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**Quebec Region** 

Canadian Science Advisory Secretariat Science Response 2008/006

# NWEST ENERGY INC. WESTERN NL GEOPHYSICAL SURVEY PROGRAM – REVIEW OF THE COMMERCIAL FISHERIES SURVEYS SECTION FROM THE EA REPORT

#### Context

On 17 March 2008, NWest Energy Inc. submitted an environmental assessment (EA) report to the Canada-Newfoundland and Labrador Offshore Petroleum Board (C-NLOPB) for a proposed geophysical program for exploration licences 1097, 1098, 1103 and 1104 in western Newfoundland. The project consists of a multi year (2009-2015) 3D marine seismic acquisition program. The total project activity area is 3115 km² (seismic exploration area < 1000 km²) and is proposed to take place between August and October each year beginning in 2008.

The report entitled "Environmental Assessment of Geophysical Survey for Exploration Licences 1097, 1098, 1103 and 1104 Western Newfoundland" describes the project activities at various locations for the next 8 years, the biological and human environment of the area and assesses potential impacts of the activity on them.

The C-NLOPB has forwarded this document to DFO, NL Region as an Expert Federal Authority under CEAA for review, comment and provision of advice. As the Quebec Region is in charge of the scientific survey in the area covered by the program, the Fish Habitat Management Branch (FHMB) solicited the DFO Science Branch at the Maurice-Lamontagne Institute (MLI) to review only the section on Commercial Fisheries Surveys in consideration of the potential impacts of the proposed project on Gulf surveys, to determine if sufficient information has been provided in support of this program and/or if information provided is accurate. The request was sent to the Science Advice, Information and Support Branch (SAISB) on April 8, 2008, and a response was required by April 22, 2008.

## **Analysis and responses**

The comments provided by the Fisheries Science and Aquaculture Branch, MLI, are related to sections 5.3.1.10, 5.3.2, 5.3.3 and 5.3.4 only, and for which we were invited to provide comments as an expert authority.

#### 5.3.1.10 Cod

- There was also a moratorium from 1994 to 1996 (included 3 years)
- The cod fishery in this area is nearshore, not offshore (gillnets and longlines). The stratified random surveys (Teleost DFO, sentinel) cover all depths deeper than 20 fathoms (sentinel) and 50 fathoms (Teleost DFO) in the Gulf.
- Figure 5.43 Cod harvest effort by month in 4Rb, c The source is missing.



## 5.3.2.1 Sentinel Survey

- These are not surveys; sampling is done as in a commercial mode.
- The number of the figure indicated here (Figure 5.45) is wrong. It should be Figure 5.44.

#### 5.3.2.2 Research Vessel Surveys

- There is a mixture of DFO groundfish research surveys, fixed gear sentinel, and mobile gear sentinel surveys. Those should be separated. We suggest putting the fixed gear sentinel text in section 5.3.2.1 and then renaming it: Fixed gear sentinel.
- The DFO Groundfish Research Survey (referred in the two first sentences of the paragraph) is completely independent of commercial activities and should not appear in the section 5.3.2 titled Commercial Fishery Surveys. The information provided do not tell us the purposes of this specific survey like: where it is done, which species are under studies, etc. In fact, the information provided is insufficient to evaluate adequately the true impacts of the project on the DFO groundfish research surveys.

## 5.3.2.3 Groundfish Enterprise Allocation Council

These surveys in 3Ps are probably discontinued, to be verified.

#### Figure 5.45 DFO Research Vessel Surveys August 2005-07

• There may be a problem in latitude conversions of fishing tows as they appear as 5 separate horizontal bands in 4R. Something likes a conversion from minutes to fraction of degrees. It should be a continuous sampling area.

#### 5.3.2.4 Snow Crab Survey

• It would have been interesting to plot fishing positions of the snow crab survey on the previous map.

#### 5.3.2.5 Halibut Tagging

- Specify the size of juvenile fish, less than 81 cm, and indicate that is the minimum legal size of capture. Since 2007, there is also tagging on commercial size halibut.
- It would have been interesting to: plot tagging positions sites, show how many fishermen are involved in this project, give an idea of the number of halibut tagged at each sites, when (which months) the tagging activities are achieved, the scientific reasons for why the tagging is done, etc.
- We can't interpret the meaning of the last sentence.
- This section needs to be re-visited.

#### 5.3.2.6 Cod Reproductive Survey

• The first sentence should read "Two otter trawlers must perform fishing tows to conduct...".

#### 5.3.3 Aquaculture

• There are **two** blue mussel sites according to Figure 5.46. One on Goose Arm in the Bay of Islands **and another one, at Piccadilly Head on the northern side of St. George's Peninsula.** 

#### 5.3.4 Marine Traffic

This should not be an argument. These shipping lanes are not compulsory. Vessels can
move outside this area when ice occurs. There are also many local vessels that do not
transit towards the Great Lakes in the Gulf. Many small fishing boats do not have Vessel
Monitoring Systems (VMS).

## **Conclusions**

The scientific assessment provided is based on the information that we were requested to review only and which appears to be incomplete for providing a better advice. However and based on the information provided, it is our views that the activities anticipated could affect research and fishing activities and resources in the targeted areas of this proposal and even on a broader scale of the distribution for the reviewed species.

### **Authors and Editor**

The following persons from MLI, DFO were asked to review the report by the FHMB:

Alain Fréchet Diane Archambault Charley Cyr Fisheries Science and Aquaculture Branch Fisheries Science and Aquaculture Branch Centre for Science Advice (editor)

## Approved by

original signed	Date: <i>April 17, 2008</i>
Serge Gosselin	· · ·
Director	
SAISB	

### Sources of information

Canestoga-Rovers & Associates, 2008. Environmental Assessment of Geophysical Surveys for Exploration Licences 1097, 1098, 1103 and 1104 Western Newfoundland. Report No. 50016 (2).

## This Report is Available from the

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