

**LAKE MANITOBA AND LAKE ST. MARTIN OUTLET CHANNELS PROJECT
RESPONSE TO IAAC TECHNICAL INFORMATION REQUESTS**

Question IAAC-42

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Abbreviations and Acronyms

AEMP	Aquatic Effects Monitoring Plan
EIS	environmental impact statement
km	kilometre
LSMOC	Lake St. Martin outlet channel
mg/kg	milligram per kilogram
PDF	portable document format
ppm	parts per million

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EIS Guideline Reference: N/A

EIS Reference: Throughout

Context and Rationale

Errata that were identified in Chapter 7 of the EIS.

Information Requests

Correct the following errata:

- The last paragraph at the bottom of page 7.5 is cut-off (there appears to be text missing).
- There appears to be a typo in Section 12.5.1. Please confirm that the section being referenced in 7.2.1.4, and not 7.2.4.1.
- A number of references to the appendices throughout the text are incorrect.
- The first sentence of the last paragraph of page 7.53 is incomplete.
- Provide the units for the data presented in Table 7.2A-16.

Response IAAC-42

For the instances of missing or incomplete text, in preparing the revised EIS that incorporated conformity responses, a Portable Document Format (PDF) writer issue was encountered that resulted in text from the final Microsoft Word® version of the document not appearing in the final PDF. The issue was generally correlated with special characters or italics font in most but not all instances. The following is a list of corrections.

Page 7.5

Volume 3, Section 7.2.1.2 Influence of Engagement on the Identification of Issues and the Assessment Process on Page 7.5 should read (missing text is underlined):

“Manitoba Infrastructure has undertaken engagement prior to and throughout preparation of the EIS, and will continue to consult with Indigenous groups, government agencies, and stakeholders throughout the life of the Project. A discussion of the engagement process is provided in Chapter 5: Indigenous and Public Engagement.

Engagement with the public and Indigenous groups has been important for identifying issues of concern, framing the scope of the EIS baseline and effects assessments, and in identification of specific mitigation measures, where provided. Concerns relevant to potential effects of the Project on fish and fish habitat are summarized under the following topics...”

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Section 12.5.1

The last paragraph of Volume 5, Section 12.5.1 should read (corrected text is underlined):

“The intent of the AEMP will be to monitor the measurable parameters identified in Section 7.2.1.4 for each potential pathway of effect with the greatest likelihood of occurrence and/or greatest potential consequence to fish and fish habitat.”

Appendix References

The revised appendix references are shown in Table IAAC-42-1 below.

Table IAAC-42-1 Changes to Appendix References in Chapter 7 of the EIS

EIS Page	EIS Location	Existing Appendix Reference	Revised Appendix Reference
7.24	Para. 2, line 4	Appendix 7A, Table 7.2A-2	Appendix 7A, Table 7.2A-3
7.34	Para. 4, line 4	Appendix 7A, Table 7.2A-4	Appendix 7A, Table 7.2A-6
7.35	Para. 1, line 5	Appendix 7A, Table 7.2A-4	Appendix 7A, Table 7.2A-6
7.35	Para. 2, line 3	Appendix 7A, Table 7.2A-4	Appendix 7A, Table 7.2A-5
7.35	Para. 5, line 4	Appendix 7A, Table 7.2A-5	Appendix 7A, Table 7.2A-7
7.36	Para. 1, line 1	Appendix 7A, Table 7.2A-5	Appendix 7A, Table 7.2A-7
7.36	Para. 3, line 3	Appendix 7A, Table 7.2A-5	Appendix 7A, Table 7.2A-7
7.36	Para. 5, line 5	Appendix 7A, Table 7.2A-6	Appendix 7A, Table 7.2A-8
7.37	Para. 1, line 5	Appendix 7A, Table 7.2A-8	Appendix 7A, Table 7.2A-9
7.37	Para. 2, line 4	Appendix 7A, Table 7.2A-8	Appendix 7A, Table 7.2A-9
7.37	Para. 3, line 4	Appendix 7A, Table 7.2A-7	Appendix 7A, Table 7.2A-11
7.37	Para. 3, line 6	Appendix 7A, Table 7.2A-8	Appendix 7A, Table 7.2A-9
7.37	Para. 4, line 9	Appendix 7A, Table 7.2A-7	Appendix 7A, Table 7.2A-11
7.38	Para. 1, line 2	Appendix 7A, Table 7.2A-9	Appendix 7A, Table 7.2A-12
7.38	Para. 2, line 3	Appendix 7A, Table 7.2A-9	Appendix 7A, Table 7.2A-12
7.38	Para. 3, line 3	Appendix 7A, Table 7.2A-10	Appendix 7A, Table 7.2A-13
7.38	Para. 4, line 7	Appendix 7A, Table 7.2A-8	Appendix 7A, Table 7.2A-9
7.39	Para. 2, line 3	Appendix 7A, Table 7.2A-11	Appendix 7A, Table 7.2A-14
7.39	Para. 3, line 3	Appendix 7A, Table 7.2A-11	Appendix 7A, Table 7.2A-14
7.39	Para. 4, line 3	Appendix 7A, Table 7.2A-6	Appendix 7A, Table 7.2A-8
7.39	Para. 5, line 2	Appendix 7A, Table 7.2A-11	Appendix 7A, Table 7.2A-14
7.44	Para. 6, line 2	Appendix 7A, Table 7.2A-12	Appendix 7A, Table 7.2A-2
7.45	Para. 3, line 3	Appendix 7A, Table 7.2A-13	Appendix 7A, Table 7.2A-10
7.45	Para. 3, line 6	Appendix 7A, Table 7.2A-13	Appendix 7A, Table 7.2A-10



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Table IAAC-42-1 Changes to Appendix References in Chapter 7 of the EIS

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7.45	Para. 6, line 4	Appendix 7A, Table 7.2A-14	Appendix 7A, Table 7.2A-4
7.46	Para. 5, line 2	Appendix 7A, Table 7.2A-16	Appendix 7A, Table 7.2A-17
7.46	Para. 6, line 3	Appendix 7A, Table 7.2A-17	Appendix 7A, Table 7.2A-18
7.48	Para. 1, line 2	Appendix 7A, Table 7.2A-17	Appendix 7A, Table 7.2A-18
7.55	Para. 1, line 5	Appendix 7A, Table 7.2A-17	Appendix 7A, Table 7.2A-18
7.72	Para. 1, line 6	Appendix 7A, Table 7.2A-8	Appendix 7A, Table 7.2A-11
7.77	Para. 3, line 8	Appendix 7A, Table 7.2A-18	Appendix 7A, Table 7.2A-16

Page 7.53

The last paragraph of Page 7.53 should read (missing text is underlined):

“Natural surface and shallow, subsurface drainage flow may be affected along the approximately 24 km length of the LSMOC. However, due to the complexity of the system, the nature of the effect on groundwater is uncertain. Should reductions in groundwater inputs to the bog complex occur, it may affect...”

Table 7.2A-16

Please see the revised Table 7.2A-16 below with highlighted units included.

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Table 7.2A-16 Mean Arithmetic and Standardized Mercury (Hg) Concentrations in Lake Whitefish and Northern Pike sampled from Lake St. Martin, the Dauphin River and Sturgeon Bay in 2011 and 2014 and in Walleye sampled from Sturgeon Bay in 2011¹

Species	Water Body	Year	n	Mean Length (mm)	Mean Weight (g)	Mean K	Mean Age (years) ²	Arithmetic Mean Hg (ppm or mg/kg)	Standardized Mean Hg (ppm or mg/kg)
Lake Whitefish									
	Lake St. Martin	2014	4	399	800	1.25		0.049	
	Dauphin River	2014	24	383	904	1.59		0.032	
	Sturgeon Bay	2011	33	392	823	1.48	7.6	0.039	0.039
	Sturgeon Bay	2014	2	424	1200	1.57		0.04	
Northern Pike									
	Lake St. Martin	2014	6	533	1376	0.78		0.232	
	Dauphin River	2014	1	555	975	0.57		0.077	
	Sturgeon Bay	2011	45	551	1574	0.77	5.4	0.17	0.170
	Sturgeon Bay	2014	16	587	1709	0.8		0.234	
Walleye									
	Sturgeon Bay	2011	18	392	823	1.22	3.9	0.2	0.188
¹ – samples collected from fish captured during fisheries investigations conducted as part of Lake St. Martin Emergency Outlet Channel monitoring (2011-2015) ¹ . ² – blank cells indicate fish were not aged.									