NUNAVUT WATER BOARD

AMENDMENT TO THE HAMLET OF RANKIN INLET TYPE "A" WATER LICENCE

PUBLIC HEARING

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APPLICANT

M. Lustey	GN-CGS
J. Acorn	Stantec

INTERVENERS

J. Dahl	Department of Fisheries and Oceans

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Mary Rose Angoshadluk	Inuktitut
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(PROCEEDINGS COMMENCED AT 9:04 AM)

THE CHAIR: Good morning. Can you hear me clear? Good morning. My name is Thomas Kabloona, and I'm the chair of the Nunavut Water Board. Before we proceed with the hearing, let us begin with a prayer. And I would like to ask David Aglukark to do the opening prayer. Stand up.

Opening Prayer

Opening Remarks by the Chair

THE CHAIR: Thank you, David.

Just before we begin, I'd like to ask for you to try to take -- turn off your cell phone. Thank you.

On behalf of the Nunavut Water Board, I welcome you to Rankin Inlet. Now, to give you a background to this hearing, the Nunavut Water Board, which I will refer to as "the Board" or "the NWB", is an institution of public government created under Article 13 of the Nunavut Land Claims Agreement, and is responsible for the use, management, and regulation of fresh water in Nunavut settlement area. The purpose of this public hearing is to review the application filed by Stantec Architecture Limited, who I will refer to as "Stantec", on behalf of the Government of Nunavut Community and Government Services, who I will refer to as "GN-CGS", for the amendment to the Type "A" Water Licence in accordance with the Nunavut Waters -- Nunavut Waters Surface Rights Tribunal Act.

The Type "A" Water Licence that GN-CGS is seeking to amend was originally granted by the NWB on GN -- to GN-CGS and authorized the use of water and operation of the water supply facilities Utilidor and sewage treatment facility for municipal undertaking of the hamlet of Rankin Inlet.

After the Board recommended the regional licence be granted on June 9, 2010, the minister of Western Indian Northern Affairs Canada approved the original licence on July 28, 2010. Pursuant to Section 13.3.6 of the Nunavut Land Claims Agreement and Section 29 of

the Nunavut Waters and Nunavut Surface Rights Tribunal Act, the Board has to delegate its power to dispose (sic) all matters relating to the Type "A" Licence amendment application, Licence Number 3AM-GRA1015 for the hamlet of Rankin Inlet, including the conduct of this public hearing to a panel of the Board. This panel is now here in front of you.

Introductions of Nunavut Water Board and Staff

THE CHAIR: I will be chairing with this panel, and with me today are members of the panel -- are Board members Ross Mrazek to my right and David Aglukark Sr. to my left.

Several staff members who have contributed to the NWB's administration and technical review of the application are present, along with the NWB legal counsel. I will introduce the individuals attending today: Damien Côté, executive director; David Hohnstein, director of corporate (sic) services; Karén Kharatyan, technical advisor; Robin Ikkutisluk, licencing administrator; Craig Boyer, with Shores Jardine LLP, legal counsel for the Board. We also have with us today two new technical advisors who recently joined the board: Cynthia Ene, technical advisor; and Brady MacCarl, technical advisor.

In addition, we have two interpreters available for simultaneous translation: Ben Kogvik, secretary to

the Board, and local interpreter Mary Rose Angoshadluk. To ensure an accurate record of the proceeding, we have with us a court reporter, Christy Longacre. To assist Christy, I will ask all parties please state their name prior to speaking. Last but not least, we also have Ryan Dempster from PIDO, our sound technician for this public hearing.

And we can now move on to the introduction of applicant interveners. We have the applicant. Introduce yourself.

Introductions of Parties

MR. ACORN: Thank you, Mr. Chair. My is Joe Acorn. I'm with Stantec Consulting out of Yellowknife, and I will be representing CGS.

MS. LUSTEY: Hi. My name is Megan Lustey, and I'm with CGS.

THE CHAIR: Thank you.

AANDC?

MS. COSTELLO: Good morning. My name is Karen Costello. I'm with Aboriginal Affairs Northern Development Canada. My -- the spelling of my name, K-A-R-E-N, C-O-S-T-E-L-L-O. And I'm joined by Ian Parsons. Do you require him to come up to the mic as well? He is our regional coordinator, and he will also be part of the presentations. Correct spelling of his name, I-A-N, P-A-R-S-O-N-S. Thanks.

THE CHAIR: Thank you.

DFO?

MS. DAHL: Good morning. My name is Julie Dahl. I'm with -- I'm the regional manager for Fisheries Protection Program of the Department of Fisheries and Oceans.

THE CHAIR: Thank you.

GN?

MS. LUSTEY: I'm the representative from CGS-GN.

THE CHAIR: Thank you.

Identification of Any Motions or Objections

THE CHAIR: Any preliminary matters or objections to this proceeding?

MR. BOYER: Mr. Chair, I suggest that you have the parties and the interveners just advise if they have any objections, as you've asked, at this point in time.

THE CHAIR: Any objections?

MR. ACORN: Joe Acorn. No objections.

MS. COSTELLO: Karen Costello on behalf of Aboriginal Affairs Northern Development Canada. We have no objections. Thank you.

THE CHAIR: DFO?

MS. DAHL: Julie Dahl, DFO. We have no objections.

THE CHAIR: Thank you.

In the past, parties in other proceedings have approached the media prior to the release of the Board's decision, suggesting comments about what the Board was going to do, either procedurally or items in the final result. Since the Board cannot comment on pending matters either by confirming or denying to the media the accuracy of the statements of others, the Board would appreciate if all parties would refrain from any such comments that may imply a certain action or decision by the Board. Board members will not discuss the hearing or the matters before the Board with the intervening parties or the media. If you have a question about the Board and its practice or procedure, please speak to the executive director directly, and he will assist you.

Prior to identifying the parties in attendance today, I will provide a brief history of the application before the Board.

On June 9, 2010, the NWB issued Licence Number 3AM-GRA1015, a Type "A" Municipal Licence for GN-CGS to authorize the use of water and operation of water supply facilities, Utilidor, and sewage treatment facility for municipal undertaking at the hamlet of Rankin Inlet. The ministers have subsequently approved the issuance of the licence on July 28, 2010.

The licence authorized the use of 850,000 cubic metres of water annually for municipal purposes. Water is withdrawn from Nipissar Lake year round. The annual water usage was reported by applicant as being 603,234 cubic metres for 2013, while the Nipissar Lake natural replenishment is reported to be 311,789 cubic metres. A shortfall of water at Nipissar Lake in 2013 would be approximately 291,445 cubic metres.

On August 12th, 2012, the NWB received an amendment application from Stantec on behalf of GN-CGS to obtain the Board's authorization for additional water to be withdrawn each summer from Char River, exiting Lower Lake Landing Lake, which will be pumped to the hamlet water supply, Nipissar Lake. Additional supporting information was submitted to the Board on October 6th, 2012, and August 12th, 2013.

The following documents were included within the amendment application: August 14, 2012, submissions; cover letter; amendment application; summation in Inuktitut; completed application form for a Water Licence amendment compliance; C1 pipeline site plan; C8 pipeline and screen details; C9 intake pump details revised; C10 intake site plan; and C11 project specification; Stantec authorization letter from GN-CGS and design of pipeline system to augment natural replenishment of Nipissar Lake, Rankin Inlet, Canada,

prepared by FSC Architects & Engineers on -- on December 15th, 2010; October 6th, 2012, submissions; Stantec additional information letter to NWB, and water supply capacity consumption and conservation study, Rankin Inlet, Nunavut, prepared by RMSI and FSC on April 20, 2010. Appendix A, specification for leak reduction equipment; Appendix B, AWWA/IWA water audit and water balance report; Appendix C, cost and water saving model; Appendix D, individual program descriptions; and Appendix E, Nipissar Lake volume study and environmental variable study, August 12th, 2013, submissions; Stantec additional information letter to NWB with C101 area map.

The application was prepared and submitted with the consulting support of Stantec FSC Architecture & Engineers, who I will refer to as "FSC", provided the engineering services for the design of a new intake and pipeline. Copies of the above-mentioned submissions were available on the NWB FST -- FTP site. Also, Robin Ikkutisluk, our licencing administrator, has made available for public viewing of this hearing a hard copy of submission on the -- this file that has been received to date. If you are interested in reviewing any of this documentation, please see Robin.

On August 23, 2013, the NWB acknowledged receipt of the application and asked interested parties to

review the scope and completeness of the information provided, as well as to identify deficiencies through information requests, IRs, to be submitted to the Board by September 13, 2013. This deadline was extended to September 20, 2013, as requested by Aboriginal Affairs and Northern Development Canada, who I will refer to as "AANDC".

On September 13, 2013, to September 20, 2013, the Board received comments on the completeness of the application from Fisheries and Oceans Canada, who I will refer to as "DFO", and AANDC respectively. The Board did not receive indication that the application should not proceed through the regulatory process.

On October 11, 2013, Stantec provided additional information on -- on behalf of CGN-CGS (sic). On November 19, 2013, based on the comments received from interested parties, the NWB determined that the application could proceed to the next steps in the NWB's regulatory process, and in accordance with Section 35(1) of the Nunavut Waters and Nunavut Surface Rights Tribunal Act, invited interested parties to complete a full technical assessment of the application making representation to the NWB by September 19, 2013.

On December 18, 2013, the NWB was in receipt of written representation from AANDC. AANDC stated also that they had received concerns from community members

from Rankin Inlet about the quality of their drinking water. It may be in the best interest of the hamlet to have an in-person public hearing.

On December 20, 2013, the Board Rankin Inlet panel directed the NWB staff to hold a technical meeting, "TM", and prehearing conference, "PHC", in Rankin Inlet on January 14, 15, 2014, providing copies with a proposed agenda.

On January 9, 2014, AANDC confirmed their attendance at the TM and PHC. In response to the Board's September 13 request for a conformity determination regarding the amendment application from the Nunavut Planning Commission, who I will refer to as "NPC", the Board received on December 11, 2013, NPC's conformity -- possible conformity determination regional planned use for this project proposal.

On the morning of January 14, 2014, the NWB held the informal technical meeting, TM, in Rankin Inlet, in which the applicant, interveners, community members were invited to participate to discuss a safe resolution of issues raised during the technical review of the application.

During the TM, the NWB staff compiled a list of commitments made by the various parties that was carried forward to the discussions in the prehearing conference, PHC, held the next day. On the evening of

September -- January 14, 2014, community session was held at the same venue.

The following morning, January 15, 2014, the PHC was held, in which applicant, community members, and interveners also participated. The PHC addressed several matters related to the public hearing, including establishing: (A), timetable for the exchange of information; (B), the list of issues to be dealt with at the hearing; (C), identification of interested parties; (D), desirability of amending an application for the purpose of clarification; and (E), procedures to be followed in the hearing. And on January 28, 2014, the NWB issued a prehearing conference decision in which it set a deadline no later than February 21, 2014, with a receipt of applicant's response to the commitments made in the TM, PHC in its decision.

The Board stated that the NWB, who was currently awaiting the completion of the required environmental assessment of the project by the Nunavut Impact Review Board, who I will refer to as "NIRB", and was unable to set a date for the public hearing prior to the issuance of NIRB's screening decision. The PHC decision also stated that, given the nature of the application, the most affected community is the hamlet of Rankin Inlet, and the public hearing should be held in that

community. Previous indications to the Board from parties suggested that an in-person public hearing should be held.

The following additional information related to TM commitment lists was provided to the Board on February 7, 2014, and May 9, 2014, as per February 21, 2014, extension request to the commitment list deadline: (A), information letter from GN-CGS to NWB, commitments by GN-CGS regarding 3AM-GRA1015 Type "A" Licence amendment dated February 7, 2014; information letter from Stantec to NWB Type "A" Water Licence 3AM-GRA1015 amendment application dated May 9, 2014, with updated spill contingency plan; addendum to the operations and main list plan; environmental screening document to satisfy NIRB Part 2 form; project-specific information requirements.

On June 26, 2014, the NIRB issued the screening decision reports stating the proposal may be processed without review under Part 5 or 6 and recommending project-specific terms and conditions.

Notice of public hearing was issued officially on July 7, 2014, in local papers and on bulletin boards in affected communities. The Board requested that the written submissions of interested parties, complete with executive summary in Inuktitut be filed by the Board by August 28, 2014 -- '13?

Based on the application, written submissions received, the information exchanged at the TM PHC, the NWB staff identified the following areas as issues to be addressed at the public hearing. Char: Number 1, Char River flow daily monitoring, pumping, and annual reporting; 2, Lower Landing Lake, Char River, Nipissar Lake water chemistry sampling at 2014, potential impacts on Nipissar Lake water quality, availability of the study results; 3, adaptive management plan for Nipissar Lake replenishment, including Char River monitoring, mitigation if Char River flow is insufficient for pumping; 4, Nipissar Lake replenishment -- lake's water level or full replenishment; 5, long-term alternative source assessment for Nipissar Lake replenishment; 6, erosion management at the pipeline low-drain point. Written submissions from this hearing have been received from Aboriginal Affairs and Northern Development on August 27, 2014.

If I have missed written submissions of any interveners, please let me know.

MR. BOYER: Mr. Chair, Craig Boyer here. There are no further submissions that any of the parties have indicated they are filing today, after the deadline that had been set by the Board.

THE CHAIR: Thank you.

Could we take a five-minute break?

(ADJOURNMENT)

THE CHAIR: Welcome back. It is with regret that I must inform those in attendance at the hearing that Environment Canada will not be in attendance. If there are any other interveners who would like to speak, please identify yourself.

It is our tradition to give respect to our Elders; therefore, at any time in the proceedings, an Elder may speak to the application on file.

Are there any members of the general public who would like to identify themselves?

Are there any representatives from agencies, associations, et cetera, who have not submitted interventions but would like to --

MR. BOYER: Mr. Chair, there is a person identifying herself --

THE CHAIR: Go ahead.

THERESIE TUNGILIK: Can you hear me? My name is Theresie Tungilik. I'm representing the hamlet of Rankin Inlet, as I am a Counsellor, and thanks for coming to Rankin Inlet for -- for this important hearing.

THE CHAIR: Thank you. My apologies for not introducing you earlier.

Are there any representatives from agencies,

associations, et cetera, who have not submitted interventions but would like to speak?

Before proceeding, if not done already, I would like to request all parties register and sign in with Robin Ikkutisluk, NWB's licencing administrator at the entrance site table.

I would now proceed with the identification of any motions or any objections to the application that is before the Board.

We will now proceed with Item 8 of the agenda, presentation by the application -- applicant.

MR. BOYER: Mr. Chair, Craig Boyer here. Before the applicant begins, I will affirm them before they give their testimony.

MEGAN LUSTEY & JOE ACORN, Affirmed

THE CHAIR: Please go ahead with your presentation.

Presentation by the Applicant

MR. ACORN: Joe Acorn. Thank you, Mr. Chair.

Just before I start with our presentation, I just am looking at the Nunavut Water Board's slides, and there's just a -- one, two, three, four, five, six -- there's a correction that needs to be made to the Nunavut Water Board Slide Number 6. Near the bottom of the slide, you have water usage in 2013. That should

be "2030". The 603,000 cubic metres is a 2030 figure. The estimated usage for 2014 is actually about 358,000 metres (sic). And the same for the next slide. The difference calculated for 2013; that should say for "2030". The difference in 2014 is about 47,000 cubic metres. So ...

All right. Thank you, Mr. Chair. We'll get into our presentation. I'll just wait 'til the slides are up.

That's not our presentation.

MR. BOYER: Mr. Chair, Craig Boyer. There needs to be some reorganizing of the PowerPoints. If we could have a five-minute break?

THE CHAIR: Five minutes?

MR. BOYER: Yeah.

(ADJOURNMENT)

THE CHAIR: Welcome back. And before we proceed with the hearing, I understand the -- we have an audience (sic) in the -- in our -- I understand the SAO from Rankin is in this building. I'd like to ask you to go to the microphone and introduce yourself, please. Thank you.

JUSTIN MERRITT: Good morning. My name is Justin Merritt. I'm the acting SAO with the hamlet of Rankin Inlet, and it's nice that you're all here this morning, and I'll hope our application goes well.

Thank you, very much.

THE CHAIR: Thank you.

The application (sic), I understand you are ready to go? Please go ahead.

MR. ACORN: Joe Acorn. Thank you, Mr. Chair. So our presentation's up there now. This is just a photo of the pipeline.

So the -- this is the Type "A" Water Licence issued by the Board on June 9th, 2010. The activities permitted under the licence were the operation of the water supply facilities, the Utilidor, and the sewage treatment facility, with an annual withdrawal allowance of 850,000 cubic metres from Nipissar Lake.

In 2009, CGS contracted Stantec and RMSI to complete the water supply capacity consumption and conservation study to evaluate decreases in the water level of Nipissar Lake. What it found was that the volume in Nipissar was decreasing by about 44,000 cubic metres per year, and it was concluded that Nipissar would be an unsuitable potable water supply source by 2019 due to low volumes. There's actually an error in the next one. The natural replenishment in Nipissar Lake was -- it shows -- that should be 311,000 cubic metres, not litres there.

In 2010, CGS contracted Stantec to complete the design of a water intake pipeline to replenish

Nipissar. In 2012, CGS constructed the 4-kilometre pipeline to pump water from the Char River to Nipissar Lake. And in 2014, CGS submitted the regulatory applications to the Nunavut Water Board, the Nunavut Planning Commission, and NIRB to obtain approval to pump water from the Char River.

The pipeline is designed with a screened water intake pipeline located in the Char River extending from the intake location to the pump, 175 horsepower intake pump, a 4-kilometre HDPE pipeline. There are two high-point air releases and one low-point drain and a sea can as a storage container to house the intake pipe and pump during the wintertime.

There's just a map of the pipeline showing the route it takes in the upper left corner is just our in point where it would withdraw water from the Char River. There's three blue dots shown -- it's a little difficult -- where culverts were constructed to bury the pipeline to keep it underground, and there's -- the one larger blue circle is the low-point drain line. So there's two high points and one low-point drain where --

MR. HOHNSTEIN: Sorry, Mr. Chair. Dave Hohnstein here. I was just going to mention that you can use the mouse, if you wanted, to point out where things are there.

MR. ACORN: Joe Acorn. Yes. So there's a culvert here and a culvert here and a culvert down here, and the low-point drain is located here. So there is the intake spot off the Char River after it comes out of Lower Landing Lake, and there is the outlet into Nipissar Lake down here. And -- thank you.

The pipeline would be a summer-only operation when there is sufficient flow available in the river. So anticipated something from June to September. Even right now, there's very little water flowing out there in that river. So, I mean, that's one of the things we would have to -- operations would be adjusted as required based on the actual flow each year, which we anticipate would change each year according to precipitation each summer. The duration of the pumping would be dependant upon the -- the population of Rankin Inlet. The consumption rate, which we have a target of 344 litres per person per day, and the pipeline would have a -- the pump has a maximum pumping rate of .04 cubic metres per second. So the pump can be throttled back. So if a pumping rate of less than the maximum is required to stay within the 10 percent withdrawal limit, then the pump will be throttled back.

So here's our numbers for 2014 and 2030. So the 2014 population of 2,859. The calculated volume required -- that would've been required to maintain the

existing volume in Nipissar Lake would've been a transfer of about 47,000 cubic metres with a -- which would've required a pumping duration of about 14 days operating around the clock, so 24 hours a day.

In 2030, assuming a population estimate in Rankin Inlet of 4,649 -- and that assumes a 3 percent annual growth rate of population between now and 2030 -- we calculate that the volume required in that year would be about 272,000 cubic metres to be transferred into Nipissar in order to maintain the volume of the lake with a pumping duration of about 79 days.

So during the -- the preparation of documents for the Nunavut Impact Review Board, we prepared the environmental screening report. And so we looked at -- the project was evaluated for its environmental effects during the construction, operations, and decommissioning phase. So valued ecosystem components, were evaluated. The list is just up there: Terrain, stability, and permafrost, soil quality, air quality, water quantity and quality, vegetation, wildlife, and avifauna, fish and habitat, socioeconomic, and archaeological and heritage resources. All the details with regarding to what was exactly evaluated, which species were evaluated, for instance, in a -- for wildlife are all detailed in the environmental screening report.

The environmental screening report details a number of mitigations which are put in place based on our findings in the environmental screening report. Air quality, just follow best practices, reduce vehicle and equipment, exhaust emissions, implement dust suppression techniques when required. For water quantity, complete regular monitoring of the flow rate of the river, adhere to a maximum withdraw rate of 10 percent of the flow rate while maintaining an in-stream minimum depth of 0.5 metres. Pumping would cease if the minimum depth of 0.5 cannot be maintained. And complete annual monitoring to ensure natural drainage is not obstructed and et cetera.

For water quality, just maintaining working areas and equipment clean and free of potential deleterious substances; implement sediment and erosion protection (sic) and control measures when required; implement spill prevention and response protocols; limit surface disturbance, especially near water bodies and riparian areas; conduct routine equipment inspections and comply with fuel-handling best practices, including personnel training, setbacks, and secondary containment.

To protect vegetation, if any off-road requirement is -- use to be low-ground pressure vehicles, i.e. ATV, where offset (sic) road travel is required. Wildlife fisheries, we would be conducting regular monitoring

during pumping of the flow rate in the Char River, and again, adhere to the maximum withdrawal rate of 10 percent, minimum in-stream depth of 0.5 metres, with pumping ceasing if that depth cannot be maintained.

During the operational phase, what we're proposing to do is to conduct a hydrological assessment. So what we're going to be doing this fall is there's going to be surveys of a number of cross-sections of the river to develop a theoretical flow curve, and during next season, there will be -- we're planning to have three site visits, so a pre-freshet, and then another visit in July and August to calibrate the flow curve to make sure that the flow curve accurately represents the flow in the river at any particular time. So we'll be using the flow curve along with an in-stream staff gauge in the Cullar (sic) River -- in the Char River to complete the seasonal flow monitoring each year. As I said, a water withdrawal limit to 10 percent of the instantaneous flow with a 0.5 metre depth minimum with periodic monitoring of the community's water use.

Now, we recognize that the data set with regards to how much water is available in the river right now is certainly not complete, and much more work needs to be done, and we're planning to do that. And so if a longer term alternative water supply source is required, CGS accepts its responsibility to ensure that

there is a safe and secure long-term water supply that is also protective of the environment.

To that end, with CGS, we are requesting that a clause be included in the Water Licence stating that, If water withdrawal from the Lower Landing Lake becomes a preferred option in the future due to low water levels in the Char River, that CGS be required to prepare and provide a water balance to the Nunavut Water Board at least six months prior to pumping from Lower Landing Lake to demonstrating that the proposed pumping rate is acceptable and will not be harmful to the environment in Lower Landing Lake.

And that's about it. So there's any questions?

THE CHAIR: Thank you. Questions from AANDC? Any questions from AANDC?

Questioning of the Applicant by the Parties

THERESIE TUNGILIK: Hello. I've been here for nearly 36 years, and I've seen the difference in the Meliadene River itself. It has dried within the last 36 years about 4 feet. And I'm sure that Char River is -- it is happening to Char River as well, because when I first moved here, the water used to be near the bridge, and now some people can walk across it. What happens when -- when the pumping area is getting dry?

MR. ACORN: Just in the last slide there, that's what I mentioned, is that we recognize there is

uncertainty with regards to how much water is available right now in Char River to pump to Nipissar Lake, and as you say, how much longer will that water be available? How many years in the future would a transfer from Char River to Nipissar be viable? So we think the next best option, if Char River isn't viable in the long term, would be to probably extend the pipeline into Lower Landing Lake and the intake to that point. And so that's -- we're -- we're suggesting that we include a clause in the Water Licence that requires CGS to do a water balance if that becomes an option that CGS wishes to pursue at some time in the future. And if Lower Landing Lake itself becomes unacceptable, then perhaps there will be -- need to be a larger regional water balance and evaluation of potential supply options.

THE CHAIR: Thank you.

Question from AANDC?

MR. PARSONS: Good morning, Mr. Chair. Ian Parsons with AANDC. Just one question. You were talking about the in-stream minimum depth of .5 metres. Just wondering where along the river that that was going to be taken; is it the whole river or just at certain points because the profiled river changes upstream compared to downstream?

MR. ACORN: Joe Acorn. Thanks. Yes.

When the surveyors are up here to do the cross-sections, we will be searching the river for what it would -- we would consider to be its widest point. So that would be, essentially, the -- the minimum depth bottle neck, you want to call it. So when we're evaluating a -- requiring an in-stream minimum depth of 0.5 metres, it would be at the lowest point of depth within the river in its -- in an entirety. So if there's -- could be a 1 metre of depth at the pipe intake location, if there's 0.5 metres of depth at the low water point at some other point within the river, well, that's the point that's going to dictate whether or not we continue pumping or we shut off pumping. So we'd be looking for the widest and shallowest point in the river to make that determination.

THE CHAIR: Thank you.

Anybody any supplementary?

MR. PARSONS: Again, Mr. Chair, Ian Parsons, AANDC.

Just one follow-up question to that, I guess. Is that going to be looked at daily or weekly, because I know, myself, I'm not from here, but I've been here time and again, and the change is quite rapidly (sic), the flows in Char River.

MS. LUSTEY: This is Megan Lustey. Yeah, with the operation and maintenance plan that we

submitted to the Water Board, it will be monitored, the flow rate and the depth at that .5 metre location, on a daily basis during operation and for the first year for the entire summer to create the background data that we need for this to have more information on this project.

THE CHAIR: Thank you. Any further questions from AANDC? Thank you.

DFO?

MS. DAHL: Julie Dahl, DFO. I just have a few questions. You have indicated that the pump that you're using is a variable pump, that you're able to, as you say, throttle back from the .04 metres per second maximum. Do you know what the minimum pumping rate may be of that -- that that pump could be operated at?

MR. ACORN: Sorry. Right off the top of my head, I can't recall, but I can try and find that out for you.

MS. DAHL: Okay. Thank you.

I've got another question here. Sorry. Give me a moment. Okay. Just looking at your slide here where you gave a comparison of pumping requirements between 2014 and 2030, you had indicated that in 2014, a volume of just over 47,000 cubic metres needed to be pumped, and I'm assuming that that relates to the figure that you gave on the third slide that said that Nipissar

Lake dropped by 44,000 cubic metres per year. I was just wondering if that -- on Slide 3, it says that the lake dropped by 44,000 cubes per year. Over which years is that, and how many years, because I'm wondering whether or not there's a cumulative water level drop and whether a one-time replenishment in 2014 would account for one year of drop, but has there been a cumulative over-year drop of about 40-some-odd-thousand cubic metres each year?

MR. ACORN: It's Joe Acorn. That $44,000 -- sorry, 44,000-cubic-metre figure comes from the water consumption study that was done in 2010, and it was estimated that the Nipissar Lake water volume had been dropping over a number of years at a rate of 44,000 cubic metres per year.

MS. DAHL: Okay. So is there a cumulative water level drop?

MR. ACORN: Yes. The rate -- the -- the level of -- in Nipissar Lake is continuing to go down, so it is cumulative.

MS. DAHL: Okay. So will the one-time replenishment that was proposed for 2014 just address the drop for that one year?

MR. ACORN: Yes. The 47,000 that would've been transferred in 2014 would've simply maintained the level for that year, so it would've been enough to

accommodate the community's requirements and maintain the lake level. So it really wouldn't have been a -- a replenishment in 2014, it would've been simply a maintenance transfer.

MS. DAHL: Thank you.

THE CHAIR: Thank you.

For the benefit of our court reporter, please state your name prior to either questioning or answering, please. Thank you.

Next we have anybody from GN? Questions?

THERESIE TUNGILIK: I have one more question.

THE CHAIR: Theresie Tungilik, Counsellor of Rankin Inlet. What is the pipeline material made of, and how durable is it?

MR. ACORN: Joe Acorn. It's an HDPE pipe, which is high-density polyethylene. The pipe was designed to last at least 20 years, but the expectation is that it would last much longer than that. I can't say right now exactly how long its life span could be, but I know it was designed to last for at least a 20-year period.

THE CHAIR: Thank you. Anybody else?

AANDC?

MS. COSTELLO: Thank you, Chair. Karen Costello, Aboriginal Affairs Northern Development Canada. On your figure, you illustrated two

air-release valves which are close to the Char River. I have seen these valves. There's no lockout on them. Is there a possibility in the interest of safety during operation -- you wouldn't really want to have someone releasing these valves while you're pumping. Is there a -- can you make adaptions to these valves so that there's a lockout provision so they cannot be released or opened during operation? Thank you.

MR. ACORN: It's Joe Acorn. I can speak to one of our engineers, but that certainly doesn't sound like that would be a problem at all. So we can look into that.

MS. COSTELLO: Thank you, sir.

THE CHAIR: Thank you. Anybody else?

Anybody from staff questions to the applicant?

Questioning of the Applicant by Nunavut Water Board Staff

MR. KHARATYAN: Thank you, Mr. Chair. Karmén Kharatyan. I have a couple of questions, please.

So the first question is with respect to actual water usage, which is around the 500 or 550 litres per capita. So in calculation, you use the target of 340 something litres per capita. How you will (sic) meet this target ETS water consumption per capita?

MR. ACORN: Joe Acorn. CGS is implementing, and is continuing to implement, a number

of water-minimization methods in the community. Megan, you can speak better about that? Could you? Do you want to talk?

I can refer back -- just a second here. I'll dig up the letter here that we got. Yeah, here it is. If you want to refer back to the letter we submitted on May 9th, 2014, it was Item Number 6 that came out of the prehearing conference, and what it was, was to outline water-saving measures implemented or to be implemented. And the response at that time was: (as read)

> CGS is committed to establishing water-conservation initiatives and improve water utilization in the community. As part of these initiatives, CGS has installed district and zone meters to record water use and identify losses for leakage reduction. In addition, CGS is working with the Nunavut Housing Authority to evaluate water usage and identify further opportunities for water conservation in units, and the CGS will continue to work on water-saving initiatives in the future.

MR. KHARATYAN: Karmén Kharatyan again. Why I ask this question, because I remember during technical meeting where we already raised this issue, and from my

understanding, this is a very long-term target because we were provided with information that the licencee or CGS needs to go to housing corporation and change many appliances in -- in every housing -- every houses to meet this target. So is it really realistic for short term or no?

MR. ACORN: In the short term, probably not, but we're looking at a -- a 2030 -- or a 16-year time horizon here. As we said, CGS is looking at a number of options, and if water-minimization efforts are more economical on a -- a dollars-per-saving basis, than perhaps upgrading the existing facilities, then I think that will be the option that CGS will be pursuing.

If you look at the water supply report, there are a number of options in there for things that CGS can do if it chooses to pursue those options. But the 2030 numbers, I mean, a lot of it is based on projections, which we're not sure of at this time. We're using a 3 percent annual growth rate for the community of Rankin Inlet, which, if you look at the -- at Nunavut Bureau Statistics, we're probably quite overestimating what the population in Rankin Inlet will be in 2030. So the numbers we're using are -- are quite conservative in -- in the fact that the required water in 2030 is probably quite likely going to be lower than what we're

estimating in our project, just to make sure that we have it covered. So we -- we think there's -- there's quite a bit of safety factor built into what we're projecting here. But, again, if -- if additional water-saving measures are required, CGS will continue to pursue them.

MR. KHARATYAN: Thank you.

One more question, please. In the beginning or in the initial documentation submitted to the Board, from our understanding, the goal of licencee is replenish Nipissar Lake. From the last submissions, I was a little bit confused because I noticed that the goal is -- is not really replenish, it's just preventing the further decrease of water level. And the plans with the last submissions was going -- pumping rate or pumping days will increase progressively to 43 or 79 in 2030. So the question is: If you think that in 2030 you can take this water, so Char River will allow you to take 'X' amount of water in 20 years or 15 years, why not taking this water right now or from when it's approved in 2015, for example? So not going progressively, but trying to replenish the lake, which is more sustainable solution.

MS. LUSTEY: This is Megan Lustey. Yes, what we have submitted in the last document there would be the minimum pumping days that we need to pump in

order to maintain. Because we don't have the data at this time to know how many pumping days are available, we just wanted to present what we would need to do to maintain. But the plan is that we would create a withdrawal plan from Char River next year when we have that hydrological data and be able to pump as much water as possible every year, making sure that we don't exceed the thresholds of 10 percent and the .5 metres depth at the widest area of the river.

MR. KHARATYAN: Okay. So the plan may change from preventing to replenishing, really?

MS. LUSTEY: Yes. The information -- this is Megan Lustey. The information provided was the minimum we needed to maintain the water levels, but the goal is to replenish the lake. And so, because the data shows that the lake has been dropping for quite a few years, it will take more than one year to replenish the lake to historic levels, but our information provided was to show that this is how much of minimum pumping days that we're going to need, and because we don't have the number of pumping days that we can use from the river yet, that's what that was to show.

MR. KHARATYAN: Thank you.

One very short question. Do you know how much is the -- or how deep is the lake now?

MR. ACORN: Lower Landing Lake, you mean?

Sorry.
MR. KHARATYAN: Nipissar Lake, the --
THE CHAIR: Do you have a name? Please state your name.
MR. KHARATYAN: Karén Kharatyan again. I mean Nipissar Lake. How much is the -- the maximum depth now?
MS. LUSTEY: I don't have the measurement of the maximum depth, but if you give me one second, I can grab the latest depth from at the pump -- at the intake.
THE COURT: Do you have a name?
MS. LUSTEY: Sorry. That was Megan Lustey.
THE CHAIR: Thank you.
Any further questions from staff?
MR. HOHNSTEIN: Thank you, Mr. Chair. David Hohnstein. I think we're going to wait for a quick answer here, and then we've got a couple more questions, I believe.
MS. LUSTEY: This is Megan Lustey. At the intake on Nipissar Lake, which is not at the deepest point of the lake, it is 3.4 metres deep as of last month.
THE CHAIR: Staff?
MR. HOHNSTEIN: Thank you, Mr. Chair. David Hohnstein again. Just one question from my end. Going

back a little bit to our -- there was some initial discussion on potential alternative water sources if -- if Char River wasn't adequate or through the hydrological studies it was found that additional sources would be needed. I was just wondering if this information might be something that would be presented in a renewal application that would be coming forward to the -- to the Water Board, seeing as the actual licence right now is expiring in May of 2015. So we really won't have the -- I guess, the benefit of another season for determining some of the -- the -- the water characteristics or the flow characteristics of the Char River. Thank you.

MS. LUSTEY: This is Megan Lustey. Yes. As soon as this amendment application has been processed, the renewal application for this Water Licence will be going -- moving forward. What we would like to see is, in this amendment, we have the ability to provide information on the water balance for Lower Landing Lake. If, once we've completed the studies, too, that we've committed in our last submission to the Board and to AANDC on September 11th, which we will not have the results for until after next season, at that point, if that shows that we don't have sufficient to pump as much water as we need for -- to the 2030 date, at that point, we can then start doing the water

balance information on Lower Landing Lake.

What we don't want to see is that the amendment process is held up waiting for that information because we would like to be able to pump in the summer of 2015 to replenish Nipissar Lake that year.

MR. HOHNSTEIN: Thank you, Mr. Chair. David Hohnstein again.

So just for clarification, was there going to be additional alternatives proposed in the -- in the renewal application, or is that waiting for additional information to come in?

MS. LUSTEY: This is Megan Lustey. That will be waiting for the information that comes in from the hydrological data that will be done this fall and next summer.

MR. HOHNSTEIN: Thank you, Mr. Chair. I don't believe we have any more questions.

MR. KHARATYAN: One more, please.

MR. HOHNSTEIN: Sorry. One more question.

MR. KHARATYAN: Karén Kharatyan again. So the hydrological data to be submitted will also include the chemical data or no? Because I think we discussed in technical meeting in -- there is a study chemical -- or a water-quality study for Char River, Nipissar Lake, and the Lower Landing Lake ongoing. So the question is: Do you intend to submit this information with the

renewal licence application, or it will be submitted independently?

MS. LUSTEY: This is Megan Lustey. Yes, the chemical water quality of the Char River and Nipissar Lake can be submitted with the renewal application. It was sampled this summer, and our plan is to sample both Char River and Nipissar Lake annually before starting the pumping.

MR. KHARATYAN: Thank you.

MS. LUSTEY: Sorry, this is Megan Lustey. I just want to add, and at the -- in the case that we will be examining Lower Landing Lake, we'll also be sampling water-quality data from that source as well.

THE CHAIR: Thank you. Any further questions from staff?

Any questions from Board members, panel members?

Questioning of the Applicant by Nunavut Water Board

MR. AGLUKARK: Thank you, Mr. Chair. David Aglukark Sr., Water Board member. A question to the lady here that just mentioned just a little while ago the depthness (sic) of Nipissar Lake. My question is: How late is the information -- is that?

MS. LUSTEY: This is Megan Lustey. That information is from in August. I could find out the latest depth for you tomorrow, because there's actually someone doing the measurement today, but I don't have

the depth from this week.

THE CHAIR: Thank you.

Before we move on to the next presentation, I will suggest a 15-minute break. Thank you.

(ADJOURNMENT)

THE CHAIR: Welcome back. Before we proceed with the next presentation, I understand staff has more questions to ask to the applicant.

Questioning of the Applicant by Nunavut Water Board Staff

MR. KHARATYAN: This is Karmén Kharatyan. Thank you, Mr. Chair.

I have a question related to the slide -- I don't see the number -- "Pumping Requirements". Under 2014 -- under 2014, we have this calculated volume required, 47,187 cubic metres, and based those -- based on this number, total pumping duration, 14 days. So how this 47,000 was calculated? So what was the per capita water usage used in this calculation?

MR. ACORN: That was 356 litres per capita per day multiplied by 352 days per year multiplied by the population.

MR. KHARATYAN: So this 356 was actual water usage or targeted value? I don't know. Because I -- why I am asking this question -- and I should clarify -- that you mentioned about an error. This

wasn't an error, it was just GN-CGS reporting in 2013 water usage, which is 600-something thousand. So it gives 500 -- or a little more than 500 litre per capita.

MR. ACORN: Yes, I think if you look back in the letter in November 2012, I think there's an acknowledgement that the actual numbers differ perhaps from what's been reported, and the 356 litres per cubic -- litres per capita per day is what is believed to be the actual usage, whereas -- with a target eventually of 344.

MR. KHARATYAN: Karmén Kharatyan again. Why I am confused, Joe, because this letter came in 2012, that because they were narrowing calculation before -- yes, with the initial application. But this number of water use 6 -- which is 600,000, was reported just in 2014 for 2013. So it was just reported in March as water use by community.

THE CHAIR: Applicant, do you have a name before you speak?

MR. ACORN: It's Joe Acorn. I think, rather than getting into a debate over numbers here, how about we get -- take a look at it and we can get back to you on that, and if we can sort of try and reconcile this.

MS. LUSTEY: This is Megan Lustey. I guess

one of the things we also want to look at is that we're not saying that we're necessarily pumping this number of days, as I explained. We're pumping for the water 'til we reach that 10 percent and that .5. That's -- those are going to be our thresholds. This is just an estimate of how much water we're looking at needing in the community. But the thresholds of when we're not going to be pumping is the 10 percent flow rate if we're exceeding that and the .5 metres of the water depth.

THE CHAIR: Any further questions from staff?

MR. KHARATYAN: Karmén Kharatyan again. Thank you, Megan. I do not worry about the 10 percent or 0.5 metres, I'm just -- this is a -- this is just, not confused, but I do worry that you need more water that (sic) you are providing.

MR. ACORN: It's Joe Acorn. Sorry, I mean, and that may be the case. I mean, that's something we're going to look at. I think the important point to keep -- is not to get lost in the numbers, but realize what it is we're trying to do here, and what we're trying to do is maintain the level of Nipissar Lake so that it stops decreasing. And we don't know exactly how much we can move out of Char River right now, and so what we're putting in place are

essentially environmental safeguards. We will pump as much as we can maintaining the 10 percent withdrawal limit and the 0.5 metre minimum depth. So exactly how much we pump each year, we don't really know right now; we need to do the hydrologies out there. We're hoping to pump as much as we can each season while maintaining those two key environmental protection measures, keeping them in place.

So what the actual numbers turn out to be, we don't know yet. We -- we can't say that. That's part of the reason why we're looking at doing the hydrology study. But we're putting in place two measures that we think will protect the environment while we're doing that and while we're getting these numbers in place.

THE CHAIR: Thank you. Any further questions?

Any further questions from the floor? AANDC?

MS. COSTELLO: Thank you, Mr. Chair. Karen Costello, Aboriginal Affairs Northern Development Canada. I appreciate the information that we have received from the -- from the applicant on -- on the water depth. And the benefit of a conversation over coffee break has triggered this question. The statement was made that the water levels in Nipissar Lake in 2014 are similar to the water levels right now that were recorded in 2009. And the pipeline has been

constructed for a couple of years now. I just want -- has -- just want to get it on the record. Has the pipeline been used at all? Has there been -- or has it just been constructed? Thank you.

MEGAN LUSTEY: The pipe -- this is Megan Lustey. The pipeline has not been used at all because we do not have the Water Board amendment in place.

MS. COSTELLO: Thank you, Mr. Chair.

THE CHAIR: Thank you.

Anybody else from the floor?

PETER IPKORNERK: My name is Peter Ipkornerk. I'm from Rankin Inlet. This is not a good stand here. You need to have everything well in place.

My name is Peter Ipkornerk. I am from Rankin Inlet. Thank you for coming here, and thank you for coming and looking after our community. I thank you all.

I want to comment on a few things here because whatever is being talked about is open. I would like to say Nipissar Lake, you probably seen it, the level of the water has gone down, and there's a pipeline put up there, and the pipe has not been used, and it was installed last year or a couple years ago. And it's not been used. There was -- a little bit was flowing, maybe for, like, three weeks it was pumping, and I thought -- I thought it was going to flow over the

summer, but, you see, the water is very low. The water is flowing there. And just this summer, I'm not too sure if it was flowing from Char River, and the pipeline that is up there is just on the main -- mainland. It's, like -- it's not properly installed. It's funny to see it just being -- laying on the ground. If the water starts flowing there and if -- if it keeps flowing or whether to -- coming from -- during the summer, it only -- we only have three -- you can finish it in three months of the year coming from Rankin Inlet to end of the road, using that road to -- I'm pretty sure we can get water from Meliadene because I'm pretty sure we would -- the population of Rankin is growing, and there's a lot of people that use water. Because of the population of Rankin, we are using so much water. We've been using Nipissar Lake for so many years. I just wanted to comment -- comment on this. Thank you. I don't want to speak too long. I'll probably say something later on. Thank you.

THE CHAIR: Thank you.

Anybody else? If there are no more questions to the applicant, we will move on to our next intervener, AANDC.

MR. BOYER: Mr. Chair, Craig Boyer. I will propose to swear in the witnesses.

KAREN COSTELLO & IAN PARSONS, Affirmed

THE CHAIR: You may proceed with your presentation. Go ahead.

Presentation by AANDC

MS. COSTELLO: Thank you, Mr. Chair. Good morning. As stated, my name is Karen Costello. I am the director of resource management for Aboriginal Affairs Northern Development Canada, the Nunavut regional office. I'd like to express my appreciation to the Nunavut Water Board for providing this opportunity to make a presentation regarding our intervention regarding the Government of Nunavut's application to amend the Rankin Inlet Hamlet Type "A" Water Licence for the seasonal replenishment of Nipissar Lake.

I am joined by Ian Parsons, one of our regional coordinators with the water resources division in the Nunavut regional office.

On behalf of the department, I'd like to express my thanks to the Hamlet and the people of Rankin Inlet for their kind hospitality during this visit, and also for the giving up of their Community Hall to facilitate this hearing.

We appreciate the efforts of the Nunavut Water Board during this licence application review process, as well as the Government of Nunavut's Department of Community Government Services and Stantec for

responding to our questions and concerns during this process.

Throughout this presentation, I will refer to Aboriginal Affairs and Northern Development Canada as "the Department". I'm just going to briefly touch on the Department's responsibilities with regard to the licence amendment application on the contributions that the Nunavut regional office has made with respect to this process so far.

I will review the technical comments that the Department previously provided, and although resolution of these comments and recommendations with the Government of Nunavut has not yet been confirmed, the Department is confident that they can be resolved.

We have provided technical review comments on seasonal flow and availability, on the adaptive management plan, alternatives assessment, and pipeline drainage.

Aboriginal Affairs' mandate and responsibilities with respect to Nunavut water resources are derived from a variety of -- of acts and legislation. As you can see from the Department of Indian and Northern Development Act, the Nunavut Land Claims Agreement Act, and the Nunavut Waters and Nunavut Surface Rights Tribunal Act and Regulations, as well as the Territorial Lands Act and Regulations, we have a very

broad mandate. In addition, the Department administers and enforces regulatory authorizations that pertain to Nunavut's Crown land and fresh water resources.

And as I've mentioned, we participate in the Water Licence processes that are administered by this Board, and our participation is along with other interested parties, and we provide technical advice and expertise for the Board's consideration. Following the issuance of any licence by the Board, we will -- we also inspect for compliance.

The contributions to the Water Licence amendment application review have been ongoing for -- since last year. The Department reviewed the scope of the information included in the amendment application and recommended further information requests. A written memo was provided on September 20th, 2013. Following that, the Department conducted a technical review of the amendment application, and comments and recommendations were provided for the Board's consideration in a written memo on December 18th, 2013.

The Department participated in a technical meeting and prehearing conference held here in Rankin Inlet earlier this year in January, and the Department conducted a second technical review following the submission of additional information by the applicant. Comments and recommendations were provided for the

Board's consideration in a written memo on August 28th.

MR. PARSONS: Good morning, Ian Parsons, Aboriginal Affairs. I will now go over our technical review comments.

So our first comment revolves around the flow monitoring. We've said this right from the outset of the licence amendment, and it's been a conversation all the way through. So we're recommending that the licencee be required to undertake a multi-year seasonal flow monitoring of Char River. This will clarify the viability of Char River to meet the community needs in the future. This will also provide evidence toward adaptive management of water withdrawals, as well as establishing issue and flow objectives.

As I've stated, we've had conversations, either over the telephone or in writing, with the applicant all through the process. They were able to provide a limited flow data set that was provided to them by Agnico-Eagle; however, it was very limited and didn't provide much information. So -- so we're still recommending that the flow monitoring be undertaken.

MS. COSTELLO: Karen Costello for Aboriginal Affairs. With -- the applicant had a September 11th, 2014, submission. They responded to the Department's technical recommendation for flow monitoring. They indicated a commitment to monitor flows prior to and

during pumping events, and were proposing the establishment of in-stream flow objectives based on general Department of Fisheries and Oceans guidelines.

Aboriginal Affairs agrees that the use of Department of Fisheries and Oceans guidelines is an acceptable method of establishing in-stream flow requirements and that monitoring of flows during pumping will adequately support the management of pumping operations. It remains unclear, however, whether the annual variability of flow will allow sustained withdrawal sufficient to meet community requirements.

The September 11th submission indicates such information is not necessary because other pumping options will be explored if required in the future. And the applicant spoke to that in their presentation about asking for a term and condition.

Should the community adopt this approach, there is a risk without this term and condition that another licence amendment may be required on relatively short notice in a crisis situation. Aboriginal Affairs, therefore, continues to recommend a multi-year seasonal flow monitoring program to fully characterize water availability. Our colleague from Fisheries and Oceans will comment more on this in their presentation.

In Slide Number 6, here are two recent photographs

taken of the area. The photograph on the left shows Char River. In the back, you will actually see the blue sea can, which the applicant has referred to where the pump is stored, and the pipeline just comes to the -- to the left of the sea can. You can actually see the water level of Char River, and this picture was taken on August 23rd of 2014. Over on the right is a picture just highlighting the shoreline of Nipissar Lake. It was taken the same day. And this is just across from the pumping station on Nipissar Lake.

We had comments on the adaptive management plan. The operation and maintenance plan developed for the proposed operation does not include management strategies for maintaining in-stream flow. Specifically, Section 5.2 of the plan states that: (as read)

> If insufficient flow to operate the pump is present, pumping activities will cease until sufficient water is present. Additional commitments in the Stantec submission propose to maintain a minimum flow depth during pumping in accordance with Fisheries and Oceans guidelines.

And when we developed this issue, it was not clear what -- that the minimum flow depth would be maintained at all points in the river, which varies considerably

in profile -- and you can see a little bit in that previous photo -- or how water withdrawals would be sustained if the minimum depth cannot be maintained.

And during some dialogue earlier this morning, there was -- in response to a question from the floor, the applicant indicated that the depth would be determined at various stages, and I think that was new information to -- to explain how the -- this .5 minimum depth was going to be calculated.

So the Department recommends that as a condition of the Water Licence amendment, the licencee be required to develop an adaptive management plan that would include flow monitoring of Char River, formulation of in-stream flow objectives for the river, and mitigation options for occurrences when flow may be insufficient to meet pumping objectives. Mitigations should include the identification of alternative intake locations. And here we're thinking back to the original location of Lower Landing Lake. And this goes back to the term and condition that the applicant mentioned this morning.

The applicant has indicated that the Char River was selected as a supplementary community water source based on economics and a limited assessment of water availability that did not account for flow variability or competing water uses. The targets for the number of

pumping days may exceed the number of high-flow days available for pumping. This raises the question of the viability of the Char River in meeting community water supply objectives.

So the Department recommends that the applicant conduct a more robust assessment of alternative supplementary community water sources that would assess water shed, water balances, seasonal availability, annual flow availability, competing water uses that -- and that fully captures implementation and operational costs.

Some of our comments, we had noted that the applicant had indicated that the low point in the water resupply pipeline will have a drain valve allowing the remaining water in the pipeline estimated at approximately 127,000 litres to be drained once the resupply was complete. It is the Department's recommendation that structures at the pipeline discharge point be placed to prevent erosion during discharge.

Aboriginal Affairs recognizes that it is vitally important that Nipissar Lake be seasonally replenished, and it is no longer an adequate water source for the community of Hamlet Lake (sic). It is necessary to ensure that the water source chosen for the replenishment is both adequate and environmentally

sound.

Our observation is that the decision to install a pipeline and pump water from Char River did not take the water licencing process a proper assessment of water availability, flow variability, or in-stream flow factors into account. The hamlet is now in an unfortunate position of applying for a Water Licence and beginning to consider important environmental questions, only after having invested in a pipeline to what appears to be an unproven water source.

That being said, Aboriginal Affairs supports the issuance of an amendment to the Rankin Inlet Water Licence to allow the use of water from Char River for municipal supply, but only under the conditions we have outlined. It is essential to conduct ongoing seasonal flow monitoring of the Char River to develop an adaptive management plan that better aligns pumping activities with water availability to account for competing uses, and to better understand the viability of the Char River over the medium and long term.

Thank you.

THE CHAIR: Thank you.

Before we move on to the questioning of the interveners, I would suggest that we break for lunch now and be back here at 1. This will give all the -- everyone the chance to think about the questions over

the lunch hour, and we'll see you back here at 1.

(LUNCHEON ADJOURNMENT AT 11:20 AM)

(PROCEEDINGS RECOMMENCED AT 1:00 PM)

THE CHAIR: Welcome back, everyone. I guess we'll start the questioning by the applicant to AANDC, and we'll go DFO, staff, Board, and public, in that order -- not necessarily in that order, but you're good to go.

Questioning of Aboriginal Affairs Northern Development Canada by the Parties

MR. ACORN: Joe Acorn. Thank you, Mr. Chair.

I just have maybe a couple questions for AANDC. Just, you went through your recommendations that you've made in your submission back in late August. After that, we submitted a letter to the Board on September 11th, 2014. There was no chance for AANDC to provide a written response after that date and put it on the record, so if we could, could you maybe explain or acknowledge or provide some kind of response from AANDC to our September 11th letter and sort of indicate to the Board if and how, and if not, how does our September 11th response satisfy the recommendations that AANDC had put forward?

MR. PARSONS: Good afternoon. Ian Parsons, AANDC, Mr. Chairman.

So, yeah, when we reviewed your September 11th submission, we have (sic) already had everything prepared and done for this public hearing. So our discussions focused around -- but your -- your issuing objective such as the DFO guidelines, which our colleague will speak more to in her presentation. But everything seemed okay to us with regards to the studies that you guys are going to undertake.

We just wanted to get on the record that our recommendations still stood at that time with regards to the flow monitoring and the viability of the Char River as a sustainable replenishment source for Nipissar Lake. That's our biggest concern.

MR. ACORN: Joe Acorn. Just to follow up just to be clear, then, we're not wanting to start doing an alternative study analysis of other supply options until we know Char Lake (sic) is -- is not a viable source in the long term. So the intention is to do the research that we're doing now, and do our hydrological work next summer. So -- and your -- your recommendation didn't seem to have a timeline to initiate the alternative source study, so just want to be clear, you're acceptable of us sort of waiting perhaps a year, perhaps two, whatever it takes, to make that determination, whether or not Char River is viable or not in the long term before we initiate the study of

an alternative source?

MR. PARSONS: Mr. Chairman, Ian Parsons, AANDC.

Maybe we weren't clear in our presentation, but what we've seen so far, there's very little data to suggest whether or not Char River is viable, so we would like to see an alternative assessment done as soon as possible. With what's been shown to us, we think you're going to need to come up with an alternative source in the very near future.

MR. ACORN: Joe Acorn. And I agree. I mean, we don't know for sure how viable Char River is in the long term right now, but I think that that's part of what we're trying to do with the work we're doing this fall and again next summer. I mean, we don't want to initiate a study into an alternative source until we kind of make that determination of how viable Char River is in the long term. So, I mean, we don't think we should be initiating an alternative study at this point. I'd sooner wait until we make that decision on -- on -- on how much flow there is available in Char River. So is that acceptable?

MS. COSTELLO: Thank you, Mr. Chair. Karen Costello for Aboriginal Affairs.

As I stated, Aboriginal Affairs does support this amendment request, and we recognize that this

additional information will only be forthcoming after the fall study and the 2015 planned field work, and based on the commitments made in the 2011 submission, we're satisfied at this point. Thank you.

MR. ACORN: Joe Acorn. Thank you. That's all my questions.

THE CHAIR: Thank you.

DFO? DFO, any questions to --

MS. DAHL: No.

THE CHAIR: -- AANDC?

Go to the microphone, please.

MS. DAHL: Julie Dahl -- sorry. Julie Dahl, Fisheries and Oceans. No questions for AANDC.

THE CHAIR: Thank you.

Any questions to AANDC from staff?

MR. HOHNSTEIN: Thank you, Mr. Chair. David Hohnstein, no, we have no further questions.

THE CHAIR: Any questions to AANDC from Board members?

Any questions to AANDC from the public? Hamlet? Thank you.

Next we have DFO with a presentation. Craig?

MR. BOYER: Mr. Chair, Craig Boyer. Could I proceed to swear in the witness?

JULIE DAHL, Affirmed

THE CHAIR: Whenever you're ready, please

go ahead.

Presentation by Department of Fisheries and Oceans

MS. DAHL: Julie Dahl, Department of Fisheries and Oceans. Good afternoon to the Board and Board staff. I will be giving a presentation on behalf of Fisheries and Oceans Canada, or DFO, for this hearing. The -- I'm assuming this works. Oops. Okay. All right. There we go.

I would like to apologize, first of all, for the relatively late participation by DFO in this process. We had only recently determined that we would be attending the hearing, and therefore, the written submission had not been provided. I do have my notes that accompany the presentation that I can provide to the Board afterwards as part of -- part of a -- a formal submission.

So Fisheries -- DFO is an interested party in the Nunavut Water Board review of the Government of Nunavut proponent or the applicant application to amend the Type "A" Water Licence for the hamlet of Rankin Inlet to allow for annual replenishment of Nipissar Lake.

Pursuant to federal legislation, DFO ensures compliance with the fisheries protection provisions of the Fisheries Act, specifically to manage impacts to fish and fish habitat, to provide for the sustainability and ongoing productivity of the

commercial, recreational, and aboriginal fisheries that are supported.

The proposed licence amendment is intended to address the drawdown of Nipissar Lake, the primary water source for Rankin Inlet, due to increasing water demand by the local population, lower than anticipated annual recharge rates to the lake, and leaks in the water supply system.

DFO has considered the project assessment information, as well as responses to questions posed by DFO and other reviewers. After considering the proponent's proposed avoidance and mitigation measures and in consideration of those measures being fully developed and effectively implemented, DFO is of the opinion that there is likely a low probability of detectible impacts to the Char River in terms of its ability to support commercial, recreational, or aboriginal fisheries; however, it is very important to state that this determination is conditional upon the implementation of effective and appropriate mitigation measures, monitoring, and responsive management actions, and the development of a long-term water management plan such that the sustainability of the Char River is not jeopardized.

Despite the application of mitigation and monitoring, there is still uncertainty regarding the

ability of the Char River to provide the required water to maintain Nipissar Lake without endangering the aquatic resources of the river.

In an attempt to provide a basis for DFO's comments, I have used some simplified figures taken from the various numbers that have been provided and revised regarding current water usage and protected -- projected usage. I think we have seen that there have been many figures provided, calculated, recalculated, different projections, and I know for myself, it has created a technical challenge to really figure out what -- what we are faced with in terms of water needs, and I'm -- I'm understanding that it's probably a confusion that's among a number of people when we're -- in trying to interpret the data in trying to come up with some reasonable recommendations.

As I can understand from the data, it appears that the natural recharge of Nipissar Lake is approximately 314,000 cubic metres per year, and that is as per the 2008 operation and maintenance plan, and then as restated in the updated 2010 operation and maintenance plan.

The estimated use of water per year from the lake is stated to be approximately 600,000 cubic metres. And I got that from the -- from the recent public hearing conference report. And that seems to leave an

approximate difference of about 286,000 cubic metres of water that need to be pumped from the Char River or elsewhere to the lake each year. Based on an anticipated maximum pumping rate of .04 cubic metres per second, or 40 litres a second, it is expected to take approximately 80 days of pumping from the Char River to replenish Nipissar Lake each year.

DFO provided advice to the Board in December of 2013 that an authorization pursuant to the Fisheries Act would not be required, and this was based primarily on four proposed mitigation measures, these four measures generally being: A commitment to withdraw no more than 10 percent of the instantaneous flow from the Char River; a commitment to continuously monitor instantaneous river flow to ensure pumping rates do not exceed this 10 percent value; a commitment to include a cutoff limit, in this case, being a water depth below which water would not be pumped from the river; and a commitment to provide an acceptable fish screen on the intake to avoid the entrainment or drawing in of fish.

DFO notes that while these mitigation measures may be appropriate to address impacts to aquatic resources in the Char River, uncertainty due to limitations in the data available to adequately describe the flow regime and information on how the measures will be implemented, monitored, and adapted are unclear.

So I was just going to briefly review each of these four main mitigation measures and identify a few questions and some recommendations with respect to each.

So regarding the commitment to determine daily flows to ensure that pumping rates do not exceed 10 percent of the instantaneous flow, it is not clear what is considered a pumping day. While the assessment reports provided imply that the pump will be shut off each day and restarted subsequent -- each subsequent day following a daily flow calculation, it is noted that for the proposed pumping that was to occur in 2014, it was stated that the duration of pumping will span over approximately 14 days, with the pump operating 24 hours a day. As well, the anticipated pumping duration of approximately 80 days to replenish the 286,000 cubic metres of water in Nipissar Lake can only be achieved with 24 hours of pumping for the entire period.

Our recommendation is that clarification be provided as to whether monitoring of instantaneous flows is continuous, as well, clarification is required as to the procedures for determining daily river flow rates and pumping rates, including the timing of these calculations, how adjustments to pumping rates will be implemented when needed.

The second mitigation was regarding stopping pumping if the 10 percent withdrawal rate was exceeded. The intention was to cease the pumping if the flow rate of the river cannot be achieved. This was identified in the assessment report as a mitigation measure to address the potential for loss of habitat and impedance of fish movement associated with the water withdrawal activities. However, during periods of rapid decline in spring freshet flow, it is not clear how it will be ensured that pumping rates will be adjusted so as not to exceed 10 percent withdrawal. In particular, assessment reports indicate that upon completion of the freshet, flow rates drop significantly to approximately 1.13 cubic metres per second from an average flow at the peak of the freshet of 7.3 cubic metres per second.

The recommendation is that clarification be provided as to the procedure for adjusting pumping rates in response to rapidly changing river flows to ensure the 10 percent of instantaneous flow is not exceeded. In other words, a daily calculation of flow may not be adequate if we are in a rapid decline situation.

Regarding the commitment to include a cutoff limit below which pumping would cease, setting a minimum water depth may not provide an additional level of protection for the fish and fish habitat function in

the river. Data collected for the Char River in support of the Meliadene project indicate that average water depths in the river were in the range of .5 down to .3 metres from the high flow in the spring to lower flows in the summer, with some areas up to 1 metre in depth in the spring. It is not clear what the water depth is at the pump location -- and I had asked this question of Stantec earlier -- nor how a .5 metre depth cutoff would be applied, especially if that depth is only likely to be achieved in the spring and only in specific areas of the river.

As well, the assessment reports reference a 2013 DFO document referred -- called the "Framework for Assessing the Ecological Flow Requirements to Support Fisheries in Canada". This document speaks to a cutoff limit, but it is not a minimum water depth, but it is a point where withdrawal would cease if the instantaneous natural flows drop below 30 percent of the mean annual discharge for the river. It is unlikely that sufficient flow data for the river are available to calculate this mean annual discharge.

The proponent should -- should refer in more detail to the DFO ecological flow requirements document. A less than 10 percent of instantaneous flow withdrawal limit is likely protective during high seasonal flow; however, a flow based cutoff possibly in

the .1 to .6 cubic metres per second range may be required during extreme low events and during the typical seasonal low flows. This would be a flow level at and below which no water should be withdrawn from the Char River.

The recommendation is that the water depth at the pump location be clarified, also, given the implications of drawing down a 1-metre deep pool to .5 metres on other areas of the river that may only experience a maximum depth of .5 metres should be considered, and the appropriateness of this criteria to manage withdrawal-related impacts should be clarified.

The proponent should gain greater knowledge of the river-flow regime to establish a protective limit for water taking during seasonal low flow. This may involve determining the mean annual discharge with some accuracy or modelling natural flow in the Char River such that a 30 percent of mean annual discharge cutoff limit can be defined and compared to in-stream flow suitability measurements for important fish life cycle requirements.

Regarding the commitment to provide an acceptable fish screen on the intake to avoid the entrainment of fish, clarification was provided that the screen-opening size would be 2.54 millimetres, in compliance with DFO's fish-screening guidelines, and

that the surface area of the intake was developed such that maximum velocities at the face did not exceed .16 feet per second, which is .049 metres per second.

The recommendation is that the proponent ensure that all of the required design criteria, including determination of an acceptable approach velocity, the required open-screen area, the type of screen and material, and the suitability of the dimensions of the screen have been considered in the design of its water intake fish screen to be in compliance with DFO's fish screen guideline and to avoid serious harm to fish.

DFO would like to remind the proponent or the applicant that they are required to demonstrate due diligence in complying with the Fisheries Act, and it is their duty to notify DFO if they have caused or are about to cause serious harm to fish. "Serious harm" is defined in the Fisheries Act as death of fish or any permanent alteration or destruction of fish habitat and applies to fish and fish habitat that are part of or support a commercial, recreational, or aboriginal fishery.

I would also like to provide some further clarification regarding a question of potential impacts of water withdrawal on fish habitat compensation works in the Char River. DFO can confirm that there are no fish habitat compensation works constructed, being

monitored, or planned in the Char River. Further, there is no fish habitat compensation agreement with Agnico-Eagle that involves the Char River; therefore, DFO can confirm that water -- that water withdrawal from the Char River would not affect an existing fish habitat compensation agreement.

Based on the seasonality and the short duration of high flows in the Char River, water withdrawal may only be possible during spring freshet each June. It is unlikely that sustained flows above an ecologically derived cutoff limit will be available to support the anticipated pumping period of 43 to 79 days from the Char River.

In closing, I would like to say that DFO notes and supports AANDC's recommendations for multi-year flow monitoring and assessment of viability of the Char River as a water source for adaptive management for when flows in the Char River were insufficient and a robust alternatives assessment of supplementary water sources. Thank you.

THE CHAIR: Thank you.

Questions to DFO from the applicant?

Questioning of Department of Fisheries and Oceans

MR. ACORN: Joe Acorn. Yes. A mix of questions and comments, I suppose. I guess the first one would be is that: I appreciate you've done what

you can this week; it would've been very helpful if we'd gotten this earlier 'cause the last thing we have on the record from DFO was a statement that you had no comments and support the project. So there's -- there was nothing coming forward from DFO in terms of any types of recommendations from us that we could've responded to earlier.

I'm not a fisheries biologist, and if I had known DFO would be attending with a set of recommendations, I either would've brought one with me or had one available by phone here for us today. So we'll try to respond as best we can right now, but we'll want to have one of our senior fisheries biologists have a look at the recommendations, and we'll need to respond at a later date.

So if you could back up to Slide 6 right now. All right. So just a clarification on that one. The pumping day, as we talked about, for, like, whether it's 14 days, 43 days, 79 days, those calculations are based on a 24-hour pumping cycle. So whether that's 14 days, 24 hours a day, or 28 days at 12 hours a day, we've -- we've -- what we've said is that's the period it would be. So the calculation was 14 days, 24 hours a day pumping.

Clarification of whether the instantaneous flow is continuous. I mean, there's not going to be -- there

was no plan to have a data log or anything like that there, if that's what you're referring to. The idea is, is that as long as pumping is going on, there will be checks, CGS, Rankin staff will be out there monitoring the pump. There will be -- there will be a staff gauge installed near the bridge, a button and switches close to the -- the intake location. They'll monitor the -- the flow gauge and relate that to the flow curve that's created through the hydrological assessment, and through that, we will know what the instantaneous flow in the river is at any particular time. The indication is that we would probably be doing that once a day. If during periods of rapid decline in the river, that needs to be done more than once a day, well, that's an option we're certainly willing to look at, I think.

But, no, there's not going to be some computerized day log or anything like that. So it's simply going to be somebody from the staff reading from the staff gauge and relating that to the flow curve.

Could you go to your next one there? Monitor flows and cease pumping if the 10 percent withdrawal is exceeded. That's worded a little bit differently, because, actually, pumping would never exceed 10 percent. So -- so that's what the -- the in-stream low flow cutoff is for. So if -- we would never exceed 10

percent. But if the depth and the river reaches what we've suggested as a -- as a minimum depth of 0.5 metres, then we would simply stop pumping. So we would never exceed the 10 percent withdrawal. As for where that 0.5 is, what we were -- we put forward the 0.5 as -- on the basis of some very preliminary research on water needs of Arctic char, and what we found was, is that they would need -- for juvenile rearing would probably be the critical period, and that, for that stage of life for Arctic char -- and we chose Arctic char as a -- as a large-bodied fish on the assumption that it would -- if Arctic -- it was acceptable for char, it would be acceptable for a smaller-bodied fish. And so juvenile rearing for Arctic char favours a 0.1 to a 1 metre depth. So that's why we selected a 0.5 as something that would ensure that there was juvenile rearing depth available. The spawning period for Arctic char is around this time of the year, and right now there is little to no flow in the river whatsoever, and so that's why we chose juvenile rearing as the life stage at which we would determine the 0.5 metres.

And so the idea there was that the 0.5 was based on a very preliminary review based -- after we saw the AANDC recommendations where they were wanting us to have an in-stream flow cutoff. We are going to -- intending to do this fall a more detailed literature

search and review of the scientific literature and come up with something. And if the 0.5 metres needs to be adjusted up or down based on that research, that's what will be done, and we'll provide that research to the Board.

Now, the 0.5, where it would be measured would be at the -- as I said this morning, at the -- sorry, the widest and shallowest point at the river. So the depth at the actual intake location is not where the 0.5 metre would be selected. So if the 0.5 metres is, I don't know, 500 meters down from the intake location, well, that would be related back to the depth at the -- the intake. Part of that is that the intake pump is actually located in a scour hole. And so the actual depth of the intake is never going to get down to 0.5 metres. You have to -- the river would be dry before the -- the intake hole was down to 0.5. So that obviously couldn't be the shutoff point. So that's why we're suggesting the widest, shallowest place in the river as the 0.5 metre minimum depth.

Could you flip to your next one there, please? No, the other way. Right there.

The design approach velocity right now. We don't have that. I mean, we do have the screens size, that was 2.45 metres. I don't think there's been any calculation that I've seen of a design approach

velocity. That's something we can look at. As I said, the intake -- the screen is located in a scour hole, so I would assume the -- that would slow the water down, but that's something we can certainly look at.

If you can flip to your next one. Okay. No, and 11. Okay. And 12. Okay. Yeah, I mean, and -- and that one there, we agree. Flow in the Char River may only be available during this freshet. There's no disagreement there. We recognize the need to do the hydrological assessment to determine what is the pumping window and how wide it is. Right now we don't know what it is.

In the short term, we think it is enough to start transferring water to at least maintain the level in Nipissar Lake, probably not to bring it up. The 43 to -- the 43 to 79 days, remember, that is a projection for 2030. That's not 2014. There's some wildly varying estimates on what the water needs might be in 2030. We used the population growth rates with a 3 percent in Rankin Inlet from now until 2030 to come up with an estimated population of about 4,700 people in 2030. The Nunavut Bureau Stats has the forecast population Rankin Inlet in 2030 of around 3,800. So, I mean, there -- there's a swing of about 1,000 people there based on our growth estimates in the Nunavut Bureau of Stats. So, I mean, the actual need in 2030

could be much less than what we projected with our 79 day, and maybe 43 days is better. But, I mean, we don't know that right now.

We also don't know what the actual litres of consumption per day per person is going to be in 2030. We're using a number of 344. I mean, that's certainly the target to try and improve the water usage within Rankin Inlet. CGS is taking steps to do that. So I mean, keep in mind when you're looking at this that, for 2014, the window that was needed to try and maintain Nipissar is much shorter than what is shown up there.

And could you bring us up to your next one? And your next one, please? Okay. No, that's -- that's all the only response I can give you right now. I mean, as I said, I'll have one of our senior fish bios have a look at this, and we'll -- oh, the 30 percent -- sorry. Could you go to your slide where you talk about the 30 percent annual recharge? Yeah. There.

Again, right now, we don't have the data. Simply we do not know what the hydrological regime is in Char River. We went with a 0.5 metres. We thought that would be protective of a key life stage for the Arctic char right now. I mean, that's what we can do right now. We don't know what the 30 percent of the mean annual discharge for the river is. That's the reason

why we're doing the hydrological study next year, and when we get that data, then we could report back to you on that, but we simply don't have that right now. And that's about it for me.

THE CHAIR: Thank you.

Questions from AANDC to DFO?

MS. COSTELLO: Thank you, Mr. Chair. Karen Costello for Aboriginal Affairs. We have no questions at this time. Thank you.

THE CHAIR: Thank you. Any other questions from the floor to DFO?

JUSTIN MERRITT: Good afternoon. Justin Merritt, hamlet of Rankin Inlet. I'm just wondering if DFO has any numbers or any studies of the fish habitat in Char River; is it used for fish run up to Landing Lake or any -- do you have any figures on that? Thank you.

THE CHAIR: Thank you.

DFO?

MS. DAHL: Julie Dahl, DFO. No, unfortunately, we do not have any figures for the habitat in the Char River.

THE CHAIR: Thank you.

JUSTIN MERRITT: Thank you, Justin Merritt again with the Hamlet. I know, like, maybe 35, 40 years ago there was some char -- or some trout that ran

up that river, but in the last 20 years, I've never -- I thought that most of the fish in Landing Lake were landlocked now. So I'm just wondering what the impact of -- how we can determine the impact of water flow on fish if we don't know what's studied in the river. Thank you very much.

THE CHAIR: Thank you.

DFO?

MS. DAHL: Julie Dahl, DFO. We do have some information on the species of fish that have been captured in the Char River. One of the species that's probably of more concern because of the proposed spring withdrawal be the Arctic grayling because they do spawn in the spring, and their spawning is closely linked to the timing of that spring peak and how long the spring peak is and how big the spring peak is. And so Arctic grayling would be a good indicator species for whether or not withdrawal from the river is going to be problematic to the fish that are present.

THE CHAIR: Thank you.

Any further questions from the floor? Applicant?

MR. ACORN: Joe Acorn. Just to follow up on that, then. I mean, if maintaining -- just to be clear, then, maintaining of the 10 percent withdrawal limit would be protective, in your view, of the Arctic grayling?

MS. DAHL: Julie Dahl, DFO. If you stay within the 10 percent withdrawal limit, our science group that developed the ecological framework has indicated that, at a 10 percent withdrawal -- below a 10 percent withdrawal, you're unlikely to have detectible changes in the -- in the habitat in the river.

We've used the 10 percent figure for a number of years in our -- you're probably familiar with the -- the water withdrawal protocol that we had that was subject to a rigorous science review, and they have supported that a 10 percent withdrawal of the instantaneous flow is unlikely to have detectible -- detectible impacts. And that's why earlier we had said that, with the implementation of that as a mitigation measure, that probably will mean that there's no detectible change. It's -- it's more of a matter of how much water can you reasonably withdraw when you only can take 10 percent and the flows are dropping rapidly?

THE CHAIR: Thank you. Any questions from staff? Sorry. Go ahead.

MR. KHARATYAN: No, Mr. Chair.

THERESIE TUNGILIK: Theresie Tungilik, Counsellor for Rankin Inlet. I'm wondering if you have taken into consideration when nature takes over. Like, three --

two or three years ago, we had very dry winter where we hardly had any snow, and then in the month of March, we had, for three days, our -- 70 percent of our annual snowfall come down. And that kind of winter has an effect on the lakes because when there is hardly any snow on the ice, the -- if there's hardly any snow on the ice, the ice tends to be frozen deeper, and sometimes it does kill the fish.

What happens at a point when, you know, something like that happens again and -- like, if -- if we consider what Al Gore has predicted, yes, every year our northern waters are drying up more while there are more floods down south, so those two will have an effect too.

THE CHAIR: Thank you.

DFO?

MS. DAHL: Julie Dahl, DFO. Thank you for that comment, and that is very important to keep in mind, is that the weather patterns are quite variable. And if you've had an extreme, dry year, that will affect the availability of water. And this highlights why it is important to ensure that other water sources are identified and that you don't rely on just one water source that -- that may not be available in a really dry year. And that's why the -- the assessment of alternatives is important.

THE CHAIR: Thank you.

Any questions from staff?

MR. KHARATYAN: No questions. Karmén Kharatyan.

THE CHAIR: Thank you.

Questions from members? Thank you.

MR. ACORN: Mr. Chair, can I respond to that last comment? Joe Acorn. Just one point just related to your last comment there. I just want to make clear -- and we did write this in the written submission -- is that if we did have a really dry year and water levels in the Char River were very low, then we wouldn't pump. I mean -- but what's important for people to be clear of is that that doesn't create any type of emergent situation in Rankin Inlet because Char River is not the water supply for Rankin Inlet; Nipissar Lake is.

So if there's a very dry year comes along and we can't make that water transfer, then we won't make it. I mean, it does mean that Nipissar Lake will continue to decline, but it doesn't create a situation in Rankin Inlet where there's a loss of water supply. Obviously if there's a number of years in a row, then that does create more of a concern. And in that type of situation wherein the long term Char River is not going to be sufficient, then CGS is going to evaluate those

alternative supplies. But if there is an -- as there was this year -- I think certainly around Yellowknife -- if there is around here a very dry year and we can't pump, then we won't pump. That's -- that's not a question. There's not going to be a debate about that.

MR. BOYER: Mr. Chair, Craig Boyer. I understood that the applicant would like to have an opportunity to have a fish habitat biologist respond to the comments from DFO, and if I could ask the Board to see about what timelines the applicant is looking at because what he is, in effect, asking for is to keep the record open after the hearing finishes, and we need to be clear on timelines and deadlines and if there's any further response by any of the other parties. Thank you.

THE CHAIR: Thank you.

On that note, we will take a ten-minute break and resume in ten minutes.

(ADJOURNMENT)

THE CHAIR: Welcome back, everyone. We understand there's more questions from the floor?

ROSIE OOLOOYUK: I just had a questions (sic) to -- well, I had a concern over the -- it's called nowadays it's Nipissar Lake. We've been using it quite a -- quite a few years. My concern is, down the road,

I know that Rankin will be booming in the future to do with the mining as well, and Nipissar Lake, it's right in the middle of the town and Char River that I saw a few minutes ago. For now and for down 10 to 15 years, probably for me it's the way we just saw it with our own eyes, probably same. But down the road, I'm just -- I just had a concern. And when it start to pump from Char River, and as well, Char River had a lot of fish that we always enjoying in springtime. And around area of that as well that I could see not too far from me there's a park. So all those pictures that I'm -- have been seeing, when I'm growing up too as well, these are a few other things that are my concern.

But just one thing for now, that is Nipissar Lake. I know the road that we using, it's only the road that we are using right now and unbelievable when there's dust. My grandmother wouldn't been able -- never will have the water from there. But now since today, we're using the pump, and I know that it's different. But in the other side right on the left -- or on the right, there's also airstrip. When -- when I was growing up, I only used to see once in a while just a single plane, but now today it's more getting different again because of growing in Rankin.

The main thing my concern is Nipissar Lake. I have never seen in years that got so dry. That's a big

issue, a big issue and concern to me. Char Lake -- Char River, is -- there's another Second Landing Lake that we call today also had a creek going down to Char River, and there are some fish there as everyone else know that 'cause we are enjoying it in springtime. And also, usually there's some plane, singles or whatever, always landed there. And that's one of my concern as well. I don't know how often or how many times a year that water get checked.

So these are one, two, three. That I brought it up for as well for my concern. Is that clear, or did I -- did I interpret it for it (sic) or what's -- is it okay? Thank you.

THE CHAIR: (OTHER LANGUAGE SPOKEN)

ROSE OOLOOYUK: Rose Oolooyuk. Thank you.

THE CHAIR: Any other questions from the floor? AANDC?

MS. COSTELLO: Thank you, Mr. Chair. Karen Costello for Aboriginal Affairs. If I understood the member of the public who just asked a question, I understood a question to be as: How often is the water monitored at the source, and you're asking about Landing Lake? You were asking how -- if that is monitored.

ROSIE OOLOOYUK: Landing Lake, yeah.

MS. COSTELLO: Aboriginal -- Aboriginal

Affairs has a responsibility to monitor the water quality at -- at the source. So we do this -- that's part of our regular monitoring. So if there's any monitoring that is required of any source water, that is something that -- that we would do. We don't look at the quantity, but we'll -- we'll -- we'll monitor the -- the quality to make sure that there's nothing deleterious in it. Thank you.

THE CHAIR: Thank you.

Any other questions from the floor?

PETER IPKORNERK: Yeah. Peter Ipkornerk, Rankin Inlet resident. The Nipissar Lake that we use for our water, like we have said before, it has -- the water has gone down. It looks like it's an emergency now because every year the water seems to be going -- going lower. Like, I believe this -- this year, I'm pretty sure it's going to go a lot lower than this past year. The -- from Char River, that one that was -- the pipe that was put -- I don't like how it is set up because it's just on the ground, and it's not covered; it's just on top of the land. Like, you can see the pipe right there. And -- and that lake is very small. I'm pretty sure the water will be gone just like that because of the population growing too in Rankin and 2,355 is the population now. I'm pretty sure we will go over 3,000 next year, the population. And the

houses, there are more houses being built that will need a Utilidor installed, and I'm pretty sure there will be a lot more growth in our population.

Like I said this morning, coming from Meliadene, if you can get pipe from Meliadene from up there to here, I think it would be a lot better building a pipe from because the population of Rankin Inlet is growing. And every year there's the ice breaking right away, and the water is less and less, and every year there is less water because there is -- if there's hardly any snow this year, I'm pretty sure there's going to be less water.

Like the people from the south say, we are -- the climate is changing, and the weather is getting warmer. I never used to believe that on the climate change, and now I see it's a reality. And sometimes the summer comes earlier, and sometimes 35, 40 percent, it's like that. Like, these are some concerns that he (sic) -- he (sic) has, and whether it's the -- the river's flow anywhere, there is dryness too. Like, every year we see dryness, even from the rivers flowing. There's no water in these.

Thank you for giving me the time to speak and have yourself a good day. Thank you.

THE CHAIR: Thank you. Any other questions from the floor?

Looks like there's none forthcoming. We will adjourn for the day and be back here for the community session tonight at 7. We'll see you at 7 tonight. Thank you.

MR. BOYER: Mr. Chair, Craig Boyer. There's one issue that I think we should clarify, and that was the comment by the applicant to be able to respond to the comments by DFO, and if there's a time and date by which the applicants could respond so that we can then formally close the record of the hearing. So I would suggest that that be addressed before we close today. Thank you.

THE CHAIR: Okay.

MR. CÔTÉ: Mr. Chair, Damien Côté. I guess they put that in the form of a question, as you heard from Craig and the Chair. We'd look for some clarification from the applicant with respect to when you would see yourself able to respond to the presentation from DFO. Thank you.

MR. ACORN: Joe Acorn. I'll have to see the schedule that my two fish biologists who have been familiar with this file, but certainly by the end of next week would be fine, and if we can get it in earlier than that, we certainly will try to do so.

MR. CÔTÉ: Thank you.

MR. BOYER: Mr. Chair, Craig Boyer.

Just for clarity, are you saying by the end of business on October 3rd that you would be responding.

MR. ACORN: If October 3rd is next Friday, yes.

MR. BOYER: Yes.

MR. ACORN: Okay. All right. Thanks.

MR. BOYER: All right. So October 3rd, if the Board is accepting in that date.

THE CHAIR: October 4, Mountain, Central, Eastern?

MR. BOYER: October 3rd, and it's up to you what time you feel is appropriate.

THE CHAIR: Central. I think there are people on the floor who would suggest 5 Eastern would be great.

On that note, any other -- on your plate, Craig?

MR. BOYER: Mr. Chair, Craig Boyer. Yes, 4 PM on October 3rd is going to be the deadline for the response by the applicant to the DFO comments.

And the only other matter I'd have is just a confirmation that the panel would have all of the materials that have been presented today by the various parties and interveners entered as exhibits in these proceedings.

THE CHAIR: Go ahead.

MR. BOYER: Mr. Chair, just if the panel

would direct that, then I can keep note of it, that the -- all the things that have been put before the Board today are, in fact, exhibits in these proceedings. Is that yes, that these will be exhibits in these proceedings? Mr. Chair, yes?

THE CHAIR: Yes.

MR. BOYER: Thank you. And there may be a proceeding this evening where there be materials presented by the Water Board, and so there may be additional exhibits that would need to be entered, but we can deal with that tonight. Thank you.

THE CHAIR: Thank you. Anything else?

So we'll see you back here at 7 tonight for the community session.

(PROCEEDINGS ADJOURNED AT 2:18 PM)

CERTIFICATE OF TRANSCRIPT:

I, Christy Longacre, certify that the foregoing pages are a complete and accurate transcript of the proceedings, taken down by me in shorthand and transcribed from my shorthand notes to the best of my skill and ability.

Dated at the City of Calgary, Province of Alberta, this 30th day of September, 2014.

Christy Longacre, CSR(A)
Official Court Reporter

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