following reasons:

Not responsive

### Youds, John A FLNR:EX

From:

Youds, John A FLNR:EX

Sent:

Monday, December 5, 2011 3:37 PM

To: Cc: Arcand, Michelle X FLNR:EX McLeod, Joanne FLNR:EX FW: placer report updated edits

Subject: Attachments:

Dec 1st Working Placer Report with Objectives.docx

Michelle, You've done a great job! I put a few edit comments on the document for your review – hope you can find them with all the comments listed.

From: Arcand, Michelle X FLNR:EX

Sent: Thursday, December 1, 2011 2:38 PM

**To:** McLeod, Joanne FLNR:EX **Cc:** Youds, John A FLNR:EX

Subject: placer report updated edits

Got through the Exec summary and conclusion/recommendation on this so thought I would send updated version for your review Jo.

As I said yesterday I have lost perspective on this so please be callous in your review - I just want to get it done right-whatever it takes.

Michelle

### Youds, John A FLNR:EX

From:

Arcand, Michelle X FLNR:EX

Sent:

Thursday, December 1, 2011 2:38 PM McLeod, Joanne FLNR:EX

To: Cc: Youds, John A FLNR:EX

Subject:

placer report updated edits

Attachments:

Dec 1st Working Placer Report with Objectives.docx

Got through the Exec summary and conclusion/recommendation on this so thought I would send updated version for your review Jo.

As I said yesterday I have lost perspective on this so please be callous in your review - I just want to get it done rightwhatever it takes.

Michelle

Pages 55 through 160 redacted for the following reasons:

Not Responsive Not responsive

#### Youds, John A FLNR:EX

From:

Arcand, Michelle X FLNR:EX

Sent:

Monday, October 31, 2011 12:49 PM

To:

Stewart, Rodger W FLNR:EX

Cc:

Youds, John A FLNR: EX; McLeod, Joanne FLNR: EX

Subject:

RE: NOTES: placer report example

Thanks Rodger, this will be helpful.

Michelle Arcand 250-991-7252

From: Stewart, Rodger W FLNR:EX

Sent: Monday, October 31, 2011 12:10 PM

To: Youds, John A FLNR:EX; Arcand, Michelle X FLNR:EX

Subject: NOTES: placer report example

Thanks for the reminder and notes John.

S22

Just to recap and to help inform the final drafting, here was my line of thought, flowing from conversation with Gerry the RED. BY natural resource value, what specifically were we inspecting. For example:

- Value: fish habitat
- Objective: applied practices are not causing harmful alternation damage or destruction of fish habitat
- Indicator(s):
  - o requirement within the placer NOW of the requirement for a riparian reserve zone
  - presence or absence of a riparian reserve zone along all streams designated as fish habitat
  - o condition of the reserve zone, if one exists
- Measure(s):
  - o In what manner, if any, does the NOW specify a reserve zone requirement?
  - What is the width of the reserve zone retained, if any?
  - Is the reserve zone comprised of vegetative cover typical of the riparian community within the ecosystem?

Rodger Stewart Director, Resource Management Ministry of Forests, Lands and Natural Resource Operations Cariboo Region 400 - 640 Borland Street Williams Lake, BC V2G 4T1 cell (250) 305 8536, desk (250) 398 4549 fax (250) 398 4214

From: Youds, John A FLNR:EX

Sent: Monday, October 31, 2011 10:23 AM

**To:** Stewart, Rodger W FLNR:EX **Subject:** RE: placer report example

Hi Rodger, Unless you've already done the example, don't worry about it – we made good progress in review of the report on Friday in Quesnel and Michelle will be drafting a new version that will reflect a clearer definition of which environmental values were being monitored and the criteria used for evaluating them.

From: Youds, John A FLNR:EX

Sent: Tuesday, October 25, 2011 4:27 PM

**To:** Stewart, Rodger W FLNR:EX **Subject:** placer report example

Hi Rodger, I know you're very busy, however if you do get a chance to develop the example in the placer report that you and I discussed this would be helpful. Joanne, Michelle and I are planning to meet this Friday to do further revisions on the report. Thanks.

From:

Stewart, Rodger W FLNR:EX

Sent:

Tuesday, October 25, 2011 9:08 PM

To: Subject: Youds, John A FLNR:EX Re: placer report example

Sorry John, its not been a very ositive few days at work. I may be able to deal with this tomorrow. Thanks for the reminder.

Rodger

From: Youds, John A FLNR:EX

Sent: Tuesday, October 25, 2011 04:27 PM

**To**: Stewart, Rodger W FLNR:EX **Subject**: placer report example

Hi Rodger, I know you're very busy, however if you do get a chance to develop the example in the placer report that you and I discussed this would be helpful. Joanne, Michelle and I are planning to meet this Friday to do further revisions on the report. Thanks.

From:

Youds, John A FLNR:EX

Sent:

Wednesday, October 19, 2011 3:03 PM

To:

Stewart, Rodger W FLNR:EX

Subject:

FW: placer report addressing effectiveness/compliance?

Attachments:

Working Placer Report with Objectives.docx

Rodger, Michelle has been doing some edits to the placer report after our discussion about compliance vs effectiveness. Attached is the latest version for our discussion tomorrow morning.

From: Arcand, Michelle X FLNR:EX

Sent: Wednesday, October 19, 2011 2:32 PM

To: Youds, John A FLNR:EX
Cc: McLeod, Joanne FLNR:EX

Subject: RE: placer report addressing effectiveness/compliance?

Thanks John, I'm pressed for time working on this today but hope this addresses the outstanding points for your discussion tomorrow.

Michelle Arcand 250-991-7252

From: Youds, John A FLNR:EX

Sent: Tuesday, October 18, 2011 10:05 AM

**To:** Arcand, Michelle X FLNR:EX **Cc:** McLeod, Joanne FLNR:EX

Subject: FW: placer report addressing effectiveness/compliance?

Hi Michelle, I like the edits that you've done. As a result of your new edits, I went through the report again and noted a few more possible edits in track changes (have a look). The intent is not to edit the report to death, but to make the results as clear as possible. I meet with Rodger on Thursday to discuss the release of the report. If you can finalize the edits before then, that would be great. Thanks.

From: Arcand, Michelle X FLNR:EX

Sent: Monday, October 17, 2011 5:03 PM

**To:** Youds, John A FLNR:EX; McLeod, Joanne FLNR:EX **Subject:** placer report addressing effectiveness/compliance?

## Hi John and Joanne,

I've tried to wrap my head around what the issue is with the Placer report and compliance vs. effectiveness monitoring (and why it matters). In reviewing the topic I came to the conclusion that perhaps the issue is that as we are not mines inspectors we do not have authority to assess compliance under the Mines Act and hence should possibly abstain from commenting on 'compliance' with NOW for the most part. So I've made a few edits to try and stay away from that can of worms...

With regard to compliance with the 10m riparian reserve I believe it is not inappropriate for us to comment, given this standard emerges from the MOU btn MEM and MOE, as well as our authority under the Water Act for changes in and about a stream.

The one thing I haven't addressed is what to entitle the last column on the table?

With regard to the objective of the project I've added 3 sentences under a new heading (3. Project Objective) to try and describe what we were setting out to do. Not sure if this is best as a separate section or should be included under one of the other headings? I found this awkward so please provide any suggestions on content.

Finally, I've also added a little text in the discussion section to address the issue around what we found in regard to compliance even though that was not our objective.

All changes are tracked. Comments welcome! Thanks,

Michelle Arcand Habitat Biologist phone: 250-991-7252

mailing address: 322 Johnston Ave. Quesnel BC V2J 3M5

Pages 166 through 204 redacted for the following reasons:

\_\_\_\_\_\_

Not responsive

From:

Youds, John A FLNR:EX

Sent:

Tuesday, October 18, 2011 10:05 AM

To: Cc: Arcand, Michelle X FLNR:EX McLeod, Joanne FLNR:EX

Subject:

FW: placer report addressing effectiveness/compliance?

Attachments:

Final Placer Report with Objectives.docx

Hi Michelle, I like the edits that you've done. As a result of your new edits, I went through the report again and noted a few more possible edits in track changes (have a look). The intent is not to edit the report to death, but to make the results as clear as possible. I meet with Rodger on Thursday to discuss the release of the report. If you can finalize the edits before then, that would be great. Thanks.

From: Arcand, Michelle X FLNR:EX

Sent: Monday, October 17, 2011 5:03 PM

**To:** Youds, John A FLNR:EX; McLeod, Joanne FLNR:EX **Subject:** placer report addressing effectiveness/compliance?

Hi John and Joanne,

I've tried to wrap my head around what the issue is with the Placer report and compliance vs. effectiveness monitoring (and why it matters). In reviewing the topic I came to the conclusion that perhaps the issue is that as we are not mines inspectors we do not have authority to assess compliance under the Mines Act and hence should possibly abstain from commenting on 'compliance' with NOW for the most part. So I've made a few edits to try and stay away from that can of worms...

With regard to compliance with the 10m riparian reserve I believe it is not inappropriate for us to comment, given this standard emerges from the MOU btn MEM and MOE, as well as our authority under the Water Act for changes in and about a stream.

The one thing I haven't addressed is what to entitle the last column on the table?

With regard to the objective of the project I've added 3 sentences under a new heading (3. Project Objective) to try and describe what we were setting out to do. Not sure if this is best as a separate section or should be included under one of the other headings? I found this awkward so please provide any suggestions on content.

Finally, I've also added a little text in the discussion section to address the issue around what we found in regard to compliance even though that was not our objective.

All changes are tracked. Comments welcome! Thanks,

Michelle Arcand Habitat Biologist phone: 250-991-7252

mailing address: 322 Johnston Ave. Quesnel BC V2J 3M5

From:

Youds, John A FLNR:EX

Sent:

Tuesday, October 18, 2011 8:59 AM

To: Subject: Arcand, Michelle X FLNR:EX; McLeod, Joanne FLNR:EX RE: placer report addressing effectiveness/compliance?

Perhaps the last column of the table is just "not consistent with NOW (%)"

From: Arcand, Michelle X FLNR:EX

Sent: Monday, October 17, 2011 5:03 PM

**To:** Youds, John A FLNR:EX; McLeod, Joanne FLNR:EX **Subject:** placer report addressing effectiveness/compliance?

#### Hi John and Joanne.

I've tried to wrap my head around what the issue is with the Placer report and compliance vs. effectiveness monitoring (and why it matters). In reviewing the topic I came to the conclusion that perhaps the issue is that as we are not mines inspectors we do not have authority to assess compliance under the Mines Act and hence should possibly abstain from commenting on 'compliance' with NOW for the most part. So I've made a few edits to try and stay away from that can of worms...

With regard to compliance with the 10m riparian reserve I believe it is not inappropriate for us to comment, given this standard emerges from the MOU btn MEM and MOE, as well as our authority under the Water Act for changes in and about a stream.

The one thing I haven't addressed is what to entitle the last column on the table?

With regard to the objective of the project I've added 3 sentences under a new heading (3. Project Objective) to try and describe what we were setting out to do. Not sure if this is best as a separate section or should be included under one of the other headings? I found this awkward so please provide any suggestions on content.

Finally, I've also added a little text in the discussion section to address the issue around what we found in regard to compliance even though that was not our objective.

All changes are tracked. Comments welcome! Thanks,

Michelle Arcand Habitat Biologist phone: 250-991-7252

mailing address: 322 Johnston Ave. Quesnel BC V2J 3M5

Pages 207 through 244 redacted for the following reasons:

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Not responsive

From:

Youds, John A FLNR:EX

Sent:

Friday, October 7, 2011 10:07 AM

To:

Stewart, Rodger W FLNR:EX

Subject:

FW: Completed Placer Mine Inspection Report

As requested

From: Arcand, Michelle X FLNR:EX

Sent: Thursday, September 15, 2011 3:20 PM

To: Stewart, Rodger W FLNR:EX

**Cc:** Youds, John A FLNR:EX; McLeod, Joanne FLNR:EX **Subject:** Completed Placer Mine Inspection Report

Completed Placer Mine Inspection Report!
When convenient we should all discuss where this goes from here...



Final Placer Inspection Report..

Michelle Arcand 250-991-7252

From: Arcand, Michelle X FLNR:EX

Sent: Thursday, September 15, 2011 3:16 PM

To: McLeod, Joanne FLNR:EX

Subject: Thanks: RE: Final final final

Here's me smiling!

Awesome – good work Joanne – I think we've finally done it. Wouldn't say I was the principle author, more like co-authors - I know it would have been a much tougher road without our joint effort! and John's edits have been a great help.

I'll forward it on. M

From: McLeod, Joanne FLNR:EX

Sent: Thursday, September 15, 2011 2:52 PM

**To:** Arcand, Michelle X FLNR:EX **Subject:** Final final final

I read through it one more time and put it into a final format. Your name should go first, as you have been the principle author. I checked the APA website - you've seen the e-mail I sent to John – so I left the personal communication referencing as it was. I fixed the numbering system and checked for typo's...should be good to go!

<< File: Final Placer Inspection Report.docx >>

# Joanne McLeod

Habitat Biologist Fish, Wildlife and Habitat Management Ministry of Forests, Lands and Natural Resources Operations 400-640 Borland Street Williams Lake, BC V2G 4T1 Ph: (250) 398-4256

Fx: (250) 398-4214

Pages 247 through 283 redacted for the following reasons:

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Not responsive

From:

Youds, John A FLNR:EX

Sent:

Monday, September 26, 2011 12:05 PM

To: Cc: Stewart, Rodger W FLNR:EX MacDougall, Gerry L FLNR:EX

Subject:

RE: MEM response to 2010 MoE Audit

Attachments:

Response to MoE audit.docx

Rodger, I find Bruce's response report to be biased, inaccurate and containing misinterpretations. It is not very useful in terms of edits or refinements to the report but seems more focussed on slandering my staff and dismissing the findings. I am not very encouraged about working collaboratively with MEM to address the issues uncovered by these inspections when their staff clearly take such defensive positions. I am extremely disappointed with the negative tactics that MEM is employing on this. I have put some comments on Bruce's response report (see attachment). I would like to meet with you and Gerry to discuss next steps.

From: Stewart, Rodger W FLNR:EX

Sent: Monday, September 26, 2011 9:31 AM

To: Youds, John A FLNR:EX

Subject: FW: MEM response to 2010 MoE Audit

John, forwarded as promised. Portions of the text will be corrosive to staff engagement, so I suggest that you and I discuss how best to guide staff though this rough patch. ) owe you and your team some further insights on key points for the inspection report, per conversations I have had with Gerry.

Rodger Stewart
Director, Resource Management
Ministry of Forests, Lands and Natural Resource Operations
Cariboo Region
400 - 640 Borland Street
Williams Lake, BC
V2G 4T1
cell (250) 305 8536, desk (250) 398 4549
fax (250) 398 4214

From: MacDougall, Gerry L FLNR:EX

Sent: Wednesday, September 21, 2011 2:05 PM

**To:** Stewart, Rodger W FLNR:EX **Subject:** FW: Response to MoE Audit

Hi Rodaer.

Thank you for following up on the placer report.

I didn't send MEM's response around earlier because I was actually hoping to get more detail on it, as described below.

Ken made some calls but Bruce was away for much of August. So far, this is all I've got.

I've reviewed the September version by Michelle and Joanne.

I'm waiting to get some input from Joe Seguin.

Please have a read of this and then give me a call.

**From:** MacDougall, Gerry L FLNR:EX **Sent:** Thursday, August 4, 2011 3:13 PM

To: Seguin, Joe MEM:EX

Cc: Hupman, C Bruce MEM:EX; Vanderburgh, Ken FLNR:EX

Subject: FW: Response to MoE Audit

Hi Joe,

I just got back from holidays and had a read of this.

Thanks Bruce, for putting it together.

It provides useful context with some specifics on inaccuracies.

As per your request for comments, it would be helpful to have a more complete summary of errata that the authors could use to ensure that the report is objective and accurate.

My hope is that we'll see several positive outcomes from this:

- · better relationships between our ministries' staff
- better understanding of our respective businesses and
- a factually correct report that includes collaboratively defined measures that address currently outstanding infractions.

I've asked Ken to give you a call on this and have forwarded your document to him as part of this email. Again, thank you for helping us with this.

Gerry

From: Hupman, C Bruce MEM:EX

Sent: Tuesday, July 26, 2011 10:50 AM

To: MacDougall, Gerry L FLNR:EX; Seguin, Joe MEM:EX

Subject: Response to MoE Audit

Hi Gerry and Joe

I have crafted a response to the 2010 MoE audit of placer operations in the Quesnel Area. Please review the attached and if possible provide feedback. I have not forwarded this document beyond you and await your response.

Thanks Bruce

# Ministry of Energy and Mines

Response to 2010 Placer AUDIT conducted by Ministry of Environment Ecosystem staff-Williams Lake

Bruce Hupman PAg - Senior Inspector of Mines 7/26/2011

#### **Executive Summary**

In the 2009 operational year, the BC government realigned operational boundaries of Ministries regulating the natural resource sector. As a result of this realignment the Ministry of Environment (now MFLNRO) - Cariboo Region experienced a substantial increase in the number of placer Notices of Work referred to them from the Ministry of Energy, Mines and Petroleum Resources — South-Central Region. The rationale for these referrals was twofold; to seek out local information not readily available in existing documents and to cultivate a positive working relationship with Environment in another region.

As a result of this perceived increase in activity and the potential environmental impacts associated with placer mining, staff from the Ministry of Environment-Ecosystems conducted site visits during the summer of 2010 and summarized their findings in a placer audit. The study area was within the Cottonwood and Quesnel Rivers watersheds.

Very tight constraints were applied during this exercise and as a result of these constraints there is limited value in the conclusions and recommendations delivered. Ecosystems Branch staff relied only on the supplied Notice of Works. Their opinions were formed without conducting file reviews, consulting with a Mine Inspector or the Mines Act, seeking advice on mining methods, having mine site reclamation experience and others.

The Health, Safety and Reclamation Code for Mines in British Columbia states that...."Other than an inspector, only persons authorized by the manager shall enter or be permitted to enter a mine". Some of the authors of the MoE audit were informed of the authority needed to enter a mine site several months prior to any field work being conducted. Not only did staff neglect Regulation, they placed themselves and their guests in harm's way in doing so. As neither they nor their guests from local First Nation communities have any authority or the necessary training to enter a mine site, these inspections un-necessarily placed all attendees at risk.

Some of the noted offenses within the MoE audit go beyond the authority of the Mines Act. For example the spread and control of noxious weeds at the mine site is a permit condition and a requirement of the Mine Act permit. The audit notes the occurrence of noxious weeds on site, yet failed to mention that the weeds could be tracked from the forest roads to the mine site indicating the invasion route and seed source.

Adding another layer of complexity to the MoE audit report was the referring to non-permitted works within the report and works conducted prior to the acceptance of certain standards. Clearly any mechanical disturbance made without approval for the intent of mineral exploration is not in compliance with regulations. Works which were permitted prior to the Forest Practices Code (FPC) clearly cannot meet those requirements and the FPC was never intended to be applied to placer mining. Inclusion of these findings into the reports created bias. The

Comment [jay1]: This is an interesting explanation for the increase in placer mining activity in the region however the increase is likely also related to other factors such as the increased market value of gold.

Comment [jay2]: No data from MEM but indicates bias. The main reason the inspections were done was to check to see whether guidance provided by MOE was being used in operations.

Comment [jay3]: Meaning what? The inspections spanned several weeks and the write-up was done over several months.

Comment [jay4]: The inspection report deals with observations, not opinions.

#### Comment [jay5]:

S14

Comment [jay6]: The inspection report talks about non-compliances with the NOW permit, but doesn't refer to offenses.

Comment [jay7]: Bruce may be missing the point here: regardless of source, the spread and control of noxious weeds such as knapweed is a permit condition which is not being followed in at least one case

Comment [jay8]: I think that Bruce has misinterpreted here. The Inspection report (p. 4) clearly states that the FRPA designations do not apply directly to placer mining.

2 | Page

corporate image of the BC government is impacted by uninformed comments; resolution of this issue requires full commitment and teamwork by agencies within and outside of government.

As demonstrated during a meeting with members of the Caribou Managers Committee not all assumptions made by the Ecosystems team were accurate. It was understood that the report required adjustments before being discussed or released to the public. The May 31, 2011 meeting and this document are part of that established agreement.

Comment [jay9]: Which assumptions is Bruce referring to here? This is not very

Notwithstanding this agreement, First Nation communities continue to demand meetings with the Ministry of Energy and Mines (MEM), quoting compliance numbers derived within the original draft MoE audit. Ongoing and new consultations related to mineral exploration and development within the Williams Lake Indian Band asserted traditional territory are being influenced by statements contained within the original draft MoE audit.

When considering the impact of mineral exploration and development in the Cottonwood and Quesnel Rivers watersheds, we must separate the historical practices from those permitted under current regulations. Indeed the damming of streams for and the use of hydraulic mining, dredging of water channels, diversion of streams and other outdated practices did impact riparian zones, fish habitat and hydrology of streams. Today none of these activities would likely be authorized, or if so under considerable review and oversight.

Comment [jay10]: The draft table of results were shared with the Northern Shuswap with DRM approval but the report has not been shared

It cannot be argued that placer mining does not contribute to the cumulative effects on the environment. However one must consider that permitted operations must, maintain riparian setbacks, have zero discharge and reclaim the site. Provincially the footprint of mining is around 0.5% of the landmass within British Columbia and is concentrated around localized outcroppings of mineralization.

Comment [jay11]: But the inspection

results clearly show this not to be the case

Comment [jay12]: This statement is: not helpful, particularly when a large portion of the placer mining activity is concentrated in the eastern Cariboo. This is like saying there is no impact if you look

#### 1.0 Background

The MEM was supplied a draft of the MoE Placer Audit May 2009 after it was presented and discussed at the Caribou Managers Committee. As a draft, the report was an internal document not for distribution.

Referrals continue to Ministry of Environment, Williams Lake seeking improved intergovernment co-operation thus strengthening the Crown's commitment to enhanced stewardship of the natural resources.

As a result of these referrals, Ministry of Environment-Ecosystems staff continues to provide comments on placer applications. Not all comments submitted by MoE are developed into permit conditions. Some issues such as, the control of noxious weeks, are not solely specific to MoE, but are Code requirements under the Mines Act and are often included in responses from

Comment [jay13]: Bruce must not be up to-date on this because in 2010 we requested that MEM not do this but instead incorporate our guidance into their permitting process.

Comment [jay14]: Inaccurate; definitely NO

3 | Page

the Ministry of Forests. Comments such as these are included without prompting from MoE. Other suggested permit conditions go beyond existing regulations or are not supported by regulation. When considering these MoE suggestions an Inspector may have to mitigate the issue without creating a provincial standard. Riparian setbacks are a prime example of this management of issue and regulation. Rather than neglecting regulation and placing staff at risk by conducting on site inspections it is suggested that a discussion with MEM staff on whether the MoE suggested condition was applicable to a Mines Act permit could remain the simplest method to assess whether MoE recommendations were being passed on to proponents or incorporated into permit conditions.

A recent request made to a Mines Inspector was for the proponent to manage and replace the old growth timber "logged" by a mineral exploration company. The area in question had been harvested by a forest company the previous winter. As companies conducting mineral exploration and development are generally small scale operators on a landscape and do not control the harvesting of timber, requests such as this cannot be entertained. An important point should be noted; miners typically see timber and the disposal of the trees and stumps as a liability and generally attempt to avoid any timber extraction.

The definition of "mine" includes; a place where mechanical disturbance of the ground or any excavation is made to explore for or to produce coal, mineral bearing substances, placer minerals, rock, limestone, earth, clay, sand or gravel, all cleared areas, machinery and equipment for use in servicing a mine or for use in connection with a mine and buildings other than bunkhouses, cook houses and related residential facilities, all activities including exploratory drilling, excavation, processing, concentrating, waste disposal and site reclamation, closed and abandoned mines, and a place designated by the chief inspector as a mine. A "mining activity" means any activity related to, the exploration and development of a mineral, a placer mineral, coal, sand, gravel or rock, or the production of a mineral, a placer mineral, coal, sand, gravel or rock, and includes the reclamation of a mine. The Inspector of Mines applies the Mines Act, the Health, Safety and Reclamation Code For Mines in British Columbia and other documents like the Handbook for Mineral and Coal Exploration in British Columbia to manage impacts of exploration activities on other resource values including timber, fish and wildlife and their habitat; water quality and cultural heritage resources. Placer mines are not exempted from the Mines Act or its related regulation.

The General Wildlife Measures (GWMs) associated with the Wildlife Habitat Areas (WHAs) apply to forestry activities. The Crown has recognized that mineral exploration and development cover a limited area of the landbase, and therefore, in keeping with the two-zone land use system for mineral exploration and mining, the GWMs do not apply for the purpose of exploration, development and production activities when those activities have been authorized

Comment [jay15]: I don't understand why Bruce is so defensive on the noxious weed issue

Comment [jay16]: Which suggestions is he referring to here?

Comment [jay17]: I disagree, a paper review process can never replace field inspections; the inspection has shown that many conditions of permit are not being followed

Comment [jay18]: Not sure of the specifics of this story but it does not appear to be directly relevant to the inspection report

Comment [jay19]: This is acknowledged in the report. under the Mineral Tenure Act, Coal Act, the Mines Act, the Petroleum and Natural Gas Act or the Geothermal Resources Act.

This resource management plan is one of seven resource management plans developed to support the Cariboo-Chilcotin Land Use Plan. The QSRMP ensures access to 100 percent of the plan area for mineral and aggregate exploration and potential development, excluding protected areas and Goal 2 areas within the plan. This is consistent with government's two-zone approach to mineral exploration and development. The comprehensive nature of the QSRMP objectives will assist the mineral sector in making informed choices. Mine development is addressed under the Environmental Assessment Process. In general developed mines are a very small part of any strategic planning area; they are however an important economic driver for the province.

Comment [jay20]: Bruce has raised a major point of concern here. He suggests that all land use planning objectives can be overridden by 100% mineral access. FLNRO preference is that NOW permit needs to contain conditions that protect these important habitat elements.

#### 2.0 Observations:

The on-site inspections were:

1) Conducted by people without the necessary training and experience to enter a mine site,

Comment [jay21]: This suggests that they are untrained staff – poor wording

2) Skewed due to very limited familiarity with mining operations,

Comment [jay22]: Bruce needs to provide some evidence or drop the allegation

3) Did not acknowledge time lines and the introduction and repeal of Acts/Regulations,

Comment [jay23]: Perhaps the report title should acknowledge that these were environmental inspections

4) Did not consider other resource values. The core values and mandates of the two Ministries' may appear opposing as the "audit" appears to favour one value above another

Comment [jay24]: This is not true, as usually the Mine Manager was talked to

5) Preformed with at least one Mines Act regulation violated

#### General observations conclude:

- Non-permitted works are occurring on Crown land.
- Some contraventions of the Mines Act are occurring,
- Of the 26 sites reviewed and the 14 possible contraventions sent to MEM for decisions;
   5 resulted in actions by MEM,
- Of the 90+ concerns expressed in Appendix 1, only 5 have resulted in orders (implies 94% compliance rate),

Comment [jay25]: Appendix 1 is a DFO audit result from 2001.

• Although the audit highlights the destruction of fish habitat, it also comments on fish accessing mine associated workings.

Comment [jay26]: This is not a good thing; I think that Bruce has misinterpreted

5 | Page

#### 3.0 Recommendations:

MEM continues to outreach to our client group. As part of the extension, we have approached the Williams Lake MoE group to join us in one of our sessions with the Caribou Placer Miners. During this brief introduction of the regulations concerning placer miners, MoE staff are requested to listen to other presentations and then to present a brief overview of their issues to the placer miners. It is expected that this interaction will begin to remove the; us and them situation which appears to be part of the issue here.

MEM provides a "Protecting Values above and below the WaterLine" training sessions to our client groups

MoE staff in the Kamloops and Penticton areas has experience with mines and mines inspectors. Perhaps a temporary assignment for staff from one region to another might help in information flow, applications on the ground, and crafting permitting suggestions in a manner acceptable under the Mines Act.

As MEM has developed a Placer Best Management Handbook, perhaps the MoE audit may speed up its review, acceptance and release.

MEM is preparing to develop and deliver a training package for various groups. Staff from the Ministry of Environment-Ecosystems could be included in this training. The training component could include site visits to placer operations, mineral exploration and sand and gravel operations.

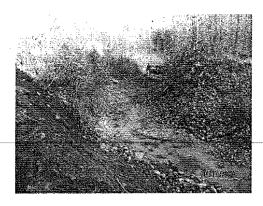
Comment [jay27]: I chatted to Bruce about this but there has been no follow-thru from Bruce.

Comment [jay28]: This is strictly
Bruce's opinion; frankly, I think that the
defensiveness of MEM on these issues
reflects that they have not gotten past this.

Comment [jay29]: The results of the inspections show that these sessions alone are not working

Comment [jay30]: Interesting comment because Kamloops staff are using our guidance. This comment verges on slander against my staff — completely not called for.

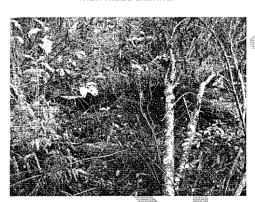
Comment [jay31]: Both of these recommendations are already incorporated into the recommendations of the inspection report



Man made channel



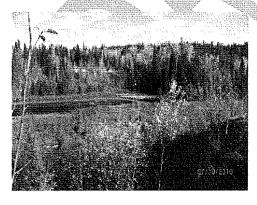
1980's un reclaimed workings



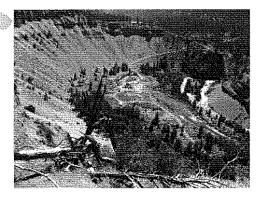
Ephemeral Channel



Permitted Works pre 1995



Permitted Works pre 1970



Placer mining creating habitat

From:

McLeod, Joanne FLNR:EX

Sent:

Thursday, September 15, 2011 2:38 PM

To:

Youds, John A FLNR:EX Arcand, Michelle X FLNR:EX

Cc: Subject:

FW: placer

Attachments:

more Sept 15 Placer Audit edits.docx

I used APA citation guidelines in this document, which doesn't include personal communication within the referencing section. The clip below is from the APA website:

An interview is not considered recoverable data, so no reference to this is provided in the reference list. You may, however, cite the interview within the text as a personal communication.

#### Examples:

- (J. Smith, personal communication, August 15, 2009)
- J. Smith (personal communication, August, 15, 2009)

For examples of how to cite an interview you've read, see the APA Style blog.

(adapted from the sixth edition of the APA Publication Manual, © 2010)

From: Arcand, Michelle X FLNR:EX

Sent: Thursday, September 15, 2011 11:26 AM

To: McLeod, Joanne FLNR:EX

Subject: placer

Michelle Arcand Habitat Biologist phone: 250-991-7252

mailing address: 322 Johnston Ave. Quesnel BC V2J 3M5

Pages 294 through 300 redacted for the following reasons:

Duplicate - Response to 10201 Placer Audit released in EGM-2012-00105

Duplicate - released in EGM-2012-00105

From:

Arcand, Michelle X FLNR:EX

Sent:

Tuesday, September 13, 2011 1:45 PM

To:

Youds. John A FLNR:EX

Cc: Subject: McLeod, Joanne FLNR:EX Final edits Placer report

Attachments:

Placer Audit Final Draft.docx

#### Hi John,

We've made some final edits to the placer report. Comments welcome. Not sure where this goes from here...

- 1. See under Methods added paragraphs to address definitions of stream and reclamation as utilized during the assessments.
- 2. Replaced the term audit throughout document generally refer simply to inspections or inspection project.
- 3. Revamped title page
- 4. Photos named, added a couple and referred to them all in text
- 5. Recommendations altered a little in response to comments made by RMT during our May presentation but we never received any written comments from the RMT members.

Michelle Arcand Habitat Biologist phone: 250-991-7252

mailing address: 322 Johnston Ave. Quesnel BC V2J 3M5

Pages 302 through 379 redacted for the following reasons:

Duplicate Not responsive

From:

Hupman, C Bruce MEM:EX

Sent:

Monday, July 25, 2011 10:35 AM

To:

Youds, John A FLNR:EX

Subject:

RE: Actions respecting the 2010 placer inspection report.

#### Hi John

From: Youds, John A FLNR:EX

Sent: Monday, July 11, 2011 11:55 AM

To: Hupman, C Bruce MEM:EX

**Cc:** Stewart, Rodger W FLNR:EX; Arcand, Michelle X FLNR:EX **Subject:** RE: Actions respecting the 2010 placer inspection report.

Hi Bruce, Can you confirm for July 26<sup>th</sup> or 27<sup>th</sup>, or did I miss this as I was away? Thanks.

From: Youds, John A FLNR:EX

Sent: Thursday, June 30, 2011 4:15 PM

To: Hupman, C Bruce MEM:EX

**Cc:** Stewart, Rodger W FLNR:EX; Arcand, Michelle X FLNR:EX **Subject:** RE: Actions respecting the 2010 placer inspection report.

Hi Bruce, If you can come to WL that would be great. The "we" would be the report authors, myself and, possibly, Rodger Stewart. Can we pin down the 26<sup>th</sup> or 27<sup>th</sup>?

S22

but if you could confirm the date with Rodger and Michelle, it would be much appreciated. Thanks.

From: Hupman, C Bruce MEM:EX

Sent: Thursday, June 30, 2011 4:03 PM

To: Youds, John A FLNR:EX

**Subject:** RE: Actions respecting the 2010 placer inspection report.

#### Hi John

Let's see. The Week of July 25<sup>th</sup> seems to be clear right now. Hope it's not a mistake, let's select a day ASAP allowing for travel. Who are the "we" you refer to? Looks like it might work if I go there but...

From: Youds, John A FLNR:EX

Sent: Wednesday, June 29, 2011 1:39 PM

**To:** Hupman, C Bruce MEM:EX **Cc:** Stewart, Rodger W FLNR:EX

**Subject:** RE: Actions respecting the 2010 placer inspection report.

Hi Bruce, In regard to Rodger's note on actions (below), I'd to follow-up on Action 1 with you. Can we arrange to meet in July to discuss the content concerns that you might have with the report? I need to discuss availability of dates with the report authors, who should attend the meeting, but currently I have availability in the weeks of July 11<sup>th</sup> and July 25<sup>th</sup>. Can you let me know if either of these weeks will work for you, Bruce. We could possibly travel to Kamloops if you can't make it up to WL. Let me know. Thanks.

**From:** Stewart, Rodger W FLNR:EX **Sent:** Tuesday, June 28, 2011 2:56 PM

To: Hupman, C Bruce MEM:EX; Youds, John A FLNR:EX

Cc: Vanderburgh, Ken FLNR:EX; MacDougall, Gerry L FLNR:EX; Arcand, Michelle X FLNR:EX; McLeod, Joanne FLNR:EX

**Subject:** Actions respecting the 2010 placer inspection report.

I was reminded to share with you the written summary of the actions from our meeting on 31 May, as I had promised. One of these actions is growing in urgency. There is increased demand from FN and from the federal Department of Fisheries and Oceans for release of the report. We would be prudent to carry out Action 1 below as soon as we can, in order to ensure the document is finalised in advance of any FOI initiative that could get launched.

During our conversation on the 31st we resolved to:

**Action 1:** URGENT - Review and edit the inspection report to resolve any questions of accuracy, and to indicate where there may be specific differences in interpretation of outcomes, and identification of natural resource features. To the fullest extent practicable, respecting the lead responsibility of MEM, we will document the means by which the non-compliant outcomes identified in the inspection report will be addressed.

**NOTE:** We need to nail down the time when this task will be completed without further delay. I believe the review and edit work can get done in a morning's focussed enterprise,

**Action 2:** Resolve challenges in sustaining the ability of FLNRO staff to conduct inspections of placer mine operations. Possible seek agreement from mine managers to enable inspections for specified purposes. MEM regional staff to join FLNRO regional representatives in enquiring of the Chief Inspector of Mines as to means of authorising FLNRO staff to carry out inspections of placer mine that would be pertinent to environmental stewardship standards.

Action 3: MEM and Cariboo Region FLNRO will collaborate in:

- advising the placer mining sector of the standards applicable to their activities,
- orienting the sector to their environmental stewardship responsibilities,
- devising means to influence selection of practices by the placer mining sector, and
- establishing means by which the outcome of applied practices will be monitored.

**Action 4:** Examine the administrative process for placer mining permits and Notices of Work authorisations to identify where clear, enforceable environmental stewardship standards will be set in those documents.

**Action 5:** Confirm progress on the development of a placer mining BMP guidebook. Determine means by which parts of the MX Code will be established as legal standards in permits and NOW. Confirm the means by which MEM and FLNRO will seek formal, public commitment from the placer mining sector respecting standards for placer mining operations.

Rodger Stewart
Director, Resource Management
Ministry of Forests, Lands and Natural Resource Operations
Cariboo Region
400 - 640 Borland Street
Williams Lake, BC
V2G 4T1
cell (250) 305 8536, desk (250) 398 4549
fax (250) 398 4214

From:

Arcand, Michelle X FLNR:EX

Sent:

Thursday, June 30, 2011 8:03 AM

To:

Youds, John A FLNR:EX

Subject:

RE: Actions respecting the 2010 placer inspection report.

I have nothing booked all that week except the 14<sup>th</sup> when I have the OTBH.

Michelle Arcand 250-991-7252

From: Youds, John A FLNR:EX

Sent: Wednesday, June 29, 2011 9:01 AM

To: Arcand, Michelle X FLNR: EX; McLeod, Joanne FLNR: EX

**Subject:** FW: Actions respecting the 2010 placer inspection report.

Here is the direction I got from Rodger, so my plan is to contact Bruce to set up a meeting date to address action 1. Joanne is not available in July. Michelle, What does your availability look like for week of July  $11^{
m th}$ ?

From: Stewart, Rodger W FLNR:EX Sent: Tuesday, June 28, 2011 4:17 PM

To: Youds, John A FLNR:EX

Subject: RE: Actions respecting the 2010 placer inspection report.

- 1. Your team with Bruce, while I manage the conversation and keep it on line with principles agreed in advance.
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- 3. as for 2, but once we settle the approach, your team. Gerry and I would clear the way for products your team might choose to share – hopefully with MEM doing the leg work.
- 4. Ken Vanderburgh with Bruce, and possibly Steve Dodge with Quesnel likely still engaged in placer NOW tasks
- 5. same as 2.

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fax (250) 398 4214

From: Youds, John A FLNR:EX

Sent: Tuesday, June 28, 2011 4:11 PM

To: Stewart, Rodger W FLNR:EX; Hupman, C Bruce MEM:EX

Cc: Vanderburgh, Ken FLNR:EX; MacDougall, Gerry L FLNR:EX; Arcand, Michelle X FLNR:EX; McLeod, Joanne FLNR:EX

**Subject:** RE: Actions respecting the 2010 placer inspection report.

Rodger, As I was not involved in the May 31 meeting, can you please elaborate on who was assigned to lead each of these actions – in other words, who is identified as responsible for taking the next steps. Thanks.

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Cc: Vanderburgh, Ken FLNR:EX; MacDougall, Gerry L FLNR:EX; Arcand, Michelle X FLNR:EX; McLeod, Joanne FLNR:EX

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From:

Arcand, Michelle X FLNR:EX

Sent:

Wednesday, June 29, 2011 8:34 AM

To:

Youds, John A FLNR:EX

Subject:

RE: Actions respecting the 2010 placer inspection report.

John, I will have time for follow up on this in the next couple weeks, but appreciate your question respecting who is to lead what?

S22 back tomorrow so we could

discuss before you head on holiday if you get some direction from Rodger.

Michelle Arcand 250-991-7252

From: Youds, John A FLNR:EX

Sent: Tuesday, June 28, 2011 4:11 PM

To: Stewart, Rodger W FLNR:EX; Hupman, C Bruce MEM:EX

Cc: Vanderburgh, Ken FLNR:EX; MacDougall, Gerry L FLNR:EX; Arcand, Michelle X FLNR:EX; McLeod, Joanne FLNR:EX

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Cc: Vanderburgh, Ken FLNR:EX; MacDougail, Gerry L FLNR:EX; Arcand, Michelle X FLNR:EX; McLeod, Joanne FLNR:EX

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From:

Youds, John A FLNR:EX

Sent:

Tuesday, June 28, 2011 4:26 PM

To:

Stewart, Rodger W FLNR:EX

Subject:

FW: Actions respecting the 2010 placer inspection report.

Thanks, Rodger. I will contact Bruce on Action 1 then to try to pin down a date a meet.

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To: Youds, John A FLNR:EX

**Subject:** RE: Actions respecting the 2010 placer inspection report.

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Sent: Tuesday, June 28, 2011 4:11 PM

To: Stewart, Rodger W FLNR:EX; Hupman, C Bruce MEM:EX

Cc: Vanderburgh, Ken FLNR:EX; MacDougall, Gerry L FLNR:EX; Arcand, Michelle X FLNR:EX; McLeod, Joanne FLNR:EX

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fax (250) 398 4214

From:

Stewart, Rodger W FLNR:EX

Sent:

Wednesday, May 18, 2011 6:08 PM

To:

Youds, John A FLNR:EX

Subject:

Re: Placer audit report and NS/MOE Communication Protocol Meeting May 19th, 2011

That is ok John, long as its marked draft.

From: Youds, John A FLNR:EX

**Sent**: Wednesday, May 18, 2011 03:39 PM

To: Stewart, Rodger W FLNR:EX

Subject: RE: Placer audit report and NS/MOE Communication Protocol Meeting May 19th, 2011

Rodger, Would you consider it okay to share the draft Table of Results or is this going too far?

From: Stewart, Rodger W FLNR:EX Sent: Tuesday, May 17, 2011 9:46 AM

To: Youds, John A FLNR:EX
Cc: MacDougall, Gerry L FLNR:EX

Subject: RE: Placer audit report and NS/MOE Communication Protocol Meeting May 19th, 2011

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I have to say the work staff has well carried out and is of great importance to the mandate of our ministry. RMT has been actively reviewing our course of action with MEM. Your team as struck a cord that resonates across wide scope of our corporate responsibilities.

Rodger Stewart
Director, Resource Management
Ministry of Forests, Lands and Natural Resource Operations
Cariboo Region
400 - 640 Borland Street
Williams Lake, BC
V2G 4T1
cell (250) 305 8536, desk (250) 398 4549
fax (250) 398 4214

From: Youds, John A FLNR:EX

**Sent:** Tuesday, May 17, 2011 9:28 AM **To:** Stewart, Rodger W FLNR:EX

Subject: Placer audit report and NS/MOE Communication Protocol Meeting May 19th, 2011

Rodger, The placer audit report will be a topic at the NS/MOE meeting on Thursday as it is on a list of outstanding action items. Do you know if the RMT has determined if it can be shared at this point?

**From:** Palmantier, Kristy FLNR:EX **Sent:** Monday, May 16, 2011 4:19 PM

To: 'Ann Louie'; 'Aaron Higginbottom'; 'Ardythe Wilson'; 'Chief Mike Archie '; 'Jamie Baldwin'; 'Charlotte Gilbert'; 'Canoe Creek Indian Band'; 'Chris Wycotte'; 'Bev Sellars'; 'Chief Hank Adams'; 'Chief Fred Robbins'; 'Don Dixon '; 'Edna Robbins'; S22 'Irvine Johnson'; 'Jamie Baldwin'; Ramsay, Mike K FLNR:EX; 'Patrick Harry'; 'Richard Sellers'; 'Gilbert, Robin'; 'Gord Sterritt'; Stewart, Rodger W FLNR:EX; 'Sally Sellars'; Fiala, Tony ENV:EX; Youds, John A FLNR:EX Subject: NS/MOE Communication Protocol Meeting May 19th, 2011

# 2nd Reminder.

Weytk/Hello Northern Secwepemc/MOE participants

Attached please find Action Items from the February 8th, 2011 meeting.

#### **NS/MOE Communication Implementation Meeting**

- This Thursday-May-19<sup>th</sup>, 2011 at the MOE 4<sup>th</sup> floor Board Room (changed from May 10 because of the WLIB Strategy Session all that week)
- Please advise if you are planning on attending or not.

### Draft Agenda --

- · Review Action items completed, outstanding, follow up updates
- · Current Resource management challenges
- MOE updates
- · NS F&W updates
- · Other business

# Kristy Palmantier

Aboriginal Program Specialist
Ministry of Forests, Lands & Natural Resource Operations
Cariboo Region - Williams Lake

Phone: 1-250-398-4570 Cell: 1-250-398-0278 Fax: 1-250-398-4214

From:

McLeod, Joanne FLNR:EX

Sent:

Tuesday, May 17, 2011 4:16 PM Youds, John A FLNR:EX

To: Subject:

PLacer presentation



Placer\_Audit\_Pres entation\_Fin...

# Joanne McLeod

Habitat Biologist Fish, Wildlife and Habitat Management Ministry of Forests, Lands and Natural Resources Operations 400-640 Borland Street Williams Lake, BC V2G 4T1

Ph: (250) 398-4256 Fx: (250) 398-4214

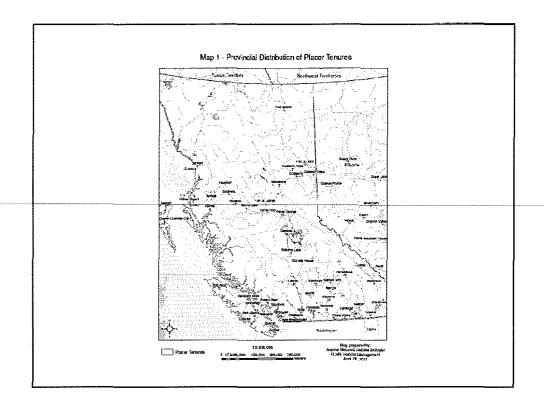
# 2010 Placer Mining Audit Presentation to Cariboo Regional Management Team

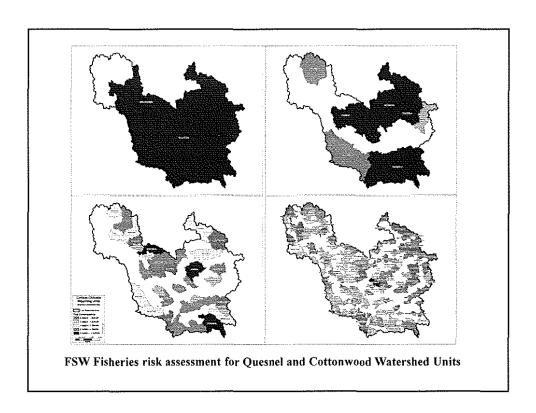
Michelle Arcand & Joanne McLeod

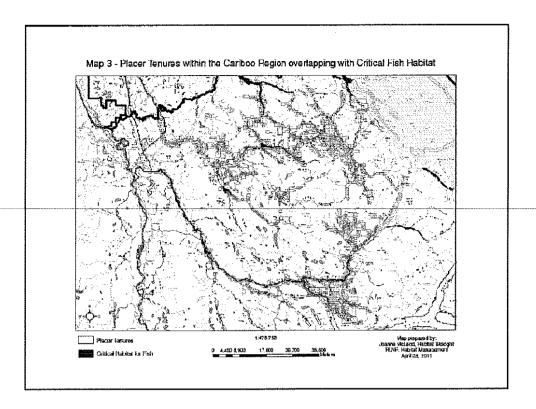
Ministry of Forests, Lands and Natural Resource Operations, Habitat Management Section

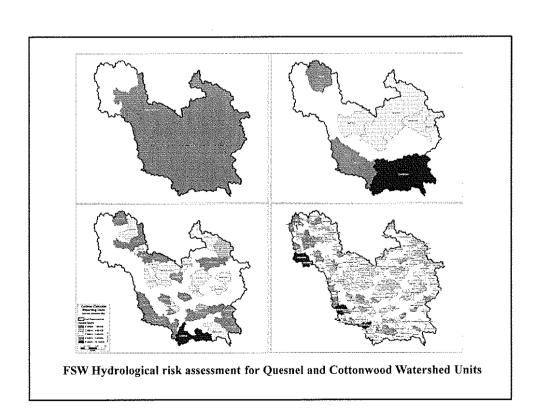
# Introduction

- Audited 26 placer operations in the Quesnel and Cottonwood watersheds
- Sites chosen based on previous concerns, with adjacent sites also inspected (non-random sampling)
- Examined
  - 1. Distance from watercourse
  - Potential impacts to fish and wildlife habitats (esp in areas designated as WHA, UWR or Critical Fish Habitat)
  - 3. Evidence of reclamation
  - 4. Potential discharge to watercourse
  - 5. Compliance with submitted Notice of Works









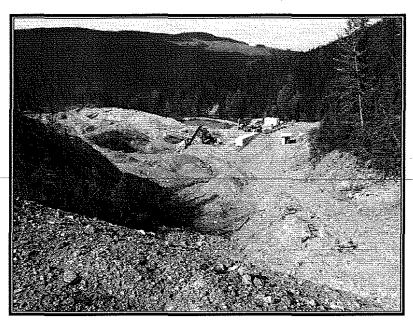
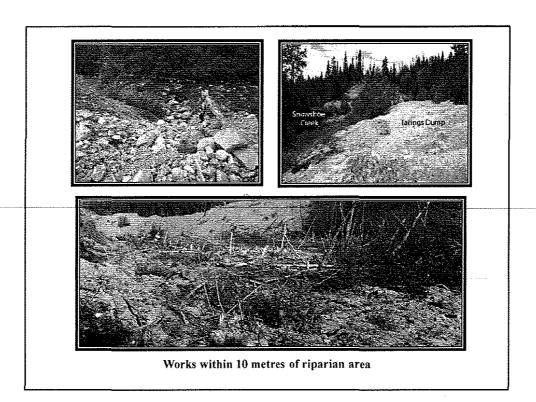
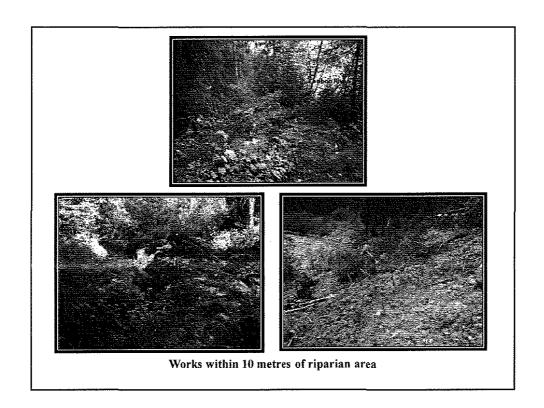


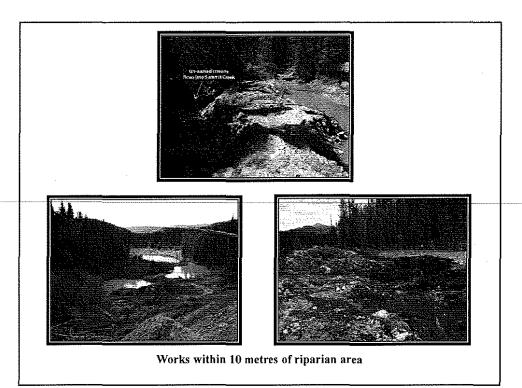
Photo from a 2009 inspection of placer claim by Lightening Creek in Stanley

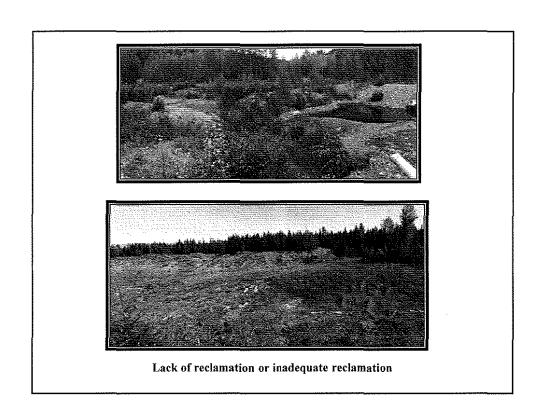
Inspection≉	Likely/2010-1	Likely/2010-2	Likely/2010-3	Likely/2010-4	Likely/2010-5	Likely/2010-6	Likely/2010-7	Quesnel/2010-1	Quesnei/2010-2	Quesnel/2010-3	Quesnel/2010-4	Quesnel/2010-5	Quesnel/2010-6	Quesnel/2010-7	Quesnel 2010/8	Quesnel 2010/9	Quesnei 2010/10	Quesnet 2010/11	Quesnel 2010/13	Quesnel 2010/14	Quesnal 2010/16	Quesnel 2010/16	Quesnel 2010/17	Quesnel 2010/18	Quesnel 2010/19	Quesnel 2010/20	% non-compliance
NoW compliance	ħ	¥	N	N	NA.	R	34	n	N	14	×	н	4	Y	٧	ħ	NA.	н	74	Y	NA	×	×	¥	н	Y	74
Disturbance > Indicated on NoW	¥	NE	Y	N	KA	ř	N	γ	У	Y	y	Y	И	N	N	á	N/A	7	7	N	NA	7	¥	24	¥	N	61
Works within 10 m. siparian reserve	н	ж	γ	¥	на	у	ÿ	Y	γ	24	Ą	γ	r	N	14	Y	HA	¥	×	И	NA	Y	γ	N	М	N	57
- authorized?	na	₽₹	S	H	ña	Я	N	Ħ	N	na	N	N	4	63	na	N,	na.	N	Ra	na	93	N	R	пa	na	72	100
Critical fish habitat	Y	¥	N	Y	Y	N	y	И	N	γ	И	N	¥	Ÿ	ï	N	24	۲	H	И	И	Υ	Я	34	N	N	na
Works < 30m of CFH	H	*	na	Y	HA.	na	Y	na	84	¥	Ra	na	па	¥	N	NA	NA	¥	72.0	па	NA	Y	na	na	118	na	60
Dis charge to watercourse	N	N	Υ	N	NA	γ	N	¥	н	М	Y	N	4	N	N	¥	HA	N	Υ	N	NA	N	И	И	y <sup>3</sup>	N	35
Unauthorized in- stream works	н	н	И	N	NA	Y	¥	¥	y	N	¥	¥	۲	N	4	¥	NA	Y	N	я	NA.	y	N	н	н	N	43
Fish screen	Y	Y	NR	¥	ra)	ÆR	N	NA	HR	И	NR	N	ų	Ni.	NR	NR.	na	Πž	93	ПЭ	R.Z	G-a	8	па	N8	nа	67
Redamation as indicated on NoW	я	x	Я	9	H	N	N	X	ЯR	x	N	н	x	Y	Ba	h	лæ	N	¥	na	na	я	N	па	н	x	61
WHA or UWR	٧	N	N	н	N	M	N	М	N	N	N	N	ų	N	N	N	¥	γ	н	N	N	N	N	Ŋ	н	N	na
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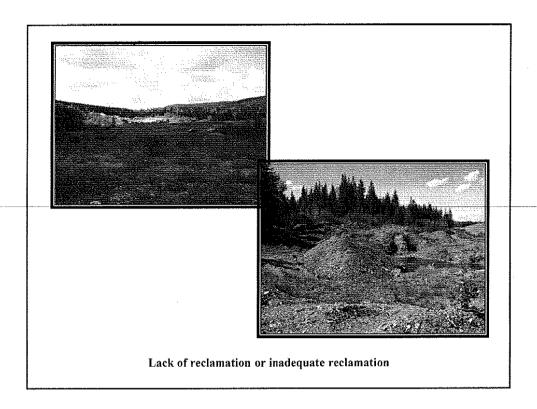
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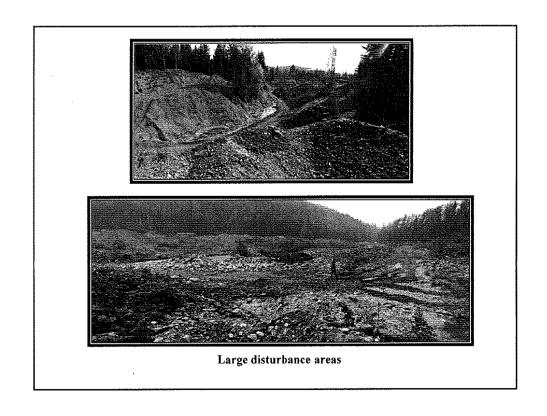


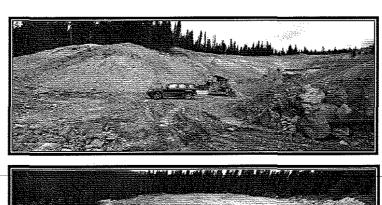


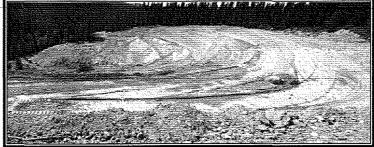




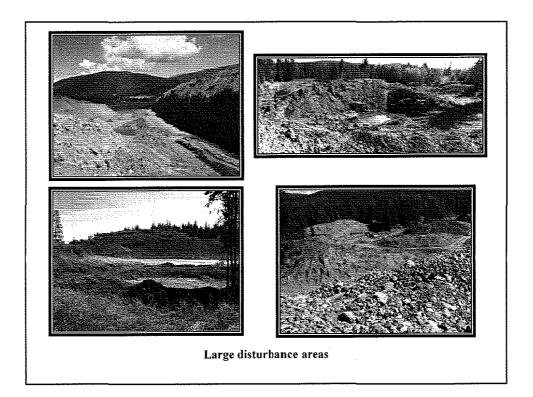


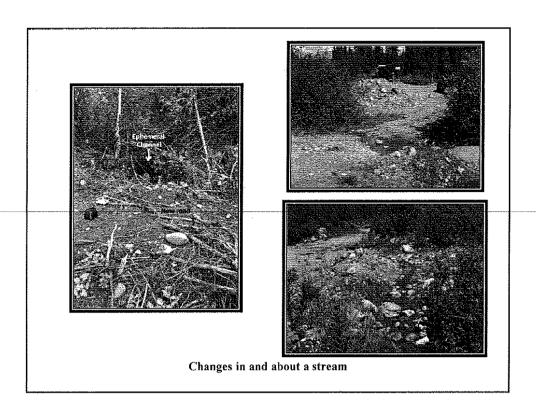


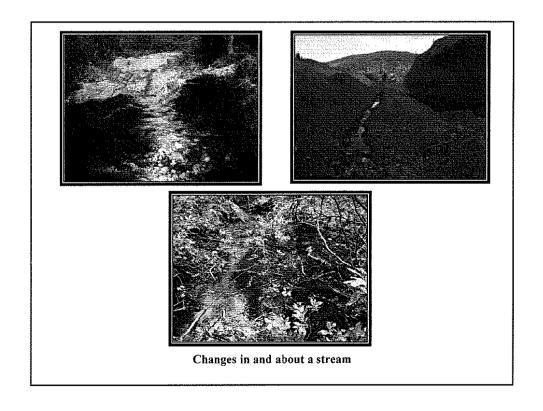


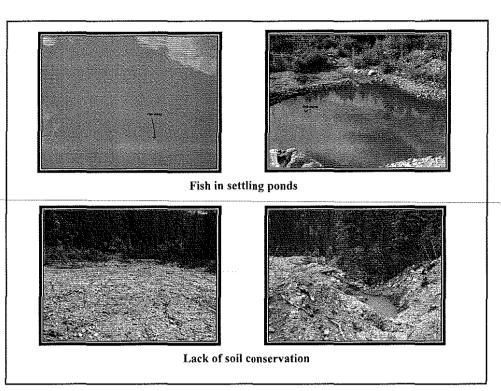


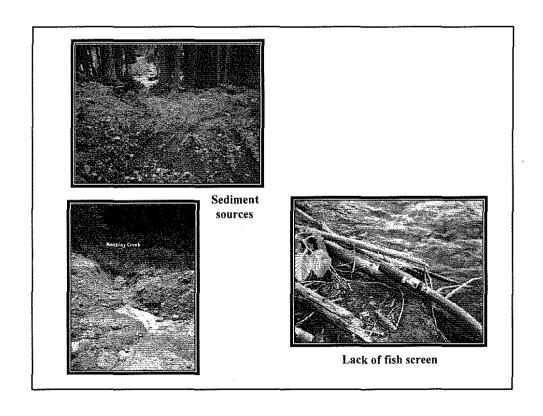
Large disturbance areas

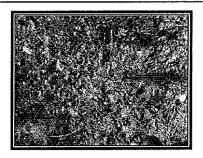




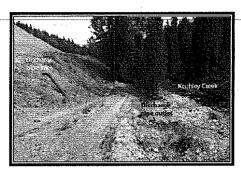








Invasive weed infestation





Discharge to watercourse

# Recommendations

- Develop a coordinated interagency compliance and enforcement plan for placer mining activities.
- Establish authorities to enable enforcement of placer mining standards by other agencies other than Energy and Mines (C+E, COS)
- Ensure standards provided regionally by MoE are incorporated into permit conditions
- Work with MEM to develop simple BMP's for distribution to placer miners
- Apply for renewal of the placer No Staking Reserve on the Horsefly watershed for a minimum of ten years
- Recommend the development of provincial standards and guidelines for the placer mining industry

#### Youds, John A FLNR:EX

From:

Arcand, Michelle X FLNR:EX

Sent:

Tuesday, May 17, 2011 10:23 AM

To: Cc: Youds, John A FLNR:EX McLeod. Joanne FLNR:EX

Subject:

RE: Placer audit report and NS/MOE Communication Protocol Meeting May 19th, 2011

I'd prefer you defer on this until the next meeting John. Let me know when that will be so can be sure to schedule it in. Thanks.

Michelle

From: Youds, John A FLNR:EX

Sent: Tuesday, May 17, 2011 9:53 AM

To: Arcand, Michelle X FLNR:EX; McLeod, Joanne FLNR:EX

Subject: FW: Placer audit report and NS/MOE Communication Protocol Meeting May 19th, 2011

FYI – Michelle, any chance you could attend the May 19<sup>th</sup> meeting (late morning or early afternoon) to give an overview presentation of the results? If not, I will defer topic to next meeting.

From: Stewart, Rodger W FLNR:EX Sent: Tuesday, May 17, 2011 9:46 AM

**To:** Youds, John A FLNR:EX **Cc:** MacDougall, Gerry L FLNR:EX

Subject: RE: Placer audit report and NS/MOE Communication Protocol Meeting May 19th, 2011

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- NS F&W updates
- Other business

#### Kzisty Palmantier

Aboriginal Program Specialist Ministry of Forests, Lands & Natural Resource Operations Cariboo Region - Williams Lake

Phone: 1-250-398-4570 Cell: 1-250-398-0278 Fax: 1-250-398-4214

#### Youds, John A FLNR:EX

From:

McLeod, Joanne FLNR:EX

Sent:

To:

Tuesday, May 10, 2011 3:22 PM Arcand, Michelle X FLNR:EX; Youds, John A FLNR:EX

Cc:

Higgs, Karen E FLNR:EX

Subject:

Final draft of placer audit report

Here is the final draft of the placer audit report to be distributed to RMT today.

Karen, I should have a copy of the presentation for you shortly. Thanks for your patience!



Placer Audit Final Draft.docx

# Joanne McLeod

Habitat Biologist Fish, Wildlife and Habitat Management Ministry of Forests, Lands and Natural Resources Operations 400-640 Borland Street Williams Lake, BC V2G 4T1 Ph: (250) 398-4256

Fx: (250) 398-4214

#### Youds, John A FLNR:EX

From:

McLeod, Joanne FLNR:EX

Sent:

Monday, May 2, 2011 12:25 PM

To:

Youds, John A FLNR:EX; Packham, Roger M FLNR:EX

Subject:

First draft of the placer audit

Here it is! Please make your changes using the track changes option. Photos and title page will be inserted before the May 11 meeting with Cariboo RMT. Upon your review and approval, we will forward it to Rodger Stewart later this week.



Draft 1 Placer Audit.docx

## Joanne McLeod

Habitat Biologist Fish, Wildlife and Habitat Management Ministry of Natural Resources Operations 400-640 Borland Street Williams Lake, BC V2G 4T1

Ph: (250) 398-4256 Fx: (250) 398-4214



Not responsive - out of date range

From: Youds, John A FLNR:EX

Sent: Tuesday, December 20, 2011 8:47 AM

**To:** Stewart, Rodger W FLNR:EX **Cc:** MacDougall, Gerry L FLNR:EX

Subject: FW: Final Placer Report completed

Rodger, Michelle and Joanne have put a lot of extra effort into drafting a new version of the placer report, focussing on emphasizing how the inspections link to environmental values that our ministry has responsibility of the meaning,

and the criteria used for assessing these environmental values. I think that they have done an excellent job. I'm hoping that you and Gerry can review this final version and advise us on how we can move this project to final completion which should include some form of endorsement of the report so that it can be communicated to other agencies. Thanks.

From: McLeod, Joanne FLNR:EX

Sent: Monday, December 19, 2011 4:45 PM

**To:** Youds, John A FLNR:EX **Cc:** Arcand, Michelle X FLNR:EX

**Subject:** Final Placer Report completed

<< File: Cariboo Placer Mine Inspection Report Final.docx >>

## Joanne McLeod

Habitat Biologist
Fish, Wildlife and Habitat Management
Ministry of Forests, Lands and Natural Resources Operations
400-640 Borland Street
Williams Lake, BC V2G 4T1
Ph: (250) 208 4256

Ph: (250) 398-4256 Fx: (250) 398-4214

## McLeod, Joanne FLNR:EX

From:

McLeod, Joanne FLNR:EX

Sent:

Monday, December 19, 2011 4:45 PM

To:

Youds, John A FLNR:EX

Cc: Subject: Arcand, Michelle X FLNR:EX Final Placer Report completed



Cariboo Placer Mine Inspection...

# Joanne McLeod

Habitat Biologist Fish, Wildlife and Habitat Management Ministry of Forests, Lands and Natural Resources Operations 400-640 Borland Street Williams Lake, BC V2G 4T1

Ph: (250) 398-4256 Fx: (250) 398-4214

# Cariboo Region Placer Mine Inspection Report

December 2011



Photo by: Joanne McLeod

Prepared by:

Michelle Arcand and Joanne McLeod

Habitat Biologists

Resource Management Division

Ministry of Forests, Lands and Natural Resource Operations

Cariboo Region

#### **Executive Summary**

This is an inspection report prepared by FLNRO (Ministry of Forests, Lands and Natural Resource Operations) staff and is based on their field observations. Though MEM (Ministry of Energy and Mines) staff were provided the opportunity to review a draft, the results, conclusions and recommendations that appear in this report are solely the work of FLNRO staff.

Placer mine inspections were undertaken in the Cariboo Region by Ecosystems staff from the Ministry of Environment (now FLNRO) during the summer of 2010. The inspection project was initiated in response to a substantial increase in the number of placer Notice's of Work being received by government, and concern over potential environmental impacts associated with this industry. The objective of this placer mine inspection project was to assess the potential impacts of placer mining activities to aquatic and wildlife habitat values in the Cariboo region. The project was intended to assess whether potential impacts to identified high value habitats were being effectively mitigated and determine whether desired environmental conditions were being achieved through current regulation of placer mining in the Cariboo.

A sample of twenty-six placer tenures were inspected and assessed in relation to desired environmental conditions and compared with submitted Notice of Works. The inspections were distributed throughout much of the area of placer activity in the region, within the major watersheds of the Cottonwood, Bowron and Quesnel Rivers, encompassing ten watershed basins with both anadromous salmon and resident trout populations. Parameters assessed during inspections related to potential wildlife and aquatic habitat impacts and included: type and extent of works in the vicinity of watercourses and within areas designated as Critical Habitat for Fish; type and extent of disturbance within Ungulate Winter Range, riparian corridors and Old Growth Management Areas; adequacy of site reclamation; and accuracy of reporting in NoW's with regard to habitat impact indicators.

At 74 % of the twenty-three active tenures inspected, observed works were not consistent with those reported on the Notices of Work. The inspection results highlight the risks of aquatic, fish, and riparian habitat impacts, occurring in high value fisheries watersheds with inherent hydrological sensitivity. Works inside the 10m placer riparian reserve setback were observed at more than half (57%)of the active tenures, while unauthorized in-stream works had occurred at 43% of tenures, and evidence of wastewater discharge into waterbodies was observed at 30% of the tenures. Inadequate reclamation and unreported disturbance on placer mine tenures were also key findings. The inspection results revealed that placer Notices of Works did not accurately reflect the works that were undertaken on the ground, and that the size and types of disturbance associated with placer mining pose substantial risks to high value habitats in the Cariboo region.

Recommendations are made for: increasing compliance and enforcement on placer mine operations; implementing regional habitat protection standards through the placer mine permitting process as a short term measure; developing and disseminating guidance on acceptable practices to placer miners active in this region; renewal of the Horsefly River Watershed placer No-staking Reserve; and

development of a provincial placer mining regulation with resource management standards that are consistent with those for other sectors.

#### 1.0 Introduction

This is an inspection report prepared by FLNRO staff and is based on their field observations. Though MEM staff were provided the opportunity to review a draft, the results, conclusions and recommendations that appear in this report are solely the work of FLNRO staff.

Placer mining is the process of recovering unconsolidated mineral ores (most commonly fine gold) found in sand, gravel, and loose earth. In contrast to hard rock mining, which requires fracturing of bedrock to recover embedded ores, placer mining occurs in areas of alluvial deposits where water has historically eroded, deposited and reshaped minerals in loose or unconsolidated deposits. Hence by its very nature, placer mining is associated with historic or modern streams and rivers which have carried these precious minerals in their bedload.

Placer mining activity in the Cariboo region of BC has a history dating back to the Cariboo Gold Rush of the 1860's. For those with little capital to invest, placer mining (which includes prospecting, panning and surface sluicing of sandbars or surface gravels) has long been a relatively low cost mining technology. In areas where deeper subsurface placer deposits are uncovered, larger scale placer mine operations can be undertaken. Historically, larger placer operations often utilized hydraulic mining technologies (using high pressure water) to separate unconsolidated materials and remove precious material (Newell, 2011).

In the Cariboo region, small and large scale placer mining has continued since the time of the gold rush, with the amount of resources dedicated to the industry generally proportional to the relative price of gold at any given time. The nature of the typical Cariboo placer operation has been influenced by increased utilization of mechanized equipment (backhoes, excavators etc) which allows even the smallest one man placer operations to uncover increasingly larger areas and process considerable volumes of material in a season. Changes in policy and regulations have also impacted placer operations over time, as the laws regulating work in and around water courses and fish habitat have become more stringent. For instance dredging and sniping (section dredging) of river and stream beds, a common practice in placer mining not so long ago, is now considered an unacceptable practice in fish bearing waters.

Placer mining activity is not evenly distributed throughout the province but is concentrated in a relatively small number of areas of BC. The level of placer activity in the Cariboo region east of Quesnel is unprecedented in any other region of the province (see Appendix 1. Map 1). This concentration of placer mine activity is focused along rivers and creeks which also provide some of our highest value salmon and trout fisheries, including the Quesnel River, Cariboo River, Cottonwood River, Little Swift River, Lightning Creek, Willow River, Antler Creek, Bowron River and others (Appendix 1. Map 2). This concentration of placer activity is strongly correlated with areas of high value habitat including critical habitat for fish, wildlife habitat areas, ungulate winter ranges, old growth forests and riparian areas (see Appendix 1. Maps 3-6). Such high value habitat areas have been identified through the Cariboo Chilcotin Land Use Plan (CCLUP) implementation process as requiring additional protection and are now designated under a Land Act Order which restricts or prevents forest harvesting within these areas. Over the past five years, as the market value of gold has soared, there has been a dramatic increase in

the number of placer Notice's of Work (NoW's) being referred to Ministry of Environment (MoE)<sup>1</sup> in the Cariboo region. Throughout the 2010 calendar year Ministry of Environment received one hundred and thirty-five NoW referrals for placer operations within the Cariboo region. In the past, MoE Ecosystems staff reviewed and commented on individual placer Notice's of Work, providing written recommendations for protection of habitat to Ministry of Energy Mines and Petroleum Resources (now Ministry of Energy and Mines) within 30 days.

With the increased number of placer referrals being received by Ecosystems staff in the Cariboo region it became apparent in 2010 that Ecosystems staff lacked the capacity to continue with individual review of NoW's. In deliberating on how best to assess and address the level of environmental risks associated with placer operations the following issues were taken into account:

- 1. There were no government endorsed best management practices specific to placer operations and legislation in British Columbia. The *Handbook for Mineral Exploration* (Energy and Mines, 2009), though an excellent resource on mineral exploration best practices, is a very detailed and extensive reference document, but not tailored for, or entirely applicable to placer mining.
- 2. Placer operations are specifically exempted from *exploration activities* as defined in Part 9 of the *Health, Safety and Reclamation Code* (referred to hereafter as the Code). Hence, this section of the Code which provides the mine regulations for many of the important environmental aspects of mining activities including, riparian setbacks, soil conservation, terrain stability, water management, and reclamation does not apply to placer mining.
- 3. A Memorandum of Understanding (MoU) was established in 1997 (Appendix 2) between the provincial ministries responsible for mining, forests and environment with respect to placer mining activities in riparian ecosystems intended to "form an interim agreement for management of placer activities, until replaced by a placer mining regulation under the Mines Act" (Employment and Investment, 1997). As yet a placer mining regulation has not replaced this MoU and it remains the only endorsed source of guidance for regulating placer operations in riparian areas. The MoU establishes for placer operations a 10m setback from the high water mark of rivers, streams, lakes or wetlands. A clause in the MoU allows for a modification of the 10 metre setback if jointly agreed to for site-specific areas with aquatic protection concerns. Although this clause exists, there have been several instances in the Cariboo Region where a larger reserve was requested by Ecosystems staff but was not supported by MEM staff.
- 4. Although placer mining often requires authorization for harvesting timber from areas to be mined, the rules which apply to other holders of forest tenures including commitments to uphold land use plan objectives are not applied for placer mining activities. Although areas designated under FRPA or Land Act orders as ungulate winter ranges, riparian management zones, wildlife habitat areas, old growth management areas, and critical fish habitat are not

<sup>&</sup>lt;sup>1</sup> Prior to autumn 2010, Ecosystems Section was with Ministry of Environment, but is now with the Ministry of Forests, Lands and Natural Resource Operations, and is called Habitat Section in the Cariboo Region.

required to be managed accordingly when placer mining, the habitat values of these areas and objectives for maintaining associated habitat components remain relevant.

In the spring of 2010, MoE made a decision to cease individual review of placer NoW's. To support this initiative we collated all of the mapped habitat values that are typically considered in review of placer NoW's and compiled a compendium of our previous comments. We used these to formulate a guidance letter addressed to MEMPR, outlining our recommendations for protection of habitat values related to mapped attributes, with an explanation that we would no longer be individually responding on placer NoW referrals (Appendix 2. Letter to MEMPR). We also outlined our intention to reallocate available staffing resources to field inspection of placer operations.

The objective of this placer mine inspection project was to assess the potential impacts of placer mining activities on aquatic and wildlife habitat values within the Cariboo region. Our intention was to review current placer practices in areas where high habitat values have been identified, and to assess whether under the current regulatory framework placer mining was being conducted such that potential impacts to important habitat values were being effectively mitigated. The project was intended to assess the risk to fish and wildlife habitats such as aquatic and riparian habitat, ungulate winter ranges, critical fish habitat, and old growth forests associated with applied placer mining practices.

#### 4.0 Methods

Inspections of a sample of placer mines were undertaken by Cariboo region Ecosystems staff, Michelle Arcand and Joanne McLeod, from July 7 to September 9, 2010. We were accompanied on inspections at different times by Conservation Officer Service staff, the Ecosystems Section Head, Williams Lake Indian Band staff, and DFO officers and habitat staff. Selection of the sample was non-random. Placer tenures associated with high fish and wildlife habitat values or in a few cases tenures which appeared to have large areas of surface disturbance were prioritized for site inspections. This allocation of inspection effort biased to sites of higher risk was intended to reduce detection risk by lessoning the possibility of forming an incorrect opinion as a result of not detecting a significant non-compliance event or condition. The allocation of samples to areas where risks are higher is a recommended approach to addressing inherent risk and detection risk during environmental audits (Cuthbert, 2003). In order to maximize the number of sites and watersheds visited, effort was made to cluster site inspections along the same road network during any given field day, and to visit sites from a variety of geographic locations over the course of the season. Hence not all placer sites inspected were rated as high priority, nor were we able to inspect all of the sites that we prioritized as a high potential for impacts. Placer tenures were inspected in the following watersheds: Willow River, Ketcham Creek, Big Valley Creek, Summit Creek, Antler Creek, Swift River, Cottonwood River, Lightning Creek, Cariboo River, and Quesnel River (upstream of Quesnelle Forks). All of these watersheds provide habitat for both anadromous salmon and resident (trout) populations.

Advance notice of inspections was not given to tenure holders, but when we arrived at mine sites we always made any personnel on site aware of our presence and intentions. At each inspection, we made an effort to view the entire area of the claim where works were reported in the NoW, as well as any

other areas of apparent disturbance. We did not attempt to assess timber volumes removed, or look at health and safety compliance, as these issues were outside the scope of our assessment. Inspection results for each site were recorded on an individual field form developed for this project (Appendix 3).

The results of inspections and potential non-compliances were forwarded by email to MEM for fourteen of the inspected placer sites. We received responses and were notified of follow-up action by MEM in regard to five of these inspections. During the course of the inspection project, MEM staff raised concerns to us about proper safety procedures and use of appropriate safety wear when accessing mine sites. Accordingly we ensured that we were wearing all necessary safety gear when entering onto active mine sites.

During inspections we compared what we observed on mine sites to what was reported in the referred NoW, as this document has been our basis for assessing risks and providing guidance to mitigate impacts from placer operations. We did not have approved NoW permits as these are not provided to Ecosystems staff subsequent to referrals. However it is our understanding that the submitted NoW becomes a legally binding part of the mine permit. The NoW provides important indicators of objectives for minimizing impacts to fish and wildlife habitat values. For example the NoW asks if merchantable timber will be cut, what the source of water supply will be, if the operation is planned for zero discharge, the size of existing and proposed surface disturbance on and off the placer property, the present state of the land on which work is proposed, if the riparian buffer (10 metre reserve) is intact, whether any changes in or about a stream are proposed, and what the reclamation program will be. By comparing works on the ground with those described in the NoW we were seeking to assess whether review of the information in the NoW provides for an accurate assessment of risks to habitat values associated with placer mining.

The criteria used for assessing risks to identified habitat values as a result of placer practices were based on indicators provided within the NoW framework, and guided by legislated habitat protection measures enabled under FRPA, the federal Fisheries Act, the Water Act, and the Land Act. The specific habitat values we included in our assessment were riparian habitat, aquatic and fish habitat, critical fish habitat, mule deer wintering habitat, mountain caribou wintering habitat, and old growth forest habitat. We also assessed impacts to wildlife habitat in general resulting from applied placer mining practices and reclamation.

Indicators of riparian habitat values are reflected in numerous pieces of legislation and standards endorsed by the government of BC which require riparian reserves ranging from 5 up to 70m depending on the values which are being targeted for protection, the existing condition of the riparian corridor, the land use of surrounding areas, and the type of disturbance proposed. While recognizing that considerably wider riparian buffers are required for meeting a wide variety of riparian habitat objectives (see discussion section), our assessment focussed primarily on the 10m wide riparian reserve zone because this is the standard reserve zone referred to in the placer NoW and the MoU. For our assessment of potential risks to riparian habitat values from placer operations we measured the width of the reserve zone retained, considered whether the NoW stated that the 10 metre reserve was intact, and assessed whether the terrain and vegetation within the riparian reserve and adjacent area was

representative of the riparian habitat for that ecosystem. The extent and type of placer disturbance adjacent to the 10 metre reserve zone was also important for informing our assessment of risk to riparian habitat associated with placer mining. The desired objective for riparian habitat is that the structure of the riparian corridor is sufficiently intact such that valued ecosystem functions (see Discussion section) for both terrestrial and aquatic habitats are maintained.

Criteria for the assessment of potential impacts to fish and aquatic habitat included whether there was disturbance to vegetation and ground within the 10 metre reserve zone; whether in-stream works had occurred; whether there was wastewater (and sediment) discharge into water bodies; whether fish screens were properly utilized on water intakes; whether there was evidence of vehicular and machinery access into or through watercourses; and whether fish were observed or there was a high probability of fish access into mine ponds. The extent of overlap between placer tenures and streams that are either known fish streams or directly connected to fish streams is also an important measure for informing risk. The desired objective for fish and aquatic habitat is that applied practices are not causing harm to fish or harmful alteration, damage or destruction of fish and aquatic habitat; and that no deleterious substances (including sediment) are being deposited or allowed to enter fish bearing waters.

The identification of streams during inspections was based on legally accepted definitions from the Water Act, the Forest and Range Practices Act, and the Mines Act; and by utilizing standards established in the FPC Fish Stream Identification Guidebook. Consistent with legislated definitions, for our assessments we considered a stream to be a naturally occurring perennial or seasonal watercourse that had a continuous defined channel either scoured by water or containing deposited inorganic alluvium that was at least 100m in length. We based our identification of wetlands on legal definitions from such places as the Code, the FPPR, and the Riparian Areas Regulation which define wetlands as areas of land that are inundated by water at a frequency and duration sufficient to support a prevalence of vegetation typically adapted for life in wet or saturated soil conditions. We considered 'in-stream' works to be excavation or deposit of material within the channel of a stream or within the perimeter of a wetland or lake (as lakes, wetlands and streams are all included in the definitions of a stream under the Water Act and the Code). At all inspections where in-stream works were identified, the areas up and down stream of works were assessed to verify that the watercourse was in fact part of a natural stream or wetland by the accepted definitions.

Risks to critical fish habitat were assessed based on the type and extent of works occurring within 30 metres of the normal high water mark within areas identified in the CCLUP and Land Act Order as "Critical Habitat for Fish". Within these areas we assessed whether the natural topography, vegetative cover and drainage patterns of floodplain areas, side channels and inflowing streams was maintained. The desired objective for areas of critical fish habitat is that the habitat characteristics which have been identified as critical for salmonid species within these areas are not harmfully altered, damaged or destroyed. An important measure of critical fish habitat value is that watercourses within the floodplain including small tributary streams, back channels, oxbows, wetlands and ground water sources are preserved and remain seasonally connected to main channels. Although areas mapped as critical fish habitat can extend much further than 30m from the high water mark this criteria was chosen as it has

most often been our recommended setback (as a compromise from the standard 10 m reserve zone) when commenting on NoWs that encompass areas of critical fish habitat. A minimum 30m setback reserve was also the recommendation we provided in our standard guidance letter to MEM for placer operations within critical fish habitat areas.

Risks to critical mountain caribou habitat were assessed based on the type and extent of disturbance and state of reclamation within areas identified as mountain caribou Wildlife Habitat Areas (WHA's). Under FRPA, timber harvesting and road development is restricted in these WHA's, which are large contiguous tracts of mature and old forest at high elevations that provide adequate winter forage and allow caribou to disperse at low densities and avoid predators. Snowmobiling and commercial winter recreation has also been restricted in these areas in recognition of the critical value of this habitat for caribou recovery. The extent of overlap between placer tenures and caribou WHA's is also an important measure for informing an assessment of risks to mountain caribou habitat from placer mining. The desired objective for caribou habitat is that human activities do not significantly disturb, alter, destroy or create access into areas of contiguous caribou habitat resulting in impacts that would jeopardize the recovery of mountain caribou populations.

Risks to mule deer wintering habitat were assessed based on the type and extent of disturbance and state of reclamation within areas identified as Mule Deer Winter Ranges (MDWR's) under FRPA. The desired objective for mule deer winter range is that important habitat characteristics are not significantly altered by applied practices. Slope, aspect, forest cover, snowpack depths, topographic breaks, migration corridors, and forage types are all important components of MDWR habitat values. As a generalization, valued mule deer wintering habitat within the Caribou region tends to be associated with Douglas fir stands found at lower elevations along major river corridors. Such Douglas fir stands provide essential forage, cover and snow interception, and migration corridors for mule deer in winter. Hence the maintenance of these stand characteristics are important measures for assessing habitat risks to mule deer.

Risk to old growth forest habitat was based on assessment of disturbance to old growth forest characteristics in areas identified as OGMAs under FRPA. The permanent designation and restrictions on timber harvesting and road building within these areas is an important indicator of habitat value associated with old growth forests. The land use objective for old growth forest habitat management is to ensure that biological diversity on the forested land base is conserved by retention of mature or old forest stands distributed throughout landscape units. In order to meet this objective, OGMA's have been established on the forested land base in conjunction with other harvest retention areas such as riparian reserves to ensure retention of sufficient areas of old forest.

In general, potential impacts to habitat values resulting from placer activities were assessed based on the extent and type of disturbance observed on mine sites and the adequacy of the reclamation observed. Whether the proposed and existing disturbance areas and reclamation reported on the NoW accurately reflected what was observed during the site inspection was also important to informing the assessment of risk to habitat values. The objective for conservation of habitat values in general on crown land is that alterations caused by human activities are limited in area and of a temporary nature

such that wildlife habitat values and ecosystem services are not permanently destroyed and are reestablished as quickly as possible. Indicators of such objective include the reclamation requirements for all mineral tenure holders as described in the Health, Safety and Reclamation Code; as well the NoW reporting requirements relating to disturbance areas and reclamation; requirements for reclamation deposits; restocking and free-to-grow requirements under FRPA for regeneration of harvested forest stands, and the federal Fisheries Act "no net loss" policy which requires habitat compensation for harmful alterations or destruction of fish habitat.

When assessing reclamation during inspections we compared the observed conditions on the mine site with the reclamation plans stated in the NoW's. In regard to the adequacy of reclamation we consulted the Reclamation Standards outlined in Part 10 of the *MX Code* as well as guidance provided in the *Handbook for Mineral and Coal Exploration in British Columbia*. In general we were looking for site recontouring, application of growth medium, and revegetation of mechanically disturbed sites such that: the land and watercourses were left in a manner consistent with adjacent landforms; natural surface drainage patterns were established; potential for noxious weed invasion was minimized; soil erosion and sedimentation of watercourses was prevented; and the land was returned to a productive capability similar to that of the surrounding areas.

To provide a quantitative analysis of the overlap between placer claims and identified habitat values, we delineated an area boundary using 16 Landscape Units, including Abhau, Antler, Big Valley, Cariboo Lake, Cunningham, Gerimi, Jack of Clubs, Lightning, Likely, Lower Cariboo, Polley, Swift, Umiti, Victoria, Whittier and Willow. (Appendix 1, Map 7). This area was used to assess the overlap between placer claims and Critical Habitat for Fish, Wildlife Habitat Area for Mountain Caribou, Ungulate Winter Range for Mule Deer, and Old Growth Management Areas. These four habitat values were chosen for the analysis because they have management obligations for the forest industry, as well as the mining industry in the case of Mountain Caribou. This area is referred to as the analysis area in the results section, consisting of an area 689,895 hectares in size.

#### 5.0 Results

During our assessment we inspected twenty-six placer mine sites. There were no works initiated at three of the inspected sites. Two of the operating placer mines were found to be working without approved NoW permits from MEMPR. Results of the assessments for all of the placer sites are summarized in Table 1. At seventeen (74%) of the placer operations, inspected works were not consistent with what was reported in the NoW in relation to habitat value measures. NoW reporting inaccuracies relating to habitat values included under reporting of disturbance areas, unreported changes in or about a stream, unreported waste water discharge to watercourses, and misreporting of reclamation that did not occur.

#### 5.1 Riparian habitat

 Thirteen of the 23 active placer operations inspected (57%) had works inside the 10m placer riparian setback reserve.

- The NoW for all 23 of the inspected active placer sites stated that the riparian reserve was intact and that no changes in or about a stream were proposed.
- Types of disturbance within the 10m riparian reserve zone included removal of shrubs and trees, ground excavation and trenching, construction of berms, dumping of spoil piles, construction and use of bladed trails and roads, construction of drill pads, clearing for camps, excavation of wetlands, vehicle and equipment access through water courses, diversion of streams, and construction of settling ponds.
- Where works occurred less than 10m from water bodies, there was also considerable mine
  disturbance immediately adjacent to the riparian reserve zone such that the natural vegetation
  and terrain of the riparian corridor was significantly altered and there was a high potential for
  erosion, wastewater discharge and sedimentation to streams.
- Of the ten sites where works did not occur within the 10m wide riparian reserve, two of these operations were working right up to the riparian reserve setback.
- Eight of the 23 active placer operations inspected were working greater than 20m from water features and the riparian corridor was relatively intact and representative of the ecosystem.



Figure 1. Placer mine works in riparian reserve, in-stream and discharging to watercourse.

#### 5.2 Aquatic and fish habitat

At ten of the active 23 sites inspected (43%), in-stream works had occurred. Unauthorized instream works included: excavation of stream beds; diversion of natural streams into constructed channels and settling ponds; roads constructed through streams; infilling of stream channels and dispersion of stream flow; excavation and dumping of material in wetlands and beaver ponds (See Figure 1 and 2).

- The NoW's for all 23 of the active placer sites stated that no changes in or about a stream were proposed.
- At seven of the sites (30%) the in-stream works occurred in streams directly connected to known fish streams.
- At two of these seven sites the affected stream had been effectively disconnected from the fish bearing stream as it had been entirely diverted into mine settling ponds, without a visible discharge channel.
- At three sites where in-stream works occurred, the affected streams were not directly
  connected to a known fish stream. At one of these sites the affected stream bed was filled in
  and the site recontoured dispersing flow and disconnecting the tributary channel from the main
  stem.
- At eight (35%) inspected placer sites there was evidence of wastewater discharge from mine operations into a watercourse.
- The NoW's for all 23 of the inspected placer sites stated that the operations were planned for zero discharge.
- In two cases fish were observed in mine settling ponds. Two more sites had evidence of connections between settling ponds and fish bearing streams.
- Of the nine sites that required fish screens, six of the placer operations inspected (67%) did not have screens on their water intakes or their screen was identified by DFO as inadequate and not meeting the DFO's fish screening directive.

#### 5.3 Critical fish habitat

- Ten of the inspected placer tenures overlapped with areas identified as critical fish habitat under the CCLUP and Land Act Order; one of these tenures was not active.
- Six out of the nine active sites inspected that overlapped with critical fish habitat had works occurring less than 30m from the high water mark (67%). At four of these sites, operators were actually working less than 10m from the associated stream. In one of these cases the mine permit was later forwarded to us from MEMPR and it was found to specifically require a minimum riparian setback of 30m, (as per our recommendations) but this was not being complied with.
- Works observed within 30m of channels in areas identified as critical fish habitat included removal of vegetation, excavation of the topsoil and underlying unconsolidated material, construction of berms, relocation of excavated material for processing, dumping of spoil materials, construction of settling ponds, and ongoing placer processing.
- Where placer mining works occurred within critical fish habitat areas the value of the habitat for fish was effectively destroyed.
- There are 10,734 hectares of critical fish habitat in the analysis area, and 62% of this critical habitat for fish overlaps with placer tenures.

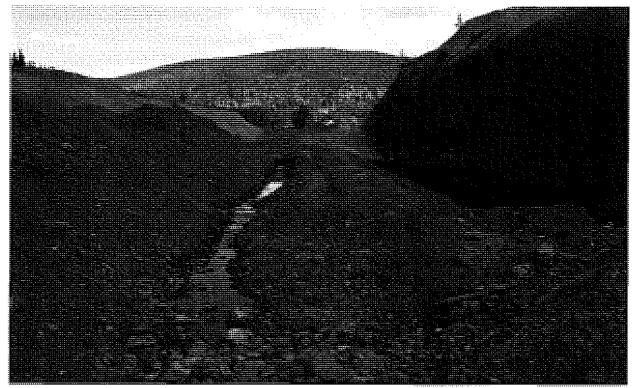


Figure 2. Excavated and diverted stream channel through placer mine site

#### 5.4 Mountain Caribou critical winter habitat

- Two of the inspected placer tenures overlapped with no-harvest Wildlife Habitat Areas designated for Mountain Caribou. There was no activity on one of these tenures at the time of inspection.
- The one active tenure that overlapped with identified core caribou habitat was not operating in that area of the claim.
- There are 71,704 hectares of Wildlife Habitat Area for Mountain Caribou in the analysis area, and 8% of this habitat overlaps with placer tenures.

#### 5.5 Mule deer wintering habitat

- Two of the inspected placer tenures overlapped with designated Mule Deer Winter Range (MDWR). One of these tenures did not have works within the winter range.
- In the one tenure where works were inspected within the MDWR there was no reclamation carried out within the MDWR, and the disturbance area was found to be more than double what was reported in the NOW.
- There are 32,763 hectares of MDWR within in the analysis area, and 23% of this habitat overlaps with placer tenures.

#### 5.4 Old Growth Management Areas

• Eleven of the 26 tenures (42%) overlapped with areas designated as Old Growth Management Areas (OGMA's). One of these tenures was not active.

- In five of the ten active tenures with OGMA's the disturbance recorded was quite small (<1ha) or outside the OGMA, but the other five had disturbed areas ranging from of 3ha to 28 ha.
- Of the ten active placer tenures inspected within OGMA's, only one (10%) had adequate reclamation consistent with that reported in the NoW. This was a very small new operation where far less than a hectare of area had been disturbed.
- There are 84,257 hectares of OGMA's in the analysis area, and 26% of this old growth habitat overlaps with placer tenures.

#### 5.5 General wildlife habitat

- Significant disturbance to wildlife habitat was observed at all but three of the placer mines inspected. These were new small operations where very little area had been disturbed.
- In general, the resulting landscapes observed where placer mining was carried out were devoid
  of pre-existing habitat features. Mined areas lacked native vegetation, were littered with
  settling ponds, and covered by spoil piles of sorted boulders, cobbles, gravels and finer
  materials which have been unearthed, relocated, washed, sorted and dumped after processing.
- Only one of the 23 active placer tenures inspected had adequate reclamation consistent with that reported in the NoW; five others indicated that reclamation would take place at the end of the season.
- Thirteen of the placer sites (57%) had areas of disturbance notably more extensive than indicated on the NoW with little or no reclamation observed (See Figure 2).
- Ten placer tenures (43%) had disturbance areas ranging from 2.5 hectares to over 28 hectares; while 13 tenures had disturbance areas of approximately 1ha or less.
- Soil conservation for reclamation was only recorded at three of the sites visited.
- The invasive plant species knapweed was identified in disturbed areas at one of the tenures.



Figure 3. Extensive area of inspected placer claim lacking adequate reclamation

Table 1: Summary of individual placer inspection results, sampled during the summer 2010 in the Quesnel and Cottonwood River watersheds

Placer Operation Inspection#	Likely/2010-1	Likely/2010-2	Likely/2010-3	Likely/2010-4	Likely/2010-5	Likely/2010-6	Likely/2010-7	Quesnel/2010-1	Quesnel/2010-2	Quesnel/2010-3	Quesnel/2010-4	Quesnel/2010-5	Quesnel/2010-6	Quesnel/2010-7	Quesnel 2010/8	Quesnel 2010/9	Quesnel 2010/10	Quesnel 2010/11	Quesnel 2010/13	Quesnel 2010/14	Quesnel 2010/15	Quesnel 2010/16	Quesnel 2010/17	Quesnel 2010/18	Quesnel 2010/19	Quesnel 2010/20	Results (%)
Works inconsistent with NoW	Υ	N	Y	Υ	NA	Υ	Y	Y	Υ	Υ	Υ	Y	Y	N	N	Y	NA	Υ	Υ	Z	NΑ	Y	Y	N	Y	N	74
Disturbance > indicated on NoW	Y	N	Y	N	NA	Υ	N	Υ .	Y	Υ	Υ	Υ	N	Ν	N	Y	NA	Υ	Υ	N	NA	Υ	Υ	N	Y	N	61
Works inside 10 m. riparian reserve	2	N	Y	Υ	NA	Y	Y	Υ	Y	N	Y	Υ	Υ	N	N	Y	NA	Υ	N	Z	NA	Υ	Υ	Z	Ŋ	Ŋ	57
Critical fish habitat	Υ	Y	Ŋ	γ	Υ	N.	Y	N	N	Υ	N	N	N	Υ	Υ	N	Z	Y	N	N	N	Y	N	N	Ŋ	N	na
Works < 30m of CFH	N	2	na	Υ	NA	na	Y	na	na	Y	na	na	na	Y	N	NA	NA	Υ	na	na	NA	Y	na	na	na	na	67
Discharge to watercourse	N	N	Υ	N	NΑ	Y	N	Y	N	N.	Υ	N	Y	N	N	Y	NA	N	Υ	N	NΑ	N	N	N	Υ <sup>1</sup>	N	35
Unauthorized in- stream works	Z	Ŋ	N.	N	NA	Y	Υ	Υ	Υ	N	Υ	Υ	Υ	N	N	Y	NA	Y	N	N	NA	Y	N	N	N	N	43
Fish screens present	Y	Υ	Mil	Y	na	NR	N	NR	NR	N	NR	N	N	N	NR	NR	na	na	na	na	na	na	N	na	NR	na	33
Reclamation as indicated on NoW	N	x	N	N	N	N	N	х	NR	×	N	N	х	Y	na	N	na	N	Y <sup>2</sup>	na	na	N	N	na	N	х	30
WHA or UWR	Υ	N	Ŋ	N	N	N	N	N	N	N	N	N	N	N	N	N	Υ	Υ	N	N	N	N	N	N	N	Ŋ	na
OGMA	N	Y	Ŋ	Y	N	N	Υ	N	N	N	N	N	N	Υ	N	N	Υ	Υ	Υ	Υ	Ν	Υ	Y	Υ	N	N	na
Disturbance area	~1ha	small	tibo	8h	small	17ha	3ha	<1ha	~1ha	~1ha	small	small	17.4ha	<1h	< 1ha	> 1ha	None	4ha	15ha	28.5ha	None	>1ha	small	<1ha	~ 6ha	2.5ha	na

<sup>1 -</sup> historic ponds connect

NA - not active

na - not applicable

NR - not required

X - reclamation to be complete at end of season

<sup>&</sup>lt;sup>2</sup> - insufficient

#### 6.0 Discussion

Placer mining has often been considered a low risk, low impact industry due to what has been cited as a small environmental footprint associated with these small mine operations. Within the Cariboo region, this does not appear to be an accurate reflection of the placer mining industry. The results of this placer inspection project provide evidence that placer mining in the Cariboo region is often undertaken in high value riparian areas and that environmental footprints are in some cases quite large. The potential impacts of placer mining and habitat risks revealed by this placer inspection project are examined in the discussion which follows.

It was observed at three of the placer sites inspected that at the smallest scale, testing programs of placer deposits can result in relatively innocuous small disturbance areas (few square metres). Where test pits also serve as well contained settling ponds for processing (minimizing the disturbance area), and where excavated material including topsoil and organic debris is properly stockpiled and promptly reapplied to disturbed areas such test programs can have minimal impacts on habitat values. However the type and extent of disturbance associated with placer mining which we observed at the majority of the operations visited during this inspection project was not what has just been described, and often the observed habitat impacts will be long lasting. In general we found that the larger the area of disturbance the greater the impact to habitat values. However, even in relatively small disturbance areas, if the habitat was of high value such as in riparian areas, critical fish habitat, ungulate wintering ranges and old growth management areas, placer mining has the potential to significantly and permanently alter the value of the associated habitat.

In order to fully appreciate the impacts of placer mining on riparian, aquatic and fish habitat it is necessary to understand the habitat value and ecosystem services provided by natural riparian areas. Riparian zones are the complex and dynamic interface between aquatic and terrestrial environments, involved in the transfer of water, sediment, nutrients, organic matter, and heat both vertically and horizontally over different time scales. Riparian zones are particularly sensitive to disturbance and they support many highly valued resources. Healthy riparian areas have high species richness; they provide wildlife habitat and travel corridors, as well as supporting aquatic ecosystems. Riparian vegetation contributes to bank stability, and influences factors that contribute to microclimate such as air temperature, solar radiation and wind speed. Riparian vegetation also maintains water quality by intercepting sediment and nutrients, regulates water temperatures, and contributes organic matter that provides the primary form of energy for stream food webs (Pike et al, 2010).

The value of healthy riparian areas for providing habitat to both terrestrial and aquatic species are extensively documented based on scientific research as well as professional observations. Studies have shown that 80 percent of wildlife are either directly dependent on riparian ecosystems or use them more frequently than other habitats (Ministry of Environment, 1998). Recommended riparian reserve widths and riparian restrictions vary considerably dependent on the type of proposed disturbance, the existing riparian condition, and the species and functions targeted for protection. Indicators of value placed on riparian habitats are reflected in numerous pieces of legislation and government endorsed standards. Some examples include:

- Under FRPA, the Forest Planning and Practices Regulation specifies riparian reserves of 20 to 50m on all streams greater than 1.5 metres wide, and road building is restricted for an even greater distance from streams. Even along the smallest streams (<1.5 m) where complete reserves are not legislated under FRPA, vegetation retention targets, road building restrictions and machine free zones are utilized to meet objectives for maintenance of water quality, stream bank stability, channel processes, stream shade and organic inputs.</li>
- Urban and rural development guidelines for BC (Ministry of Environment, 2006) recommend riparian buffers of 30 to 60 metres wide along all watercourses (whether fish bearing or not) to provide protection for a variety of aquatic and riparian species. Target buffer distances for development around wetlands range from 30 metres for urban areas to 150 metres for undeveloped areas.
- The Riparian Areas Regulation requires minimum buffers of 15 metres to 30 metres wide on fish bearing waterbodies, and 5 to 15 metre minimum buffers on non fish bearing waters (Ministry of Environment, 2006).
- The Cariboo Regional District Shoreland Management Policy requires covenants be placed on riparian properties with proposed developments to maintain 15 metre wide riparian buffers (Cariboo Regional District, 2004).
- The Code for mineral exploration in British Columbia requires stream riparian setbacks of 20 to 70 metres for streams greater than 1.5m in width. The minimum setback allowed under the MX Code near small streams(<1.5m wide) is a 5m reserve for drilling, but on these same small streams access development must be setback a minimum of 15 to 30 metres.</li>
- Fisheries and Oceans Canada guidance in relation to project planning is that "activities planned in water or within 30 m of water (including riparian areas) have the potential to impact fish or fish habitat" (Fisheries and Oceans Canada, 2011).

Such standards and legislation are indicators of the importance attributed to riparian areas for providing valued habitat and ecosystem services. The current standard for placer mining setbacks of only 10 metres from any watercourse is not consistent with government standards and guidelines which apply to other tenured activities on crown land and development of privately owned lands within the province and the Cariboo region.

The project results indicate that placer operations regularly occur in close proximity to water features and that the applied riparian reserves are often inadequate for maintaining fish, aquatic and riparian habitat values. Observed placer mining practices within and adjacent to 10 metre riparian reserves included extensive removal of vegetative cover, permanent alteration of the natural topography and drainage patterns, and extraction and degradation (sedimentation, temperature alteration) of water from natural habitats for placer processing. The inspections revealed that placer mining often results in long term loss of riparian vegetation important for providing bank stability, runoff buffering, input of litter, coarse woody debris, stream shade, and cover. The loss of vegetation and disruption of soil and natural drainage caused

by placer mining activities in riparian areas has potential for serious consequences on aquatic resources. The cumulative impacts to fish and aquatic habitat associated with observed placer practices may include: increases in suspended sediment in streams resulting from increased erosion and wastewater discharge; reduced capacity of un-vegetated riparian areas to retain water resulting in higher peak flows and lower low flows; loss of stream bank and channel stability; and loss of shade resulting in increased stream water temperatures.

During placer mining not only is vegetation removed from the riparian area but the habitat is subjected to considerably greater alterations as the ground cover, organic and coarse woody debris, and topsoil is removed, and the underlying material is excavated. Excavated riparian areas only 10 metres from watercourses were frequently observed to be used as placer processing sites. These areas were subject to ongoing disturbance as new material was continually being excavated, processed and deposited in these areas as placer mine expansion progressed. There is considerable risk of applied placer mining practices impacting stream water quality as erosion and sedimentation sources are substantially increased on the placer mine site and vegetative buffering in the riparian area is destroyed.

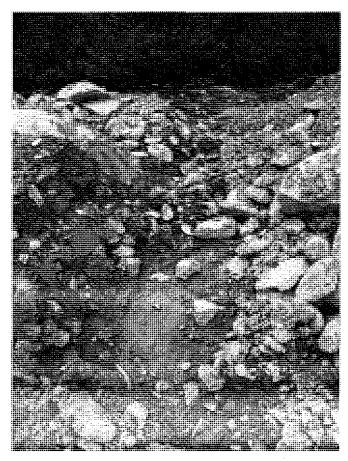


Figure 4. Placer sediment source to fish stream

Risks to fish and fish habitat are heightened in areas with critical habitat values where placer activities cut off fish access to and destroy seasonally critical habitat features (ephemeral streams, oxbows, back channels) within the floodplain and in riparian areas adjacent to main stem channels. Critical fish habitat has been identified in areas of exceptional habitat determined by regional

fisheries experts to have particular value for spawning or rearing of anadromous salmon, kokanee, bull trout and rainbow trout (Hoffos, personal communication, April 22, 2011). These areas have been designated as requiring additional riparian protection for maintenance of water quality, base flows, channel morphology, stream temperature and organic inputs. Areas designated as 'Habitat Critical for Fish' include specific watercourses adjacent to main channels within floodplains, as well as backchannels, oxbows, wetlands, and ground water sources connected to the main watercourse, which provide exceptional habitat for juvenile salmonids (Integrated Land Management Bureau, 2007). During our inspections we observed habitat disturbance at six of the nine sites active within areas designated as critical fish habitat. Some of these areas had been historically disturbed by past mining, however the recurring disturbance to riparian and floodplain areas caused by recent placer mining activities precludes the natural recovery of historically impacted streams and diminishes their potential for providing critical fish habitat values.

At two operations fish were observed in settling ponds and at two more sites settling ponds were connected with fish bearing streams making it highly likely that fish would be present in these ponds as well. Instances of fish inhabiting placer mine ponds are not particularly unusual, as fish have been noted in placer ponds at several other operations within the region in recent years. The presence of fish in settling ponds should not be misconstrued to suggest that placer mining actually improves or creates habitat for salmonids. The important habitat values provided to salmonids by natural seasonally inundated areas connected to mainstem channels are destroyed when the habitat structure and functions of these areas are dramatically altered by placer mining. Whereas natural floodplains, oxbows, wetlands, backchannels, ephemeral streams and groundwater sources adjacent to mainstem channels are rich in habitat complexity and provide excellent high water refuge for rearing juvenile salmonids, the environment provided by placer settling ponds is much less hospitable. Juvenile salmonids gaining access to constructed settling ponds are trapped in a stagnant environment that lacks complexity, vegetative shade and cover, where they are susceptible to water temperature and dissolved oxygen extremes, subject to ongoing inputs of suspended sediment, have limited forage opportunities, few available predator avoidance strategies, and no means of escape. Salmonids which gain access to placer settling ponds are unlikely to survive for long under such conditions.

Given the current regulatory framework and current observed placer practices it appears there is an ongoing risk of cumulative watershed impacts associated with extensive placer mining in the Cariboo region. In the past 15 years numerous riparian, fish habitat, and hydrologic assessments have been carried out as a consequence of the 1995 CCLUP which set targets to "manage the Cariboo (and Horsefly) and Cottonwood River Watersheds for hydrologic stability through watershed assessment, restoration work and monitoring programs" (Government of British Columbia, 1995), and to manage the Horsefly, Bowron, Quesnel, Cottonwood and Cariboo Rivers for salmon stocks through riparian area protection and controls on the rate of harvest. These watershed assessments have commonly identified placer mining as having an extensive and significant impact on the stream systems. In *An Inventory of the Watershed Conditions* Affecting Risks to Fish Habitat in the Cottonwood, Cariboo and Horsefly Watersheds (Chapman Geoscience Ltd. & Dobson Engineering Ltd., 1997, p. iv, x) a key finding common to all three watersheds was that:

"Where placer mining had occurred, stream channels have been disturbed resulting in increased sediment supply that overwhelmed the potential effects from other land use activities. Channel restabilization was observed and the supply of coarse sediment was reduced at locations where mining had been abandoned."

It was also noted that "Channel disturbances from placer mining activity are common in many tributary channels of the Cariboo River system...If fish habitat is to be improved in these systems many stream channels will require rehabilitation. Unless there is a change in the way that placer mining is undertaken, any channel rehabilitation will be unsuccessful."

Our inspection results indicate that applied placer practices in the Cariboo may not have changed significantly, and many operations are still not meeting the current minimum standards for this industry (10 metre reserves, no discharge, and effective reclamation), and fall far short of attaining environmental standards that apply to other land use activities. The Horsefly, Quesnel and Cottonwood watersheds are rated as highly sensitive watersheds for both resident and anadromous fish species, and they also have the highest hydrology hazard scores in the Cariboo Region, based on Fisheries Sensitive Watershed assessments currently underway (John Youds, personal communication, May 4, 2011). Under the current regulatory framework, and given the current placer mining practices observed, there is considerable risk that cumulative impacts from this industry could detrimentally impact watershed management targets.

In comparing the results of our 2010 inspections with a Fisheries and Oceans Canada 2001 placer inspection in the Likely area, as well as their 1995 file information we note a recurrence of the same habitat related issues at the same placer sites and among the same operators (see Appendix 4). Many issues identified during our 2010 placer inspection project were also raised in those 2001 DFO inspections including: unauthorized in-stream works, works within fish habitat, discharge to water courses, large disturbance areas, and encroachment into the 10 metre riparian reserve, and lack of effective reclamation. These findings indicate that applied placer practices are not necessarily improving over time in relation to potential habitat impacts and that regulatory change for placer mining may be necessary in order to improve protection of habitat values. Specific examples of recurring habitat issues reported by DFO and revealed in our 2010 inspection project include the following:

- At one mine site removal of riparian vegetation and encroachment within the 10 metre riparian reserve continued to occur under the same operator in 1995, 2001 and 2010 (Fisheries and Oceans Canada, 1995a)
- A separate proponent had been warned by Fisheries and Oceans Canada about working within a 10 metre riparian reserve in 1995 (Fisheries and Oceans, 1995b) and yet was found to be operating equipment within 5 metres of the Cariboo River in 2010, and developed a skid trail less than 10 metres from the river for a distance of 75 metres.
- At this same site, Fisheries and Oceans Canada had requested a 50 metre setback in 2001 (Pow, e-mail communication, January 31, 2002), and Ministry of Environment had requested a 50 metre setback in 2010 (Ludwig, e-mail communication, March 23, 2010), however both requests were turned down by MEM.

- At another site, the proponent was warned by Fisheries and Oceans Canada in 2001 about removing riparian vegetation and operating within the 10 metre riparian reserve, yet was found to have excavated a wetland in 2010.
- On yet another site, fish were recorded in a settling pond located in the floodplain in 2001 and again in 2010 (Fisheries and Oceans Canada, 2001).

Changes in and about a stream are regulated under the *Water Act* and the *Water Regulation* in British Columbia. Section 44(3) of the *Water Regulation* exempts the holder of a mine permit from the requirement to obtain an approval or license to make a change in or about a stream so long as the permit holder complies with Part 9 of the Health, Safety and Reclamation Code and complies with any conditions respecting the change described in the mine permit. However Part 9 of the Code, which includes riparian setbacks, does not apply to placer activities. In seeking a legal interpretation of the *Water Act* as it applies to placer mining with regard to making changes in and about a stream, we have been advised that if Part 9 of the Code does not apply, then placer mining is not exempted under Section 44(3) of the *Water Regulation*. Therefore an Approval, Licence, or Notification would be required for placer mining in and about a stream as per other sections of the *Water Act* and *Water Regulation*. The MoU establishing a 10m setback for placer mining from the high water mark of rivers, streams, lakes or wetlands appears to be intended to pre-empt placer mines from the requirement to obtain an Approval under the Water Act. Hence it is our contention that placer mine activities within the 10m setback reserve constituting changes in or about a stream are undertaken without legal authority.

The results of the inspections indicate that placer mining also poses risks to terrestrial wildlife habitat, particularly for wildlife which are dependent on limited areas of critical habitat such as wintering habitat for mountain caribou and mule deer wintering, and old growth forests. The extent and type of disturbance associated with placer mining as well as effectiveness of reclamation for returning the disturbed area to a vegetated state similar to adjacent undisturbed areas are important measures for informing the potential impacts of placer operations on wildlife habitat values. In comparison to timber harvesting which can be carried out with very little ground disturbance, placer mining involves complete removal of all vegetation and topsoil to access and excavate the underlying surficial material. Our inspections revealed that reclamation practices on placer mines in the Cariboo region are often ineffective in promoting natural succession and do little to restore disturbed areas to a productive ecosystem resembling that of the surrounding areas.

In areas which have been identified as critical habitat for caribou or mule deer wintering (WHA's and UWR's), or set aside as old growth forest reserves (OGMA's), placer mining effectively destroys the habitat values on these sites. Placer mining creates access, intercepts migration corridors, removes the vegetation and completely alters site conditions such as topography, soils, and natural drainage patterns. Mature and old trees are critical components of caribou, mule deer and old growth management areas. As placer mining removes the vegetation, forage and cover opportunities of these sites are eliminated. Furthermore, topographic alterations, poor topsoil conservation and reclamation practices diminish the productive capacity of the land and the resulting impacts to critical habitat values are more intense and longer lasting than they would likely be from timber harvesting. The risk of impacting wildlife populations dependent on these habitats is contingent on the extent of the disturbance area which placer mining and associated

access development has on identified critical habitats. Over time with increasing placer activity and without restrictions placed on placer mining, the cumulative impacts of habitat loss could have significant effects on wildlife populations.



Figure 5. Extensive area of placer mine within riparian corridor lacking adequate reclamation

The type of disturbance to the land associated with placer mining is considerable. One might contend that there is little more that could be done to disturb the land than what occurs during placer mining. Where placer mining is undertaken not only is standing timber removed, but all understory vegetation and herbaceous ground cover, coarse woody debris, organic litter and topsoil is also removed; and subsequently the underlying unconsolidated material is excavated, relocated and segregated. Excavations may go to significant depths (several metres), and settling ponds are constructed for processing, where water is used to isolate progressively finer materials and allow retrieval of gold particulates. Heavy equipment is used to excavate and relocate substrates around the mine site resulting in ongoing disturbance and compaction of underlying terrain. Settling ponds are usually constructed in the riparian area as close as possible to watercourses which provide the water used for processing. On steeply sloped sites, the settling ponds receive considerable inputs of surface runoff from the disturbed areas of the mine site, and are prone to over filling. Where placer activities occur on floodplains, operators often construct berms along the riparian reserve in attempts to prevent high stream flows from flooding the mine area and to keep settling ponds isolated from main stem flows.

Inadequate reclamation and unreported disturbance areas on placer mine tenures were key findings of the placer mine inspection project (Figure 4). It was not possible to thoroughly assess reclamation of the current years work on tenures where the NoW indicated it was to occur at the end of the season. However the recurrent trend was that previously disturbed areas including trenches, test pits, access trails, roads, spoil piles, and settling ponds were not reclaimed. Large (sometimes massive) un-reclaimed piles of sorted rock, gravel, and sand were common at the larger placer operations. We also found that there was often ongoing or new disturbance in areas recorded on NoW's as previously reclaimed, and it was common for exploration work, sampling, and trail clearing to occur in areas not reported on the NoW. It was apparent that access roads and equipment platforms are constantly being newly established and used for excavating, relocating and dumping material. Such practices result in continual and ongoing disturbance and

compaction of terrain leading to reduced water holding capacity of the site and limiting potential for revegetation. Unreported works were often undertaken in areas of high environmental sensitivity such as riparian areas, ephemeral stream beds, wetlands, or along steep slopes. A lack of topsoil conservation noted at several placer sites is highly relevant to effectiveness of reclamation. Without organic matter and nutrients from conserved soil, reclamation of denuded, excavated and compacted tracts of land will be ineffective and revegetation will take decades longer. The cumulative impacts of large disturbance areas associated with unreclaimed placer operations and a lack of topsoil conservation, present a long term loss of wildlife habitat and potential chronic sediment sources (see Figure 5).

## 7.0 Conclusions and Recommendations

This placer mine inspection project provides evidence that there is potential for significant impacts to aquatic and wildlife habitat associated with placer mining in the Cariboo region. Placer mining (other than at the very small test scale) dramatically alters the landscape at the site level and effectively destroys the existing wildlife habitat. Where placer mining occurs in riparian habitat (including areas identified as critical habitat for fish), there is a high risk of impacts to aquatic and fish resources from placer mining practices, and potential impacts are not currently being effectively mitigated. Potential indirect fish and aquatic impacts include: increased sedimentation; altered water quality; contributory flow alterations; increased water temperatures; loss of bank and channel stability; as well as reductions in shade, litter, invertebrates for fish forage, and long term large woody debris contributions which are all impacts associated with loss of riparian vegetation. Given the observed incidences of unauthorized in-stream works, wastewater discharge to streams, alteration of 'critical fish habitat' in floodplain areas, and lack of effective fish screens it appears that under the current regulatory framework there are also substantial risks of direct impacts to fish and aquatic resources associated with placer mining in this region.

With regard to identified high value wildlife habitats such as old growth forest, caribou and mule deer wintering habitat, and riparian habitat we found that placer mining effectively destroys the existing habitat values of the site. Furthermore, current placer practices and inadequate reclamation limit (rather than promote) reestablishment of vegetation and habitat similar to the pre-existing condition. Recovery of placer mine sites is hindered by loss of topsoil, permanently altered topography, interruptions to groundwater flow and surface drainage, segregation and compaction of excavated material, increased susceptibility to erosion, and limited moisture retention capacity. As a result, habitat alterations associated with placer mining are likely to persist for many decades.

Currently there is little environmental regulation for placer operations outside of specific permit conditions which can be applied at the discretion of the permitting agency, and which are only enforceable by Mines Inspectors. Under the Mines Act, government officials not designated as Mines Inspectors do not have the authority to enter onto placer mine sites without permission of the mine manager. The results of this placer mining review project (and the previous Fisheries and Oceans Canada inspections from 2001) indicate that placer mine activities are not consistent with descriptions provided on submitted NoWs and that aquatic and terrestrial habitat impacts are resulting from placer mining.

There needs to be a coordinated and cooperative approach among resource agencies to address the impacts of placer mining within the Cariboo region. The first step will be a common recognition among resource agencies that current placer mining practices have the potential to seriously impact high value habitats and important resources, and it is therefore in the public interest to improve industry practices. Provincial regulation of placer mining needs to be brought up to standards that are comparable for other permitted resource users on the land base, and are consistent with all provincial and federal legislation.

To address the current and potential impacts of placer mining it is recommended that the following measures be considered for implementation in collaboration between FLNRO and MEM:

- Develop a coordinated interagency compliance and enforcement plan for monitoring placer tenures in regard to fish and riparian resources, wildlife habitat restoration, Water Act compliance, reclamation, soil conservation and invasive weed control.
- Establish an inter-agency agreement that would allow inspection of placer mine sites by qualified staff from FLNRO and MOE to enable improved environmental regulation at these sites.
- 3. Establish authorities to enable enforcement of placer mining standards by additional agencies including the Conservation Officer Service and FLNR Compliance and Enforcement staff.
- 4. Ensure the standards previously provided regionally by Ministry of Environment to Mines staff in the May 26, 2010 letter (Appendix 2.) are incorporated into placer mining permit conditions enabling enforcement of these standards within the Cariboo region. This would be an interim measure to reduce harmful impacts of placer mining within this region, until provincial standards are completed.
- 5. Develop Placer Mining Best Management Practices (BMPs) for distribution and outreach to placer miners by Mines Inspectors and compliance and enforcement staff.
- 6. Renew the placer No-Staking Reserve within the Horsefly River Watershed, provincially significant for its fish habitat value, for a minimum of ten years.
- 7. Develop provincial legislated standards for the placer mining industry in conjunction with Fisheries and Oceans Canada.

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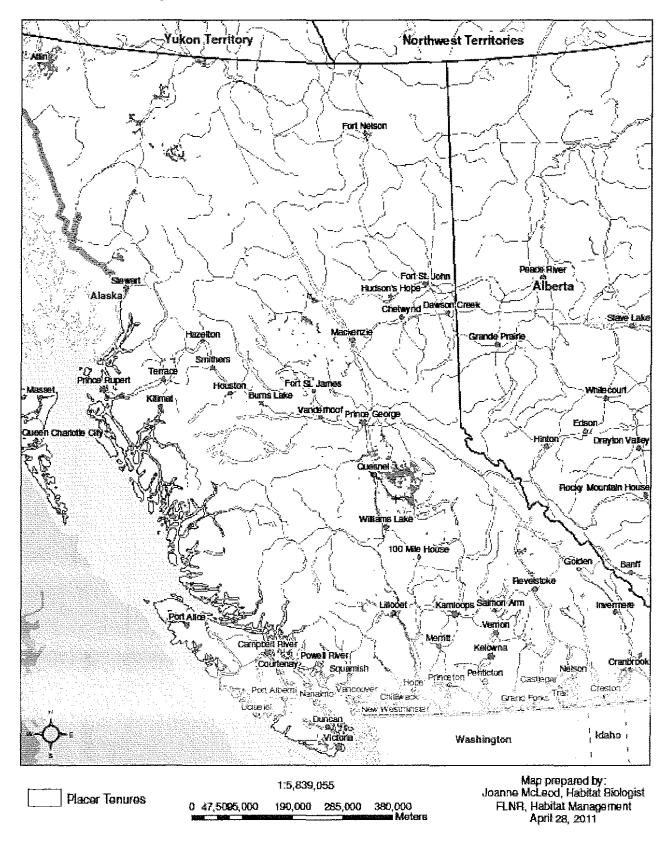
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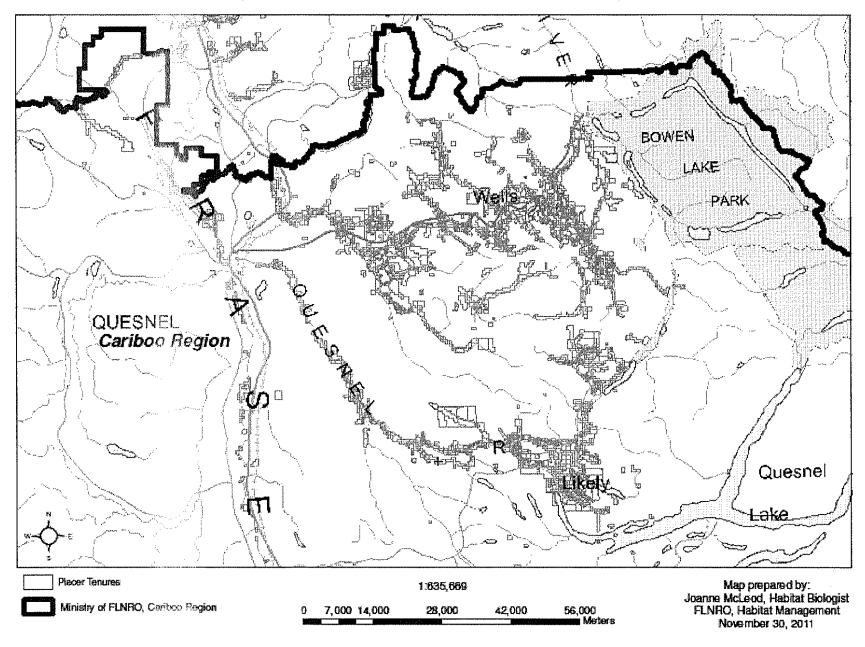
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Appendix 1. Maps

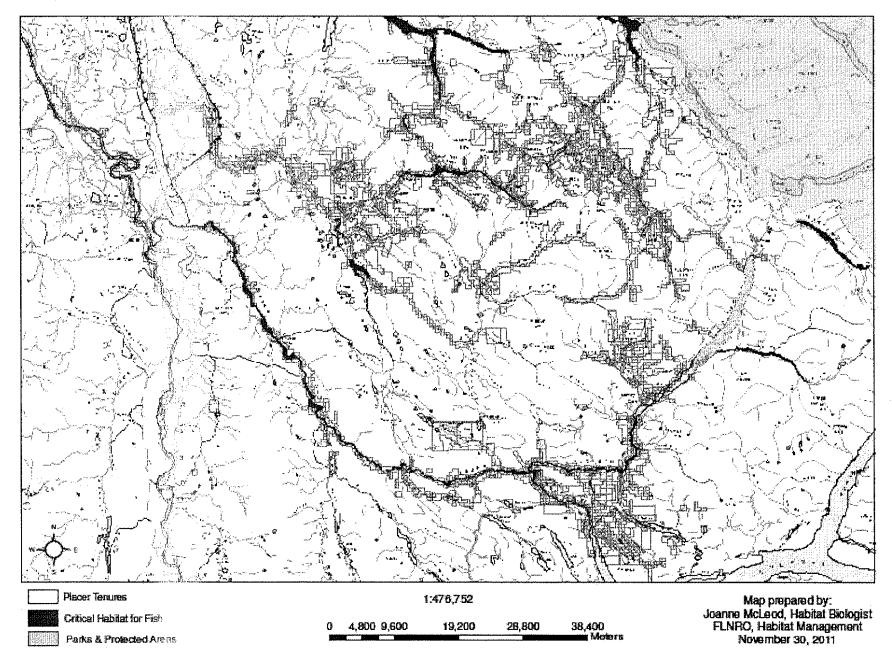
Map 1 - Provincial Distribution of Placer Tenures



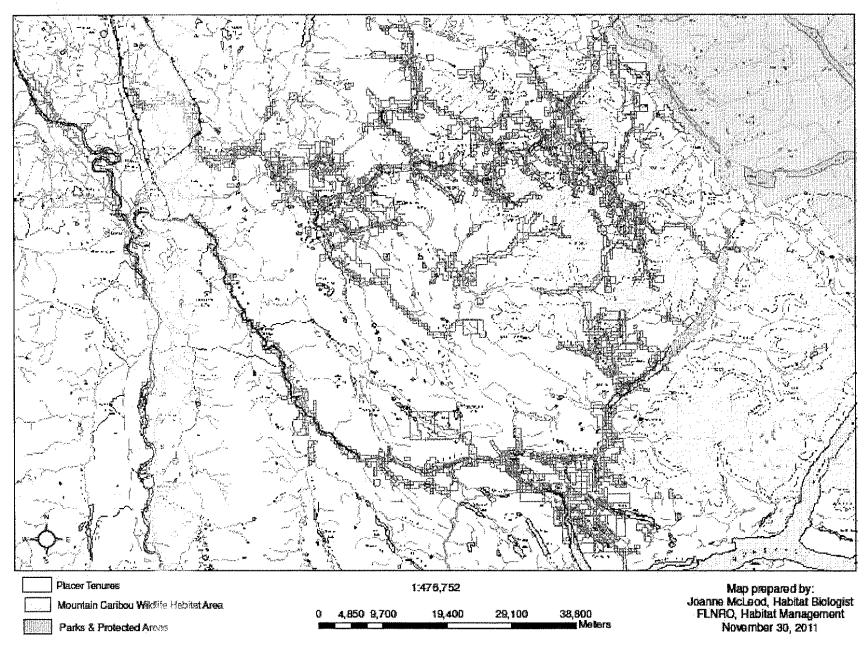
Map 2 - Placer Tenures within the Cariboo Region



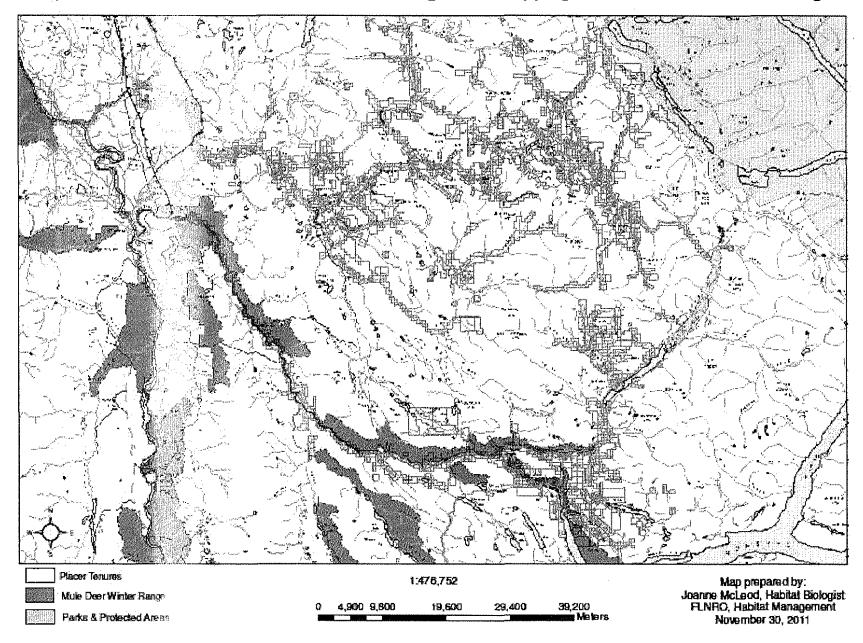
Map 3 - Placer Tenures within the Cariboo Region overlapping with Critical Fish Habitat



Map 4 - Placer Tenures within the Cariboo Region overlapping with Mountain Caribou WHA



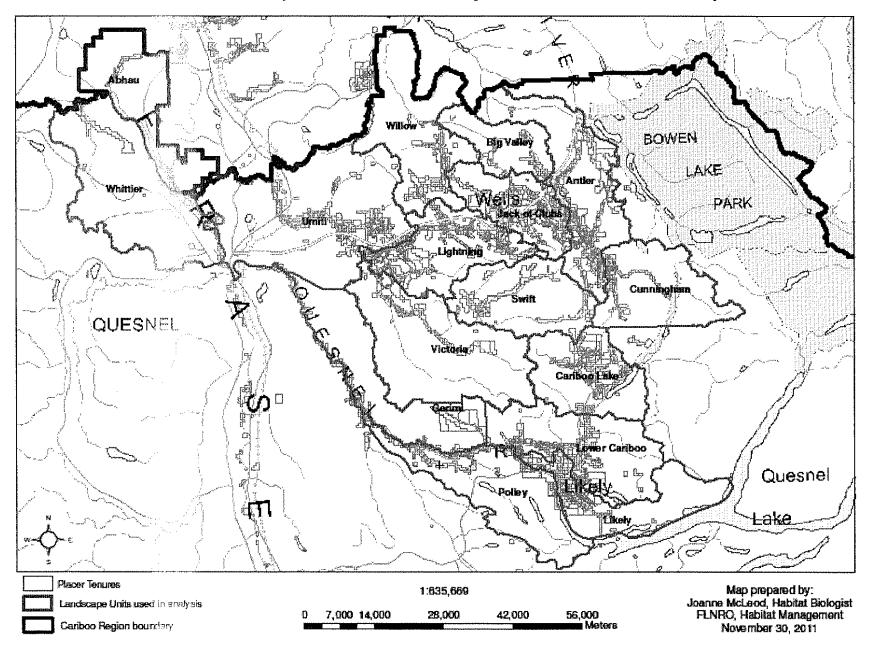
Map 5 - Placer Tenures within the Cariboo Region overlapping with Mule Deer Winter Range



Map prepared by: Joarne McLeod, Habital Biologist FLNRO, Habitat Management November 30, 2011 Map 6 - Placer Tenures within the Cariboo Region overlapping with OGMA's 38,800 Melara 29,100 19,400 1.476,752 4,850 8,700 Permanent Old Growth Management Areas Parks & Protected Areas Placer Tenures

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Map 7 - Landscape Units Used in Analysis of Placer Claim Overlaps



Appendix 2. Letter to MEMPR

File: 58000-30/Mines

May 26, 2010

Regional Director Ministry of Energy, Mines and Petroleum Resources 162 Oriole Road Kamloops BC V2C 4N7

## Dear Joe Seguin:

As a result of decreased staffing capacity within the Cariboo Region Ecosystems Section, in conjunction with the increase in placer mine referrals that are being received at our office, we will no longer be able to review and respond to all placer NOW referrals. We are expecting that MEMPR will continue to refer placer NOWs to our office for information purposes. It is our intention to allocate available resources this field season to monitoring and reporting out on placer activities within the region.

In order to reduce impacts to high value habitats that we consider to be at greatest risk from placer operations it is our expectation that the following minimum standards be followed:

## Ungulate Winter Ranges and Wildlife Habitat Areas

Placer tenure operations located within Wildlife Habitat Areas (including Caribou WHAs) or Ungulate Winter Ranges should conduct activities consistent with the General Wildlife Measures designated by GAR Order under FRPA. Where activities are proposed in an UWR or WHA that are not consistent with the GWMs, placer tenure holders are required to apply for an exemption from the Ministry of Environment, and should provide such an exemption to Ministry of Mines prior to issuance of a work permit.

## Riparian, Old Growth, and Fish Habitat Protection

All placer mine activities must comply with the *Federal Fisheries Act* and the *Water Act*. In stream works and works less than 10 m from the high water mark of any watercourse (including seasonal streams, wetlands, lakes and rivers) should not be permitted. For water bodies which

provide fish habitat, greater setback distances may be required in order to ensure compliance with the *Fisheries Act*.

Camps, road access, and settling ponds should be developed at least 30 m from the high water mark of watercourses, to minimize long-term disturbance and impacts within riparian areas.

Areas designated as Critical Fish Habitat under the Cariboo-Chilcotin Land Use Plan have been identified in consultation with Ministry of Environment and Fisheries and Oceans Canada, as requiring additional riparian setbacks to adequately protect valuable fish habitat. This should be reflected in the placer permit conditions for operations in these areas. At a minimum, 30 m setbacks from the high water mark should be required in these areas.

Timber harvesting should be avoided in areas identified in the CCLUP as Critical Fish Habitat or Old Growth Management Areas. These digitally mapped layers are available through the Land and Resource Data Warehouse.

Mining activities must not result in sediment delivery into fish bearing waters, or harmful alteration, destruction, or disruption to fish habitat. This includes sediment delivery resulting directly from mining activities, or indirectly such as from runoff erosion on disturbed areas or roads.

Settling ponds must not be allowed to connect or discharge into natural waterbodies at any time, as this may result in fish migration into settling ponds. Where there is any indication that settling ponds have been breached or that fish may be present in settling ponds, an assessment and fish salvage conducted by appropriately qualified environmental professionals should be required prior to allowing further works.

In the absence of complete fish inventory data, streams should be considered fish bearing unless proven otherwise by an accepted methodology conducted by appropriately qualified professionals.

Stream crossings utilized for access to placer operations must be constructed and maintained consistent with the *Federal Fisheries Act*, the *Water Act*, and *FRPA*. The Forest Practices Code *Fish Stream Crossing Guidebook* 

(http://www.for.gov.bc.ca/tasb/legsregs/fpc/FPCGUIDE/FishStreamCrossing/FSCGdBk.pdf) must be utilized for best management practices regarding construction of stream crossings. Stream crossing structures must provide for fish passage during all flow conditions. In general, only open bottomed structures should be utilized for crossing fish streams. Where stream crossings are required, a Notification for Changes In or About a Stream application must be submitted to MOE (available at

http://www.env.gov.bc.ca/wsd/water\_rights/licence\_application/section9/index.html).

Given the vicinity of many placer tenures to fish bearing lakes and streams, bald eagle and osprey nests may be present. Bald eagle, osprey nests and any occupied bird nest are protected under the BC *Wildlife Act* and should not be removed or disrupted.

## Site Disturbance and Reclamation

Site disturbance should be limited to the minimum area required to carry out placer activities and topsoil and organic matter should be stockpiled for reclamation. Reclamation activities should be carried out promptly and effectively utilizing conserved topsoil to establish site stability, minimize surface erosion, and prevent sediment delivery.

Reclamation activities should include recontouring of disturbed areas similar to pre-disturbance shapes with re-establishment of natural gullies and swales so that surface drainage patterns are re-established. Compacted surfaces should be ripped to allow normal water infiltration and growth of vegetation.

Once the disturbed sites have been regraded, soil materials salvaged prior to the construction of the site should be replaced. Applied soils should:

- be rough and loose with many microsites (small depressions) for seeds to lodge in and germinate;
- be keyed into the materials under the soils so that they do not slide or slump off;
- incorporate roots, stumps and other woody debris to reduce erosion and create greater biological diversity; and
- be revegetated promptly.

Revegetation should include grass seeding with a non-sod forming seed mix to establish a quick ground cover, and prevent erosion and weed invasion. In addition, native trees and shrubs should be planted to establish a suitable, self-sustaining vegetation cover such as existed prior to disturbance.

## General

For general guidance and best management practices regarding mining activities we recommend that placer operators refer to the *Handbook for Mineral and Coal Exploration in British Columbia*.

http://www.em.gov.bc.ca/Subwebs/mining/Exploration/MX Handbook April 12 06%20ver.pdf

Yours truly,

John Youds, section head Ecosystems Branch Cariboo Region

Cc: Rodger Stewart, Regional Manager, Cariboo, Thompson, Okanagan Bruce Hupman, Ministry of Energy, Mines and Petroleum, Kamloops Region Byron Nutton, Fisheries and Oceans, Prince George **Appendix 3. Field Inspection Form** 

Inspection Date: Inspected by:	Inspection #:
Placer Claim or lease #: Road Location: Tenure holder:	UTM: 10 U Present at inspection: Yes No
Identified Values Watercourses in vicinity: Fish: Designated Critical fish habitat?: Yes No	
Wildlife Habitat Area: Yes No	
Ungulate Winter Range: Yes No	
OGMA: Yes No	
Inspection Findings NOW is accurate: Yes No	
What is differing from NOW:	
• Area of disturbance:	
Reclamation:	
Timber harvesting: Yes No	
Distance of works from watercourses:	
Fish screens?:	
Issues identified:	
MEMPR notified:	

Appendix 4. Fisheries and Oceans 2001 Inspection

Fisheries and Oceans

Pêches et Océans

Pacific Region

Habitat and Enhancement Branch Fisheries and Oceans Canada 310A -North Broadway Williams Lake, B.C V2G 2Y7



August 14, 2002

Mr. Ken MacDonald Inspector of Mines Ministry of Energy and Mines Mines Branch 3990 22<sup>nd</sup> Ave Prince George, B.C. V2N 3A1

Dear Mr. MacDonald:

Dear Mir. MacDonald.

Subject: Regulatory Action Update Request - Placer Mining Operations in the Cariboo Region

As a follow-up to the joint agency Placer Inspection which occurred in the spring and summer of 2001 Ministry of Energy and Mines provided our office with copies of "Report of Inspector of Mines" inspection forms. Each Mines Inspection Report requires that the site's owner respond in writing how they will address the issues of concern as identified by the Mines Inspector. Of the 9 inspection reports received, the Department of Fisheries and Oceans Canada (DFO) has specific fish and fish habitat concerns (specifically Fisheries Act sections 35(1), harmful alteration, disruption, destruction and 36(3), deposit of a deleterious deposit) for the 5 inspected sites listed below. We request that a written follow-up report be provided which details how each concern related to the protection of fish and fish habitat was/is being adequately addressed.

File No: 8450-6

Name of Mine	Owner or	Manager	Locality	Inspection
Tenure #	Operator			Number/Date
S22	0.000		Quesnel River	#1 June 18, 01
339642 (BV#1)		<b>新女员</b> 。	Cariboo River	<b>N</b> A June 20, 01
(restaked as		<b>《食物》。</b>	Cariboo River	#8 June 20, 01
S22			Morehead Creek	#4 June 18, 01
S22			Luce Creek	#5 June 19, 01

In addition, DFO continues to have concerns (based on the 2001 field monitoring inspections) associated with impacts to fish and fish habitat on the additional sites listed below (some of which were previously identified to Ministry of Energy and Mines in the winter of 2000 via a DFO report titled "Inventory 2000 of Placer Site Concerns In the Williams Lake DFO Area"). Written comments with respect to how the Ministry of Energy and Mines will be addressing DFO concerns (specifically Sections 35(1) and 36(3) of the Fisheries Act) should be provided for the sites identified in the attached table (Appendix 1). Any updates you can make to the tenure number and owner/operator information would be appreciated.

We look forward to being involved in the continued evaluation of proposed works and future remedial action items as required. If you wish to discuss proposed mitigation options, or you have any other questions, please contact the undersigned at telephone # 250-305-4018.

Sincerely yours;

Guy Scharf Fisheries Technologist Fisheries and Oceans Canada, Williams Lake

Cc: Jim Michie, Conservation and Protection DFO Williams Lake
Don Lawrence, Fisheries Technologist DFO Williams Lake
Rob Dolighan, Ministry of Water, Land and Air Protection Williams Lake (via email)
Bill Klopp, Land & Water B.C. Inc Williams Lake (via email)
Andrew Anaka, Ministry of Water, Land and Air Protection Conservation Services
Williams Lake (via email)

# Appendix 1: (from Fisheries and Oceans Canada 2002 letter)

Placer Mining Sites Requiring Remedial Action to Comply

With Habitat Protection Sections of the Federal Fisheries Act

Name of Mine,	Watershed	Locality	UTM's	DFO Concerns
Tenure #,			:	(based on 2001 field inspections)
Owner/Operator				
Several (Historic Hydraulic Activity)	Quesnel River	Bullion Pit, tributary to Quesnel River	10 592000E 5831500N	<ul> <li>Deposition of sediment into fish habitat from eroding upslope areas and ineffective drainage on access road</li> <li>In-stream settling ponds</li> <li>Access road/mining activity within 10m riparian reserve zone</li> <li>Evidence of historic hydraulic placer mining</li> <li>Appears to be an in-active site at time of inspection</li> </ul>
S22	Quesnel River	Quesnel River, downstream of hatchery property south side	10 594000E 5831000N	<ul> <li>Removal of riparian vegetation</li> <li>Access road within 10m riparian reserve zone</li> <li>Construction of a cabin within 10 m of high water mark</li> <li>Improper fuel containment</li> </ul>
Site #11 for 2001 Joint Agency Inspection	Quesnel River	Quesnel River, downstream of hatchery property north side	594188E 5830969N	<ul> <li>Large disturbance next to Quesnel River</li> <li>Mining related works with 10m riparian reserve</li> <li>Appears to be an in-active site at time of inspection</li> </ul>
\$22	Cariboo River	Immediately adjacent to Cariboo River	10 595736E 5835333N	<ul> <li>Workings in the Cariboo River flood plain</li> <li>Improper fuel containment</li> <li>Leaking settling ponds</li> <li>Workings within the 10m riparian reserve</li> </ul>



Possibly  (aka: Red Gate Site)  (Historic Hydraulic Activity)	Cariboo River	Immediately adjacent to Cariboo River	10 600636 5835004	Deposition of sediment into fish habitat from upslope disturbances In-stream settling ponds Poorly maintained settling ponds with extreme risk of failure into fish habitat Access road/mining activity within 10m riparian reserve zone Appears to be an in-active site at time of inspection Works within 10m riparian reserve
S22  S22  (historic hydraulic activity)	Cariboo River	Immediately adjacent to Cariboo River	10 602124E 5835616N	 Abandoned settling ponds (one is directly above Cariboo River), suspect <a href="https://example.com/high-risk">high</a> risk of failure into river Stream has been diverted into breached abandoned settling pond causing erosion of materials into lower settling pond above the river increasing risk Workings within the 10m riparian reserve Appears to be an in-active site at time of inspection
Site #9 for 2001 Joint	Cariboo River	Unnamed tributary to Cariboo River	10 599042E 5835366N	 Large settling ponds with flowing water and beaver activity, beaver/activity should be removed to ensure pond stability Appears to be an in-active site at time of inspection

Agency Tour				., <b>1</b> .2 °
Site #10 for 2001 Joint Agency Tour	Cariboo River	Unnamed tributary to Cariboo River	10 600054E 5835800N	<ul> <li>Requires follow-up inspection to ensure identified concerns are identified below have been adequately addressed prior to works beginning again</li> <li>Deposition of sediment into fish habitat from upslope disturbances</li> <li>In-stream settling ponds</li> <li>Works within 10m riparian reserve</li> </ul>
S22	Cariboo River	Frank Creek, Tributary to Cariboo Lake	10 610500E 584600N	<ul> <li>Possible deposition of sediment into fish habitat from upslope disturbances</li> <li>Removal of riparian vegetation</li> </ul>
(Historic Hydraulic Activity)	Cariboo River	Pine Creek, Tributary to Cariboo Lake	10 612341E 5851338N	<ul> <li>Deposition of sediment into fish habitat from upslope disturbances</li> <li>Removal of riparian vegetation</li> <li>Mining activity within 10m riparian reserve zone</li> <li>Evidence of historic hydraulic activity</li> <li>Appears to be an in-active site at time of inspection</li> </ul>
(Historic Hydraulic Activity)	Cariboo River	Keithley Creek, Tributary to Cariboo Lake Kitchener Pit	10 606300E 5847000N	disturbances - Poorly maintained settling pond(s) with risk of failure into fish
S22	Cariboo	Keithley	10	- Deposition of sediment into fish habitat from upslope disturbances

(Historic Hydraulic Activity)	River	Creek, Tributary to Cariboo Lake Onward Pit	605300E 5848300N	<ul> <li>Mined stream flowing through centre of site</li> <li>Removal of riparian vegetation</li> <li>Access road/mining activity within 10m riparian reserve zone</li> <li>In-active site at time of inspection</li> <li>Works within 10m riparian reserve</li> </ul>
(Historic Hydraulic Activity)	Cariboo River	Keithley Creek, Four Mile Creek, Cariboo Lake	10 605375E 5848300N	<ul> <li>Deposition of sediment into fish habitat from upslope disturbances</li> <li>Poorly maintained settling pond(s) with risk of failure into fish habitat</li> <li>Removal of riparian vegetation</li> <li>In-stream settling ponds</li> <li>Access road/mining activity within 10m riparian reserve zone</li> <li>In-active site at time of inspection</li> </ul>
S22	Cariboo River	Keithley Creek, Weaver Creek, Cariboo Lake	10 604038E 5849859N	<ul> <li>Deposition of sediment into fish habitat from upslope disturbances</li> <li>Poorly maintained settling pond(s) with risk of failure into fish habitat</li> <li>Access road/mining activity within 10m riparian reserve zone</li> <li>Removal of riparian vegetation</li> <li>In-stream settling ponds</li> </ul>
262768	Cariboo River	Keithley Creek, Weaver Creek, Cariboo Lake immediately upstream of 361177	Directly upstream of site	<ul> <li>Possible deposition of sediment into fish habitat from upslope disturbances</li> <li>Possible settling pond(s) with risk of failure into fish habitat</li> <li>Removal of riparian vegetation</li> <li>Possible In-stream settling ponds</li> <li>In-active site</li> <li>Works within 10m riparian reserve</li> </ul>
365488	Cariboo	Keithley	10	- Deposition of sediment into fish habitat from upslope disturbances

337015 337016	River	Creek, Cariboo Lake	603094E 5851490N	<ul> <li>Settling pond overflow pipe below 0.5m freeboard</li> <li>Removal of riparian vegetation</li> <li>Access road/mining activity within 10m riparian reserve zone</li> </ul>
S22	Quesnel River	Upslope of Quesnel River	10 573400E 5835140N	<ul> <li>&lt;0.5m freeboard on settling pond(s)</li> <li>Very large upslope disturbance, monitor for associated impaction</li> <li>Inspect river intake for compliance</li> <li>Large and extensive equipment remaining on site</li> <li>In-active site at time of inspection</li> </ul>
S22	Quesnel River	Upslope of Quesnel River Jack Pine Creek	10 580421E 5834583N	<ul> <li>Access road within 10m of Quesnel River</li> <li>Settling pond collecting ground water that flows on surface</li> <li>Improper fuel storage</li> <li>Appears to be an in-active site at time of inspection</li> </ul>
Lease #'s 1489 + 8272 (taken from a posted sign)	Quesnel River	Upslope of Quesnel River	10 586063E 5835070N	<ul> <li>Active slide in mined area eroding sediments into fish habitat</li> <li>Access road contributing to slide area problems</li> <li>In-active site at time of inspection</li> </ul>
S22	Cariboo River	Black Bear Creek	10 605207E 5832626N	<ul> <li>Possible deposition of sediment into fish habitat from upslope disturbances</li> <li>Access road/mining activity within 10m riparian reserve zone</li> <li>Fording of stream</li> </ul>
\$22	Cariboo River	Cariboo River Mainstem	10 589338E 5835822N	<ul> <li>Unauthorized stream diversion works around active site</li> <li>Historic settling pond in stream, barrier to fish passage</li> <li>Improper fuel storage (tank on boat in Cariboo River)</li> </ul>

## Arcand, Michelle X FLNR:EX

From:

McLeod, Joanne FLNR:EX

Sent:

Wednesday, December 7, 2011 11:54 AM

To: Subject: Arcand, Michelle X FLNR:EX

RE: Quick Analysis for placer report

Take a good look at the maps...I tried adding the landscape units, but they really clutter up the OGMA, CFH and WHA maps. Maybe I'll build one to see what you think...check it out.



11 Placer Audit OGMAv2.pdf

I can revise the legend, but I think it is too cluttered.

From: Arcand, Michelle X FLNR:EX

Sent: Wednesday, December 7, 2011 11:38 AM

To: McLeod, Joanne FLNR:EX

Subject: RE: Quick Analysis for placer report

Joanne did we also want to know the total number of hectares encompassed by these 16 landscape units?

Michelle Arcand 250-991-7252

From: McLeod, Joanne FLNR:EX

Sent: Wednesday, December 7, 2011 11:32 AM

To: Bowman, Jennifer N FLNR:EX; Weetman, Jasmine FLNR:EX

Cc: Arcand, Michelle X FLNR:EX; Youds, John A FLNR:EX

Subject: Quick Analysis for placer report

Hi Jen! As we discussed over the phone, I am hoping Jasmine can run an analysis of the overlap between placer claims and mule deer winter range, critical fish habitat, mountain caribou wildlife habitat areas and old growth management areas, in the following Landscape Units: Abhau, Antler, Big Valley, Cariboo Lake, Cunningham, Gerimi, Jack of Clubs, Lightning, Likely, Lower Cariboo, Polley, Swift, Umiti, Victoria, Whittier and Willow.

We are looking for the total hectares of each constraint (MDWR, WHA, OGMA, CFH) within these landscape units, the ha of placer claims (not mineral, just placer) that lie within each constraint, and what percentage that represents. As an example, there may be 275 hectares of mule deer winter range within the 16 landscape units, and within that 275 hectares, there are 60 hectares of placer claims within them, for a total overlap of 21.8%. I hope this makes sense!

We would also like to have the total hectares of the 16 Landscape Units.

I am attaching the maps of each constraint that will also be added to the report, to give a visual representation of what we are trying to assess. Call if you have any questions, Jasmine!

<< File: 11 Placer Audit CFH.pdf >> << File: 11 Placer Audit MDWR.pdf >> << File: 11 Placer Audit OGMA.pdf >> << File: 11 Placer Audit WHA.pdf >> << File: 11 Placer Audit LandsUnits.pdf >>

## Thanks, Jen and Jasmine!

# Joanne McLeod

Habitat Biologist
Fish, Wildlife and Habitat Management
Ministry of Forests, Lands and Natural Resources Operations
400-640 Borland Street
Williams Lake, BC V2G 4T1
Ph: (250) 398-4256

Fx: (250) 398-4214

Pages 55 through 153 redacted for the following reasons:

Not responsive

## McLeod, Joanne FLNR:EX

From:

Arcand, Michelle X FLNR:EX

Sent:

Tuesday, December 6, 2011 4:13 PM

To:

McLeod, Joanne FLNR:EX Youds, John A FLNR:EX

Cc: Subject:

Placer report all yours Jo - Thanks!

Attachments:

Dec 6th Working Placer Report with Objectives.docx

Here is the document with edits from you and John incorporated – thanks to you both for your review (again...).

Joanne as discussed outstanding items have comments attached in the document and include:

- 1. Decide on appropriate date for document title page
- 2. Review of the citations and references which I've added
- 3. Maps 4-6 of placer overlap with OGMAs, MDWR, and Mtn Caribou WHA's (we have a map 3 overlap with critical fish habitat already)
- 4. Citation change possibly for the John Youds personal communication page 19
- 5. Addition possibly of wording around wind/evaporation page 17
- 6. Results section pages 11, 12, 13: details of % and or # hectares of overlap between placer and UWR, OGMA, Critical fish, WHAs
- 7. Review Table 1 page 14
- 8. Check formatting stuff for page breaks, page numbers, headings etc I've tried to do this but with adjustments may need to be done one last time...

Thanks!

@ Michelle

Pages 155 through 199 redacted for the following reasons:

Not responsive

# McLeod, Joanne FLNR:EX

From:

Arcand, Michelle X FLNR:EX

Sent:

Thursday, December 1, 2011 2:38 PM

To: Cc: McLeod, Joanne FLNR:EX Youds, John A FLNR:EX

Subject:

youds, John A FLNR:EX placer report updated edits

Attachments:

Dec 1st Working Placer Report with Objectives.docx

Got through the Exec summary and conclusion/recommendation on this so thought I would send updated version for your review Jo.

As I said yesterday I have lost perspective on this so please be callous in your review - I just want to get it done right-whatever it takes.

Michelle

Pages 201 through 308 redacted for the following reasons:

Duplicates Not responsive Not responsive / Duplicates

### McLeod, Joanne FLNR:EX

From:

Stewart, Rodger W FLNR:EX

Sent:

Wednesday, May 25, 2011 8:13 AM

To:

Arcand, Michelle X FLNR: EX; Youds, John A FLNR: EX

Cc:

McLeod, Joanne FLNR:EX

Subject:

RE: Placer inspection report follow-up and feedback?

Priority is to finalise the report. In this we need to know if there is any input from RMT. AT this point I am not aware of anything material. I will check. I do have to read through the draft myself, but have yet to have clear time to do so.

Gerry has raised the issues with regional MEM, and is seeking further specific initiative to encourage improved outcomes, including potential for a limited form of inspector status for Resource Management staff to inspect outcomes for environmental values.

Rodger Stewart
Director, Resource Management
Ministry of Forests, Lands and Natural Resource Operations
Cariboo Region
400 - 640 Borland Street
Williams Lake, BC
V2G 4T1
cell (250) 305 8536, desk (250) 398 4549
fax (250) 398 4214

**From:** Arcand, Michelle X FLNR:EX **Sent:** Tuesday, May 24, 2011 4:01 PM

To: Youds, John A FLNR:EX; Stewart, Rodger W FLNR:EX

Cc: McLeod, Joanne FLNR:EX

Subject: Placer inspection report follow-up and feedback?

Hi,

Neither Joanne or I have heard anything back from the RMT committee in the way of comments or next steps with regard to the placer mining inspection report/presentation.

Our calendars are quickly filling (Joanne is pretty much booked up until June 17<sup>th</sup>), so if there are follow-up actions suggested for us it would be good to get a heads up with sufficient lead time for us to prepare and schedule. Please let us know if there has been any more discussion on this.

Thanks,

Michelle

Pages 310 through 354 redacted for the following reasons:

Not responsive

### McLeod, Joanne FLNR:EX

From:

McLeod, Joanne ENV:EX

Sent:

Friday, April 1, 2011 3:06 PM Arcand, Michelle X ENV:EX

Subject:

**RE: Placer Miner Presentation** 

I'm just preparing the e-mail now...the RMT date is May 11 and it doesn't look like anything else is on the agenda at this point

From: Arcand, Michelle X ENV:EX Sent: Friday, April 1, 2011 3:01 PM

To: McLeod, Joanne ENV:EX; Youds, John A ENV:EX

Subject: RE: Placer Miner Presentation

Not a bad idea, do we have a date for that? Is it second Wednesday in May?

*Michelle Arcand* **250-991-**7252

From: McLeod, Joanne ENV:EX Sent: Friday, April 1, 2011 1:31 PM

To: Youds, John A ENV:EX; Arcand, Michelle X ENV:EX

Subject: RE: Placer Miner Presentation

I'm thinking we should give mines staff a heads up that we intend to review the results of our audit at the next RMT meeting, or they may feel blindsided.

From: Youds, John A ENV:EX Sent: Friday, April 1, 2011 1:25 PM

To: McLeod, Joanne ENV:EX; Arcand, Michelle X ENV:EX

Subject: FW: Placer Miner Presentation

FYI

From: Hupman, C Bruce EMPR:EX Sent: Friday, April 1, 2011 1:16 PM

To: Youds. John A ENV:EX

Subject: Re: Placer Miner Presentation

#### Thank john

I am in training today and will try to call you Monday. I know we can't speak to connecting ecosystems across the landscape but wanted to speak to timing window (land or water) critical plant species, nesting set backs your input!!!

From: Youds, John A ENV:EX

Sent: Friday, April 01, 2011 12:00 PM

To: Hupman, C Bruce EMPR:EX; Stewart, Rodger W ENV:EX

Cc: Dodge, Steve J FOR:EX; 'Shane.Smith@dfo-mpo.gc.ca' < Shane.Smith@dfo-mpo.gc.ca>; 'chris winther'

s.22

Subject: RE: Placer Miner Presentation

Hi Bruce, The idea of outreach with placer miners is good. My group could provide information on environmental issues and guidance from the habitat management perspective. Due to resourcing priorities, I don't think that we would participate directly in the presentation. Let me know what your specific timelines are for getting information. Thanks.

From: Hupman, C Bruce EMPR:EX Sent: Thursday, March 31, 2011 1:34 PM

To: Stewart, Rodger W ENV:EX

Cc: Youds, John A ENV:EX; Dodge, Steve J FOR:EX; 'Shane.Smith@dfo-mpo.gc.ca'; 'chris winther'

Subject: RE: Placer Miner Presentation

### Thanks Rodger,

No problem, I "believe" there could be stewardship, protection and??? input to be covered in the hour. I know that's a lot of stuff to review but we are looking to inform the miner of the potential or pending issues and why certain conditions are raised. With a multi-year application we may only have to review a Notice of Work once every 3 to 4 years, thus reducing the demand on staff time for referral work. Right now it looks like:

Hour 1 -multi-year overview, process and security

Hour 2 -environmental

Hour 3 -timber

Hour 4 -FN consultation, chance find, AOA's

Hour 5 – tie in of government priorities (service Plan etc) rap up and questions

(DFO no response yet, fisheries, navigable waters ??)

Delivery method I am recommending is a power point presentation with hand-out.

It looks like a very full day when you consider coffee and information overload. Any thoughts?

#### Bruce

#### **BE ADVISED**

We will be moving in the near future Our new address will be 441 Columbia Street New phone Numbers have yet to be assigned

From: Stewart, Rodger W ENV:EX

Sent: Thursday, March 31, 2011 12:18 PM

**To:** Hupman, C Bruce EMPR:EX **Cc:** Youds, John A ENV:EX

**Subject:** Re: Placer Miner Presentation

Yeah Bruce. We would be "in" on this. Will need to talk to John Youds to I'd who would be preparing and delivering our part.

#### Rodger

**From**: Hupman, C Bruce EMPR:EX

**Sent**: Thursday, March 31, 2011 12:02 PM

To: Stewart, Rodger W ENV:EX; Dodge, Steve J FOR:EX; 'Shane.Smith@dfo-mpo.gc.ca' < Shane.Smith@dfo-mpo.gc.ca>

Cc: Seguin, Joe EMPR:EX; 'chris winther' s.22

**Subject**: Placer Miner Presentation

#### Hi Guys

AS part of our extension program we are looking to develop a presentation to the Caribou placer miners concerning area based, multi-year approvals. As part of this presentation I am wondering if your organization might want to contribute. The purpose is to educate the miner on the core values we are managing. For example with MoF, a

occupant license to cut (OLTC) may be required, so what becomes of the timber, how long is the OLTC valid for and others, perhaps MoE could speak to the winter range impacts or/and preferred plant species for reclamation, DFO on riparian setbacks, and so on. I don't want to put words in your mouth................. If you do not have the resources could you provide some info to me so that I can include it in the presentation.

As the intent is to be done in about 6 hours, each group would have about 1 hour. Timing for this will be early May Target group:

Small scale placer miner

Location:

????

Any interest???

Bruce

**BE ADVISED** 

We will be moving in the near future
Our new address will be 441 Columbia Street
New phone Numbers have yet to be assigned

# Stewart, Rodger W FLNR:EX

From:

Stewart, Rodger W ENV:EX Saturday, April 2, 2011 4:17 PM

Sent:

Saturday, April 2, 2011 4.17 PM

To: Cc: Youds, John A ENV:EX; Hupman, C Bruce EMPR:EX Dodge, Steve J FOR:EX; 'Shane.Smith@dfo-mpo.gc.ca'; 'chris winther'

Subject:

RE: Placer Miner Presentation

It may be that this is sufficiently important to justify me directly supporting the presentation on the resource management topics, given John's team can draft up the presentation, but is otherwise committed. We shall be discussing......

Rodger Stewart
Director, Resource Management
Ministry of Forests, Lands and Natural Resource Operations
Cariboo Region
400 - 640 Borland Street
Williams Lake, BC
V2G 4T1
cell (250) 305 8536, desk (250) 398 4549
fax (250) 398 4214

From: Youds, John A ENV:EX Sent: Friday, April 1, 2011 12:01 PM

To: Hupman, C Bruce EMPR:EX; Stewart, Rodger W ENV:EX

Cc: Dodge, Steve J FOR:EX; 'Shane.Smith@dfo-mpo.gc.ca'; 'chris winther'

Subject: RE: Placer Miner Presentation

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From: Hupman, C Bruce EMPR:EX Sent: Thursday, March 31, 2011 1:34 PM

**To:** Stewart, Rodger W ENV:EX

Cc: Youds, John A ENV:EX; Dodge, Steve J FOR:EX; 'Shane.Smith@dfo-mpo.gc.ca'; 'chris winther'

Subject: RE: Placer Miner Presentation

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Hour 2 -environmental

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New phone Numbers have yet to be assigned

From: Stewart, Rodger W ENV:EX

**Sent:** Thursday, March 31, 2011 12:18 PM

**To:** Hupman, C Bruce EMPR:EX **Cc:** Youds, John A ENV:EX

Subject: Re: Placer Miner Presentation

Yeah Bruce. We would be "in" on this. Will need to talk to John Youds to I'd who would be preparing and delivering our part.

Rodger

From: Hupman, C Bruce EMPR:EX

**Sent**: Thursday, March 31, 2011 12:02 PM

**To:** Stewart, Rodger W ENV:EX; Dodge, Steve J FOR:EX; 'Shane.Smith@dfo-mpo.gc.ca' < Shane.Smith@dfo-

mpo.gc.ca>

Cc: Seguin, Joe EMPR:EX; 'chris winther'

Subject: Placer Miner Presentation

### Hi Guys

AS part of our extension program we are looking to develop a presentation to the Caribou placer miners concerning area based, multi-year approvals. As part of this presentation I am wondering if your organization might want to contribute. The purpose is to educate the miner on the core values we are managing. For example with MoF, a occupant license to cut (OLTC)may be required, so what becomes of the timber, how long is the OLTC valid for and others, perhaps MoE could speak to the winter range impacts or/and preferred plant species for reclamation, DFO on riparian setbacks, and so on. I don't want to put words in your mouth.................. If you do not have the resources could you provide some info to me so that I can include it in the presentation.

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Small scale placer miner

Location:

**????** 

Any interest???

Bruce

**BE ADVISED** 

We will be moving in the near future Our new address will be 441 Columbia Street New phone Numbers have yet to be assigned Pages 360 through 392 redacted for the following reasons:

Not responsive

### McLeod, Joanne FLNR:EX

From:

McLeod, Joanne ENV:EX

Sent:

Friday, February 4, 2011 3:53 PM

To:

Arcand, Michelle X ENV:EX

Subject:

Next steps for 2010 placer audit

OK...I have to drop this for a while. I haven't touched the methodology section or written an introduction or executive summary. I've highlighted areas that need further review, especially blank sections on the table. The discussion needs input from your inspections as well as some form of wrap up. I had trouble attaching Guy's 2002 letter so I embedded it (let me know if you can't open it). Slaughtering the document is encouraged!!



Draft Placer Audit\_ver2.docx

Here is the table and maps in case you need to re-attach them. I added them by using the Paste Special function under Paste. I'll be in all next week working on referrals and goat stuff so call anytime!









Placer Audit Char11 Placer Audit P11 Placer Audit P11 Placer Audit R lacerCFH.pdf

rovincialOver... egionalOvervi...

# Joanne McLeod

Habitat Biologist Fish, Wildlife and Habitat Management Ministry of Natural Resources Operations 400-640 Borland Street Williams Lake, BC V2G 4T1

Ph: (250) 398-4256 Fx: (250) 398-4214

Pages 394 through 404 redacted for the following reasons:

Not responsive

## McLeod, Joanne FLNR:EX

From:

Arcand, Michelle X ENV:EX

Sent:

Monday, January 17, 2011 9:44 AM

To:

McLeod, Joanne ENV:EX

Subject:

Finally Placer spreadsheet FW: As discussed

Attachments:

Draft Placer Audit.docx

Hi Jo, Finally got all the NOWs and maps pulled again to fill in?s for the audit. Sorry it took so long. Let me know when you want to discuss again.

Michelle Arcand 250-991-7252

From: McLeod, Joanne ENV:EX

Sent: Wednesday, December 15, 2010 3:22 PM

To: Arcand, Michelle X ENV:EX

Subject: As discussed

Pages 406 through 416 redacted for the following reasons:

Not responsive

Pages 1 through 54 redacted for the following reasons:

Not responsive Not responsive

From:

Gordon, Steve M FLNR:EX.

Sent:

Monday, November 14, 2011 3:32 PM

To:

Clark, Brian J FLNR:EX; MacDougall, Gerry L FLNR:EX

Subject:

RE: sage advice requested Re: placer report - meeting invite sent for next week

I am interested in participating in these discussions but am away next week.

Steve

From: Clark, Brian J FLNR:EX

Sent: Monday, November 14, 2011 3:30 PM

**To:** MacDougall, Gerry L FLNR:EX **Cc:** Gordon, Steve M FLNR:EX

Subject: RE: sage advice requested Re: placer report - meeting invite sent for next week

Great questions Gerry. There is definitely a gap. Look forward to the discussion. I'll have Steve Gordon attend if possible as he and I are working on related issues.

**From:** MacDougall, Gerry L FLNR:EX **Sent:** Mon, November 14, 2011 10:31 AM

To: Clark, Brian J FLNR:EX

Subject: sage advice requested Re: placer report - meeting invite sent for next week

#### Hi Brian,

Would you have some time next week for me to discuss an unresolved topic we have in the Cariboo regarding a report on placer mining, that was prepared by our habitat staff here?

Originally commissioned under the mandate of MoE's stewardship role in the spring of 2010 – reviewing results with respect to standards and permit conditions, the report became available after the creation of FLNRO. Our folks have been patient – I've had numerous discussions with MEM staff but I'd like to be able to close the loop on this topic and would appreciate your thoughts.

#### For example:

- 1. Where has that MoE review role landed has it morphed into a FREP model or does it continue stand alone as it was in MoE?
- Staff did not have access to MEM's permit files and did not have MEM staff present for the site visits, which has been problematic. MEM has drawn into question the conclusiveness of the results. I'd like to ask you about a few ideas about next steps.

I've sent a separate meeting request with a time that I hope will be workable for you for next Monday. Looking forward to discussing with you further,

Thank you,

Gerry MacDougall
Ph 250-398-4355
Cell 250-267-8999

Regional Executive Director, Cariboo Region

Ministry of Forests, Lands and Natural Resource Operations

ECONOMIC PROSPERITY AND ENVIRONMENTAL SUSTAINABILITY

Pages 57 through 61 redacted for the following reasons:

Not responsive

From:

Stewart, Rodger W FLNR:EX

Sent:

Friday, September 16, 2011 10:51 AM

To:

MacDougall, Gerry L FLNR:EX

Subject:

FW: Completed Placer Mine Inspection Report

Categories:

Important

Gerry, I instructed staff to complete revisions to the inspection report, which has now been completed. As you know, Bruce Hupman was not able to keep his commitment to work with staff on this matter. Following upon your direction, I tried to engage Joe Seguin, but again to no material effect. Calls and e-mails are not returned.

So, we are at a point where we have to move on. Staff have added in text that indicates that differences of opinion may exist between MEM and FLNRO, and have added information respecting matters such as the definitions or standards we measured against – such as the definition of stream from the Water Act (which by the way, is virtually the same as that used by MEM....).

Staff are asking what the process should be to make this work available to the sector, other agencies such ad DFO, FN, and the public.

Rodger Stewart
Director, Resource Management
Ministry of Forests, Lands and Natural Resource Operations
Cariboo Region
400 - 640 Borland Street
Williams Lake, BC
V2G 4T1
cell (250) 305 8536, desk (250) 398 4549
fax (250) 398 4214

From: Arcand, Michelle X FLNR:EX

Sent: Thursday, September 15, 2011 3:20 PM

To: Stewart, Rodger W FLNR:EX

**Cc:** Youds, John A FLNR:EX; McLeod, Joanne FLNR:EX **Subject:** Completed Placer Mine Inspection Report

Completed Placer Mine Inspection Report!
When convenient we should all discuss where this goes from here...



Final Placer nspection Report..

Michelle Arcand 250-991-7252

From: Arcand, Michelle X FLNR:EX

Sent: Thursday, September 15, 2011 3:16 PM

**To:** McLeod, Joanne FLNR:EX

Subject: Thanks: RE: Final final final

Here's me smiling!

Awesome – good work Joanne – I think we've finally done it. Wouldn't say I was the principle author, more like coauthors - I know it would have been a much tougher road without our joint effort! and John's edits have been a great help.

I'll forward it on. M

From: McLeod, Joanne FLNR:EX

Sent: Thursday, September 15, 2011 2:52 PM

**To:** Arcand, Michelle X FLNR:EX **Subject:** Final final final final

I read through it one more time and put it into a final format. Your name should go first, as you have been the principle author. I checked the APA website - you've seen the e-mail I sent to John — so I left the personal communication referencing as it was. I fixed the numbering system and checked for typo's...should be good to go!

<< File: Final Placer Inspection Report.docx >>

### Joanne McLeod

Habitat Biologist
Fish, Wildlife and Habitat Management
Ministry of Forests, Lands and Natural Resources Operations
400-640 Borland Street
Williams Lake, BC V2G 4T1
Ph: (250) 398-4256

Fx: (250) 398-4214

From:

Dunleavey, Krista FLNR:EX

Sent:

Thursday, September 8, 2011 1:33 PM

To:

MacDougall, Gerry L FLNR:EX

Cc:

Dodge, Steve J FLNR:EX

Subject:

FW: placer referrrals

Hi Gerry

Steve and I had a call with Joe Seguin and Bruce Hupman yesterday to discuss the possible mines inspector opportunity.

Joe mentioned that MEMPR would like Quesnel to handle all placer NOW in the Cariboo, but we felt it was in the context of if and when we got a mines inspector authorized here. We did not make any commitments, as we are short staffed here, although we acknowledged it would make sense.

This note came as a surprise, so I called Bruce, who said that it was his understanding from a conversation you and Joe Seguin had that Quesnel would take on placer NOW processing and FN consultation for the entire Cariboo.

Bruce says this is approximately 60 NOW per year – which would double the number of current NOW processed for Quesnel. The FN consultation workload may be more than double based on the additional number of FN that would be consulted.

Thought I better check this out with you right away!

### Krista Dunleavey, RFT

Resource Manager Quesnel District Ministry of Forests, Lands and Natural Resource Operations 322 Johnston Avenue, Quesnel, B.C. V2J 3M5

Phone: (250) 992-4463 Fax: (250) 992-4403

mailto:krista.dunleavey@gov.bc.ca

From: Dodge, Steve J FLNR:EX

Sent: Thursday, September 8, 2011 12:59 PM

**To:** Dunleavey, Krista FLNR:EX **Subject:** FW: placer referrrals

I wasn't aware of this?

Steve Dodge RFT
District Manager
Quesnel District
Ministry of Forests, Lands and Natural Resource Operations

**☎**(250) 992-4465 <a> Fax (250)992-4403</a> 322 Johnston Avenue

## Quesnel BC Canada V2J 3M5

## ≪ steve.dodge@gov.bc.ca

From: Hupman, C Bruce MEM:EX

Sent: Thursday, September 8, 2011 11:37 AM

To: Charles, Tom MEM:EX; Feldinger, Grant M MEM:EX; Brunke, Ann FLNR:EX

Cc: Renfrew, Kristin FLNR:EX; Berston, Pat FLNR:EX; Dodge, Steve J FLNR:EX; Seguin, Joe MEM:EX

Subject: placer referrrals

#### Hello

It's my understanding that all placer notices of work within the Cariboo Region are to be sent to Quesnel for consultation and referral. This process is in line with the exiting MoU between MEM and FLNRO. Receiving, data input, acceptance, setting of security, drafting permit conditions and inspections remains with Inspectors.

If things change I will let you know once I know.........

From:

Witt, Andy FLNR:EX

Sent:

Wednesday, September 7, 2011 4:17 PM

To:

Stewart, Rodger W FLNR:EX; Down, Ted ENV:EX; Youds, John A FLNR:EX

Cc:

Ramsay, Mike K FLNR:EX; 'Lawrence, Don'; Diemert, Karen FLNR:EX; MacDougall, Gerry L

FLNR:EX

Subject:

RE: REQUEST: Sharing of information supporting the continued placer reserve over the

Horsefly River watershed

I will discuss with Brad Fanos.

Andy Witt
Manager, Habitat Management Section
Fish, Wildlife, and Habitat Branch
4th Floor, 2975 Jutland Road
PO Box 9338 STN PROV GOVT
Victoria, B.C.
V8W 9M1

Phone: (250) 356-2353 Fax: (250) 387-9750

e-mail: andy.witt@gov.bc.ca

From: Stewart, Rodger W FLNR:EX

Sent: Wednesday, September 7, 2011 8:45 AM

To: Down, Ted ENV:EX; Witt, Andy FLNR:EX; Youds, John A FLNR:EX

Cc: Ramsay, Mike K FLNR:EX; 'Lawrence, Don'; Diemert, Karen FLNR:EX; MacDougall, Gerry L FLNR:EX

Subject: REQUEST: Sharing of information supporting the continued placer reserve over the Horsefly River watershed

The placer mining sector is continuing its efforts to have the Ministry of Energy and Mines remove the placer no staking reserve over the Horsefly River watershed. Representatives of the placer sector have been very active in communications with provincial government ministers respecting the removal of the reserve, or at least alteration of it to allow for case by case adjudication of placer mining proposals. Comment was made about reducing the reserve to a 15 meter buffer along the length of the mainstem Horsefly River, which (curiously) is the same provision proposed by MEM in their 2010 proposal to remove the reserve.

I spent a long time on the phone yesterday afternoon with a representative of the sector who is seeking the science and technical information that government is using to inform decisions to maintain the reserve. The person I spoke to alleged that over a period of at least two years, no government representative (including ministers) has yet responded in a material way to requests to provide the science and technical information that justifies the continuance of the reserve. Claims were made that available information and science indicates that placer mining would have no impact on groundwater flows that are critical to productivity of the aquatic environment. There were other questions asked about why placer mining is allowed along other streams of the Quesnel River watershed, but not the Horsefly.

Comment was also made that every other land use is allowed to continue operating in the Horsefly River watershed, and that placer mining is being unduly blocked from reasonable mining development opportunities evident in the watershed. It would appear that the sector or its representatives are not that well informed about the unique risks and consequences posed by placer mining adjacent to a watercourse as significant as the Horsefly or its tributaries.

Colleagues, I would like to share information we have available with the sector in this region in an attempt to build clear understanding of the risks and consequences of placer mining in a watershed such as the Horsefly. I am aware that we have certain references and assessments that would be relevant. So, my request......:

• Please forward to my attention any information that might be useful in building understanding within the placer sector of the basis for government concerns respecting placer mining in a watershed of such significance.

Don Lawrence ..... we really have need for DFO representatives to take a active role in assisting provincial government staff in initiatives to inform decisions about continuing the no staking reserve. One initiative that would be of considerable value would be formal communication from Pacific Region to the Ministry of Energy and Mines (Mineral Titles Branch) making specific comment on the need to maintain the reserve, and the reasons behind such requirement. Don, can you please call me about this?

Ted and Andy, do we have an established avenue of dialogue with DFO Pacific Region that we could employ to acquire support from DFO on this matter?

Rodger Stewart
Director, Resource Management
Ministry of Forests, Lands and Natural Resource Operations
Cariboo Region
400 - 640 Borland Street
Williams Lake, BC
V2G 4T1
cell (250) 305 8536, desk (250) 398 4549
fax (250) 398 4214

From:

Manwaring, Richard G FLNR:EX

Sent:

Wednesday, September 7, 2011 11:08 AM

To:

MacDougall, Gerry L FLNR:EX

Subject:

RE: Heads up - Horsefly Placer Reserve

Sure

From: MacDougall, Gerry L FLNR:EX

Sent: Wednesday, September 7, 2011 9:59 AM

To: Manwaring, Richard G FLNR:EX

Subject: Heads up - Horsefly Placer Reserve

Hi Rick,

I expect we'll get a chance to chat about this later this week.

MEM has a reserve on placer mining over the Horsefly watershed.

Gold is at \$1,800. Might be a UBCM topic.

DFO interest - big salmon run.

The habitat and fish folks are collating information, in anticipation of a growing interest in lifting the reserve.

As much as there are lots of folks in FLNRO who are passionate about this, it is problematic for our ministry to lead the discussion on maintaining the MEM reserve.

I'd like to see someone in MoE take the lead – who can be supported by our staff.

**S**13

I've discussed with Rodger. He's supportive. Your thoughts later this week?

#### Gerry MacDougall

Ph 250-398-4355 Cell 250-267-8999

Regional Executive Director, Cariboo Region

Ministry of Forests, Lands and Natural Resource Operations

From:

Stewart, Rodger W FLNR:EX

Sent:

Tuesday, August 2, 2011 10:27 AM

To:

Youds, John A FLNR:EX

Cc:

Arcand, Michelle X FLNR:EX; McLeod, Joanne FLNR:EX; MacDougall, Gerry L FLNR:EX;

Vanderburgh, Ken FLNR:EX

Subject:

NOTE: Actions respecting the 2010 placer inspection report - inability of MEM to engage.

Thanks for this progress report John. I will discuss with Gerry and Ken, and from that we will determine a course of action for the report, to be effected this month.

Rodger Stewart
Director, Resource Management
Ministry of Natural Resource Operations
Cariboo Region
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fax (250) 398 4214

From: Youds, John A FLNR:EX

Sent: Tuesday, August 2, 2011 10:02 AM

To: Stewart, Rodger W FLNR:EX

Cc: Arcand, Michelle X FLNR:EX; McLeod, Joanne FLNR:EX

Subject: FW: Actions respecting the 2010 placer inspection report.

Rodger, As you are aware, Bruce cancelled on the planned meeting last week to review the draft placer report. As an alternative he said that he would provide something in writing by Friday, July 29, however nothing was provided on that date. Now I've checked back with Bruce this week only to find that he is away until August 8<sup>th</sup>. So, Rodger, I just wanted to make you aware that the follow-up that you described in your e-mail around review of the report prior to it being finalized is not able to occur in a timely fashion. I think that we need to make a decision on moving forward with the report. Outside parties have requested to see the report and these requests date back several months. As well, the quarterly meeting with the Northern Shuswap is next week (Aug 9<sup>th</sup>) and the issue of obtaining this report is likely to come up (note: I won't be there, as I'm off that week). Let's discuss our next steps this week, if possible.

From: Hupman, C Bruce MEM:EX Sent: Tuesday, August 2, 2011 9:49 AM

To: Youds, John A FLNR:EX

**Subject:** Out of Office: Actions respecting the 2010 placer inspection report.

I am away from the office and plan to return August 8th.

From:

Hupman, C Bruce MEM:EX

Sent: To: Monday, July 25, 2011 10:32 AM MacDougall, Gerry L FLNR:EX

Subject:

Placer Audit

#### Hi Gerry,

MoE staff and myself were scheduled to meet on July 26, to review the draft MoE Placer Audit. I am afraid that I will not be able to attend and will let them know right away. I have produced a rough draft of a response and plan to have the grammar corrected and a copy to you by the end of Wed.

Just dropping you a note Bruce Hupman

Pages 71 through 73 redacted for the following reasons:

Not responsive

From: Sent: Hupman, C Bruce MEM:EX Tuesday, May 31, 2011 8:52 AM

To: Cc: MacDougall, Gerry L FLNR:EX Feldinger, Grant M MEM:EX

Subject:

FW: Field trip?

Thanks Grant,
I'll let Gerry know.

Bruce Hupman PAg. Senior Mines Inspector 441 Columbia, Kamloops

From: Feldinger, Grant M MEM:EX Sent: Tuesday, May 31, 2011 8:35 AM

**To:** Hupman, C Bruce MEM:EX **Subject:** RE: Field trip?

I will gather maps etc today. With all the rain we've been having it will be very muddy getting into Fish Lake. Newton Mtn/Scum Lake will also be a bounce because the main access road (7000 Road) is impassable as the Little Chilcotin River is flooding and there is 4+ feet of water flowing over the road. The alternate access comes from the south and is an old wagon road with some possible wet meadow crossings. I haven't looked closely at the News access but I think it will be OK. Would you know where they are drilling on the News project?

Grant Feldinger, R.P.F.
Inspector of Mines
Ministry of Energy and Mines,
Alexis Creek Office - Phone 250 394-4727 Fax 250 394-4515
Kamloops Office - Phone 250 371-3755 Fax 250 828-4154
Blackberry 250 319-7743

From: Hupman, C Bruce MEM:EX Sent: Monday, May 30, 2011 7:42 PM To: Feldinger, Grant M MEM:EX Subject: FW: Field trip?

**From:** MacDougall, Gerry L FLNR:EX **Sent:** May 30, 2011 9:28 AM

**To:** Hupman, C Bruce MEM:EX **Subject:** RE: Field trip?

Hi Bruce.

I'm available Wednesday.

Not sure about Rodger or Ken yet.

I should know later today.

Gerry

**From:** Hupman, C Bruce MEM:EX **Sent:** Monday, May 30, 2011 9:16 AM **To:** MacDougall, Gerry L FLNR:EX

Subject: Field trip?

Hi Gerry
Are "we" headed out this week?
On the 31 where are we meeting to review the MoE report?
I am in the field today and will be checking e-mails via my BB when in coverage. thanks
Bruce

From: Sent:

To:

Hupman, C Bruce MEM:EX Monday, May 30, 2011 3:56 PM MacDougall, Gerry L FLNR:EX

Subject:

Re: Field trip?

Hi Gerry

See you tomorrow

From: MacDougall, Gerry L FLNR:EX Sent: Monday, May 30, 2011 02:02 RM

**To**: Hupman, C Bruce MEM:EX **Subject**: RE: Field trip?

Hi Bruce.

Will you be available to meet with us here at the region from 3 to 4:30 tomorrow?

Then field trip on Wednesday?

Gerry

**From:** MacDougall, Gerry L FLNR:EX **Sent:** Monday, May 30, 2011 9:22 AM

**To:** Hupman, C Bruce MEM:EX **Subject:** RE: Field trip?

Hi Bruce,

I'm available Wednesday.

Not sure about Rodger or Ken yet.

I should know later today.

Gerry

**From:** Hupman, C Bruce MEM:EX **Sent:** Monday, May 30, 2011 9:16 AM **To:** MacDougall, Gerry L FLNR:EX

Subject: Field trip?

Hi Gerry

Are "we" headed out this week?

On the 31 where are we meeting to review the MoE report?

I am in the field today and will be checking e-mails via my BB when in coverage.

thanks

Bruce

From:

Stewart, Rodger W FLNR:EX

Sent:

Monday, May 30, 2011 9:31 AM

To:

MacDougall, Gerry L FLNR:EX; Dodge, Steve J FLNR:EX; Vanderburgh, Ken FLNR:EX

Subject:

RE: NOTE: Cariboo Mining AGM

I am very concerned about dropping anyone into a session where the agenda respecting our representation has not been settled beforehand, and we have limited time to confirm key messages with our executive.

Rodger Stewart
Director, Resource Management
Ministry of Forests, Lands and Natural Resource Operations
Cariboo Region
400 - 640 Borland Street
Williams Lake, BC
V2G 4T1
cell (250) 305 8536, desk (250) 398 4549
fax (250) 398 4214

From: MacDougall, Gerry L FLNR:EX Sent: Monday, May 30, 2011 9:28 AM

To: Dodge, Steve J FLNR:EX; Vanderburgh, Ken FLNR:EX

Cc: Stewart, Rodger W FLNR:EX

Subject: RE: NOTE: Cariboo Mining AGM

Hi Steve,

I'm not sure yet whether we do want someone there.

Let's consider the value after our discussions with MEM this week.

Gerry

From: Dodge, Steve J FLNR:EX

Sent: Monday, May 30, 2011 9:13 AM

To: MacDougall, Gerry L FLNR:EX; Vanderburgh, Ken FLNR:EX

Cc: Stewart, Rodger W FLNR:EX

Subject: RE: NOTE: Cariboo Mining AGM

Unfortunately that's on the weekend. Not sure if we could talk anybody into attending office, unless it was an agenda topic with a specific time etc?

S22

from our

I will speak to Krista and Lauri as well.

Steve Dodge RFT
District Manager
Quesnel District
Ministry of Forests, Lands and Natural Resource Operations

steve.dodge@gov.bc.ca

From: MacDougall, Gerry L FLNR:EX Sent: Friday, May 27, 2011 9:12 AM

To: Vanderburgh, Ken FLNR:EX; Dodge, Steve J FLNR:EX

Cc: Stewart, Rodger W FLNR:EX

Subject: FW: NOTE: Cariboo Mining AGM

Steve, Ken,

What are your thoughts about having someone from FLNRO in attendance?

Gerry

From: Stewart, Rodger W FLNR:EX Sent: Friday, May 20, 2011 12:18 PM

To: Hoffos, Robin FLNR:EX
Cc: MacDougall, Gerry L FLNR:EX
Subject: NOTE: Cariboo Mining AGM

Thanks Robin. Gerry and I will discuss with RMT and MEM and respond to Winther.

Rodger Stewart
Director, Resource Management
Ministry of Forests, Lands and Natural Resource Operations
Cariboo Region
400 - 640 Borland Street
Williams Lake, BC
V2G 4T1
cell (250) 305 8536, desk (250) 398 4549
fax (250) 398 4214

From: Hoffos, Robin FLNR:EX

Sent: Friday, May 20, 2011 10:57 AM To: Stewart, Rodger W FLNR:EX Cc: MacDougall, Gerry L FLNR:EX Subject: Cariboo Mining AGM

Hi all. Chris Winther called yesterday hoping to get someone from FLNRO to attend the AGM of the Cariboo Miners Association June 4 at 1:00 in Quesnel (Billy Barker casino). He did not have an itinerary or special topics. He said the session would be informal, mostly driven by questions from the members. He is also requesting participation from EMPR but has not had any commitment. Chris's e-mail address is:

cariboominingassociation@hotmail.com

Phone 992 8568

I made no commitment but said I would discuss it with others and someone would get back to him.

The two leading issues I am aware of are the results of the placer audit and the moratorium on placer mining in the Horsefly drainage. Since we have not reconciled government's position on either of these at this point, it would be difficult handling questions from the mining membership.

I will take no further action on this but someone should contact Chris to let him know whether anyone will attend or not. It might be useful to set something up in future with the support of Mines around the results of the audit in the hopes that some education may improve practice in the field.

A. Robin Hoffos, R.P. Bio Section Head, Resource Management Specialists, Natural Resource Operations Suite 400-640 Borland, Williams Lake, BC V2G 4T1 phone 250 398 4744 cell 250 267 6570 fax 250 398 4214 Page 80 redacted for the following reason:

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Not responsive

From: Sent:

Hupman, C Bruce MEM:EX Friday, May 27, 2011 2:06 PM MacDougall, Gerry L FLNR:EX

To: Attachments:

MXHandbook2008-09.pdf

Part of the MoU with MoE

Bruce Hupman PAg. Senior Mines Inspector 441 Columbia, Kamloops Pages 82 through 84 redacted for the following reasons:

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S14

From:

Stewart, Rodger W FLNR:EX Tuesday, May 24, 2011 3:22 PM

Sent: To:

MacDougall, Gerry L FLNR:EX

Subject:

Placer EWN

Attachments:

EWN (2010 placer inspections).docx

Gerry, this any closer to the standard we discussed?

Rodger Stewart
Director, Resource Management
Ministry of Forests, Lands and Natural Resource Operations
Cariboo Region
400 - 640 Borland Street
Williams Lake, BC
V2G 4T1
cell (250) 305 8536, desk (250) 398 4549
fax (250) 398 4214

From:

Hupman, C Bruce MEM:EX

Sent:

Tuesday, May 17, 2011 12:13 PM MacDougall, Gerry L FLNR:EX

To: Cc:

Seguin, Joe MEM:EX

Subject:

June 1 to 3rd

Hi Gerry

I will be in your region on June 1 to 3 and would like to meet with you if possible while I am there. Joe Seguin (he is on annual leave for 1 month) has briefed me on a pending issue regarding a MoE inspection summary report and suggested I meet with you ASAP.

Are any of these dates open???

Bruce Hupman PAg. Senior Mines Inspector 441 Columbia, Kamloops Pages 87 through 298 redacted for the following reasons:

Duplicates
Duplicates: Pages released in EGM-2012-00105
Handbook for Mineral and Coal Exploration in British Columbia
is available online at www.empr.gov.bc.ca
Not responsive
Not responsive
Not responsive - date

From:

MacDougall, Gerry L FLNR:EX

Sent:

Monday, November 21, 2011 3:11 PM

To:

Clark, Brian J FLNR:EX

Subject:

RE: Placer - Barkerville area

#### Direct 250-398-4355

Standing by.....

From: Clark, Brian J FLNR:EX

Sent: Monday, November 21, 2011 3:10 PM

**To:** MacDougall, Gerry L FLNR:EX **Subject:** RE: Placer - Barkerville area

Just tried, will call again in another minute

From: MacDougall, Gerry L FLNR:EX

Sent: Monday, November 21, 2011 3:07 PM

To: Clark, Brian J FLNR:EX

Subject: RE: Placer - Barkerville area

Hi Brian, Give me a call when you can? Thanks,

#### Gerry MacDougall

Phone 250-398-4327
Direct 250-398-4355
Cell 250-267-8999
Regional Executive Director, Cariboo Region
Ministry of Forests, Lands and Natural Resource Operations

----Original Appointment----

From: McNeill, Diana A FLNR:EX On Behalf Of Clark, Brian J FLNR:EX

Sent: Tuesday, November 15, 2011 8:01 AM

To: MacDougall, Gerry L FLNR:EX

Subject: Accepted: Placer - Barkerville area

When: Monday, November 21, 2011 3:00 PM-4:00 PM (GMT-08:00) Pacific Time (US & Canada).

Where: Gerry to call Brian

Please call Brian on his cell @ 604-220-6953.

Great questions Gerry. There is definitely a gap. Look forward to the discussion. I'll have Steve Gordon attend if possible as he and I are working on related issues.

From: MacDougall, Gerry L FLNR:EX Sent: Mon, November 14, 2011 10:31 AM

To: Clark, Brian J FLNR:EX

Subject: sage advice requested Re: placer report - meeting invite sent for next week

#### Hi Brian.

Would you have some time next week for me to discuss an unresolved topic we have in the Cariboo regarding a report on placer mining, that was prepared by our habitat staff here?

Originally commissioned under the mandate of MoE's stewardship role in the spring of 2010 – reviewing results with respect to standards and permit conditions, the report became available after the creation of FLNRO. Our folks have been patient – I've had numerous discussions with MEM staff but I'd like to be able to close the loop on this topic and would appreciate your thoughts.

#### For example:

- 1. Where has that MoE review role landed has it morphed into a FREP model or does it continue stand alone as it was in MoE?
- 2. Staff did not have access to MEM's permit files and did not have MEM staff present for the site visits, which has been problematic. MEM has drawn into question the conclusiveness of the results. I'd like to ask you about a few ideas about next steps.

I've sent a separate meeting request with a time that I hope will be workable for you for next Monday. Looking forward to discussing with you further,

Thank you,

Gerry MacDougall
Ph 250-398-4355
Cell 250-267-8999
Regional Executive Director, Coriboo Region
Ministry of Forests, Lands and Natural Resource Operations

Subject: Location:

Placer - Barkerville area

Gerry to call Brian

Start:

Mon 2011-11-21 3:00 PM

End:

Mon 2011-11-21 4:00 PM

Recurrence:

(none)

**Meeting Status:** 

Meeting organizer

Organizer:

MacDougall, Gerry L FLNR:EX Clark, Brian J FLNR:EX

Required Attendees:

More info in email sent Nov 14

Subject: Location:

placer Rodger's office

Start:

Thu 2011-09-22 8:30 AM Thu 2011-09-22 9:00 AM

End:

Recurrence:

(none)

**Meeting Status:** 

\_Meeting organizer

MacDougall, Gerry L FLNR:EX Stewart, Rodger W ENV:EX

Organizer: Required Attendees:

From:

MacDougall, Gerry L FLNR:EX

Sent:

Tuesday, June 28, 2011 4:55 PM

To: Subject: Stewart, Rodger W FLNR:EX; Hupman, C Bruce MEM:EX RE: Actions respecting the 2010 placer inspection report.

Thanks for assembling this Rodger.

There are some elements of the MoU between FLNRO and MEM concerning placer and aggregates that I need to brief you on – that would impinge on Action 2. I'll check in with you in the morning.

The first step to complete is action 1. With good dialogue between the Quesnel District, your staff and MEM we can work through the other actions in turn.

Thank you,

Gerry

From: Stewart, Rodger W FLNR:EX Sent: Tuesday, June 28, 2011 2:56 PM

To: Hupman, C Bruce MEM:EX; Youds, John A FLNR:EX

Cc: Vanderburgh, Ken FLNR:EX; MacDougail, Gerry L FLNR:EX; Arcand, Michelle X FLNR:EX; McLeod, Joanne FLNR:EX

**Subject:** Actions respecting the 2010 placer inspection report.

I was reminded to share with you the written summary of the actions from our meeting on 31 May, as I had promised. One of these actions is growing in urgency. There is increased demand from FN and from the federal Department of Fisheries and Oceans for release of the report. We would be prudent to carry out Action 1 below as soon as we can, in order to ensure the document is finalised in advance of any FOI initiative that could get launched.

During our conversation on the 31<sup>st</sup> we resolved to:

**Action 1:** URGENT - Review and edit the inspection report to resolve any questions of accuracy, and to indicate where there may be specific differences in interpretation of outcomes, and identification of natural resource features. To the fullest extent practicable, respecting the lead responsibility of MEM, we will document the means by which the non-compliant outcomes identified in the inspection report will be addressed.

**NOTE:** We need to nail down the time when this task will be completed without further delay. I believe the review and edit work can get done in a morning's focussed enterprise,

**Action 2:** Resolve challenges in sustaining the ability of FLNRO staff to conduct inspections of placer mine operations. Possible seek agreement from mine managers to enable inspections for specified purposes. MEM regional staff to join FLNRO regional representatives in enquiring of the Chief Inspector of Mines as to means of authorising FLNRO staff to carry out inspections of placer mine that would be pertinent to environmental stewardship standards.

Action 3: MEM and Cariboo Region FLNRO will collaborate in:

- advising the placer mining sector of the standards applicable to their activities,
- orienting the sector to their environmental stewardship responsibilities,
- · devising means to influence selection of practices by the placer mining sector, and
- establishing means by which the outcome of applied practices will be monitored.

**Action 4:** Examine the administrative process for placer mining permits and Notices of Work authorisations to identify where clear, enforceable environmental stewardship standards will be set in those documents.

**Action 5:** Confirm progress on the development of a placer mining BMP guidebook. Determine means by which parts of the MX Code will be established as legal standards in permits and NOW. Confirm the means by which MEM and FLNRO will seek formal, public commitment from the placer mining sector respecting standards for placer mining operations.

Rodger Stewart
Director, Resource Management
Ministry of Forests, Lands and Natural Resource Operations
Cariboo Region
400 - 640 Borland Street
Williams Lake, BC
V2G 4T1
cell (250) 305 8536, desk (250) 398 4549
fax (250) 398 4214

From: Sent:

MacDougall, Gerry L FLNR:EX Thursday, June 16, 2011 5:40 PM

To:

Hupman, C Bruce MEM:EX

Subject:

RE: placer report

Hi Bruce,

Rodger will be calling you to discuss.

Gerry

From: MacDougall, Gerry L FLNR:EX - Sent: Thursday, June 16, 2011 1:32 PM

To: Hupman, C Bruce MEM:EX

Subject: placer report

Hi Bruce,

Got your message.

Will check on status of the edits and when or if a copy has been provided to WLIB.

I'll get back to you possibly by end of today or tomorrow.

Thank you,

## Gerry MacDougall

Ph 250-398-4355

Cell 250-267-8999

Regional Executive Director, Cariboo Region

From: Sent:

MacDougall, Gerry L FLNR:EX Thursday, June 16, 2011 1:33 PM

To:

Stewart, Rodger W FLNR:EX

Subject:

placer report

## Hi Rodger,

I just received a message from Bruce Hupman advising me that he has received a request to meet from the Williams Lake Indian Band regarding the placer report.

Can we chat about this after the Barkerville Gold meeting this afternoon?

Thank you,

## Gerry MacDougall

Ph 250-398-4355 Cell 250-267-8999

Regional Executive Director, Cariboo Region

From: Sent:

MacDougall, Gerry L FLNR:EX Thursday, June 16, 2011 1:32 PM Hupman, C Bruce MEM:EX

To:

Subject:

placer report

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## Gerry MacDougall

Ph 250-398-4355

Cell 250-267-8999

Regional Executive Director, Cariboo Region

Subject:

MEM meeting with Bruce Hupman - Placer

Location:

Cariboo Room

Start: End: Tue 2011-05-31 3:00 PM Tue 2011-05-31 4:30 PM

Recurrence:

(none)

**Meeting Status:** 

Meeting organizer

Organizer:

MacDougall, Gerry L FLNR:EX

**Required Attendees:** 

Dodge, Steve J FLNR:EX; Vanderburgh, Ken FLNR:EX; Stewart, Rodger W FLNR:EX;

Hupman, C Bruce MEM:EX

Folks, this has been scheduled for June 1 BUT if we can do this discussion on Tuesday afternoon, (Ken, Rodger) there is an opportunity to join Bruce and Grant F to visit the Prosperity mine site on June 1. It would be a good opportunity to discuss a range of issues along the way and how to go forward with the one land manager concept between FLNRO and MEM.

Rodger, can you see if Michelle and Joanne could present at this time on Tuesday?

What I'd like to do is have the RMT version of presentation on it (30 minutes), and then take some time as managers to discuss next steps.

Thank you,

Gerry

From: Sent: MacDougall, Gerry L FLNR:EX Tuesday, May 24, 2011 3:54 PM

To:

Stewart, Rodger W FLNR:EX

Subject:

RE: Placer EWN

Hi Rodger, Thank you for your work on this. I think this one is good to go.

Do they usually come with an initial block at the bottom? Would you like to forward to Karen to cliff it?

Gerry

**From:** Stewart, Rodger W FLNR:EX **Sent:** Tuesday, May 24, 2011 3:22 PM **To:** MacDougall, Gerry L FLNR:EX

Subject: Placer EWN

Gerry, this any closer to the standard we discussed?

Rodger Stewart
Director, Resource Management
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Cariboo Region
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cell (250) 305 8536, desk (250) 398 4549
fax (250) 398 4214

From:

MacDougall, Gerry L FLNR:EX

Sent:

Wednesday, May 11, 2011 6:03 PM

To:

Stewart, Rodger W FLNR:EX

Cc:

Vanderburgh, Ken FLNR:EX; Higgs, Karen E FLNR:EX

Subject:

placer

Hi Rodger,

Could you please pen a few words on the placer report for the EWN and the 30 60 90?

By next Wednesday?

You and Ken and I need to discuss the inter-ministry linkages - Karen could you please set something up for Monday?

Thank you,

## Gerry MacDougall, RPF, MBA

Ph 250-398-4355

Regional Executive Director, Cariboo Region