

The Digby Neck Community Development Association

Response to the Environmental Impact Statement on the Whites Point Quarry and Marine Terminal

Submitted to

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1. Introduction

This document is the response of The Digby Neck Community Development Association (DNCDA) to the Environmental Impact Study (EIS) on the Whites Point Quarry and Marine Terminal.

DNCDA has chosen to focus on four topics in the EIS:

- the effect of the proposed quarry on livelihoods in the tourism sector
- the effects of the proposed quarry on livelihoods in the fisheries sector
- the relation of the project to the goals and objectives of existing public plans and policies
- consultative process use to develop the EIS

The Digby Neck Community Development Association (DNCDA)

DNCDA is a community-based non-profit association with a mission “to promote and develop healthy communities and a healthy environment for Digby Neck.” Since it was formed in 1994 DNCDA has been involved in a wide range of community development activities. Its current ongoing programs include publishing a monthly newspaper that goes to every home on Digby Neck, running the Digby Neck C@P site, and managing a tourism information centre in the summer, as well as coordinating a range of community development projects.

Among DNCDA’s past activities and achievements are:

Community Economic Development (CED) - annual small business fairs, an Ecotourism Map/Brochure, start up of a community-owned corporation, start up of community-based management in the inshore fishery in this area, a small business directory

Education- computer courses, an adult literacy program, a family literacy program, and several adult literacy publishing projects

Research- participation in a social science project with St. Mary’s University, a UNESCO project on the resiliency of circumpolar coastal communities

Planning Community Visioning - numerous planning workshops on community goals and objectives, two residential planning retreats and numerous community planning consultations related to specific projects

Culture and Heritage- A local history website, *Digby Neck in Stories*, which archives a wide range of local history materials and images

Because of the range of this past work we feel that our organization is in a position to provide an authoritative response to the EIS on questions of livelihoods and community development on Digby Neck.

Methodology

DNCDA has utilized a four step methodology in order to respond to the EIS:

1. Identify key issues that were specified in the guidelines, and prioritize them based on the results of interviews and literature searches
2. Determine whether the EIS addressed these issues, or if there are any gaps in the presentation
3. If the EIS does address the issue to determine if the evidence presented is adequate and substantiates the claims made in the EIS on the issue in question
4. Make recommendations to the panel in a way that improves the usefulness and reliability of the EIS

2. Impact on Livelihoods in the Fisheries Sector

The Guidelines required the proponent to give fisheries an important place in the EIS. This reflects the central ecological, economic and social role of fisheries in the Digby Neck and Islands area. As such it is a key element in the decision-making process about whether not to proceed with the quarry. The EIS deals with the fisheries in Sections 9.1 and 9.2, relating to the economy, as well as in various appendices.

These sections of the EIS deal with the fisheries on two general ways, as directed by the Guidelines:

- 1) a descriptive profile of the fisheries, and
- 2) an account of how the quarry could potentially affect the local fisheries

Although DNCDA can see gaps in 1), this chapter will primarily address aspects of 2). In general we believe that the sections on the fisheries are superficial, inaccurate and lacking in real consideration of how the quarry will actually affect the local fisheries.

Furthermore, we believe that there are serious gaps in both the data and the arguments on fisheries issues presented by the proponent.

The guidelines included two principles that are important elements in the EIS as it relates to fisheries:

- 1) *Local Knowledge*, as defined in the Guidelines (3.1), that is the experience and knowledge of fishermen has an important role to play in the EIS
- 2) The *Precautionary Principle*, as defined in the Guideline (3.5): “That the onus of proof shall lie with proponent to show that a proposed action will not lead to serious or irreversible environmental damage, especially with respect to overall environmental function and integrity, considering system tolerance and integrity” The Guidelines go on to make it clear that the principle shall also apply to actions affecting socio-economic well-being. That is to say, if there is no evidence, or weak evidence, regarding potential harm to livelihoods in the fisheries, deliberations should err on the side of caution.

Taken together, the application of these two principles means that, in cases where there is a widespread, well-informed opinion in the fishing industry that there might be potential harm that the burden is on the proponent to provide strong evidence to contrary.

Based on these principles, DNCDA has employed the following methodology in order to evaluate the fisheries related sections in the EIS. In order to identify the major fisheries issues, we conducted a series of interviews with people engaged in the fishing industry, including interviews with

- local inshore fishermen, including all lobster fishermen who fish out of Whale Cove
- fishermen's associations, which represent all inshore fishermen of Digby Neck and the Islands, as well more than 1000 inshore fishermen in the wider area
- interviews with owners and employees of processing and buying companies, which employ more than 250 workers on Digby Neck and the Islands;
- government officials including fisheries manager and scientists

A list of those interviewed is given in Appendix 4. This represents a considerable sample of well-informed and experienced opinion regarding the local fisheries. Use of interviews is consistent with the inclusion of local knowledge, as described in the Guidelines.

We then did a literature search of relevant documents, including government documents and research report relating to the issues raised in interviews.

Having used information from these sources to identify key issues regarding the quarry's impact on the fisheries, we used this as the basis for evaluating the fisheries sections in the EIS, to determine whether these issues had been adequately addressed these issues.

We then organized our response, by species: lobster, herring, scallops, groundfish, dulse, periwinkles, as well as fishplants.

LOBSTER

The lobster fishery is the mainstay of the economy of Digby Neck and Islands. In wider region of Southwest Nova Scotia the lobster fishery is by far the single largest industry, providing the economic and social foundation for most coastal communities.

Key issues relating to lobster fishery are

- invasive species
- loss of gear due to interaction with ships
- effect of blasting on lobster stocks
- effect of siltation on juvenile and spawning lobster
- cumulative stress put on the lobster fishery by all these stress factors

Invasive Species

Interviews with lobster fishermen from Digby Neck, as well as LFA 34 lobster representatives, indicated a high degree of concern about the threat of the introduction of invasive species in ballast water exchange. Because lobster is very susceptible to disease, and because regulation and inspection of ballast water exchange is weak, there is a fear that this could harm this important fishery. Lobster fishermen are aware of the

blight on lobster in Long Island Sound¹, and are concerned that ballast water taken on in that area could be released in the Bay of Fundy, introducing invasive species which could threaten the fishery. There are serious grounds for concern about the threat to the whole LFA 34 lobster fishery.

The issue of invasive species is dealt in the EIS, but it did not address impact on lobster fishery. On the general issue of invasive species the proponent states that “it will ensure that the shipper complies with existing guidelines for the exchange of ballast water”. (9.2.14) This statement is far from reassuring because 1) It appears to shift the onus from the proponent to the shipper 2) the guidelines, and inspection are weak.

This factor has the potential of affecting the whole fishery on this area, which is worth several hundred million dollars in landed value every year. Strong concerns were voiced by the leadership of the LFA 34 Lobster Management, representing almost a thousand license holders, and an industry that employs more than four thousand workers in Southwest Nova Scotia.

Recommendation

DNCDA therefore recommends that the panel require the proponent to present strong evidence, in keeping with the Precautionary Principle, that demonstrates that invasive species will not harm the lobster fisheries.

Loss of Gear

In every interview, lobster fishermen also identified gear destruction as a major concern.

The EIS addressed this question by

- 1) proposing a shipping lane, however there is no indication how this might happen. Furthermore it states that there have been “several consultation meetings with lobster fishermen presently setting traps in Whites Cove /Whites Point waters” (9.3.13) on this issue. None of these lobster fishermen remember any such meetings, and do not seem to be documented in the consultant’s report in the EIS. (See Chapter 5- Consultative Process).
- 2) Proposing a “lobster trap fund” which would be “administered by local fishermen” (9.3.13), without any indication of how this would be managed and how much money would be available.

This is an inadequate response to this issue for a number of reasons:

¹ *Responding to a Regional Disaster: American Lobsters on Long Island Sound 1999- 2004 Balcom, N and Howell, P. 1University of Connecticut 2006*

- a) It underestimates the amount of gear in the area. There is very high density of gear lobster gear in the area adjacent to Digby Neck. DFO records show that in 2004 there were between two and three thousand traps in quadrant 80², the zone immediately off Digby Neck. This number will have increased substantially since then, since there has been a major shift of effort of boats from Yarmouth and Clare fishing in the Bay of Fundy³.
- b) It ignores the fact that most of the traps on this area are on trawl, that is, are set in strings of between 15 to 25 traps. This means that a ship is not simply pulling up a trap now or then. It means that every time a trawl is pulled up, there is a cost of between two and three thousand dollars. In addition, balloons used with trawl are far more susceptible to being caught up on a ship, than the old buoys used on single traps.
- c) It ignores the cost of replacing lost income, while waiting to resolve the issue of the cause of the loss of traps. If a trawl of traps were lost during a productive part of the season there would be considerable loss of income, which would also have to be replaced. This could easily amount more than a thousand dollars per day per trawl.
- d) It ignores the question of getting replacement tags from DFO. Lobster fishermen in LFA 34 currently get 50 replacement tags, 25 in winter and 25 in the spring, plus 30 additional traps. However, it is a very time consuming and complicated process to get these traps, and could take up to a month. .
- e) It ignores the possibility of the ship having to maneuver or circle in bad weather while waiting for safe docking conditions, moving through large areas of high gear density and pulling up gear. Several fishermen indicated that typical patterns of weather, wind, tides and current could easily and frequently create such conditions.

Recommendation:

DNCDA therefore recommends that the panel require the proponent to adequately address the scale and importance of the issue of replacing lobster gear in the EIS.

Blasting

A number of fishermen who were interviewed expressed concerns that blasting could affect lobster spawning lobster stocks.

² LFA 34 Lobster Report 2006, provided by D. Pezzak, DFO

³ *Framework Assessment for Lobster (Homarus Americanus) in Lobster Fishing Area (LFA) 34*, Pezzak et al DFO, 2006, as well as from interviews with fishermen, and D. Pezzak DFO lobster specialist and DFO Yarmouth

The EIS states that there is not good research on this topic (2.10.1). In light of the Precautionary Principle this would indicate that the proponent must come up with evidence that blasting will not adversely affect lobster stocks.

Recommendation

DNCDA recommends that the panel require the proponent to produce evidence that blasting does not affect lobster reproductive cycle.

Siltation

A number of lobster fishermen and organizations also talked about their concern that particulate from blasting and from pond overflows would damage lobster. In particular, there is concern about silt being carried on currents through Petite Passage to St. Mary's Bay, a nursery area, with large number of juvenile lobsters.

Recommendation

DNCDA recommends that he panel require the proponent to produce evidence that siltation form blasting and runoff will not affect juvenile lobster..

Increased Stress

The lobster fishery is a healthy and successful fishery. However the Bay of Fundy lobster fishery is experiencing considerable increased stress do to a shift of effort from Yarmouth and Clare.⁴ This was pointed out both in interviews with lobster fishermen and DFO as well as in the annual DFO stock assessment. With such an important industry at stake, the EIS should consider whether this is a good time to add new stresses to the Bay of Fundy lobster fishery (loss of gear, invasive species, blasting etc).

Recommendation

DNCDA recommends that the panel require the proponent to provide compelling evidence that the combined effects of the quarry (blasting, gear loss, invasive species, and siltation) will not put increased stress the Bay of Fundy lobster fishery, thereby reducing livelihoods and income.

HERRING

The waters off Digby Neck and Long Island are an important and productive part of the Bay of Fundy herring fishery. With the most successful herring weir in Nova Scotia, as well as harvesting by herring purse seine fleet, more than two million dollars worth of herring are harvested from the small area off Digby Neck and Long Island every year.⁵ It is well known that herring behaviors- how much they school up together, how they

⁴ *Framework Assessment for Lobster (Homarus Americanus) in Lobster Fishing Area (LFA) 34, Pezzak et al DFO, 2006*

⁵ Interview with Tony Hooper, Connors Brothers

follow migratory paths- are affected by noise and light.⁶ This is why the herring purse seiners fish with their lights off. The quarry would have a major impact on livelihoods and income in this fishery.

This concern was voiced by the owner of the herring weir at Sandy Cove, as well as by a representative of Connors Brothers, the company that buys herring from weirs and have a fleet of herring seiners.

Herring is not mentioned in the EIS, except in a general way. The effect of lights, grinding and blasting on herring movement and schooling behaviour is not dealt with at all.

The herring weir fishery is dismissed in the EIS: “Again, the traditional knowledge attributes the demise of the herring weir fishery is due to the changing technology and large herring seiner boats that “stalk” the mouth of the Bay of Fundy.” (9.3.10). The fact that herring weir landings are the same as they were in 1993 and above the annual average over the last ten years⁷, appears to have been overlooked. The EIS also failed to note that the herring weir which is almost adjacent to Whites Point, depending on herring which must swim past Whites Point, is the most successful herring weir in Nova Scotia. They also failed to interview the owner of that weir (see Chapter 5, *Consultative Process*).

Recommendation

DNCDA recommends that the panel require the proponent to produce compelling evidence that the quarry will not be detrimental to the herring fishery off Digby Neck and Long Island.

SCALLOPS

The manager for D.B. Kenney Ltd, one of the main owners of the Digby scallop fleet, expressed concern about the particulate from blasting on scallops. Because scallops are a filter feeder, and because the powerful tides will carry any silt considerable distances, this is a concern that must be taken seriously. Particulate from blasting which is known to have sharper edges than particulate from grinding. This could be harmful to the scallop's internal system. This concern was also raised by current and former representatives of the Digby Scallop fleet (Ref Vol IV, Tab 22). This concern was not dealt with in the EIS.

⁶ Ona E, Toresen R, *Reaction of Herring to Trawling Noise* ICES Copenhagen 1988,
Herig G. *Avoidance of Acoustic Stimuli in Herring* ICES Copenhagen 1968
Olsen, K. *Directional responses in Herring to Sound and Noise Stimuli*, ICES, 1969

⁷ DFO '2005 evaluation of 4VWX herring': http://www.dfo-mpo.gc.ca/csas/Csas/Publications/ResDocs-DocRech/2005/2005_023_e.htm

Recommendation

DNCDA recommends that the panel direct the proponent to produce evidence that particulate from blasting will not affect scallop stocks.

GROUND FISH

The water off Digby Neck and Long Island has long been fished for groundfish. Although this is a much-reduced fleet, it is still important to the local economy. In particular there is a lucrative halibut and haddock longline fishery in the Bay of Fundy, mostly based on Digby Neck and the Islands.⁸

The biggest question regarding groundfish is the threat to herring (see above), which is an important food fish for groundfish. The absence of this issue from the EIS demonstrates the lack of an ecosystem approach.

These waters have also been identified as groundfish spawning areas in a study of Bay of Fundy spawning areas.⁹ The effect of blasting and siltation on groundfish spawning grounds has not been addressed in the EIS.

Recommendation

DNCDA recommends that the Panel require the proponent to provide evidence that the groundfish stocks will not be affected by blasting and siltation.

PERIWINKLES AND DULSE

The owners of periwinkle and buying operation were interviewed. They employ between 12 and 20 harvester, depending on the season. Both said that they buy from harvesters who harvest along the shore near White's Cove.

Of particular concern is the lack of adequate data on levels of copper concentration, and their effect on the safety of periwinkles for human consumption. (9.3.19.2)

They expressed concerns about the effect of dust on the periwinkles and dulse making them unfit for consumption.

Recommendation

DNCDA recommends that the panel require the proponent to produce stronger evidence that there will be no detrimental effects on the periwinkle and dulse harvesting industries.

⁸ Interview with M.Kaye, Fundy Fixed Gear Council

⁹ *Local Knowledge and Local Stocks* Graham J. Engle S & Recchia M St. Francis Xavier University 2002

FISHPLANTS

There are two fishplants in Little River employing more than 30 people year round. The owners of these plants were interviewed and expressed concern that their fresh water supply could be threatened. Already they have had to dig well far from their plant, nearer to the Bay of Fundy (and the proposed quarry site). There are two aspects to this claim

- 1) The CFIA water quality standards for salination have the same levels as for fecal choliform bacteria contamination. Above these levels, CFIA requires the user to put in place a water quality monitoring and purification program
- 2) Groundfish fish plants require large amount of fresh eater daily to make the tonnes of ice need to store and ship groundfish.

If the fresh water is in any way salinated, both these plants would have to move resulting in the loss of 30 jobs in this area. This issue was raised by both plant owners in the EIS (Ref Vol IV Tab 22), but was not addressed.

Recommendation

DNCDA recommends that the panel require the proponent to produce compelling evidence in the EIS that the fresh water supply to fishplants in Little River will not be affected by the quarry.

3. Impact on Livelihoods in the Tourism Sector

The White's Point Quarry and Marine Terminal (the 'quarry') could harm present and future livelihoods in the tourism sector in a number of ways. Because the EIS Guidelines clearly emphasized socioeconomic effects, including those on the tourism sector, it is critical that the EIS and review process give serious consideration to these potential effects. The Digby Neck Community Development Association ('DNCDA') believes that these potential negative effects were not adequately addressed in the EIS. The purpose of this section is to identify some of these issues, and recommend how the panel might improve the EIS by requiring the proponent to address them.

In order to identify these issues we have taken a two-fold approach 1) It consulted with tourism operators, businesses, and officials in tourism agencies and departments and 2) it reviewed existing literature to determine these potential issues. From this process of consultation and research DNCDA has identified that the quarry could affect tourism livelihoods by

- undermining the marketability of ecotourism, by creating an industrial rather than natural image of the area
- harming whale watching businesses, by driving whales out of reach of whale watch boats
- limiting the future growth of ecotourism in the area
- spoiling the aesthetic experience of nature for ecotourism visitors to Digby Neck and the Islands

Of these issues, the EIS has only dealt with the last, and that only in terms of one aspect of ecotourism experience, visual perception. This section will present evidence to show that these potential effects are critical to determination of overall effect on the maintenance and development of livelihoods in the tourism sector. Based on this DNCDA will recommend that the panel require that the proponent address these issues to the EIS. It will also examine the proponent's methodology, especially on terms of consultation to extract local knowledge.

DNCDA's methodology for determining the importance of potential effects was based on two approaches

- interviews with 23 local tourism business owners. These included 9 Digby Neck and Islands whale watching businesses, 9 Digby Neck and Islands accommodation businesses, 11 gift shops and 8 restaurants. (Some combined accommodation, gift shop and restaurant) These businesses were interviewed using a questionnaire (see Appendix A);
- interviews with some tourism operators outside the area, using the same questionnaire;
- interviews with others engaged in tourism industry in NS Department of Tourism and TIANs;

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- a literature search of studies related to tourism on Digby Neck and the Islands

DNCDA's approach was informed by two important elements identified in the guidelines:

- *local knowledge*- This means that the informed opinions of people who have spent many years working in this sector- marketing, providing services, interacting with tourists- is worthy of consideration. That is, if the vast majority of these tourism operators say that the quarry will affect their businesses in a particular way it creates an obligation to adequately address that concern in the EIS.
- The *Precautionary Approach*, that is, relating to tourism livelihoods, this means that, when it appears that there is a good chance of harm to the maintenance and creation of livelihoods that we should err on the side of caution.

EFFECT ON MARKETABILITY OF DIGBY NECK AND ISLANDS AS AN ECOTOURISM DESTINATION

The quarry could affect the ability of tourism businesses and agencies to market this area as an ecotourism destination. A great deal of energy and money has gone into creating a marketing image of this region as a pristine natural environment for nature tourism. This area is in direct competition with other areas also claiming to have pristine natural environments. The quarry will create a different image, that of industrial development, which will undermine these marketing efforts. If this happens there will be a harmful impact on the local livelihoods in the tourism sector.

The EIS does not deal with this potential harmful effect to the image of this region as an ecotourism destination.

The surveys indicated that tourism business operators believe this to be a serious issue. Based on their interaction with tourists, the vast majority of them believe that this kind of industrial development will harm their business's ability to market.

Many identified "pristine environment" as the very reason their customers choose to come to this region over other areas. Tourism business owner were asked "Have you talked to tourists about the quarry?". 19 said they had spoken to tourism about the quarry. Of these 16 responded that tourists had expressed negative opinions about the quarry and three neutral. None had ever heard a tourist express a positive opinion about the quarry. This sample of ecotourism visitors to Digby Neck and Islands indicates that the image of Digby Neck and Islands could be negatively impacted by the existence of the quarry.

As one accommodation business operator said:

The quarry would be a detriment, it would affect us tremendously. Because they're destroying what I'm advertising. And then I can't say that I'm offering

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pristine, anymore. So they just negate everything that we've worked for thirty years.

Or as one whale watch operator put it

And as far as the tourism industry goes, if we lose our prestige as a place of unspoiled beauty, then I'm worried that it will create a negative impact.

There is also concern about of the project's undermining marketability is also true on a wider provincial scale. This view is supported by Tourism Industry of Nova Scotia (TIANS). The Darlene Grant Fiander, Acting President of TIANS has stated in a letter to DNCDA.

TIANS is very concerned about the effect that this quarry will have on the business of tourism operators in the region of Digby Neck and Islands and beyond. The presence of this basalt quarry would conflict with the efforts being taken at a provincial level to market this region of Nova Scotia as an ecotourism area. Visitors travel to the area for its unspoiled beauty and TIANS is concerned that this quarry would change the image of region. We do not feel this has been adequately addressed in the EIS.¹⁰

The EIS does not deal with this question that is how the quarry will change the image.

Recommendation

DNCDA therefore recommends that the Panel require the proponent produce compelling evidence that the quarry will not have a detrimental effect on the marketability of Digby Neck and Islands as a tourism destination, presenting evidence based on interviews with local tourism operators and presenting studies that show it will not have such an effect.

THE EFFECT ON DIRECT AESTHETIC EFFECT ON THE ECOTOURISM EXPERIENCE

The quarry could also have a potential effect on the aesthetic experience that tourists have, that is, the direct sensory experience of nature when they are visiting Digby Neck and Islands. This is an important factor in terms of tourism livelihoods, because the industry depends largely on two factors for its success 1) return visits and 2) word of mouth referrals: if tourists have had a negative experience that will translate quickly into reduction of business to the industry in this area a whole.

¹⁰ Email from TIANS to DNCDA, July 20, 2006

The EIS deals with this issue, but only in terms of *visual* perception of the quarry itself. It does not deal with the sound of the rock crusher and the blasting.

The example given in the EIS is that of Auld's Cove (Porcupine Mountain) at Canso Strait, but only in terms of visual perception, not air quality or sound. Furthermore the example is not a strong one, because that quarry is not *in* an ecotourism area, it is *on the way* to an ecotourism area, that is Cape Breton's Cabot Trail etc. The Canso Causeway is not an ecotourism destination. There is a big difference between people going past such an industrial development on the way to an ecotourism destination, and people deciding to vacation in an ecotourism destination, which also happens to be the location of the biggest industrial quarry in eastern Canada.

In the interviews a number of operators indicated that sounds would be a major issue for the ecotourism experience, especially hearing blasting and grinding while out on whale watch boats. In terms of blasting, one campground operator stated his concerns this way:

How do you think the quarry will affect your business? There's only one way that I know how to explain it, it's what I say to everybody. That quarry is just a few miles from here. And we're going to say that somebody had some gill nets set for herring there in White's Cove. When conditions are just right, you know yourself sometimes you're able to hear more than others, you would be able to hear a little six-cylinder engine, idling, picking their nets. So you know if there's a big bunch of crushing machines going, it's a-going to be almost overwhelming. You could hear just the engine idling there. What I mean, it wouldn't be that way all the time, you know, when conditions were just right. But what I mean is, you've got great big gear like that, you're going to hear it continuously all the time. It might not be something that you can't talk above or anything, but it's going to be something that's always going to be there.

Another whale watch operator expressed concern about hearing the blasting from the boats:

I just think if in any way, noise pollution or anything else, if it affects the whale watching or any number of things, it would end up affecting me.

There was also concern about the sensory effect in the Little River, Mink Cove and Sandy Cove communities, which would make these much less desirable summer vacation destinations. As one operator stated it

How do you think the quarry will affect your business? Depends on the magnitude of the noise, I would say. Because they're going to be running grinders all day long, 24 hours a day. They're going to run that operation 24 hours a day from what I understand, at least I think they are. And with the lights and the noise

at night time, the people down in Little River, that's going to sound like a thunder storm, and it might even be worse than that, I don't know

Overall 15 out of 21 of respondents to the questionnaire had concerns about this and that it would clearly affect their businesses negatively. One was not sure, and only one thought it would have no effect.

The EIS does deal with the visual element, but does not address sounds especially sound on the water.

Recommendation

DNCDA therefore recommends that the Panel direct the proponent to amend the EIS to address the issue of how the quarry will affect the aesthetic experience of ecotourism.

THE EFFECT ON WHALE WATCHING BUSINESSES

Whale watching is the centerpiece of the local tourism industry, providing numerous season jobs both directly and indirectly in other businesses in the area. If the whales modify their behaviors or change their migratory patterns, resulting in their moving away from the Digby Neck and Islands area of the Bay of Fundy, this will have a major impact on whale watch businesses. Because of time limitation of trip tours and fuel cost limitation they are simply not able to follow the whales very far beyond this area. This in turn would have a harmful effect on the accommodation and hospitality businesses in the area.

The EIS does talk about whales, but not in the context of them moving further offshore, and the effect of that on the whale watching businesses.

There are two primary ways the quarry might affect the behaviors of whales:
1) the sound of blasting 2) the impact on the migratory patterns of herring.

The impact of the quarry on the movement of herring along the Digby Neck and Islands shore would be significant. Herring are the primary food species of whales. According to DFO and herring weir fishermen and companies that own herring purse seine fleets, the effect of the operation's sound and light on herring stock and migratory pattern will be unquestionable. This is detailed in the section on the fisheries.

TIANS is also concerned about the effect on whale watch operators. Their President has stated

Our association supports this in principle to ensure a sustainable whale watching industry. If whales avoid this area due to the activities of the quarry, this will have an irreparable effect on the business of TIANS members in the area. We ask that the proponent address this in their EIS.¹¹

Recommendation

DNCDA therefore recommends that the Panel direct the proponent to address the question of how the quarry will change whale behaviors and migration patterns that might harm local whale watching operations. This should include interviews with all local whale watchers.

FUTURE EXPANSION OF TOURISM SECTOR

The EIS did not address the key question of the effect on future tourism. It did however make some comments about the future of tourism, implying that there will be little growth in this sector.

In fact informed opinion and existing evidence point to a huge potential for ecotourism on this Digby Neck and Islands area. It is therefore incumbent on the proponent to show that quarry will not have a negative or limiting affect on this potential.

The questionnaire used in the interviews with local tourism operators included the following question, with multiple choice answers:

- Do you think the future potential of ecotourism of Digby Neck and Islands is*
- extremely promising*
 - very promising*
 - promising*
 - not very promising*
 - not promising at all*

Of the 23 local operators interviewed 5 said the future of the tourism was extremely promising, 13 said it is very promising, 4 said it is promising 1 said it is not promising and one said not at all. The last gave the quarry as the reason for her pessimism.

There were many optimistic comments about the future of tourism in the area.

The public has been more interested in ecotourism, and I think as you have more young people there's going to be more and more interest in ecotourism. I think it's going to draw a lot of people. The future is outdoor, outdoor tourism. I've been doing this seventeen years.

¹¹ Email from TIANS to DNCDA, July 20, 2006

Because we have the Bay of Fundy which is a very unique area, and we have one of the only areas where you can see seven different species of whales, we have the rarest, most endangered whale in the world that comes here, and we have beautiful, untouched communities that represent what the Maritimes are all about.

Because the coastline is still relatively undeveloped and there's a large resource out in the Bay. Reasonable access to world class phenomena, with the tides and the whales and so on.

Even a tourism operator from outside the area (Hubbards) saw great potential in this area

Because of the uniqueness of the area and your proximity to the Bay of Fundy, whales, everything, and I think that that's certainly a very viable source of tourism, and that to me falls into eco-tourism because that's what we all wish for is to be responsible out there, while looking at whales, so yeah, I think it's very promising.

These views are supported by the figures, which show that there is an overall upward trend in tourism business in this area over recent years. The number of accommodation businesses has increased from six in 1996 to 20 in 2005. Similarly the whale watch visitors went from 15,453 in 1997 to 21,834 in 2001. The overall trend therefore shows that there is a huge potential for growth in the ecotourism industry on Digby Neck and the Islands

These opinion were supported by the views of TIANS and NS Dept of Tourism¹²

This understanding of the potential ecotourism in this area of this area, in terms of business development and the creation of sustainable livelihoods, is confirmed by a number of studies, including:

- *Marine Ecotourism in the Bay of Fundy: Minimizing the Negative Impacts and Maximizing the benefits for Coastal Communities*, MacKay, Charlotte SRES Dalhousie 2003
- *Vision 2000* WVDA Planning Document 2001
- *Putting the Fun in Fundy: possibilities and Pitfalls of Ecotourism* Fundy Issues. Bay of Fundy Ecosystem Partnership (BoFep) 2002
- *Bay of Fundy Discovery Centre A Partnership for Sustainable Growth* Strategic Business Plan Bay of Fundy Discover Centre Association 2005

The EIS does not deal with the issue of detriment to the potential growth in the tourism sector at all.

¹² Interviews with staff

Recommendation

DNCDA therefore recommends that the Panel require the proponent to produce compelling evidence to show that the quarry will not have a detrimental affect on the potential growth of the ecotourism sector on Digby Neck and Islands and in the wider region.

4. Local and Regional Economic Goals and Objectives

DNCDA has some concerns about the section in the EIS entitled “Local and Regional Economic Goals and Objectives” (9.3.9.1.1) For more than 15 years DNCDA has been working in the field of community economic development on Digby Neck, including the engagement of the community in the development of economic goals and objectives. Our organization is therefore in a position to evaluate any claims made relating to economic goals and objectives for Digby Neck, or the lack thereof. Overall our determination is that this section contains a number of unsubstantiated claims about the economic goals and objectives for the area. The EIS gives the impression that there is a lack of economic goals and objectives at local, regional and provincial levels. This is not the case. Furthermore, the reader is left with the impression that there is a body of planning documents and processes that has called for industrial development on Digby Neck. Neither is this the case. In fact there are no community economic development strategies at any level that has called for industrial resource extraction on Digby Neck, or in the surrounding region.

At the local level, DNCDA has been engaged in a number of initiatives that involved setting goals and objectives, based on broad citizen participation. Among these have been

- three visioning /planning workshops
- community consultations as part of project specific projects
- a research project with St. Mary’s University
- a consultation on small business development
- The WVDA’s “Building Tomorrow: Vision 2000” consultation

None of these planning and visioning exercises included industrial extraction of mineral. For example the proceedings of a two day retreat held in 2001, that included a broad cross section of community members, there were dozens of recommendations for future activities that would support a sustainable and healthy future for Digby Neck. None of them included a quarry or any such similar project.

In terms of economic goals and objectives the result of these consultations have been consistent: that economic development on Digby Neck should be based on

- local participation, as opposed to top-down, backroom maneuvering
- a focus on small business, bearing in mind that more than 70% of jobs in rural NS are in businesses with four or fewer employees¹³.
- the principles that healthy economies and ecologies are intrinsically interconnected
- an integrated approach that combines economic, social and environmental realities

¹³ *Rural Nova Scotia Means Business* Canadian Federation of Independent Business 2004

These conclusions have been documented numerous times:

- CBC Documentary for the program *Nature of Things* (1998)
- The Digital Collections website *Digby Neck in Stories*
- Coastal Communities News
- A profile in *Voices From Nova Scotia, A Written Democracy* by Scott Milsom
- a Chapter in *Linking Learning to Community Economic Development NS* Department of Education 1994

Regional

In 2001 the Western Valley Development Authority (WVDA) held the most intensive and largest scale consultation on community economic development ever done, before or since, in Digby and Annapolis Counties. The resulting document "Building Tomorrow - Vision 2000", was cited as best research paper in the country in August 2000 by the Economic Developers Association of Canada. The section in the document that dealt with natural resource stated the following plan for natural resource development in this region:

Develop a community-based plan for natural resource management that includes processing of those resources in the local area¹⁴

In the vision that the WVDA, along with hundreds of local citizens and community groups came up with, the large scale industrial resource extraction was notable by its absence.

The EIS dismisses the WVDA's work : "The WVDA did not reflect the community's approach as expressed by various councils in the area and the organization was disbanded" (9.3.1.2) .This unsubstantiated opinion, overlooks the fact that the municipalities were well represented n the WVDA's board at the time, and in fact participated in and strongly supported the consultative process in 2001. Similarly, the claim that that the Municipal governments are in favour of industrial resource extraction like the quarry, as a key strategy for community economic development, is entirely unsubstantiated. In fact both the town and municipals council have come out publicly against the quarry. The proponent has produced no evidence that there is any regional planning document that calls for this kind of development.

Provincial

The EIS cites Nova Scotia Provincial Policy on Mining as its main claim that the province supports this kind of development. However on closer examination it is clear that this policy is predicated on serving the public good through the receipt of royalties for mineral extraction. Since there are no royalties associated with this project, the use of

¹⁴ <http://www.wvda.com/en/vision2000/introduction.html>

this document is questionable in this context. It also cites The Department of Economic Development's policy document "Opportunities for Prosperity" from 2001, a policy that is no longer current, having been superseded by newer policies

The EIS has left out the provincial policy document most relevant to this project: *The Nova Scotia Community Development Policy*. This policy, passed by cabinet in 2005, is a cross-cutting horizontal policy that governs all provincial departments. Among its key policy directions are¹⁵

- **Local Leadership:** The community plays the leadership role in its own development
This has demonstrably not been the case.
- **Balance:** community development builds on a balanced approach that addresses and integrates economic, social environmental and cultural considerations
- **Transparency and Accountability:** Government involvement in community economic development encourages transparency, accountability, participation and evidence-based decision-making.
- **Common Vision:** Community members and Government define a common vision for the future
- **Focus on Community Assets:** Community development is built on existing community capacity and assets.

The EIS has entirely ignored this key provincial policy, and how the quarry project is consistent with these principles.

Neither of these documents calls for large-scale industrial development in ecologically sensitive areas.

Recommendation

DNCDA recommends that the panel direct the proponent to remove any unsubstantiated claims that local, regional or provincial goals and objectives include plans for large-scale industrial extraction projects.

¹⁵ *The Nova Scotia Community Development Policy Government of Nova Scotia 2005*

“COMMUNITY IN DECLINE”

In Section 9.3.8 of the EIS it states that “The community appears to be in decline”. This conclusion is apparently based on data on population loss alone, however there was little evidence given that population loss alone necessarily is an indicator of decline.

In Section 9.3.7.1.7 the EIS quoted a document called *Rural Repopulation in Atlantic Canada* on the potential results of population decline. These included:

- Fewer opportunities for economic development new business development, and job creation;
- Depression of resale housing market;
- Rising vacancy rates in rental properties
- Diminished access to and provision of social services
- Diminished municipal capacity to provide critical and necessary municipal infrastructure

Whether these effects of depopulation hold true or not in general, there has been no evidence that any of them have happened on Digby Neck. In fact the evidence points to the opposite:

- business start-ups increased through the 1990’s
- home ownership has been steady at about 85%,
- the value of property has risen steadily
- municipal services and social services have not been reduced

Furthermore, the data given in the very same chapter of the EIS point, not to decline, but to moderately sustained economic growth. For example regarding income levels it states that

“Average income on the Neck and Islands exceeded the provincial average” (9.3.7.3.2)

“In 1994, only 34.9% of income was attributed to paid earnings, however, by 2003 the percentage had increased to 53.3%.” (9.3.7.4.2)

“Income from employment insurance benefits declined over the period from 1994 to 2003.” (9.3.7.4.2)

“The overall dependency ratio of government transfers was 34.8 on Digby Neck and Islands according to tax data for 2002....slightly lower than that of Digby County.” (9.3.7.5)

“Income levels on Digby neck and Islands are relatively high in some respects I comparison to other areas of the province” (9.3.5.7.1)

These statements are not reflected in the generalizations and out a community in decline.

Similarly, In terms of social capital, social networks, and community values, the EIS provides no evidence of decline. In fact, the conclusions of a recent study by St. Mary’s University concluded that Digby is definitely not a community in decline. It states categorically

What makes the communities of Digby Neck special is that in the face of such challenges [fisheries, outmigration], they have not been broken. In each case, the threatened closure of Sandy Cove School and the loss of the fixed gear fishery, the communities stood up for themselves and have been able to substantially improve their situation as a consequence. This is not the sign of a dying community. In our study, we were interested in the factors underlying this resilience. What can we learn about community health from the Digby Neck experience?¹⁶

The study goes on to show that in terms of social cohesion and social capital, Digby Neck is clearly not a community in decline.

Recommendation

That the panel require the proponent to remove any reference to the Digby Neck being a community in decline unless it can provide compelling evidence for this claim.

¹⁶ *Is Digby Neck a Dying Community? A paper prepared for the response to the White Point Quarry and Marine Terminal Project Environmental Impact Assessment*
Barret,G. and VanderPlaat M. 2006

4. Consultative Process

DNCDA also has some concerns about the consultative process that was used in preparing the EIS. In our opinion, the consultations undertaken by consultants on behalf of the proponent lacked credibility for four reasons: 1) *Lack of quantitative scope*, that is, they did not consult enough people to get meaningful input 2) *Inconsistencies*- The consultation appeared to be inconsistent with what we heard from the same people when we interviewed them, i.e. some people who were listed as having been consulted did not realize that they had been consulted, and 3) *Selective Interviewing* – Leaving out key informants who might have been strongly opposed to the quarry 4) *unfounded conclusions* -the consultant's analysis and conclusion did not address the concerns put forward in the interviews.

LACK OF SCOPE

In the case of tourism, only a handful of tourism operators were interviewed. In a short time, DNCDA was able to interview all tourism business operators on the Neck and Islands.

Similarly in the fisheries small number were interviewed. For example the Guidelines specified that fishermen's association were to be interviewed, but only one organization was interviewed. Again, DNCDA was able to interview fishermen's association representing all inshore fishermen in the area, in a very short time period. Likewise, few individual fishermen were interviewed. Of the few fishermen who were interviewed, few were active fishermen. In fact almost all were over 70 years of age and retired from fishing.

The consultant pointed out that many individual and organizations and businesses refused to be interviewed. This can hardly be surprising given the distrust created by the proponent in this community by the use of legal intimidation. In addition several people we interviewed said that the consultants were not forthcoming about whom they were working for, and only revealed this after repeated questioning. Because of this there an enormous gap in the consultative process for the EIS.

BIASED SELECTION OF INFORMANTS

In the fisheries consultations, key informants were simply not interviewed

- the owner of the weir nearest to Whites Cove, the largest weir in Nova Scotia, and the one most likely to be affected
- one lobster fishermen from Whale Cove
- no herring harvesting processing companies

INCONSISTENCIES

In its interviewing process DNCDA talked to a number of individuals in both fisheries and tourism industries who were surprised that their names were listed in the EIS as

having been consulted. Generally speaking someone who has been consulted knows if they have been consulted. There appears to be some inconsistency here. Another example is the statement that “several consultation meetings with lobster fishermen presently setting traps in Whites Cove /Whites Point waters” (9.3.13) relating to compensation for loss of gear. However none of these fishermen remember any such meetings, and in fact they do not appear to be documented in the consultant’s report in the EIS.

It is worth noting that this question may be broader than just the fisheries and tourism sections of the EIS. For example, in their response to the EIS the Confederacy of mainland Mi’kmaq stated. “Please be advised that letters, phone calls, e-mail, fax's do not constitute consultation.”¹⁷ Similarly, apparently only one person in the village of Little River is under the impression that they were interviewed.

UNFOUNDED CONCLUSIONS

In a number of places in the EIS, conclusions did not follow from the input given in the consultative interviews. For examples, the Summary of the Community/Business Consultation report, after hearing a considerable number of concerns about the quarry, states, "The public perception of this project has been impacted by the information disseminated by the media and the very vocal opposition." Later it goes on, “When questioned what factors lead them to believe their concept of destruction, the response was almost invariably that they ‘read it, heard it, or juts know it to be true.’” This use of unattributed quotes and unfounded generalizations, is not drawing conclusions from the input given in the consultation, but rather seems to be editorializing in a way that dismisses the informants opinions. Likewise, there was unfounded speculation in the summary following with interviews with fishplant owners in Little River. In these interviews the informants had expressed two concerns: access to fresh water and the effect on the lobster fishery. However in the conclusions, the consultant talks about labour market issues which might affect fishplants, almost as though this were the underlying but unspoken concern. These kinds of unfounded conclusions and opinions have no place in an evidence-based process such as this.

Recommendation

DNCDA therefore recommends that the consultation with the tourism and fisheries industry organizations, as well as organizations involved in community economic development organizations be done again and that every tourism operator on Digby Neck and Islands be contacted and interviewed. and that the interviewer clearly state that he/she is conducting the interview on behalf of the proponent

¹⁷ Submission by Confederation of Mainland Mi’kmaq , Michael Cox, 2006

5. Summary of Recommendations

In summary, DNCDA recommends that the Panel require the proponent to

- *present strong evidence, in keeping with the Precautionary principle, that demonstrates that invasive species will not harm the on the lobster fisheries.*
- *adequately address the scale and importance of the issue of replacing lobster gear in the EIS.*
- *produce evidence that siltation from blasting and runoff will not affect juvenile lobster, and the silt will not flow through to St. Mary's Bay.*
- *produce evidence that particulate from blasting will not affect scallop stocks.*
- *provide evidence that the groundfish stocks will not be affected by blasting and siltation.*
- *produce compelling evidence in the EIS that the fresh water supply to fish plants in Little River will not be affected by the quarry.*
- *provide evidence that the groundfish stocks will not be affected by blasting and siltation.*
- *include the issue of possible effect on the marketability of Digby Neck and Islands as a tourism destination, presenting evidence based on interviews with local tourism operators and presenting studies that show it will not have such an effect.*
- *address the question of how quarry will change whale behaviors and migration patterns that might harm local whale watching operations. This should include interviews with all local whale watchers*
- *to address the question of how quarry will change whale behaviors and migration patterns that might harm local whale watching operations. This should include interviews with all local whale watchers.*
- *to produce compelling evidence to show that the quarry will not have a detrimental affect on the potential growth of the ecotourism sector on Digby Neck and Islands and in the wider region.*
- *do no less. The proponent should also find or produce studies that show that there is little potential for growth in tourism in this area.*

- *remove any unsubstantiated claim that local, regional or provincial goals and objectives include plans for large-scale industrial extraction projects.*
- *redo the consultation with the tourism and fisheries industries and community economic development organizations are done again and that every tourism operator on Digby Neck and Islands be contacted and interviewed. and that the interviewer clearly state that he/she is conducting the interview on behalf of the proponent*
- *remove any reference to the Digby Neck being a community in decline unless it can provide compelling evidence for this claim*

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Appendix 1
Tourism Interview Form

TOURISM QUESTIONNAIRE

1) What kind of tourism operation do you have?

- accommodation
- whale watch
- gift shop
- food
- other _____

2) How many years have you been in operation? _____

3) How many people do you employ? _____

4) Do you think the future potential of ecotourism of Digby Neck and Islands is

- extremely promising
- very promising
- promising
- not very promising
- not promising at all

Why? _____

5) Have you talked to tourists about the quarry?

- often
- on a regular basis
- once n a while
- never

6) When you have talked to tourists have they expressed

- negative opinions about the quarry?
- neutral opinions about the quarry?
- positive opinions about the quarry?

7) how do you think the quarry will affect your business?

8) Is there anything else you would like to say about the quarry?

Appendix 2

Tourism operators Interviewed

Bob Van

Dan Norwood

David Graham

Deborah Ruggles

Dianne Theriault

Donna Ossinger

Gail Sollows

Gerry Einem

Karen Crocker

Lavena Crocker

Lewis Walker

Llewellyn Theriault

Monica Gillis

Murray Ross

Olivia Small

Penny Graham e

Ray Tudor

Scott Walking Adventures

Shelley Barnaby

Susan Mullin

Tom Goodwin e

Wally DeVries

Vaughn Tidd

Katherine Chisholm Feiel

FISHERIES QUESTIONNAIRE

Name _____

1) What kind of fishery enterprise are you involved in?

- Harvesting, lobster
- Harvesting, groundfish
- Harvesting, scallop
- Harvesting, herring
- Harvesting, other:
What kind? _____
- Buying
What kind? _____
- Processing
What kind? _____
- Other fisheries enterprise
What kind? _____

2) How many years have you operated this involved enterprise?

3) How many people do you employ?

4) In what areas does your enterprise operate?

Harvesting _____

Buying _____

Processing _____

4) How do you think the proposed quarry will affect your enterprise?

What do you base this opinion on?

5) Is there anything else you want to say about the quarry

Appendix 4
Fisheries Interviews

Alan Walker, fishplant owner, Little River
Wanda Vantassell, periwinkle and dulse buyer
Chris Tidd, little River lobster fishermen
Kemp Stanton, Whale Cove lobster fisherman
Roger Tidd Whale Cove lobster fisherman
Stanley Stanton Whale Cove lobster fisherman
Glen Wadman DB Kenny Fisheries
Fred Trask fishplant owner, buyer, Little River
Wayne Spinney LFA 34
Doug Pezzak DFO lobster specialist
Rob Stevenson DFO St. Andrews Biological Station
Ian Marshall DFO Yarmouth
Michael Power DFO herring specialist
Terry Farnsworth Bay of Fundy Inshore Fishermen's Association
Martin Kaye coordinator Fundy Fixed Gear Council
Tony Hooper herring buyer Connors Brothers
Ricky Nickerson Maritime Fishermen's Union Local 9
Ashton Spinney LFA 34 Lobster Management Board