

## REPORT TITLE

**Husky Energy Atlantic Region  
Newfoundland and Labrador Offshore Area  
Environmental Assessment Review for 2012**

## SUBMITTED TO

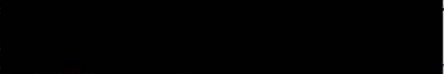


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## Additional Comments

*Revised to replace March 2012 version.*

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Date:	June 2012	Report No.:	AR-HSE-RP-0078	Version No:	03
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## 1.0 Introduction

Offshore oil and gas exploration and production programs generally encompass long periods of time and multiple, successive, operational steps. As a consequence, environmental assessments of these programs address a variety of activities undertaken over a number of years.

This document is the fifth annual review of the status and ongoing validity of the environmental assessments currently in place for Husky Energy's activities in the Newfoundland and Labrador Offshore Area. These reviews are to assist the C-NLOPB in fulfilling its responsibilities under the *Canadian Environmental Assessment Act* by ensuring that the scope of the assessment(s) and the mitigations committed to therein remain technically valid.

The following lists Husky Energy's environmental assessments that have been approved by the C-NLOPB under which Husky may be conducting offshore operations during 2012.

**Table 1 – Current Environmental Assessment Approvals for Husky Energy**

Screening Determination Reference <sup>†</sup>	EA Report Title	Husky Document Number
<a href="#">CEAR No. 06-01-7410</a>	Husky White Rose Development Project: New Drill Centre Construction and Operations Program Environmental Assessment & Addendum	WR-HSE-RP-4003 & WR-HSE-RP-0167
	Husky White Rose Development Project: New Drill Centre Construction and Operations Program Environmental Assessment Amendment: Construction of Protective Flowline Rock Berms	WR-HSE-RP-1087
<a href="#">CEAR No. 07-01-28877</a>	Husky Delineation/Exploration Drilling Program for Jeanne d'Arc Basin Area, 2008-2017	ED-HSE-RP-0016

The following sections organized by specific, individual environmental assessments provide the necessary information to confirm the ongoing validity of the assessment in question or note any changes that need to be addressed.

<sup>†</sup> Follow the links to C-NLOPB public registry to view the environmental assessments, amendments and regulatory determinations.

## **2.0 Husky White Rose Development Project: New Drill Centre Construction and Operations Program Environmental Assessment**

### **2.1 Project Description and Scope**

#### **2.1.1 Activities Covered**

This project involves the construction of up to five (5) glory holes during a construction phase that will continue through 2015. Construction will also include installation of drilling templates and other subsea equipment in the glory holes to support eventual production operations. In addition, subsea flow lines will also be installed to connect new glory holes with existing ones that connect to the *SeaRose FPSO*.

Husky Energy proposed to develop up to five new drill centres within the White Rose field. Only one of the five has been constructed to date, the North Amethyst Drill Centre. Additional drill centres contemplated were the South White Rose Extension (SWRX), the North White Rose Extension (NWRX) and the West White Rose Extension (VWRX) with up to two new drill centres. There are a total of 54 wells proposed for these five drill centres.

The Project includes the use of mobile operating drilling units, construction and diving vessels, marine support vessels, helicopter support and existing shore based facilities in St. John's Harbour. The new drill centres will either be tied-back to the *SeaRose FPSO* either through new production flowlines, or directly to the *SeaRose FPSO*. Geohazard/well site surveys and vertical seismic profiling (VSP) using an airgun array may be required on an as-needed basis at any time of the year. Geotechnical surveys (i.e. core drilling) may also occur year round. Production operations associated with these five new drill centres would occur between 2009 and 2020.

#### **2.1.2 Geographic Scope**

The geographic scope of the Drill Centre assessment is portrayed in the inset map in Figure 2-1. Planned activities for 2012 will occur within the West White Rose Extension drill centre area.

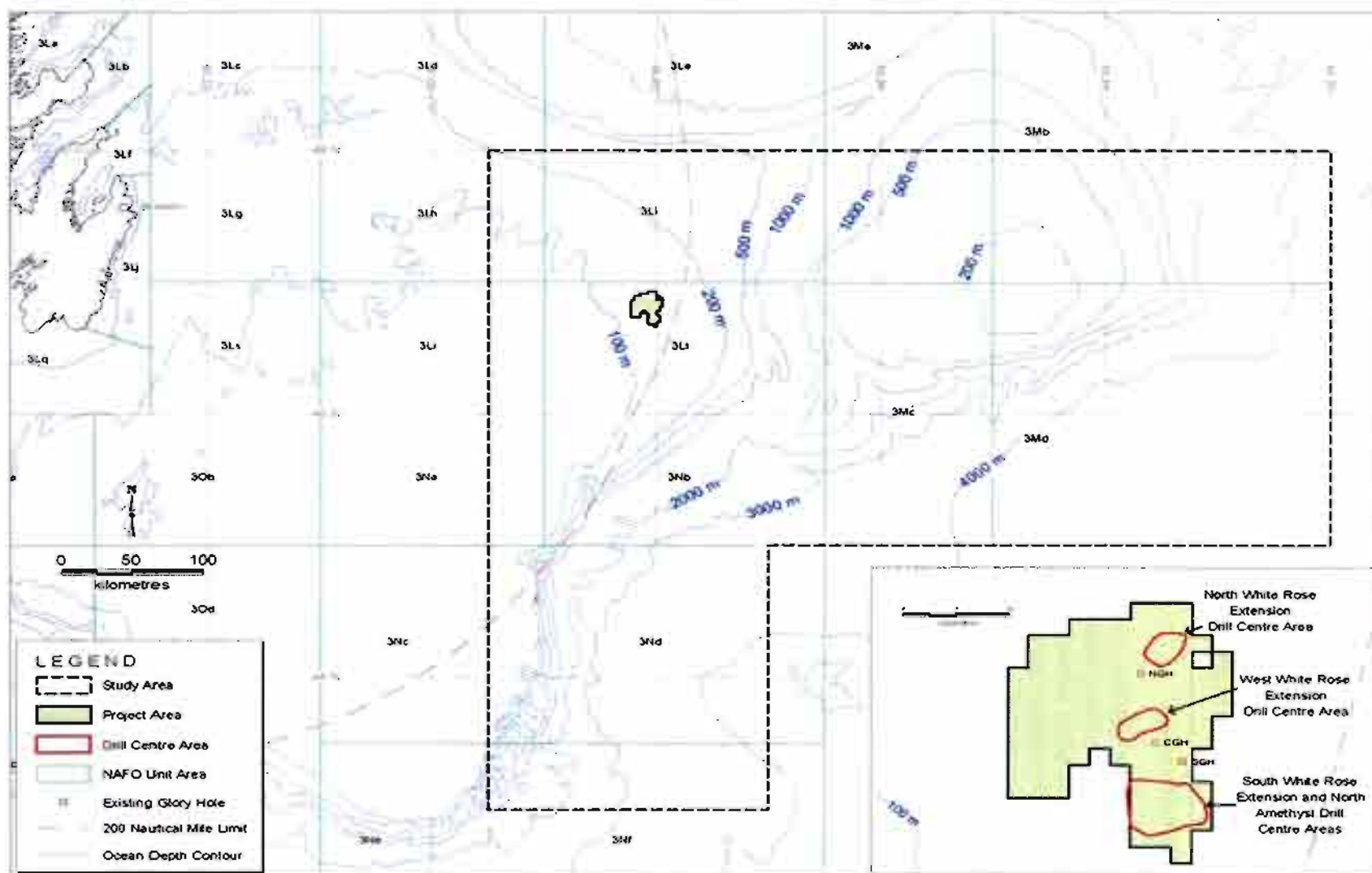


Figure 2-1 - Geographic Scope of Project Area for CEAR No. 06-01-7410

### 2.1.3 Temporal Scope

The temporal scope of New Drill Centre construction and operation activities is from 2007 to 2015.

Annually, glory hole dredging activities are scheduled for May through mid-September each year. Drilling and other construction and related activities are scoped for year round operations, however placement of subsea equipment to support drilling and production operations and installation of flow lines in glory holes will most likely occur during the summer and fall weather windows.

To date, development drilling activities carried out under the scope of this environmental assessment involved drilling at the North Amethyst Drill Center. A total of 6 of the 54 wells estimated for up to five potential glory holes scoped under this environmental assessment have been started or completed.

### 2.1.4 Planned Activities for 2012

During June of 2012, Husky will undertake a geotechnical program in the White Rose field within a 1 km radius of position 724,080 E 5,187,208 N (Figure 2-2). This program will be approximately 30 days in length, depending on weather conditions. Up to nine 250 mm (9 7/8") diameter boreholes will be drilled to evaluate the seabed conditions with respect to the foundation design of a potential bottom founded well head platform at this location. The depth of the boreholes will range from 15 to 150 meters and thus the total maximum displacement of sediment from nine boreholes to the seabed, will be 17.64 cubic meters affecting approximately 81 square meters of seafloor. A naturally sourced clay mineral based drill mud may be used while drilling the boreholes. The product has been screened and approved pursuant to the Husky's Chemical Management System and the implementation of the C-NLOPB's chemical screening guidelines therein.

During July of 2012, Husky is planning to construct a glory hole for the South White Rose Extension (SWRX). The glory hole will be dredged using the trailer suction hopper dredge, which has been previously used for glory holes within the White Rose development. Dredged material will be transported by the dredger to the White Rose field sediment disposal site previously used for disposal of dredge material during excavation of the White Rose glory holes. SWRX excavation will be an area of 80m x 45 m to an approximate depth of 11 m and total excavated volume of approximately 135,000 m<sup>3</sup>. Chemical sampling of the SWRX area indicates clean sediments with no contamination.

The sediment disposal site is approximately 3 km south of the Central Drill Centre and 3 km west and slightly south of the Southern Drill Centre. The sediment disposal site, SWRX glory hole and the geotechnical program location are all within the White Rose Safety Zone (Figure 2-3).

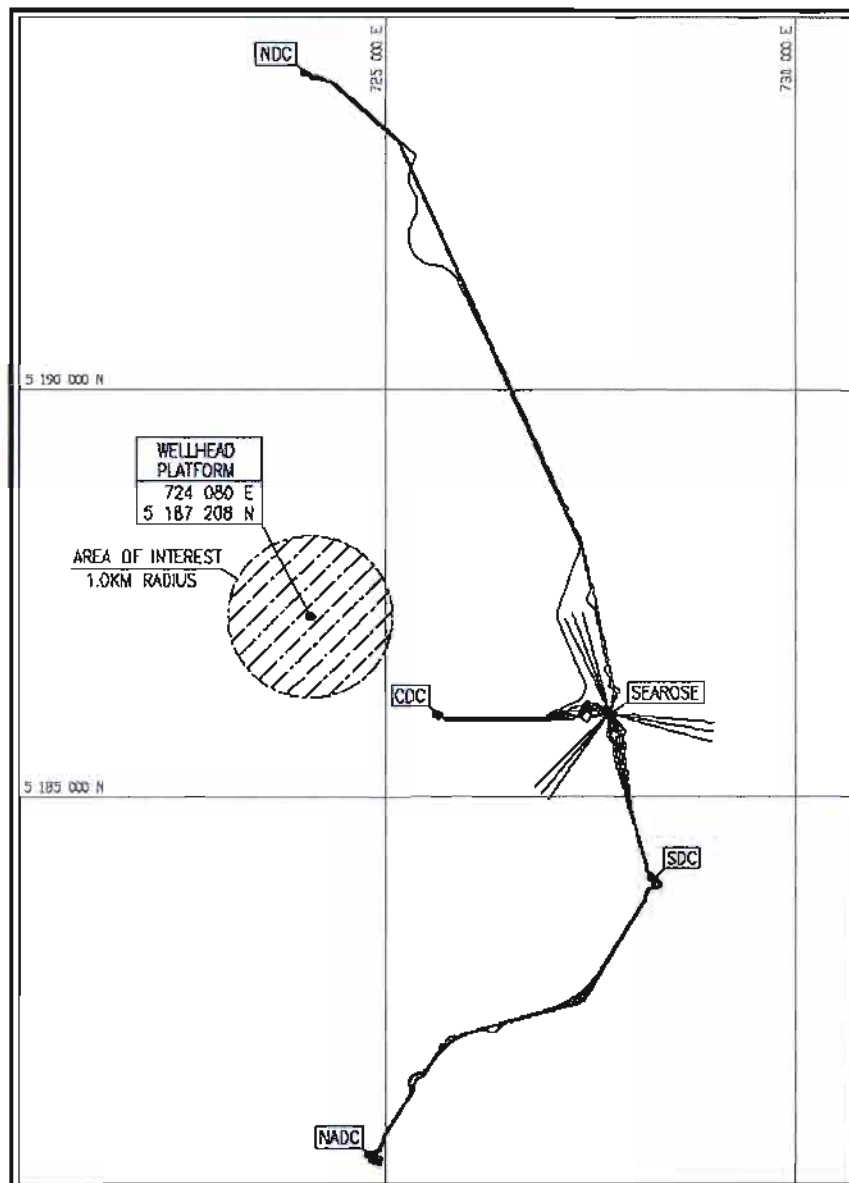


Figure 2-2 - Location of Borehole Survey Area for Wellhead Platform Geotechnical Program



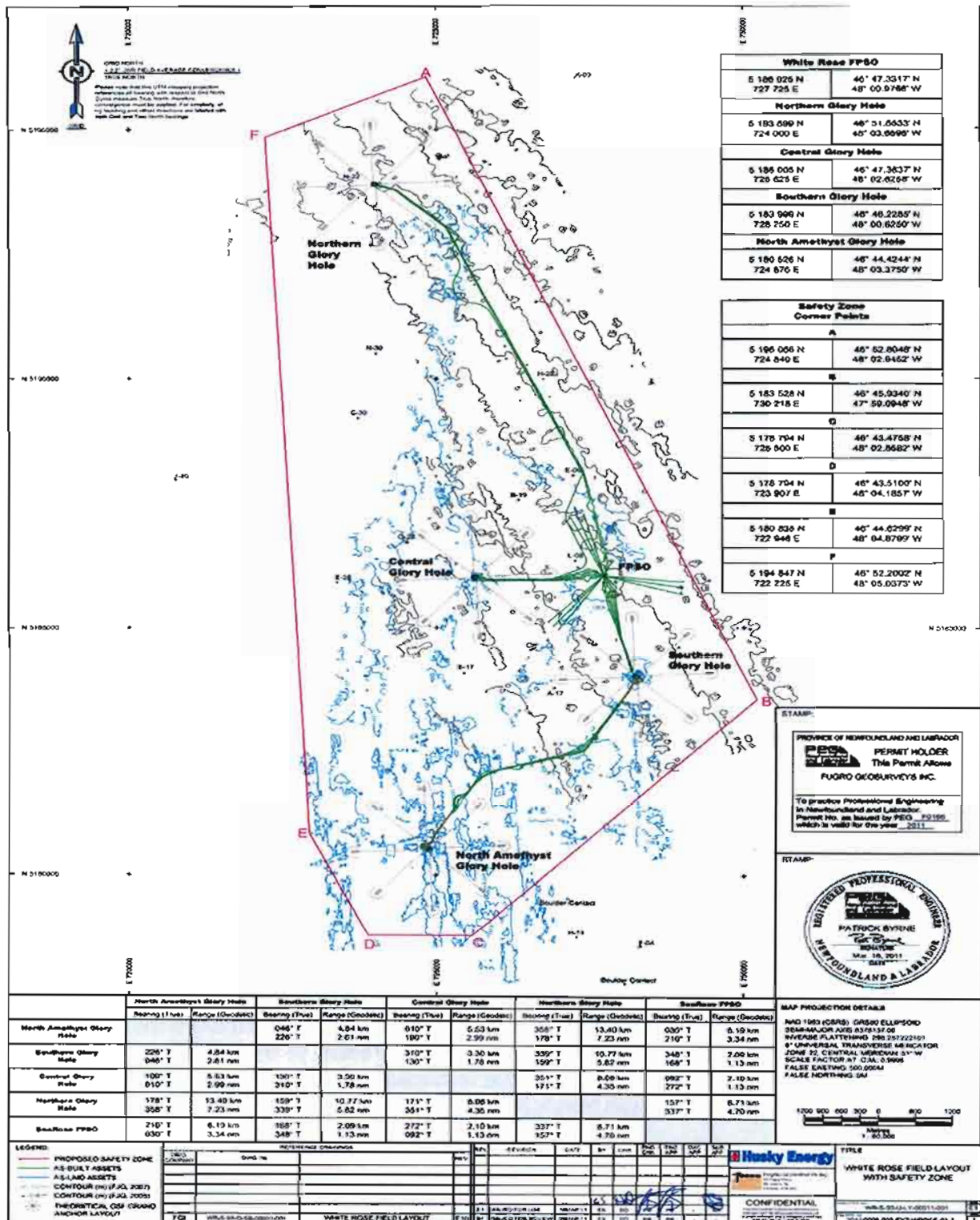


Figure 2-3 - Existing White Rose Drill Centres and Safety Zone

## **2.2 Environmental Aspects**

### **2.2.1 Fisheries**

Consultations specific to this EA update were undertaken on March 26, 2012 with Fish Food and Allied Workers Union and One Ocean to discuss new activities planned for the spring of 2012. Initial consultations for this program were held in August 2011, with the anticipation that the program would be completed during the fall.

There is also ongoing liaison with the fishing industry through the regular meetings of the One Ocean Technical Working Group that involves representatives from the various operating oil and gas companies and fishing interests.

Fishing activities in the study area have not changed significantly since the initial environmental assessment was accepted and the program approved. The most recent DFO snow crab science advisory report (DFO 2010) notes that "Offshore landings, mostly in Div. 3L, peaked at 27,300 t in 1999 and decreased to about 22,100 t in 2000 due to a reduction in the TAC. Landings remained at 22,000 to 25,000 t since 2000. Effort increased steadily from 2000 to 2007 and changed little since."

Figure 2-3 below provides a map of recently compiled fishing activity information that depicts an overall patterning of fishing activities that is consistent with that documented in the original environmental assessment. This compilation, derived from Fisheries and Oceans Canada (DFO) databases including research vessel and underutilized species information, is spatially and temporally consistent with Husky's most recent environmental assessment (LGL 2011).

While the general pattern of fishing near White Rose is seen to be generally the same between years, the following paragraphs note some points relevant to the interaction between the oil and gas and fishing industry within the scope of this environmental assessment.

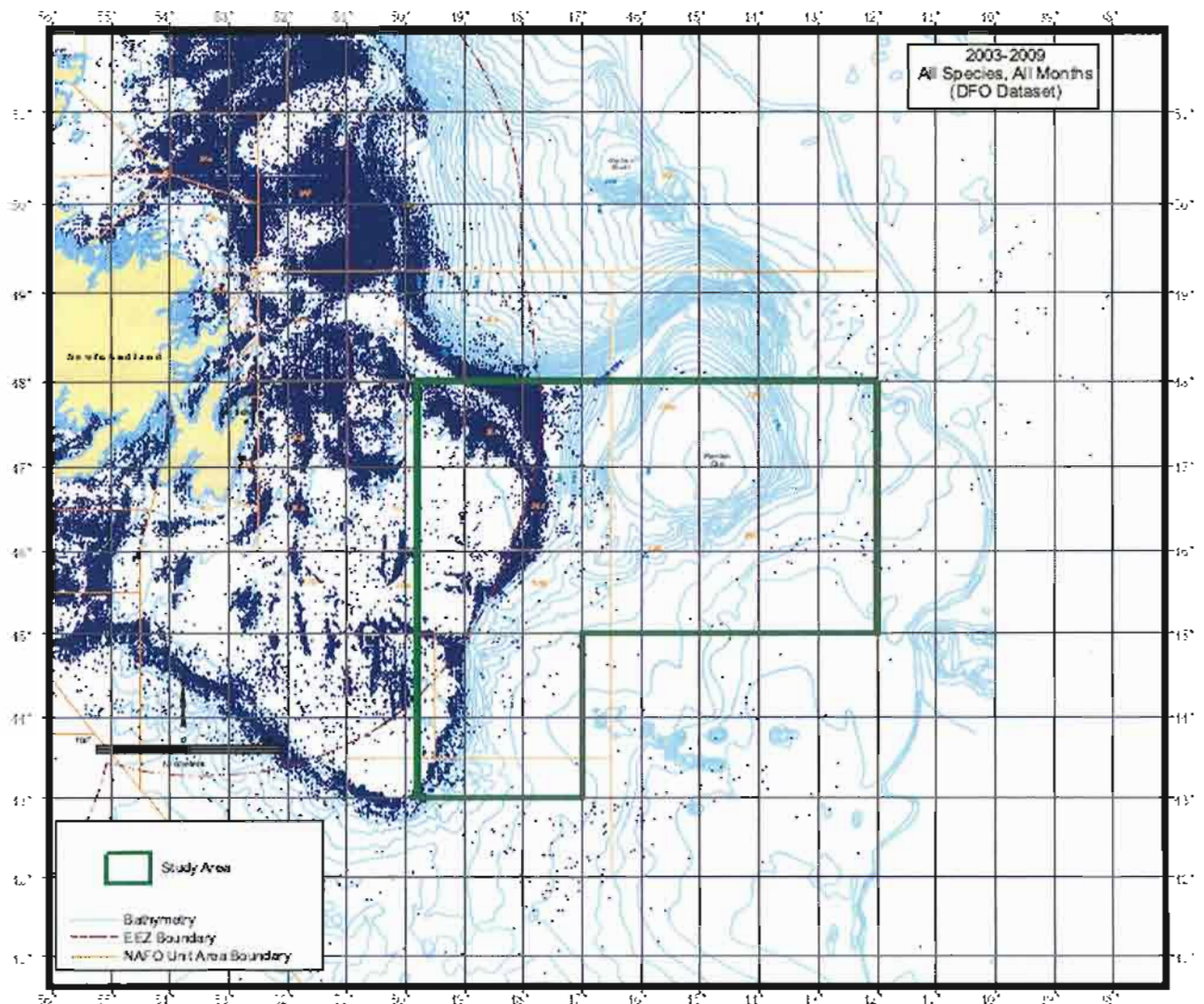
As noted in previous updates, a directed fishery for American Plaice has not existed for some time and this has not changed as of 2012. If in the future a directed fishery is authorized then previous fishing patterns for that species may be re-established in areas in and near the Jeanne d'Arc basin.

Husky understands that it is important to recognize that harvesters fish a resource, and not fixed points from year to year. Licenses are issued for large areas (e.g. NAFO subdivisions 3K or 3L) and fishing activity could take place anywhere within these areas and not just at the pattern of locations fished in recent years indicated by DFO data. Hence this requires that Husky continue to consult with the fishing industry on a regular basis to keep up to date with trends in fishing from year to year.

With regard to the conduct of its operations, Husky will continue to keep fishing interests informed of these activities during the operational planning phases. This will be done through the established One Ocean and FFAW contacts and others as deemed necessary or as advised.

Since the approval of the aforementioned environmental assessment, the fishing and oil and gas industries, through One Ocean, have completed two initiatives to help enhance

communication and collaboration between the two industries. The first is a communication protocol that has been distributed to fishers and members of the petroleum industry. The protocol recommends communication procedures between fish harvesters and offshore installations and petroleum-related vessels during operational activities. The second is a risk-based decision matrix that defines the conditions under which oil and gas operators could employ either or both a Fisheries Liaison Officer or a guide vessel in support of certain oil and gas operations that have a potential to affect fisheries activities offshore.



**Figure 2-4 - Cumulative pattern of Fishing Activity to 2003 - 2009 in Jeanne d'Arc Basin relation to the EA Study Area**



### 2.2.2 Species at Risk

An updated listing of SARA and COSEWIC<sup>2</sup> species for the Grand Banks area of relevance to this assessment is provided in Appendix 1. SARA listed species with final recovery strategies in place are noted. None of the SARA listed species relevant to the scope of this assessment have an associated critical habitat description or an action or management plan in place. It is noted however that the North Atlantic Right Whale does have a critical habitat statement pursuant to SARA however it is rare in the study area considered under this environmental assessment (see Appendix 1 – footnotes). Appendix 1 also provides the COSEWIC candidate species under consideration.

There are two cetacean species (blue whale, and North Atlantic right whale), one sea turtle species (leatherback), one seabird species (Ivory Gull), and three fish species (white shark, northern and spotted wolffish) that are legally protected under SARA and have potential to occur in the Study Area. Atlantic wolffish, the Atlantic population of fin whales and Sowerby's beaked whale are designated as special concern on Schedule 1.

Final recovery strategies have been prepared for five species currently designated as either endangered or threatened under Schedule 1 and potentially occurring in the Study Area: the leatherback sea turtle, the spotted wolffish, the northern wolffish, the blue whale, and the North Atlantic right whale. A management plan has also been prepared for the Atlantic wolffish, currently designated as special concern on Schedule 1.

Since the 2011 environmental assessment update, the white shark (*Carcharodon carcharias*) was added to the SARA Schedule 1 listing as endangered.

None of the recovery plans for SARA listed species in place materially change the mitigation measures currently committed by Husky for the scope of the operations addressed by the environmental assessment.

### 2.2.3 Mitigations

Husky regards the environmental predictions and consequent mitigations cited in the environmental assessment and subsequent significance determination that relates to [CEAR No. 06-01-7410](#) as still valid and re-commits to implementing these mitigation measures for the activities to be carried out under the scope of this assessment this year.

The potential environmental effects of geotechnical survey and drilling activities potentially undertaken as described in Section 2.1.4 are assessed to be *not significant* when evaluated against the assessment definitions and criteria applied to the valued ecosystem components addressed in the original assessment.

<sup>2</sup> SARA: *Species At Risk Act*. COSEWIC: Committee on the Status of Endangered Wildlife in Canada

### **3.0 Husky Delineation/Exploration Drilling Program for Jeanne d'Arc Basin Area, 2008-2017**

#### **3.1 Project Description and Scope**

##### **3.1.1 Activities Covered**

This environmental assessment addressed the potential for drilling 18 delineation and/or exploration wells from semi-submersible or jack-up mobile drilling units or drill ships. It also assessed the associated effects of geo-hazard/well site surveys and vertical seismic profiles.

Husky Energy proposes to drill up to 18 exploration/delineation wells on any current or future Husky land holdings in the Jeanne d'Arc Basin area during 2008 to 2017. To date 5 of these 18 wells have been drilled as follows:

- White Rose K-03 - Delineation (Spud 21 Nov 2007 to Jan 2008)
- North Amethyst E-17 - Delineation (Spud 9 Aug, 2008)
- White Rose E-28 - Delineation (Spud 13 Oct 2008)
- Glenwood H-69 - Exploration (Spud 25 Jan 2010)
- North Amethyst H-14 - Delineation (Spud 21 Mar 2010)

##### **3.1.2 Geographic Scope**

The geographic scope of the drilling program is depicted in Figure 3-1. The project area is depicted by the red rectangle. The coordinates of the project area are as follows:

48° North and 49.5° West;

48° North and 47° West;

46° North and 49.5° West; and,

46° North and 47° West.

##### **3.1.3 Temporal Scope**

Exploration and delineation drilling activities including geo-hazard/well site surveys and vertical seismic profiles associated with the drilling program as outlined above may be carried out year round from 2008 through 2017.

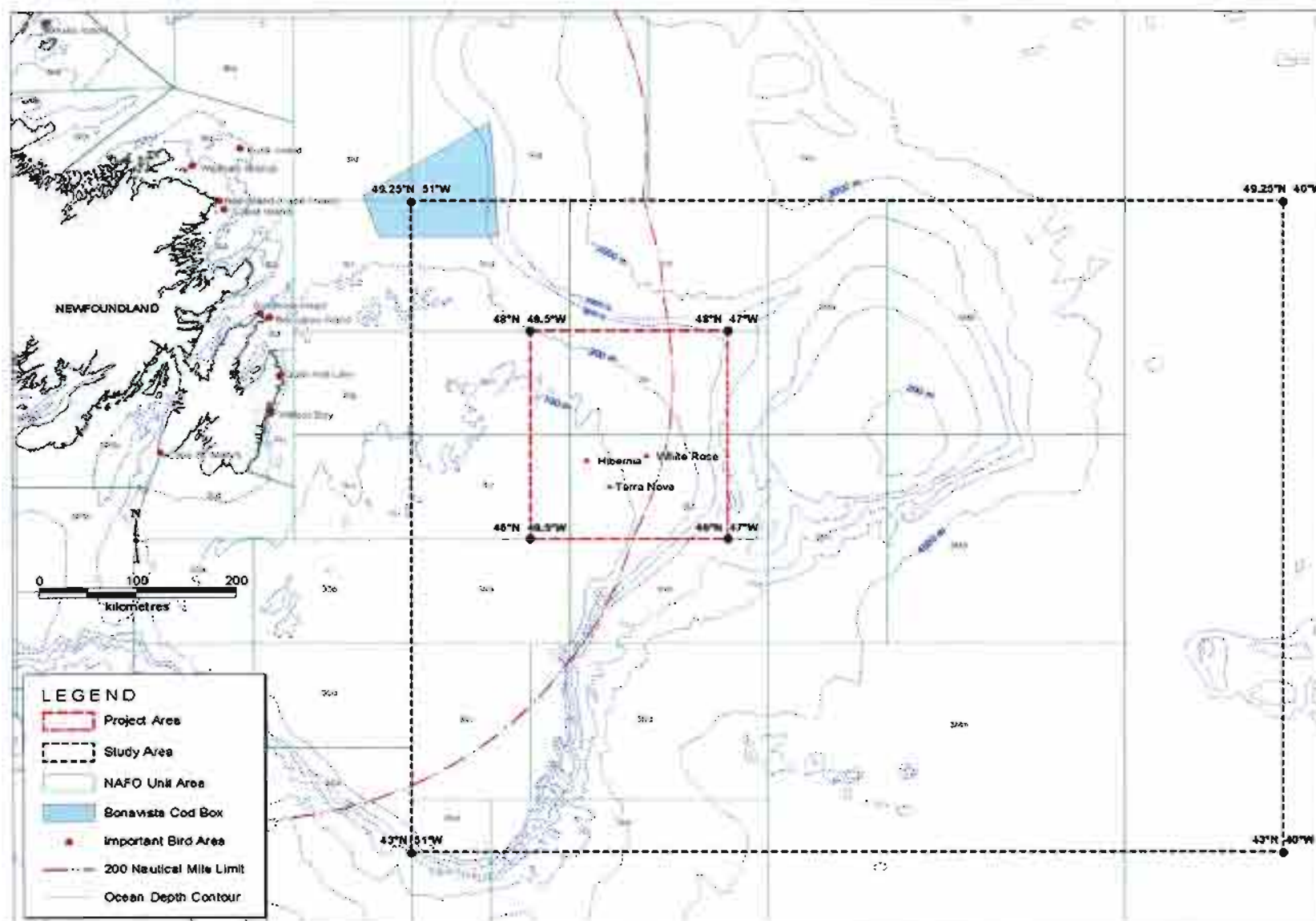


Figure 3-1 - Geographic Scope of Project Area CEAR No. 07-01-28877

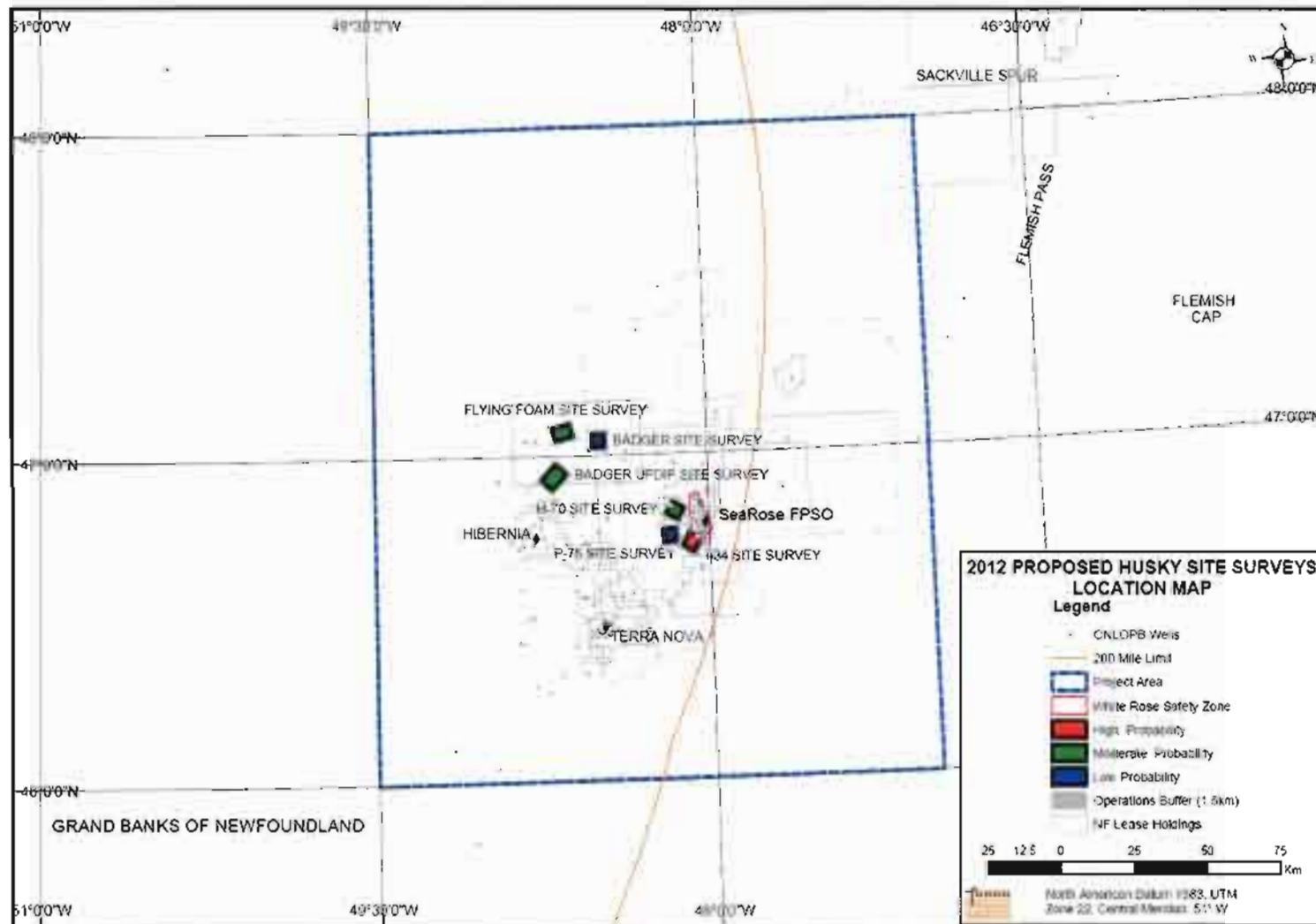
#### 3.1.4 Planned Activities for 2012

Husky plans to conduct well site surveys within the geographic area described in Section 3.1.2, starting in late April 2012 and continuing for approximately 30 days. The program will acquire high resolution 2D seismic, side-scan sonar, sub-bottom profiler, multi-beam bathymetric data and ground truth data (i.e., camera/grab samples) over the proposed areas as shown and described in Figure 3-2.

There are potentially 6 site locations to be surveyed in 2012. The well site survey at each location will take approximately 5 days to complete, depending on weather.

As noted in the current environmental assessment, for well site surveys the requirements of Appendix 2 of the *Geophysical, Geological, Environmental & Geotechnical Program Guidelines* will be complied with regarding consultation and notification of fishing and other marine interests and placing a qualified marine mammal observer on the survey vessel.

For 2012, a single well at Searcher C-87 on EL1122 is scheduled and estimated drilling duration is 50 days. Pending the outcome of the C-87 drilling program, subsequent drilling activities may occur.



2012 PROPOSED HUSKY SITE SURVEYS LOCATION MAP

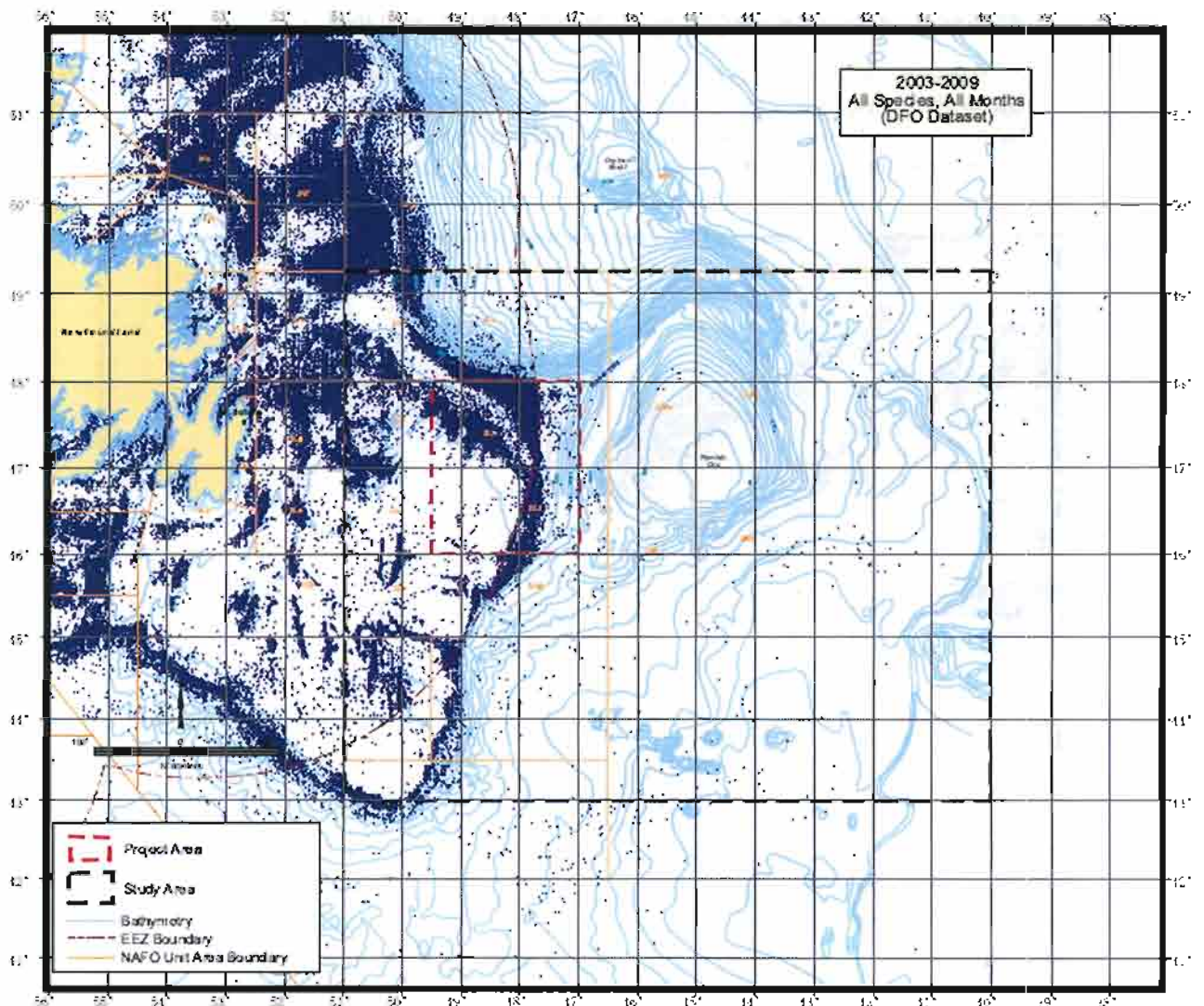
Figure 3-2 - Overview of Location of Well Site Surveys Planned for April-May 2012



## 3.2 Environmental Aspects

### 3.2.1 Fisheries

Fishing activities in the study area have not changed significantly since the initial environmental assessment was accepted and the program approved. Figure 3-4 below provides a map of recently compiled fishing activity information that depicts an overall patterning of fishing activities that is consistent with that documented in the original environmental assessment. This compilation, derived from Fisheries and Oceans Canada (DFO) databases including research vessel and underutilized species information, is spatially and temporally consistent with Husky's most recent environmental assessment (LGL 2011).



**Figure 3-3 - Cumulative pattern of Fishing Activity to 2003 - 2009 in Jeanne d'Arc Basin in relation to 2012 the EA Study Area**

Consultations specific to this EA update were undertaken on March 26, 2012 with Fish Food and Allied Workers Union and One Ocean to discuss new activities planned for the spring of 2012. Initial consultations for this program were held in August 2011, with the anticipation that the program would be completed during the fall.

While the general patterning of fishing relevant to this assessment is seen to be generally the same between years, the following paragraphs note some points relevant to the interaction between the oil and gas and fishing industry within the scope of this environmental assessment.

Preliminary decisions have been taken by Northwest Atlantic Fisheries Organization (NAFO) in the event that there is a resumption of a cod fishery in NAFO area 2J3JKL in the future (FFAW, pers. comm. & NAFO, 2010). Pursuit of such a fishery is however contingent on both Canadian and NAFO future decision making.

As noted in previous updates, a directed fishery for American Plaice has not existed for some time and there is no indication of a fishery in 2012. If in the future a directed fishery is authorized then previous fishing patterns for that species may be re-established in areas in and near the Jeanne d'Arc basin.

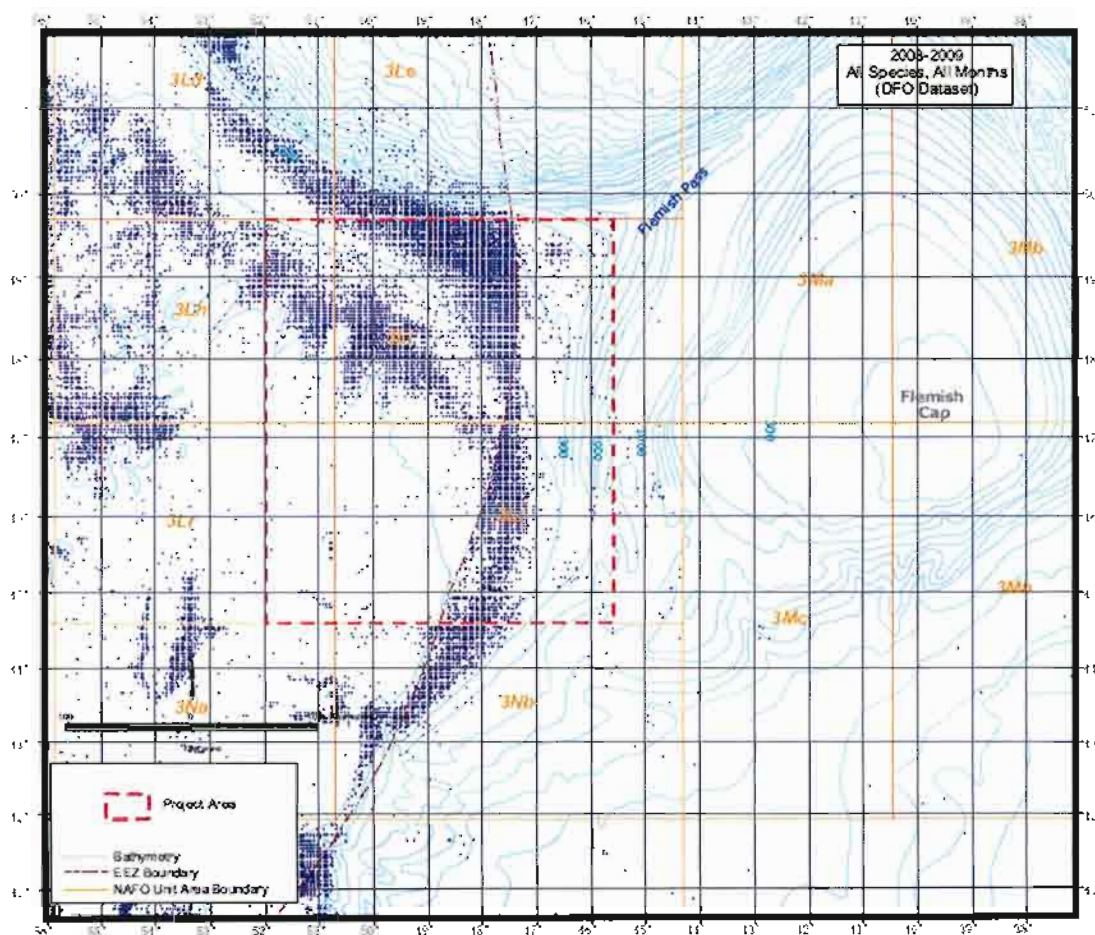


Figure 3-4 - Cumulative Fishing Activity 2003-2009 within the EA Project Area

Husky understands that it is important to recognize that harvesters fish a resource, and not fixed points from year to year. Licenses are issued for large areas (e.g. NAFO subdivisions 3K or 3L) and fishing activity could take place anywhere within these areas and not just at the pattern of locations fished in recent years indicated by DFO data. Hence this requires that Husky continue to consult with the fishing industry on a regular basis to keep up to date with trends in fishing from year to year.

With regard to the conduct of its operations Husky will continue to keep fishing interests informed of these activities during the operational planning phases. This will be done through the established One Ocean and FFAW contacts and others as deemed necessary or as advised.

Since the approval of the aforementioned environmental assessment, the fishing and oil and gas industries, through One Ocean, have completed two initiatives to help enhance communication and collaboration between the two industries. The first is a communication protocol that has been distributed to fishers and members of the petroleum industry. The protocol recommends communication procedures between fish harvesters and offshore installations and petroleum-related vessels during operational activities. The second is a risk-based decision matrix that defines the conditions under which oil and gas operators could employ either or both a Fisheries Liaison Officer or a guide vessel in support of certain oil and gas operations that have a potential to affect fisheries activities offshore.

### 3.2.2 Species at Risk

An updated listing of SARA and COSEWIC<sup>3</sup> species for the Grand Banks area of relevance to this assessment is provided in Appendix 1. SARA listed species with final recovery strategies in place are noted. None of the SARA listed species relevant to the scope of this assessment have an associated critical habitat description or an action or management plan in place. It is noted however that the North Atlantic Right Whale does have a critical habitat statement pursuant to SARA however it is rare in the study area considered under this environmental assessment (see Appendix 1 – footnotes). Appendix 1 also provides the COSEWIC candidate species under consideration.

There are two cetacean species (blue whale, and North Atlantic right whale), one sea turtle species (leatherback), one seabird species (Ivory Gull), and three fish species (white shark, northern and spotted wolffish) that are legally protected under SARA and have potential to occur in the Study Area. Atlantic wolffish, the Atlantic population of fin whales and Sowerby's beaked whale are designated as special concern on Schedule 1.

Final recovery strategies have been prepared for five species currently designated as either endangered or threatened under Schedule 1 and potentially occurring in the Study Area: the leatherback sea turtle; the spotted wolffish, the northern wolffish, the blue whale, and the North Atlantic right whale. A management plan has also been prepared for the Atlantic wolffish, currently designated as special concern on Schedule 1.

Since the 2011 environmental assessment update, the white shark (*Carcharodon carcharias*) was added to the SARA Schedule 1 listing as endangered.

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<sup>3</sup> SARA: *Species At Risk Act*. COSEWIC: Committee on the Status of Endangered Wildlife in Canada



None of the recovery plans for SARA listed species in place materially change the mitigation measures currently committed by Husky for the scope of the operations addressed by the environmental assessment.

### 3.2.3 Mitigations

Husky regards the environmental predictions and consequent mitigations cited in the environmental assessment and subsequent significance determination that relates to [CEAR No. 07-01-28877](#) as still valid and re-commits to implementing these mitigation measures for the activities to be carried out under the scope of this assessment this year.

The potential environmental effects of well site survey activities potentially undertaken as described in Section 2.1.4 are assessed to be *not significant* when evaluated against the assessment definitions and criteria applied to the valued ecosystem components addressed in the original assessment.

## 4.0 Concluding Statement

The activities Husky plans to carry out in 2012 have been reviewed and assessed to be within the spatial and temporal scope of the environmental assessments referenced herein.

The environmental effects predicted in the currently valid assessments are still valid. Husky reaffirms its commitment to implement the mitigation measures proposed in these assessments and in the Screening Decisions made by the C-NLOPB.

## 5.0 References

### 5.1 Original Husky Environmental Assessments

1. LGL Limited. 2011. Environmental Assessment of Husky's Jeanne d'Arc Basin/Flemish Pass Regional Seismic Program, 2012-2020. LGL Rep. SA1144. Prepared by LGL Limited in association with Canning & Pitt Associates Inc., St. John's, NL, and Oceans Ltd., St. John's, NL, for Husky Energy, St. John's, NL. 320 p. + appendices.
2. LGL Limited. 2006c. Husky White Rose Development Project: New Drill Centre Construction & Operations Program Environmental Assessment. LGL Rep. SA883. Rep. by LGL Limited, St. John's, NL, for Husky Energy Inc., Calgary, AB. 299 p. + App.
3. LGL Limited. 2007. Husky White Rose Development Project: New Drill Centre Construction & Operations Program Environmental Assessment Addendum. LGL Rep. SA883a. Rep. by LGL Limited, St. John's, NL, for Husky Energy Inc., Calgary, AB. 126 p. + App.
4. LGL Limited. 2007. Husky Delineation/Exploration Drilling Program for Jeanne d'Arc Basin Area, 2008-2017, Environmental Assessment. LGL Rep. SA935. Prepared by LGL, St. John's, NL, in association with Canning & Pitt Associates, Inc., Oceans Ltd.,

and PAL Environmental Services. Prepared for Husky Energy Inc., Calgary, AB. 231 p. + Appendices.

5. Husky Energy. 2010. Husky Energy East Coast Operations Newfoundland & Labrador Offshore Area Environmental Assessment Review for 2010. Doc. No. WR-HSE-RP-1886.

## 5.2 Recent & Relevant Environmental Assessments by Others

1. LGL Limited. 2008. Environmental Assessment of StatoilHydro Canada Ltd. Exploration and Appraisal/Delineation Drilling Program for Offshore Newfoundland, 2008-2016. LGL Rep. SA947b. Rep. by LGL Limited, Canning & Pitt Associates Inc., and Oceans Ltd., St. John's, NL, for StatoilHydro Canada Ltd., St. John's, NL. 292 p. + appendices.
2. Christian, John R. 2008. Environmental Assessment of Petro-Canada Jeanne d'Arc Basin Exploration Drilling Program, 2009-2017. LGL Rep. SA993. Prepared by LGL, St. John's, NL prepared for Petro-Canada, St. John's, NL 258 p. + Appendix.
3. Christian, John R. 2009. Environmental Assessment of Petro-Canada Jeanne d'Arc Basin Exploration Drilling Program, 2009-2017 Addendum. LGL Rep. SA993. Prepared by LGL, St. John's, NL prepared for Petro-Canada, St. John's, NL 22 p.
4. Stantec. 2010. Hebron Project Comprehensive Study Report. Prepared by Stantec Ltd. on behalf of ExxonMobil Canada Properties
5. Suncor 2011, Suncor I&O East Coast Operations Newfoundland & Labrador Offshore Area Environmental Assessment Review for 2011. Doc. No. TN-PE-EC15-X00-155.
6. LGL Limited. 2011. Environmental assessment of Statoil's Geophysical Program for Jeanne d'Arc and Central Ridge/Flemish Pass Basins, 2011-2019. LGL Rep. SA1121. Rep. by LGL Limited, in association with Canning & Pitt Associates Inc., and Oceans Ltd., St. John's, NL, for Statoil Canada Ltd., St. John's, NL. 227 p. + appendices.

## 5.3 Species at Risk Recovery Strategies

- Atlantic Leatherback Turtle Recovery Team 2006. Recovery Strategy for Leatherback Turtle (*Dermochelys coriacea*) in Atlantic Canada. Species at Risk Act Recovery Strategy Series. Fisheries and Oceans Canada, Ottawa, vi + 45 pp.
- Kulka, D., C. Hood and J. Huntington. 2007. Recovery Strategy for Northern Wolffish (*Anarhichas denticulatus*) and Spotted Wolffish (*Anarhichas minor*), and Management Plan for Atlantic Wolffish (*Anarhichas lupus*) in Canada. Fisheries and Oceans Canada: Newfoundland and Labrador Region. St. John's, NL. x + 103 pp.
- DFO (Fisheries and Oceans Canada). 2008. Recovery Strategy for the Atlantic walrus (*Odobenus rosmarus rosmarus*), Northwest Atlantic population, in Canada. Species at Risk Act Recovery Strategy Series. Fisheries and Oceans Canada, Ottawa, ON. x + 11 pp.

- Beauchamp, J., Bouchard, H., de Margerie, P., Otis, N., Savaria, J.-Y., 2009. Recovery Strategy for the blue whale (*Balaenoptera musculus*), Northwest Atlantic population, in Canada [FINAL]. Species at Risk Act Recovery Strategy Series. Fisheries and Oceans Canada, Ottawa. 62 pp.
- Brown, M.W., Fenton, D., Smedbol, K., Merriman, C., Robichaud-Leblanc, K., and Conway, J.D. 2009. Recovery Strategy for the North Atlantic Right Whale (*Eubalaena glacialis*) in Atlantic Canadian Waters [Final]. Species at Risk Act Recovery Strategy Series. Fisheries and Oceans Canada. vi + 66p.

## 6.0 Appendices

Appendix 1 - Current Listing of [SARA](#) and [COSEWIC](#) Listed Species in the Husky Project Areas.

**Appendix1: Current SARA Listed and COSEWIC Assessed Species in the Husky Project Areas<sup>5</sup>**

		New Since Last Update								
Species		Drill Centres	Exp Drilling	SARA Status noted as Schedules 1,2 or 3			COSEWIC Status			
Common Name	Scientific Name			Endangered	Threatened	Special Concern	Endangered	Threatened	Special Concern	Candidate <sup>6</sup>
<b>Birds</b>										
Ivory Gull	<i>Pagophila eburnea</i>			1			X			
<b>Marine Fish</b>										
Northern wolffish	<i>Anarhichas denticulatus</i>				1			X		
Spotted wolffish	<i>Anarhichas minor</i>				1			X		
Atlantic wolffish	<i>Anarhichas lupus</i>					1			X	
Atlantic cod	<i>Gadus morhua</i>					3				
Atlantic cod (NL population)	<i>Gadus morhua</i>						X			
Atlantic Salmon (various regional populations)	<i>Salmo salar</i>						X			
Porbeagle shark	<i>Lamna nasus</i>						X			
White shark	<i>Carcharodon carcharias</i>	•	•	1			X			
Roundnose Grenadier	<i>Coryphaenoides rupestris</i>						X			
Cusk	<i>Brosme brosme</i>							X		
American Shad	<i>Alosa sapidissima</i>									MPC
Alewife	<i>Alosa pseudoharengus</i>									MPC
Capelin	<i>Mallotus villosus</i>									MPC
Haddock	<i>Melanogrammus aeglefinus</i>									MPC
Shortfin mako shark	<i>Isurus paucus</i>							X		
Blue shark	<i>Prionace glauca</i>								X	

<sup>4</sup> March 2012

<sup>5</sup> Green Shade means a final Recovery Strategy is in place but no Critical Habitat has been identified nor have Action or Management plans been finalized for these species with the exception of the North Atlantic Right Whale (see footnote 7). Note that two other species that have recovery strategies, the Atlantic Walrus and Grey Whale, have been extirpated from Eastern Canadian waters and therefore are not listed in the above table.

<sup>6</sup> Candidate COSEWIC species are classified as High (H), Medium (M) or Low (L) Priority Candidate (PC) species

		New Since Last Update								
Species		Drill Centres	Exp Drilling	SARA Status noted as Schedules 1,2 or 3			COSEWIC Status			
Common Name	Scientific Name			Endangered	Threatened	Special Concern	Endangered	Threatened	Special Concern	Candidate <sup>6</sup>
American Eel	<i>Anguilla rostrata</i>								X	
Roughhead grenadier	<i>Macrourus bergla</i>								X	
Bluefin Tuna	<i>Thunnus thynnus</i>						X			
Spiny eel	<i>Notacanthus chernitzi</i>									MPC
Pollock	<i>Pollechiu virens</i>									MPC
Spinytail Skate	<i>Bathyrja spinicauda</i>									MPC
Ocean pout	<i>Zoarces americanus</i>									MPC
American Plaice (NL pop.)	<i>Hippoglossoides platessoides</i>							X		
Acadian Redfish (Atlantic pop.)	<i>Sebastes fasciatus</i>							X		
Deepwater Redfish (Northern pop.)	<i>Sebastes mentella</i>							X		
Spiny Dogfish	<i>Squalus acanthias</i>								X	
Basking Shark	<i>Cetorhinus maximus</i>								X	
<b>Marine Mammals</b>										
Blue whale	<i>Balaenoptera musculus</i>			1			X			
Humpbacked whale	<i>Megaptera novaeanglia</i>					3				
North Atlantic right whale	<i>Eubalaena glacialis</i>			1			X			
Fin whale (Atlantic pop.)	<i>Balaenoptera physalus</i>					1			X	
Killer Whale (NW Atl./East Arctic population)	<i>Orcinus orca</i>								X	
Sperm whale	<i>Physeter macrocephalus</i>									LPC
Cuvier's Beaked Whale	<i>Ziphius cavirostris</i>									MPC
Northern Bottlenose whale <sup>7</sup> (Davis Strait/Baffin Bay/Labrador Sea)	<i>Hyperoodon ampullatus</i>								X	
Sowerby's beaked whale	<i>Mesoplodon bidens</i>					3			X	
Harbour porpoise	<i>Phocoena phocoena</i>				2				X	

<sup>7</sup> A critical habitat statement exists for this species however it is rare in the study area considered in this assessment with one sighting of two individuals recorded in the DFO cetacean database.



		New Since Last Update								
Species		Drill Centres	Exp Drilling	SARA Status noted as Schedules 1,2 or 3			COSEWIC Status			
Common Name	Scientific Name			Endangered	Threatened	Special Concern	Endangered	Threatened	Special Concern	Candidate <sup>s</sup>
Hooded seal	<i>Cystophora cristata</i>									LPC
Harp seal	<i>Phoca groenlandica</i>									LPC
Ringed Seal	<i>Pusa hispida</i>									LPC
Reptiles										
Leathertback sea turtle	<i>Dermochelys coriacea</i>			1			X			
Loggerhead sea turtle	<i>Caretta caretta</i>						X			