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MVEIRB Public Hearing

Dominion Diamond Ekati Corporation Jay Diamond Mine Project

Fisheries and Oceans Canada

September 14-16, 2015
Yellowknife, NWT



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Overview

1. DFO Mandate
2. Technical Review
Conclusions and
Recommendations





Fisheries Protection Program's Mandate

The **mandate** of the Fisheries Protection Program is to maintain the sustainability and ongoing productivity of commercial, recreational and Aboriginal fisheries.

Fisheries Act

- Subsection 35 (1) - no person shall carry on any work, undertaking or activity that results in serious harm to fish that are part of a commercial, recreational or Aboriginal fishery, or to fish that support such a fishery.
- Paragraph 35 (2) (b) allows for the issuance of a *Fisheries Act* Authorization
- Section 20 relates to the provision of sufficient water and unimpeded fish passage.
- Section 36 – administered by Environment Canada - prohibits the deposit of a deleterious substance into fish-frequented waters unless authorized by regulation made under the *Fisheries Act*.



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Technical Review Conclusions and Recommendations



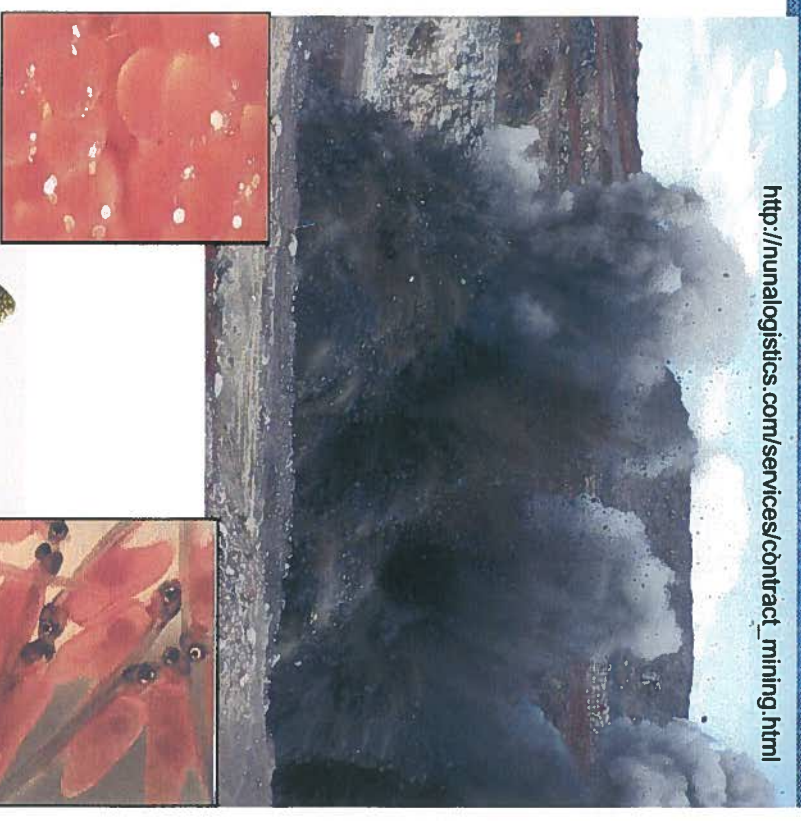
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Blasting

- Results of testing and monitoring in the north indicate that a threshold limit of 50 kPa is more appropriate to mitigate the effects of blasting on fish rather than the 100kPa threshold that is in Fisheries and Oceans Canada guidance document.

http://nunalogistics.com/services/contract_mining.html



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Blasting - Recommendations

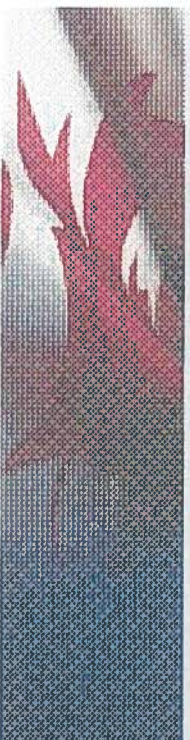
- For the Developer to revise their pressure threshold limit of 100 kPa to 50 kPa, and recalculate the setback distance, in order to develop adequate mitigation measures to address the effects of blasting on fish and reduce the risk of *serious harm to fish*.
- For the Developer to provide an appropriate blast monitoring and mitigation plan to ensure that peak particle velocities do not exceed 13 mm/s at shoal S4 during the time of Lake Trout egg incubation, including procedures to be followed in the event that blasts may exceed this threshold.



Sub-Basin B Diversion Channel

Issue

- Sub-Basin B diversion channel does not account for fish passage needs of all fish species present.





Diversion Channel Recommendations

- For the Developer to implement best management practices in the design of Sub-Basin B Diversion Channel to avoid and mitigate serious harm to fish.
 - fish passage, timing windows, bank stabilization, sediment control
- For the Developer to implement an appropriate stream diversion maintenance and monitoring plan to ensure that barriers to fish passage do not form over the life of the diversion channel.



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Diversion Channel Recommendations (Cont.)

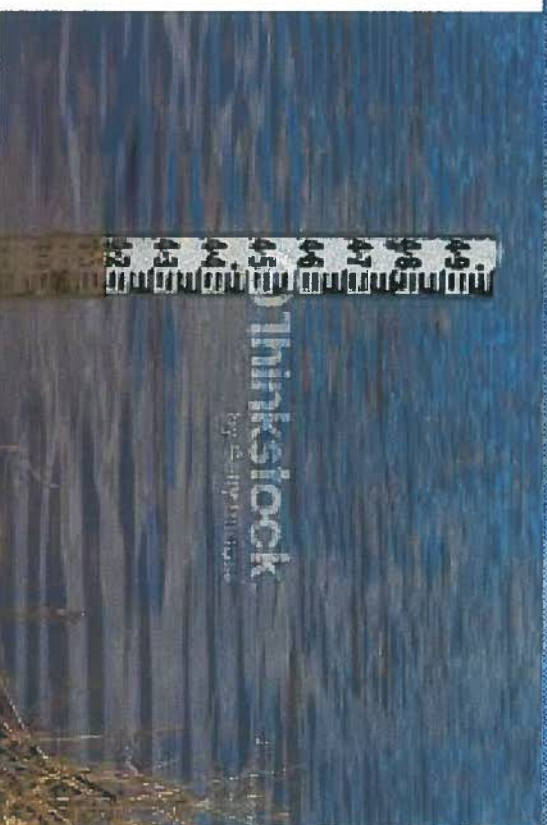
- For the Developer to provide Fisheries and Oceans Canada with detailed plans for the diversion channel to address such things as design, flows, stabilization, consideration of fish passage, erosion and sediment control, for review prior to construction.
- For the Developer to provide detailed closure and reclamation plans for Sub-Basin B Diversion channel, including the reclamation of natural channels and drainage for streams B0 and Ac35.



Water Level

Issue

- Potential Impacts from changes to water levels in the Narrows, Lake C1 and Stream C1.





Water Level Recommendations

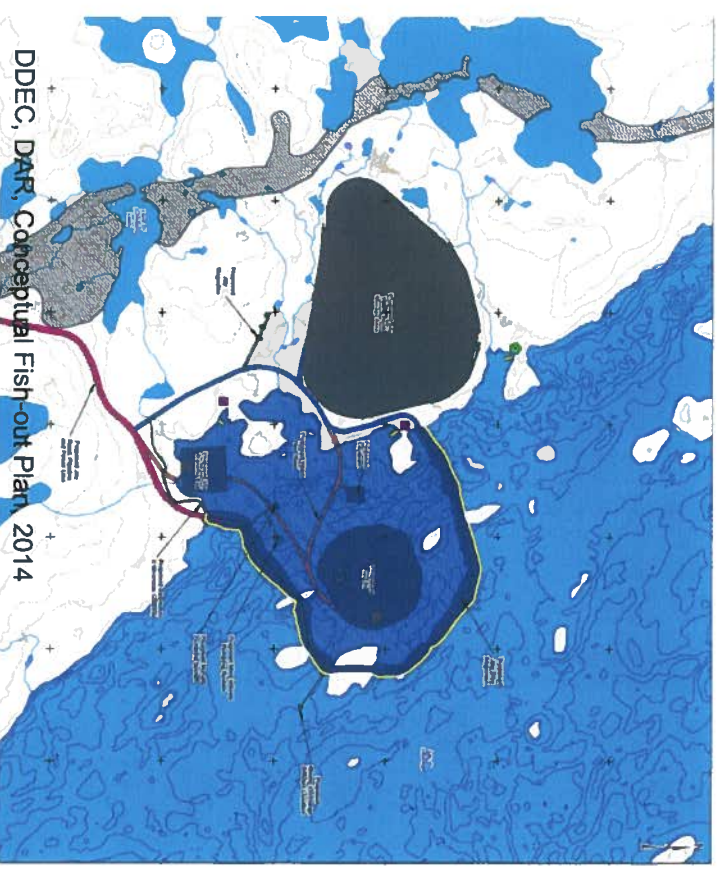
- For the Developer to monitor the water levels in Lake C1/Stream C1 and at depth-limiting locations in the Narrows during the open water season, particularly during years of low precipitation, extended drought or back-flooding at closure, to ensure that Project effects on these water bodies do not negatively impact fish passage or fish habitat.
- For the Developer to establish a mitigation, response or action plan in the event that significant changes in water levels are likely to occur, to mitigate the risk of the formation of barriers to fish passage or *serious harm to fish* in Lake C1/Stream C1 and the Narrows.



Conceptual Fish-out Plan

Issue

- The transfer of fish during fish-out of the diked area may not be supported because of high mortality rates and injuries of fish





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Conceptual Fish-out Plan Recommendation

- For the Developer to conduct additional consultation with affected communities regarding the handling and fate of fish captured during the fish-out of the diked area in Lac du Sauvage.



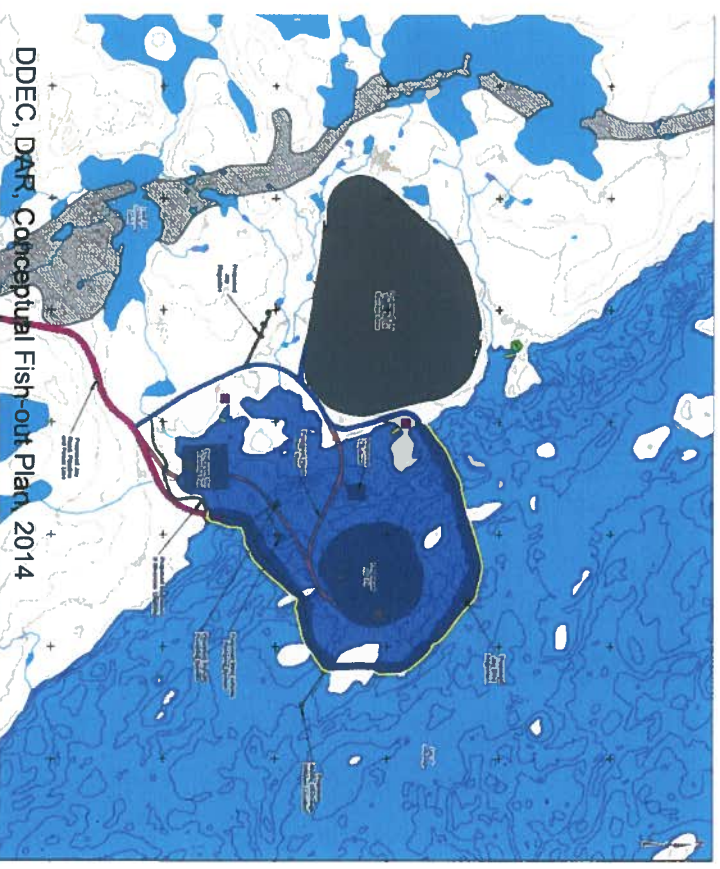
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Conceptual Offsetting Plan

Issue

- The need for suitable avoidance, mitigation and offsetting plans for the Jay Project to address Project impacts to fish and fish habitat.





Conceptual Offsetting Plan Recommendation

- For the Developer to conduct additional consultation with affected communities and continue to work with Fisheries and Oceans Canada regarding the development of options to offset the serious harm to fish which cannot be avoided or mitigated.



Concluding Remarks

Fisheries and Oceans Canada will continue to engage with the Developer and stakeholders, including potentially impacted communities, to ensure that interests for the protection of fish and fish habitat are being addressed and that:

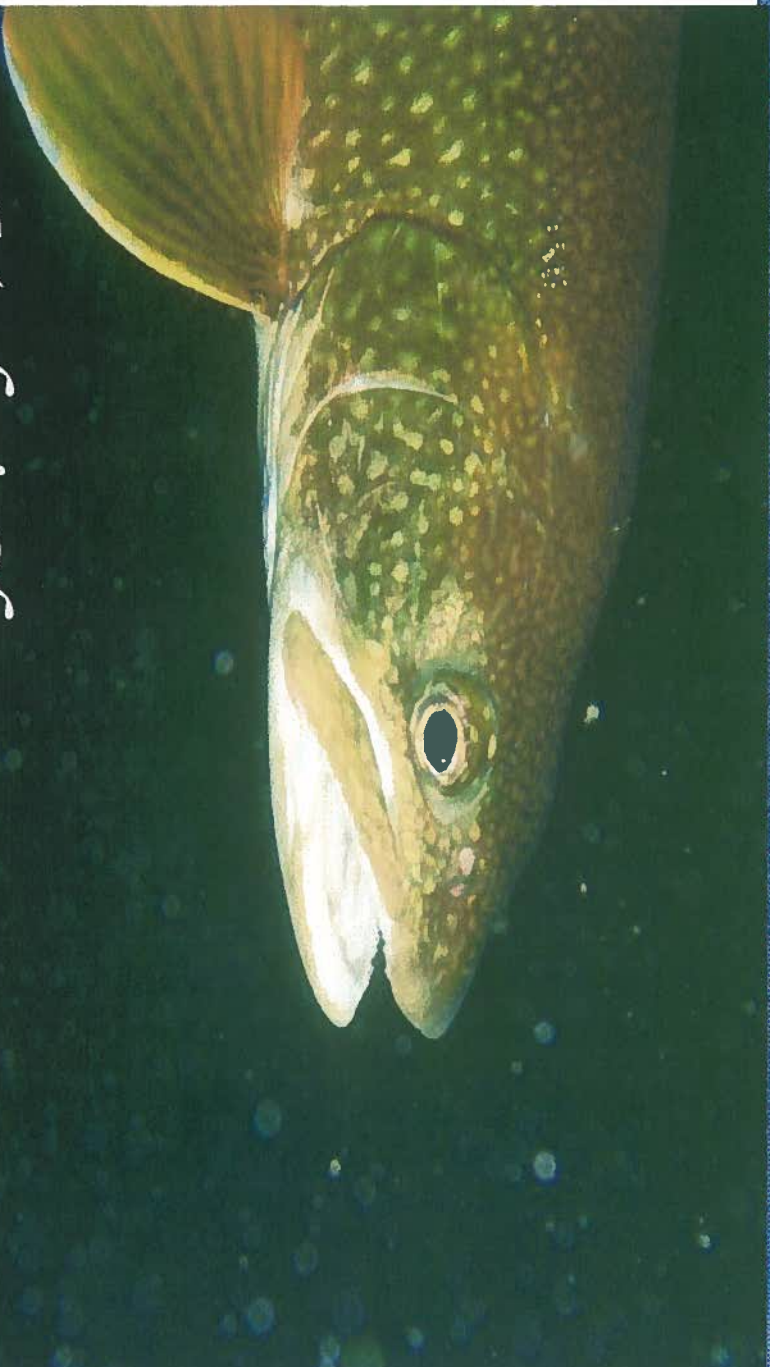
- Appropriate mitigation measures, follow-up and monitoring programs are implemented;
- A Fish-out Plan and Offsetting Plan are developed that are adequate and acceptable to Fisheries and Oceans Canada and the affected communities.



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Questions?



Mahsi Cho