

From: Davies, James W FLNR:EX
Sent: Friday, October 12, 2012 4:30 PM
To: Butler, Adrienne L EAO:EX
Cc: Balcaen, Trish L EAO:EX; Shaw, Al P FLNR:EX; Alexander, Garry EAO:EX; Cowgill, Andrea N FLNR:EX; Kreye, Ross A FLNR:EX
Subject: RE: Narrows Inlet Hydro Project: Application review timelines & update
Attachments: Narrows_Inlet_Hydro_Agency_WSD_12Oct2012.pdf

Adrienne Butler

RE: Narrows Inlet Hydro Project: Application review timelines & update

Allocation comments

James Davies, P.Eng.
 Regional Hydrologist - Water Allocation
 MFLNRO - South Coast Region - Authorizations - Water Allocation
 Tel: (604) 586-5637 FAX: (604) 586-4434
 email: James.Davies@gov.bc.ca

From: Butler, Adrienne L EAO:EX
Sent: Friday, September 7, 2012 5:22 PM
To: Alexander, Garry EAO:EX; 'Bob.Gowe@tc.gc.ca'; Taylor, Andrew JTI:EX; Carsen, Dannie CSCD:EX; 'Bob.Weston@vch.ca'; Rochetta, Steve J FLNR:EX; Babakaiff, Scott C FLNR:EX; Bronstein, Ron FLNR:EX; 'jpaul@sechelt.nation.net'; Cowgill, Andrea N FLNR:EX; Wriglesworth, Lindsay I FLNR:EX; 'brent.magee@tc.gc.ca'; 'david.rafael@scrd.ca'; Mayall, Jane EAO:EX; Davies, James W FLNR:EX; Shaw, Al P FLNR:EX; Forgeng, Eric E FLNR:EX; Malt, Joshua FLNR:EX; 'chantal.nessman@dfo-mpo.gc.ca'; 'Adam.Silverstein@dfo-mpo.gc.ca'; Sloos, Hugo FLNR:EX; Barrett, Scott FLNR:EX; 'kboras@sechelt.nation.net'
Cc: Balcaen, Trish L EAO:EX; 'Sid Quinn (SQuinn@SecheltNation.net)'
Subject: Narrows Inlet Hydro Project: Application review timelines & update

Hello,

As you know, the Narrows Inlet Hydro Project was accepted for review on September 23, 2012 and the 80-day review timelines has begun. Attached is a draft workplan outlining timelines and key due dates for the 180 day review process for your planning purposes. The dates are rough and will likely be refined somewhat as we move forward.

A few highlights:

- The public comment period began today and will go through October 22nd.
- Open houses have been scheduled for Friday October 12 and 13 in Egmont and Sechelt, respectively.
- A site tour is being scheduled for working group members on October 12. If you are interested in a site tour and haven't already contacted me, please confirm as soon as possible.

Your input on the Application is critical to ensuring the EA process is fair and efficient. Note that your initial comments are also requested by October 12th.

I look forward to seeing many of you in Vancouver at the September 19 working group meeting. Details and agenda for the meeting to follow.

Should you have any questions, please feel free to contact either myself or Trish.Balcaen@gov.bc.ca (250) 387-2445 (acting for Garry Alexander until Oct. 3rd).

Thank you,

Adrienne Butler

Environmental Assessment Officer
B.C. Environmental Assessment Office
tel: (250) 387-2413 | fax: (250) 356-7477

Davies, James W FLNR:EX

From: Eichenberger, Kathy EAO:EX
Sent: Tuesday, March 1, 2011 10:53 AM
To: Davies, James W ENV:EX; Magnan, Alain; Sarfi,Mandy [CEAA]; Peter Schober; dansoprovich
Cc: Mayall, Jane EAO:EX
Subject: RE: Proposed Stl'ixwim project

It appears that the morning of Monday the 14th is the only time that works for everyone. Mandy has booked the boardroom at CEAA. Can everyone confirm that they can attend 9:30 -12:00?

From: Davies, James W ENV:EX
Sent: Tuesday, March 1, 2011 10:44 AM
To: Eichenberger, Kathy EAO:EX; Magnan, Alain; Sarfi,Mandy [CEAA]; Peter Schober; dansoprovich
Cc: Mayall, Jane EAO:EX
Subject: RE: Proposed Stl'ixwim project

March 14, 15, 16, 17, or 18 is good for me.

James Davies, P.Eng.
Regional Hydrologist
Ministry of Natural Resource Operations
West Coast Region - Authorizations - Water Allocation
2nd Floor - 10470 - 152 Street, Surrey, BC, V3R 0Y3
Tel: (604) 582-5203 FAX: (604) 582-5235
email: James.Davies@gov.bc.ca

From: Eichenberger, Kathy EAO:EX
Sent: Monday, February 28, 2011 4:30 PM
To: Magnan, Alain; Davies, James W ENV:EX; Sarfi,Mandy [CEAA]; Peter Schober; dansoprovich
Cc: Mayall, Jane EAO:EX
Subject: FW: Proposed Stl'ixwim project

How about 1:00 pm on Tuesday March 15th?

From: Davies, James W ENV:EX
Sent: Monday, February 28, 2011 3:45 PM
To: Eichenberger, Kathy EAO:EX
Subject: RE: Proposed Stl'ixwim project

Kathy

The week of March 14 is good for me; Monday to Friday.

Jim Davies

From: Eichenberger, Kathy EAO:EX
Sent: Monday, February 28, 2011 3:44 PM
To: Davies, James W ENV:EX
Subject: FW: Proposed Stl'ixwim project

Hi James – are there any days in the week of March 14 that you could make it?

From: Magnan, Alain [<mailto:Alain.Magnan@dfo-mpo.gc.ca>]

Sent: Monday, February 28, 2011 1:33 PM

To: Eichenberger, Kathy EAO:EX

Subject: RE: Proposed St'ixwim project

Kathy, so far the week of march 7th and 14th are available, except for Thursday on both of those weeks.

Al

From: Eichenberger, Kathy EAO:EX [<mailto:Kathy.Eichenberger@gov.bc.ca>]

Sent: 2011-February-24 2:36 PM

To: Magnan, Alain; Davies, James W ENV:EX; dansoprovich; Peter Schober; Sarfj, Mandy [CEAA]

Cc: Mayall, Jane EAO:EX

Subject: Proposed St'ixwim project

Hello all:

I think this would be an opportune time for all of us to meet (and any others who may be able to contribute) to discuss:

- Any changes to the proposed project
- In stream flow requirements
- Status of EA process

Please let me know when you would be available in March. I propose a Vancouver meeting with teleconference for those who can't make it in person.


Thanks.

Kathy Eichenberger P. Eng.

Project Assessment Director

Environmental Assessment Office

off.: 250 387-7983

 *Please consider the environment before printing this email.*

Davies, James W ENV:EX

Subject: St'ixwim Renewable Energy Initiative Project
Location: CEAA 1550 Alberni suite 805 Vancouver

Start: Mon 2011-03-14 9:30 AM
End: Mon 2011-03-14 12:00 PM

Recurrence: (none)

Meeting Status: Accepted

Organizer: Eichenberger, Kathy EAO:EX
Required Attendees: Magnan, Alain; Davies, James W ENV:EX; Peter Schober; dansoprovich; Sarfi, Mandy [CEAA]; Smith, Alanya C EAO:EX

When: Monday, March 14, 2011 9:30 AM-12:00 PM (GMT-08:00) Pacific Time (US & Canada).

Where: CEAA 1550 Alberni suite 805 Vancouver

Note: The GMT offset above does not reflect daylight saving time adjustments.

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Proposed agenda - please let me know if there are any other agenda items. Also please let me know who else will be attending so that I can provide refreshments:

1. Project update - Proponent - 30 minutes
 - a. Change in project design
 - b. First Nation consultation
2. EA Process update - EAO and CEAA - 30 minutes
 - a. Timing for Application submission
 - b. Enhanced public consultation process
3. Fish and fish habitat - Proponent/DFO/MNRO 1 hour
 - a. In stream flow requirements
 - b. Potential data gaps
4. Next steps

WHAT IS?

BURRARD SKYTRAIN,

CONCURRENT OR?

A NOT.

SEE page 20
of tracking
#19, #20
YES!

Davies, James W ENV:EX

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When: Monday, March 14, 2011 9:30 AM-12:00 PM (GMT-08:00) Pacific Time (US & Canada).
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Davies, James W FLNR:EX

From: Eichenberger, Kathy EAO:EX
Sent: Monday, March 14, 2011 4:59 PM
To: 'dansoprovich'; 'Magnan, Alain'; Davies, James W ENV:EX; 'Peter Schober'; Smith, Alanya C EAO:EX
Cc: 'Jennifer Prive'
Subject: RE: Stl'ixwim Renewable Energy Initiative Project

Thanks Dan;

I agree it was a very fruitful meeting today. We'll hold off on posting the maps until you send us the next version.

Cheers

Kathy

From: dansoprovich [<mailto:dsop@mymts.net>]
Sent: Monday, March 14, 2011 2:24 PM
To: Eichenberger, Kathy EAO:EX; Magnan, Alain; Davies, James W ENV:EX; Peter Schober; Smith, Alanya C EAO:EX
Cc: Jennifer Prive
Subject: Re: Stl'ixwim Renewable Energy Initiative Project

Kathy et al.

Thanks a lot for the meeting today. Relative to the maps that I had sent on, that you were going to put onto your sharepoint site, we picked up some errors in those maps, including that the maps did not have the IFR pipes for both of CC and Ramona Upper. So, if you want to hold off til rectified, I could send you the updated maps. Let me know.

Cheers, dan

----- Original Message -----

From: Eichenberger, Kathy EAO:EX
To: Magnan, Alain ; Davies, James W ENV:EX ; Peter Schober ; dansoprovich ; Sarfi,Mandy [CEAA] ; Smith, Alanya C EAO:EX
Sent: Tuesday, March 01, 2011 6:19 PM
Subject: Stl'ixwim Renewable Energy Initiative Project

When: Monday, March 14, 2011 9:30 AM-12:00 PM (GMT-08:00) Pacific Time (US & Canada).

Where: CEAA 1550 Alberni suite 805 Vancouver

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 - b. Potential data gaps
- 4. Next steps

From: Stoddard, Erin M ENV:EX
Sent: Wednesday, March 30, 2011 12:22 PM
To: Davies, James W ENV:EX
Cc: Barrett, Scott ENV:EX; Bennett, Timothy A ENV:EX; Cowgill, Andrea N ILMB:EX; Blacquiére, Kelly ILMB:EX; Babakaiff, Scott C ENV:EX
Subject: RE: St'ixwim Renewable Energy Initiative Project - upcoming Fish Working Group meeting in April 2011
Importance: High

Jim,

Any news on a proposed April meeting for this yet? My April is filling up fast and Scott is only here for a couple more weeks, and then gone until early June.

Thanks.

Erin

From: Davies, James W ENV:EX
Sent: Monday, March 14, 2011 4:28 PM
To: Stoddard, Erin M ENV:EX; Babakaiff, Scott C ENV:EX
Cc: Barrett, Scott ENV:EX; Bennett, Timothy A ENV:EX; Cowgill, Andrea N ILMB:EX; Blacquiére, Kelly ILMB:EX
Subject: RE: St'ixwim Renewable Energy Initiative Project - upcoming Fish Working Group meeting in April 2011

Erin Stoddard
Scott Babakaiff

RE: St'ixwim Renewable Energy Initiative Project - upcoming Fish Working Group meeting in April 2011

At today's meeting, March 14, the proponent presented the changes to the plan.

(next step) A Fisheries Working Group meeting is planned for April 2011; we expect that both of you will be invited to this meeting.

The proponent's presentation touch briefly on issues of obtaining access to a stream, and the lost of monitoring sensors.

There may be completeness issues on some streams; in that they were only able to assessed a relatively small portion of a stream.

The proponent intends to submit his application in May 2011 or June 2011, depending on the issues from the Fisheries Working Group.

When I find out about the date of the April Fisheries Working Group meeting, I will forward this information to you.

James Davies, P.Eng.
Regional Hydrologist
Ministry of Natural Resource Operations
West Coast Region - Authorizations - Water Allocation
2nd Floor - 10470 - 152 Street, Surrey, BC, V3R 0Y3
Tel: (604) 582-5203 FAX: (604) 582-5235
email: James.Davies@gov.bc.ca

From: Stoddard, Erin M ENV:EX
Sent: Tuesday, March 8, 2011 5:34 PM
To: Davies, James W ENV:EX
Cc: Babakaiff, Scott C ENV:EX; Barrett, Scott ENV:EX; Bennett, Timothy A ENV:EX
Subject: RE: Stl'ixwim Renewable Energy Initiative Project

Jim,

I am already fully booked that day on another high priority file (Fraser Gravel long term planning), so I'm unable to attend. I get booked up far in advance of most meetings, and am now close to being fully booked for this month. I'm very concerned that we are hearing of this meeting so late from EAO. Two weeks prior is not enough notice, especially when it has been requested by others that we attend. I suggest that discussion with respect to fish and fish habitat issues, related flow diversion discussions (IFR, etc.) and data gaps be delayed until Scott and/or I can attend. If there are design changes then we need to see a document describing those changes at least 5 working days prior to the meeting so that we have a chance to review and speak to the information. Also, I didn't see anything on wildlife below. Is the proponent addressing wildlife, if not, then why? Someone else from Ecosystems should be addressing this as well.

Please let me know if the meeting is rescheduled or if you would like to discuss any of the above.

Thanks.

Erin

From: Davies, James W ENV:EX
Sent: Monday, March 7, 2011 8:45 AM
To: Stoddard, Erin M ENV:EX
Subject: FW: Stl'ixwim Renewable Energy Initiative Project

Erin Stoddard

FW: Stl'ixwim Renewable Energy Initiative Project

I will be attending this March 14, 2011 meeting.

Apart from a vague design change, I do not know the specifics of the changes.

Scott Babakaiff has indicated he is not available.

Are you available for this meeting?

Thanks

James Davies, P.Eng.
Regional Hydrologist
Ministry of Natural Resource Operations
West Coast Region - Authorizations - Water Allocation
2nd Floor - 10470 - 152 Street, Surrey, BC, V3R 0Y3
Tel: (604) 582-5203 FAX: (604) 582-5235
email: James.Davies@gov.bc.ca

From: dansoprovich [mailto:dsop@mymts.net]
Sent: Friday, March 4, 2011 1:05 PM

To: Eichenberger, Kathy EAO:EX; Magnan, Alain; Davies, James W ENV:EX; Peter Schober; dansoprovich; Sarfi,Mandy [CEAA]; Smith, Alanya C EAO:EX

Subject: Re: St'ixwim Renewable Energy Initiative Project

Thanks Kathy.

We were hoping/expecting that Erin Stoddard and Scott Babakaiff would be in attendance given the important technical matters related to fisheries and aquatics. Will that be the case?

Thanks, dan

----- Original Message -----

From: Eichenberger, Kathy EAO:EX

To: Magnan, Alain ; Davies, James W ENV:EX ; Peter Schober ; dansoprovich ; Sarfi,Mandy [CEAA] ; Smith, Alanya C EAO:EX

Sent: Tuesday, March 01, 2011 5:19 PM

Subject: St'ixwim Renewable Energy Initiative Project

When: Monday, March 14, 2011 9:30 AM-12:00 PM (GMT-08:00) Pacific Time (US & Canada).

Where: CEAA 1550 Alberni suite 805 Vancouver

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Davies, James W FLNR:EX

From: Davies, James W ENV:EX
Sent: Wednesday, April 6, 2011 10:37 AM
To: Eichenberger, Kathy EAO:EX
Subject: RE: St'ixwim Renewable Energy Initiative Project - fisheries sub-committee

Kathy Eichenberger

I am ok in not attending this meeting; Babakaiff and Stoddard will be in attendance.

A concern is changes to the plan were verbally presented and discussed at the March 14, 2011 meeting, but I (and others) have not seen updated drawings.

James Davies, P.Eng.
Regional Hydrologist
Ministry of Forests, Lands and Natural Resource Operations
South Coast Region - Authorizations - Water Allocation
2nd Floor - 10470 - 152 Street, Surrey, BC, V3R 0Y3
Tel: (604) 582-5203 FAX: (604) 582-5235
email: James.Davies@gov.bc.ca

From: Eichenberger, Kathy EAO:EX
Sent: Wednesday, April 6, 2011 10:29 AM
To: Davies, James W ENV:EX
Subject: RE: St'ixwim Renewable Energy Initiative Project - fisheries sub-committee

Hi Jim:

I agree we need a full day.

Scott and Erin have accepted the 20th – is it ok to proceed without you?

-----Original Appointment-----

From: Davies, James W ENV:EX
Sent: Wednesday, April 6, 2011 9:03 AM
To: Eichenberger, Kathy EAO:EX
Cc: Stoddard, Erin M ENV:EX; Babakaiff, Scott C ENV:EX
Subject: Declined: St'ixwim Renewable Energy Initiative Project - fisheries sub-committee
When: Tuesday, April 19, 2011 12:00 AM to Wednesday, April 20, 2011 12:00 AM (GMT-08:00) Pacific Time (US & Canada).
Where: Vancouver

Kathy Eichenberger

Davies declined: St'ixwim Renewable Energy Initiative Project - fisheries sub-committee

s.22

Given the proposed timelines and importance of fisheries information, I do not agree that a half-day is enough time to present the information and discuss the issues.

In order that Mr. Babakaiff and Mr. Stoddard are prepared for this fisheries meeting, they are to be provided with the information that will be discussed at the April 19 meeting.

I have forwarded an invite to them.

I expect that this fisheries information will be provided to Mr. Babakaiff and Mr. Stoddard by April 8, 2011 – Friday.

James Davies, P.Eng.

Regional Hydrologist

Ministry of Forests, Lands and Natural Resource Operations

South Coast Region - Authorizations - Water Allocation

2nd Floor - 10470 - 152 Street, Surrey, BC, V3R 0Y3

Tel: (604) 582-5203

FAX: (604) 582-5235

email: James.Davies@gov.bc.ca

[illegible]

- FNR-2013-00035
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Review of Project

Hydroelectric Component Review

- Chickwat Creek – run of the river
- SS Creek – lake storage
- CC Creek – lake storage
- Ramona Creek Upper – lake storage
- Ramona Creek Lower – combined run of the river/lake storage
- Transmission Line and Access Roads from hydroelectric generation sites to interconnection with BCH (formerly BCTC) line on Sechelt Peninsula, including submarine cable.

SS Creek

May June July

Now/
30m

■ No dam – did not provide any additional economic return

■ Drawdown scenario: 40m below natural — DTS/NATURAL VARIANCE RANGES

■ Full by May 20-June 20 until end of July – to support amphibian lifecycle

■ No IFR — NO "ENGINEERED" IFR BUT LAKE SPILLS NATURALLY

■ Lake tunnel has been realigned and doubled in length — avoids hazardous rockfall area and results in GWR

■ Alignment of shortened penstock into the powerhouse has changed slightly also no buried – spatial logistics related to existing Tyson powerhouse

■ Original 2km of proposed road to construct penstock has now been reduced to ~500m

CC Creek

- Drawdown scenario: 5m up (mid-July – end of Aug), 45m down
- IFR is located >1km below the outflow ^{of lake.} - ^{distance} of tunnel to creek.
- Lake tunnel is longer and on a different alignment – reduces terrain hazards ^{+ length}
- Shorter penstock, different alignment across the slope and buried – reduces terrain hazards and potential impacts on GWR (“suggested by S. Rochetta ... that the lower elevation habitats along CC Creek in this GWR are not likely used by Mountain Goats”) ^{- Length}
- Original 1.8km of proposed road to construct penstock has now been reduced to 800m.



CHECK FOR EXPANSION
ROAD AS WHY NOT

(A) the creek is \approx 2-km long

Ramona Creek Upper

- Tunnel tap removed, now floating surface pump – reduces possible impacts to water quality on aquatic resources

- IFR is located below outflow

- Drawdown scenario: 3m up, 45m down

- Average variation in natural lake level projected 29m to 9m below natural over the course of a year

- Surface and buried penstock alignment is more direct to powerhouse – reduces terrain hazards

DAN S.
POWER S. – MANY YEARS ^{THE} LAKE IS BELOW OUTFLOW ELEV.

Ramona Creek Lower

+ ~~penstock~~ length

- R1 Tributary has moved farther upstream and thus the penstock alignment has changed – alignment with terrain
- All but the last 60m of penstock will be buried – improves visuals

IFR?



Transmission Line

- Point of interconnection with Earle Creek Substation moved ~2km NE – at the request of the landowner, spatial conflict with another land development project *← WHAT IS?*
- Submarine cable alignment and length changed – due to available bathymetry
Sechelt Peninsula transmission line alignment changed – OGMA avoidance



Options

ROAD ACCESS

- Ramona Upper Transmission Line - preferred alignment is through Nation land if agreement can be negotiated + 2 alternate alignment options
- Camp locations – preferred location at existing barge off-loading site at the Head of the Narrows + 2 alternate location options
- Submarine cable – preferred alignment to avoid the Boat Haven but has longer upland section + alternate alignment