

October 10, 2013

Canada Nova Scotia Offshore Petroleum Board
18th Floor, TD Centre
1791 Barrington Street
Halifax, Nova Scotia
B3J 3K9

Advisor, Regulatory Policy/Rights Management (by email to callforbids@cnsopb.ns.ca)

Re: Call for Bids NS 13-1

Dear Ms. Bonnell-Eisnor:

As per the Call for Bids NS 13-1 section 2.5 Submission of Written Comments, following please find comments from the Affiliation of Seafood Producers Association of Nova Scotia (ASPANS). ASPANS represents all NS based snow crab producers, employing more than 500 people and exporting \$75m-\$100m of snow crab annually.

ASPANS member companies have significant concern regarding possible seismic research activity in the parcels currently in the call for the bids. The ecosystem in this area is very diverse and the sand and mud habitat may be subject to significant turbidity from seismic activity. For your information we have attached to this email two 'interactive' (re: layer icon on left to activate layers) overlay maps. These maps provide layers including the parcels in the call for bids, geology, bathymetry and fishing activity of shrimp and snow crab. Examination of these maps indicate:

- Crab fishing activity concentrates in the 100-300m depth strata, primarily on sand or gravelly sand bottom, and shrimp in the 200-400m depth strata.
- The fishing activity has significant overlap on parcels 1 and 2, and notable overlap in the northern half of parcels 3 through 5.

Anecdotal and inferred evidence suggests that there may be sub-lethal effects to snow crab including egg clutches on females and the hepatopancreas. Further, chronic effects regarding production or health on internally developing eggs may occur.

Given the economic importance and significant fishing activity of both snow crab and shrimp in the parcels, our preference is to have no seismic activity in parcels 1 and 2 and the northern half of parcels 3 through 5.

Though our preference is to avoid all risk associated with the impact of seismic testing in the area, requirements that would minimize risk of impact should be considered, including:

- The Fisheries Advisory Committee (FAC) to the CNSOSPB should remain fully informed regarding the granting of leases in the parcels for bid.
- If seismic testing is proposed in any of the parcels subsequent to the bid process a comprehensive plan regarding the timing, location and methods of seismic testing should be documented and provided to the FAC for comment. Given the possible sub-lethal and chronic impacts to snow crab, blanketing of an entire area with seismic studies may pose considerable risk. Consideration of this should be provided in any research plan.
- Any plan to complete seismic testing should incorporate supporting research on snow crab within the proposed area to measure the impact of testing against baseline data. It is understood that Mikio Moriyasu, DFO crab scientist, is currently collecting and examining female snow crab samples from the eastern Scotian Shelf. This information is documenting the cell structure and size and weight of organs. If seismic work does occur in any of these bid parcels, this information is suitable to be used as a baseline reference to monitor the possible impact on female snow crab health.

ASPANS has other concerns and suggestions regarding seismic research in these areas, as follows:

- The timing of seismic studies is of critical importance. The snow crab fishery occurs from April through August, with most fishing activity completed mid-July. This same time period coincides with the spawning period. To eliminate any risk of affecting commercial catch rates and larval damage, seismic testing outside this time period seems most suitable.
- There has been prior seismic work completed on the Banquereau Bank, which is the same area where the parcels are being offered. Given that this research information is now in the public domain, duplication of seismic research in the same areas would not seem warranted, except to supplement existing findings.

Thank you for the opportunity to make comment regarding the call for bids. I trust that our concerns and suggestions will be given due consideration.

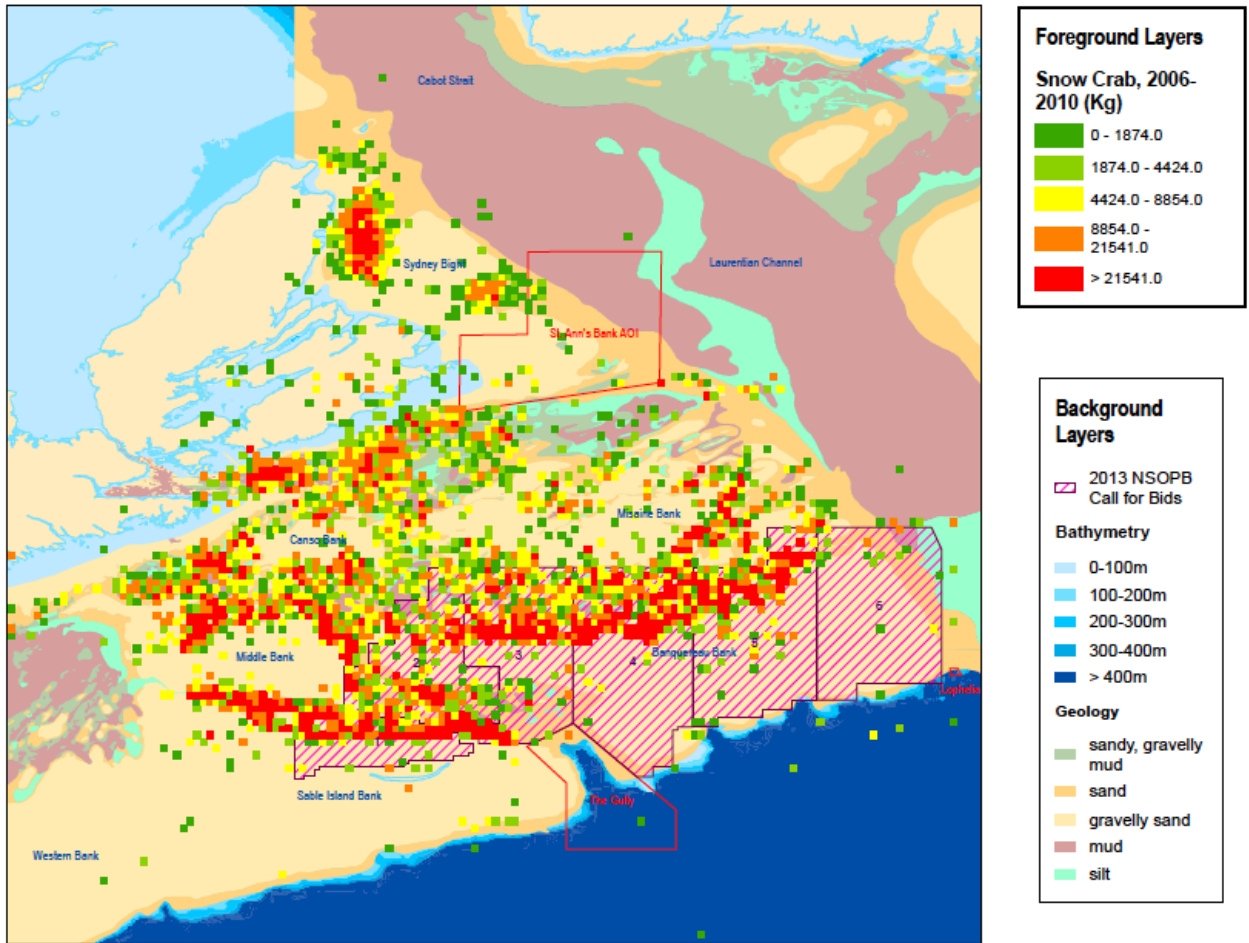
Regards,
ASPANS



Peter Norsworthy
Executive Director

Cc: Nova Scotia Minister of Fisheries
ASPANS members
Gordon MacDonald (CFA 23 Snow Crab Representative)

Snow crab fishing activity – 2006-2010



Shrimp Fishing Activity 2009-2011

