

LOWER CHURCHILL HYDROELECTRIC GENERATION PROJECT
JOINT REVIEW PANEL

PROJET DE CENTRALE DE PRODUCTION D'ÉNERGIE HYDROÉLECTRIQUE DANS
LA PARTIE INFÉRIEURE DU FLEUVE CHURCHILL
COMMISSION D'EXAMEN CONJOINT

CANADIAN ENVIRONMENTAL ASSESSMENT REGISTRY 07-05-26178
REGISTRE CANADIEN D'ÉVALUATION ENVIRONNEMENTALE 07-05-26178

HEARING HELD AT

Hotel North Two
Conference Room
382 Hamilton River Rd
Happy Valley-Goose Bay, NL

Thursday, March 17, 2011

Volume 13

JOINT REVIEW PANEL

Mr. Herbert Clarke
Ms. Lesley Griffiths
Ms. Catherine Jong
Dr. Meinhard Doelle
Mr. James Igloliorte

International Reporting Inc.
41-5450 Canotek Road
Ottawa, Ontario
K1J 9G2
www.irri.net
1-800-899-0006

(ii)

TABLE OF CONTENTS / TABLE DES MATIÈRES

	PAGE
Opening Remarks	1
Presentation from Nalcor by Mr. Perry Trimper	5
Questions by the panel	27
Questions by the public	66
Presentation from the Canadian Wildlife Service - Environment Canada by Dr. Al Hanson	101
Presentation from the Canadian Wildlife Service - Environment Canada by Mr. Scott Gilliland	111
Questions by the proponent	130
Questions by the public	143
Statement by Ms. Clarice Blake-Rudkowski	163
Questions by the panel	174
Presentation from the Province of Newfoundland and Labrador, Department of Environment and Conservation By Ms. Shelley Moores	199
Questions by the panel	220
Questions by the proponent	222
Questions by the public	227
Presentation by the Government of Newfoundland and Labrador, Department of Environment and Conservation By Dr. Isabelle Schmelzer and Mr. Shannon Crowley	246
Questions by the proponent	280
Questions by the public	283
Questions by the panel	307

(iii)

TABLE OF CONTENTS / TABLE DES MATIÈRES

	PAGE
Presentation by the Government of Newfoundland and Labrador, Department of Environment and Conservation By Ms. Jeri Graham	323
Questions by the public	335
Questions by the panel	338

1 we will come back after lunch for questions for
2 Environment Canada.

3 So if you're ready, please begin.

4 --- PRESENTATION FROM THE CANADIAN WILDLIFE SERVICE
5 - ENVIRONMENT CANADA BY DR. AL HANSON:

6 DR. HANSON: Good morning, Members
7 of the Panel, ladies and gentlemen.

8 My name is Alan Hanson and I'm the
9 Head of Landscape Conservation for the Canadian
10 Wildlife Service, Environment Canada.

11 And with me is my colleague, Scott
12 Gilliland, who is the Waterfowl Biologist for
13 Newfoundland and Labrador.

14 After my presentation, Scott will
15 be making a separate presentation specifically
16 addressing issues related to waterfowl.

17 My presentation will cover three
18 main aspects: Legislation, as it pertains to the
19 Canadian Wildlife Service and our mandate;
20 policies, programs, plans and initiatives that
21 influence our work and our analysis of the
22 potential impacts of the proposed project, and,
23 lastly, I will provide detail on Environment
24 Canada, CWS' environmental assessment analysis as
25 it pertains to migratory birds, species at risk,

1 and wetlands.

2 I think at the outset it's
3 important to reiterate that with regard to this
4 Joint Review Panel that Environment Canada is a
5 federal authority with expertise pertaining to
6 migratory birds, species at risk and wetlands. We
7 do not have a decision-making or permitting
8 responsibility as it pertains to the proposed
9 project.

10 There are three main pieces of
11 legislation that I wanted to highlight in our
12 presentation. The first is the *Canadian*
13 *Environmental Assessment Act* which requires that
14 project impacts be addressed in an integrated
15 manner.

16 For wetlands, the links between
17 wetland functions, their derived values and the
18 components of the ecosystems must be considered
19 holistically, as wetlands do not function in
20 isolation. So, a key point there is, I see
21 wetlands as a continuum from fish habitat as you
22 move up in elevation.

23 Secondly, it's important to
24 identify the *1916 Migratory Bird Convention Act* and
25 associated amendments and regulations.

1 Environment Canada is responsible
2 for administering the *Migratory Bird Convention*
3 *Act*, which implements the 1916 Migratory Bird
4 Convention between Canada and the United States,
5 and it protects and conserves migratory birds, both
6 as population and as individuals, as well as
7 protecting their habitat, eggs, and nests.

8 Lastly, the *Species at Risk Act*,
9 the purposes of the Act are to prevent wildlife
10 species from becoming extirpated or becoming
11 extinct; to provide for the recovery of wildlife
12 species that are extirpated, endangered or
13 threatened as a result of human activity; and to
14 manage species of special concern to prevent them
15 from becoming endangered or threatened.

16 There are a couple key policies,
17 as well as initiatives that we wanted to highlight.
18 The first is the federal policy on wetland
19 conservation which articulates that the objective
20 of the federal government, with respect to wetland
21 conservation, is to promote the conservation of
22 Canada's wetlands, to sustain their ecological and
23 socioeconomic functions now and in the future.

24 And as well, we wanted to
25 highlight the North American Bird Conservation

1 Initiative.

2 Division of NABCI -- excuse the
3 acronyms; we'll have a few of them here today.

4 But division of NABCI is that
5 population and habitats of North America's birds
6 are protected, restored and enhanced, through
7 coordinated efforts at international, national,
8 regional, provincial and local levels, and that
9 this is guided by sound science and effective
10 management.

11 It's also important to note that
12 the management of migratory birds is based on bird
13 conservation regions and associated conservation
14 plans.

15 Moving on to the Canadian Wildlife
16 Service Environment Canada impact analysis of the
17 proposed project, as it relates to migratory birds,
18 first and foremost, land-clearing activities, if
19 conducted during the breeding season, could result
20 in the destruction of migratory birds, their eggs
21 and nests.

22 Fledglings often rely upon
23 parental help for food and protection, and clearing
24 on a large-scale can displace birds from
25 territories, food and shelter from predation.

1 It's very important to note that
2 Migratory Bird Regulation 6A states that there is a
3 prohibition to destroy or disturb nests or eggs.

4 Under the *Migratory Bird*
5 *Convention Act* 5.1, there's a prohibition to
6 pollute, which is described as the deposition of
7 substances harmful to migratory birds in areas
8 frequented by them.

9 There is no provision to allow
10 these activities under permit. They are illegal --
11 period, full stop.

12 So with regard to migratory birds
13 Environment Canada CWS recommends that in order to
14 minimize impacts to breeding migratory birds, the
15 Proponent avoids habitat destruction such as
16 vegetation clearing, or initial grading at a
17 minimum during the period between May 1 and July
18 31st of any year. We also expect the Proponent to
19 use best management practices to minimize impacts
20 on migratory birds.

21 With regard to the analysis of
22 potential impacts on species at risk, the Proponent
23 has correctly stated in the EIS that there are 12
24 species at risk that occur in Labrador. Of these
25 species they can be categorized as species of

1 special concern which are at, relatively speaking,
2 the lowest risk of extinction or extirpation.
3 There is a group categorized as threatened and,
4 lastly, there is a group of species classified as
5 endangered. The endangered group are most at risk
6 of extinction or extirpation.

7 So out of these 12 species it's
8 important to note that only the harlequin duck,
9 rusty blackbird, woodland caribou, common
10 nighthawk, and olive-sided fly catcher are probable
11 to occur within the project footprint. So there
12 are five species at risk that occur within the
13 project footprint.

14 Furthermore, it's important to
15 note that the province of Newfoundland and Labrador
16 has the jurisdictional lead for rusty blackbird and
17 woodland caribou.

18 So Environment Canada CWS analysis
19 focused on those avian species, migratory birds
20 that were species at risk; namely, harlequin duck,
21 common nighthawk, and the olive-sided fly catcher.

22 The impact analysis for species at
23 risk rightly states that the proposed project will
24 result in habitat loss for all three species. The
25 extent of loss varies.

1 The Proponent environmental impact
2 statement report estimates the following habitat
3 loss due to the project: for common nighthawk,
4 about 12 kilometres -- square kilometres; olive-
5 sided fly catchers, 14 square kilometres; and for
6 harlequin duck 26 linear kilometres of river.

7 This overall represents a small
8 portion of the total available habitat for these
9 species in Labrador.

10 It's also important to note that
11 during the avian surveys, for common nighthawk
12 there was one incidental sighting of common
13 nighthawk. For olive-sided fly catcher, they were
14 observed at four survey points out of 55. And
15 harlequin duck occurs at relatively low numbers
16 throughout the river, and Scott will be speaking
17 more about the waterfowl aspects of the study
18 later.

19 With regard to impact analysis for
20 species at risk, it should be stated that currently
21 breeding habitat availability is not a threat to
22 the recovery of these three species.

23 Therefore, this loss of breeding
24 habitat will result in a small-scale displacement
25 of individuals and this is not believed to have a

1 significant population level effect at either a
2 local level or at larger watershed or bird
3 conservation region levels.

4 Overall, habitat loss is not
5 believed to be a future cause of population decline
6 -- breeding habitat loss.

7 With regard to recommendations
8 pertaining to species at risk, the Canadian
9 Wildlife Service recommends that to minimize
10 impacts to migratory avian species at risk, to
11 avoid habitat destruction such as vegetation
12 clearing, initial grading, at a minimum between the
13 period of May 1st and July 31st of any given year and
14 ensure water levels are managed for the created
15 reservoir during the breeding season to keep water
16 levels relatively constant.

17 Moving on to the impact analysis
18 for wetlands, the EIS and the Proponent stated that
19 the assemblage of wetland species -- of wetland
20 sparrow species present in the Lower Churchill
21 River Valley is dependent on the availability of
22 wetland and riparian habitat.

23 The amount of suitable habitat
24 affected by the project form the basis for the
25 assessment of potential impacts to wetland-dwelling

1 songbirds such as swamp sparrow, song sparrow,
2 Lincoln's sparrow, and savannah sparrow.

3 The federal policy on wetland
4 conservation with its objective of conserving the
5 ecological and socioeconomic function of wetlands
6 is the basis for Environment Canada's CWS comments
7 on this proposed project. Effects of the project
8 on wetland sparrows are directly related to wetland
9 loss. So compliance to the federal policy on
10 wetland conservation will also mitigate concerns
11 for wetland sparrows.

12 Should the project proceed, the
13 Proponent has estimated it will result in the loss
14 of up to 60 percent of habitat for wetland-
15 dependent sparrows in the Lower Churchill River
16 Valley. The availability of wetland sparrow
17 habitat outside of the riparian corridor is
18 limited.

19 However, the Proponent has
20 indicated that the creation of comparable habitat
21 along the riparian fringe of the newly created
22 reservoir is under consideration and has identified
23 that it will encourage formation of riparian marsh
24 wetland during construction.

25 Creation of suitable riparian

1 wetland habitat should be the subject of follow-up
2 monitoring to confirm the effectiveness of this
3 mitigation.

4 Our recommendations pertaining to
5 wetlands are that the Proponent is encouraged to
6 implement the federal policy on wetland
7 conservation goal of no net loss of wetland
8 function, first, by creating a comparable amount of
9 riparian wetland habitat, by implementing a follow-
10 up program to determine the effectiveness of
11 habitat creation and, lastly, by committing to an
12 adaptive management mechanism if the proposed
13 mitigation fails to perform.

14 The creation of riparian wetland
15 habitat should furthermore replace the lost habitat
16 function for wetland sparrows.

17 So in summary, Environment Canada
18 CWS recommends the following. Activities such as
19 clearing, initial grading, should be undertaken
20 outside of the migratory bird breeding season.
21 That is either before nest initiation or after the
22 young have fledged. It's important to be compliant
23 with the migratory bird regulations and
24 prohibitions on the destruction of nests and young.

25 Water level control protocols

1 through the project.

2 MR. MARCOCCHIO: Sixty (60)
3 percent of the available habitat disappearing is
4 fairly significant and the Proponent has suggested,
5 but not committed himself, to creating that
6 habitat.

7 First of all, it seems utterly
8 ridiculous to -- the notion that 60 percent of the
9 available habitat is going to be recreated. And as
10 a biologist I think you well know that.

11 If you're -- I wonder why you
12 refuse once again to make specific recommendations.
13 If you can't out of the words "significant impact"
14 -- has your ability to make recommendations been
15 impaired from so clear a case of significant
16 impacts?

17 CHAIRPERSON GRIFFITHS: And that
18 is the final question. I don't know whether the
19 presenters will be able to answer that, but please.

20 DR. HANSON: As the panel has
21 indicated this morning, it is their job and their
22 duty to administer the term "significant" to these
23 impacts.

24 What we tried to convey through
25 Environment Canada and our analysis is the relative

1 magnitude of these proposed changes.

2 CHAIRPERSON GRIFFITHS: Thank you.

3 Thank you, Mr. Marcocchio.

4 Now I'm going to turn to the panel
5 for questions to the presenters.

6 CHAIRPERSON CLARKE: Ms. Rudkowski
7 had a question.

8 CHAIRPERSON GRIFFITHS: Oh, did
9 you, Ms. Rudkowski? I didn't see you. Do you have
10 a -- I'll take one more question.

11 --- STATEMENT BY MS. CLARICE BLAKE-RUDKOWSKI:

12 MS. BLAKE-RUDKOWSKI: If I may, I
13 just want to pick up where Bruno left off in
14 respect to having our presentations given to you
15 ahead of time.

16 And for the record, I would like
17 to read the reply from Roberta for the benefit of
18 the people here in the room and for the record.
19 May I?

20 CHAIRPERSON GRIFFITHS: Yes, go
21 ahead.

22 MS. BLAKE-RUDKOWSKI: Again, this
23 is in reply to Mr. Michaud's request on behalf of
24 the panel to have our submissions submitted or sent
25 into the panel in advance.