

PUBLIC VERSION

IN THE MATTER OF AN ARBITRATION UNDER CHAPTER ELEVEN OF THE NORTH AMERICAN FREE TRADE AGREEMENT AND THE UNCITRAL RULES OF 1976

BETWEEN:

**WILLIAM RALPH CLAYTON, WILLIAM RICHARD CLAYTON, DOUGLAS
CLAYTON, DANIEL CLAYTON AND BILCON OF DELAWARE, INC.**

Claimants/Investors

AND:

GOVERNMENT OF CANADA

Respondent

PUBLIC VERSION INVESTORS' DAMAGES MEMORIAL

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	[REDACTED]	
	[REDACTED]	
	[REDACTED]	
	[REDACTED]	
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	[REDACTED]	
	[REDACTED]	
	[REDACTED]	
	[REDACTED]	
	[REDACTED]	
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“Aggregates are among the most widely used materials in our contemporary society. They are required in almost all residential, commercial and industrial building projects. They also form a major component of many public works projects such as highways, underground services, bridges, railroads, airports, hydro-electric dams and wharves.”

The Province of Nova Scotia, 2007¹

I. OVERVIEW

1. The aggregate industry is a historic mainstay of the economy of Nova Scotia. For decades, the policy of the Government of Nova Scotia has been to promote the development of quarries in the Province, and to actively attract investors to build quarries for the export of aggregates to the United States.
2. In 2002, the Claytons were invited and encouraged by the highest levels of the Nova Scotia Government to invest in the Whites Point Quarry. [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
3. [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

¹ Mineral Resources in Our Lives, (*Investors' Schedule of Documents*, Tab C1081, p. 001652).

[REDACTED]

[REDACTED]

4. [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

5. [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

6. [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

7. [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

[REDACTED] And the Claytons did everything the Governments of Nova Scotia and Canada asked them to do to build the Quarry, in exactly the way the governments asked them to do it.

8. While the Claytons were being compelled to undergo an unprecedented and unwarranted 5 year environmental assessment process, [REDACTED]
[REDACTED]
[REDACTED] Indeed, in 2006, a Nova Scotia Government Information Circular featured the Martin Marietta Quarry on its cover, proclaiming:³

A Proven Track Record

- *For more than two decades Nova Scotia has been an industry leader in the marine transport of high quality stone products using bulk carriers and barges.*
- *Martin Marietta Materials Canada on the Strait of Canso is one of the largest tidewater stone quarries in North America, capable of loading 70 000 tonne Post-Panamax vessels.*
- *Currently more than 3 million tonnes of aggregate are being exported annually to destinations such as Savannah, Houston, Bermuda, and the Ascension Islands.*

Opportunities

- *Nova Scotia has undeveloped sites, near suitable tidewater, that are capable of producing high quality granite, limestone and traprock aggregate.*
 - *Potential sites include ... the North Mountain area along the Bay of Fundy.*
9. Another Government of Nova Scotia publication in 2006, entitled “*Industrial Mineral Potential in Nova Scotia – Opportunities to Develop Deep-Water Aggregate Quarries*,”⁴ specifically featured the North Mountain as a particularly attractive location to establish a quarry for the export of aggregate. It proclaimed the “unlimited amounts of trap rock” available on the North Mountain and the

³ Appendix A.

⁴ Appendix B.

“Deep, Ice-free harbours provide Nova Scotia’s mineral products with [a] window on the world”.

10.

[REDACTED]

11.

Today, there is no more vivid testimonial to the vitality of the on-going Nova Scotia Government policy of promoting quarries, and the great value of a Nova Scotia quarry, than the expeditious approval by the Governments of Canada and Nova Scotia of the Vulcan Materials’ mega-quarry at Black Point. Because of the major social and economic benefits of a quarry to the Province, the Government of Nova Scotia expedited the approval process and expropriated land for the Black Point Quarry.

12.

If the Claytons had not been wrongfully deprived of the Whites Point Quarry,

[REDACTED]

[REDACTED] The law is also simple and clear: the Investors are entitled to full reparation to wipe out all of the consequences of the wrong done to them.

13.

[REDACTED]

14.

The Investors respectfully ask the Tribunal for the full reparation to which they are entitled by an award of damages [REDACTED]

II. THE AGGREGATES INDUSTRY

15. [REDACTED]
[REDACTED]

16. [REDACTED]
[REDACTED]
[REDACTED]

17. [REDACTED]
[REDACTED]

18. [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

19. [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

20. [REDACTED]
[REDACTED]
[REDACTED]

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

[REDACTED]

21. [REDACTED]

22. [REDACTED]

23. [REDACTED]

24. [REDACTED]

25. [REDACTED]

[REDACTED]

[REDACTED]

26.

[REDACTED]

27.

[REDACTED]

28.

[REDACTED]

29.

[REDACTED]

[REDACTED]

30. [REDACTED]
[REDACTED]
[REDACTED]

31. [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

32. [REDACTED]
[REDACTED]
[REDACTED]

33. [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

[REDACTED] The Government of Nova Scotia recognizes the strategic value of tidewater quarries, writing in a publication:

Some aggregate products are shipped as far as the Caribbean islands due to the scarcity of suitable materials in those locations and the favourable coastal position of some Nova Scotia aggregate deposits which have resulted in economic transportation costs.³⁰

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

³⁰ Mineral Resources in Our Lives (*Investors' Schedule of Documents*, Tab C1081, p. 001644).

Access to lower cost ocean transportation has made some of Nova Scotia's aggregate resources attractive as an export commodity.³¹

III. "INVEST IN NOVA SCOTIA"

A. NOVA SCOTIA PROMOTION OF AGGREGATE PRODUCTION AND EXPORT

34. For decades, the Nova Scotia Government has promoted mineral and aggregate exploration and development in the Province. Indeed, the *Mineral Resources Act* is expressly intended to "encourage, promote, and facilitate mineral exploration, development and production".³²
35. The Government has long recognized the importance of mineral and construction aggregate exploration and development to Nova Scotia's economy. In a publicly distributed brochure, the Government stated:

These operations contribute significantly to the provincial economy by increasing employment opportunities and adding value to locally produced geological resources.³³

...

Industrial minerals and construction aggregate production currently lead the industry and they have been steady, predictable sectors for several decades.³⁴

36. Historically, the aggregates industry has been a very important part of the Nova Scotia economy.³⁵ From 1925 to the present, aggregate production in Nova Scotia has followed a consistent upward trend³⁶ with over \$76,000,000 of crushed

³¹ Mineral Resources in Our Lives (*Investors' Schedule of Documents*, Tab C1081, p. 001652).

³² SNS 1990, c. 18 (*Investors' Schedule of Documents*, Tab C1087).

³³ Mineral Resources in Our Lives (*Investors' Schedule of Documents*, Tab C1081, p. 001646).

³⁴ Mineral Resources in Our Lives (*Investors' Schedule of Documents*, Tab C1081, p. 001643).

³⁵ Economic Impact of the Mineral Industry in Nova Scotia (2003) (*Investors' Schedule of Documents*, Tab C1032); Economic Impact of the Mineral Industry in Nova Scotia (2006) (*Investors' Schedule of Documents*, Tab C1033); Economic Impact of the Mineral Industry in Nova Scotia (2012) (*Investors' Schedule of Documents*, Tab C1034).

³⁶ Economic Impact of the Mineral Industry in Nova Scotia (2003), (*Investors' Schedule of Documents*, Tab C1032, p. 32); Economic Impact of the Mineral Industry in Nova Scotia (2006), (*Investors' Schedule of Documents*, Tab C1033, p. 32); Economic Impact of the Mineral Industry in Nova Scotia (2012), (*Investors' Schedule of Documents*, Tab C1034, p. 32).

stone being produced in Nova Scotia in 2006.³⁷ Mineral production is touted as a key economic benefit for the Province:

The estimated gross domestic product (GDP) contribution for both primary extraction and secondary processing was calculated to be over 400 million in 2003. The mining industry ranks second among resource industries in terms of contribution to GDP. Primary mining activity accounts for almost one quarter of a billion dollars in GDP in our province.

Along with employment benefits, a large portion of the economic spin-offs of mineral production is directly beneficial to the rural communities where many operations are situated. Positive economic benefits are realized as mineral producers purchase goods and services from local suppliers.³⁸

37.

[REDACTED]

38. In a publication entitled *Industrial Mineral Potential in Nova Scotia – Opportunities to Develop Deep-water Aggregate Quarries*,⁴⁰ the Government championed the “unlimited amounts of trap rock” available at the North Mountain” and the “Deep, Ice-free harbours [that] provide Nova Scotia’s mineral products with [a] window on the world”.

39. In another publication, the Government proclaimed the excellent quality of the North Mountain Basalt for aggregate, saying that “[t]he depositional origin and

³⁷ Economic Impact of the Mineral Industry in Nova Scotia (2006), (*Investors’ Schedule of Documents*, Tab C1033, p. 21).

³⁸ Mineral Resources in Our Lives, (*Investors’ Schedule of Documents*, Tab C1081, p. 001647).

⁴⁰ *Industrial Mineral Potential in Nova Scotia – Opportunities to Develop Deep-water Aggregate Quarries*, (*Investors’ Schedule of Documents*, Tab C1039).

composition of the North Mountain Basalt has resulted in properties that give the rocks a high stone resource potential”:⁴¹

The North Mountain Basalt is an important component of the bedrock aggregate resource. Commonly called trap rock by the industry, it has been used to produce crushed stone for several decades, as witnessed by the presence of numerous active and abandoned quarries along the mountain length.⁴²

40. The Government publication concluded by highlighting the importance of quarrying on the North Mountain, saying that:

[I]ndustry, communities and individuals have a shared interest in continued quarrying on the North Mountain. These stone resources are vital to the development of the communities, employment and tax revenue in the region.⁴³

41.

[REDACTED]

42. It was the Government of Nova Scotia’s practice to actively promote mineral exploration and development. As Dr. Daniel Kontak, Laurentian University Professor, and former Government of Nova Scotia geologist, explains:

a) The Province directed considerable effort towards assessing the development potential of industrial minerals and commodities, because of their importance to the Province in providing employment, royalties and tax revenue.⁴⁴

⁴¹ An Overview of the Industrial Mineral Potential of the North Mountain Basalt, (*Investors’ Schedule of Documents*, Tab C1040, p. 86).

⁴² An Overview of the Industrial Mineral Potential of the North Mountain Basalt, (*Investors’ Schedule of Documents*, Tab C1040, p. 86).

⁴³ An Overview of the Industrial Mineral Potential of the North Mountain Basalt, (*Investors’ Schedule of Documents*, Tab C1040, p. 102).

⁴⁴ Witness Statement of Daniel Kontak, dated December 13, 2016, para. 5.

- b) The Government undertook research and wrote papers specifically to promote Nova Scotia resources on an international scale. This included papers that Dr. Kontak wrote on the North Mountain in Digby Neck;⁴⁵
- c) The Government attended international mining conferences to promote Nova Scotia natural resources;⁴⁶
- d) The Government provided “free” consulting to private companies. The Province justified this because of its interest in ensuring natural resources were effectively exploited.

43.

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

44. Government policy was echoed in “*Mineral Resources in Our Lives*,” which the Nova Scotia Government published in September 2007:

Continue the province-wide assessment of aggregate resources (both bedrock and surficial) to ensure their long-term availability with respect to acceptable quality and affordability of supply.

Promote the wise use of the aggregate resource to government and industry. Promote the concept of strategic aggregate resource protection to the planning community and other stakeholders.

Identify and promote opportunities to export aggregate deposits and other specialty stone.⁴⁸

...

The department also supports the development of mineral resources through its associated geoscience programs. Branch activities include generation and distribution of geological information, promotion of the

⁴⁵ Witness Statement of Daniel Kontak, dated December 13, 2016, paras. 6 – 7.

⁴⁶ Witness Statement of Daniel Kontak, dated December 13, 2016, paras. 8 – 9.

⁴⁸ Mineral Resources in Our Lives, (*Investors’ Schedule of Documents*, Tab C1081, p. 001653).

province's mineral resources, and administration of regulations pertaining to mineral exploration and mining.⁴⁹

...

The Resource Evaluation section conducts activities that support exploration for, and development of, mineral and non-renewable energy resources. Specific activities include the maintenance of comprehensive mineral occurrence databases, studies to characterize the geology and genesis of mineral and energy deposits, development of new deposit models to assist mineral and energy exploration, and studies of industrial mineral commodities and aggregates.⁵⁰

...

Development of an assistance program for Nova Scotia prospectors to market their mineral claims to an international audience at conferences such as the annual meeting of the Prospectors and Developers Association of Canada.⁵¹

B. GOVERNMENT POLICY AND PRACTICE IN ACTION

45. The Government of Nova Scotia has been very successful in attracting investment in Nova Scotia's aggregate industry for export purposes. Leading examples are the Martin Marietta Porcupine Mountain Quarry and the Vulcan Materials' Black Point Quarry.

1. Porcupine Mountain

46. The Porcupine Mountain Quarry is a tidewater quarry located in Auld's Cove, Nova Scotia,⁵² on the western shore of the Cabot Strait. In the early 1950s, 10 million tons of rock were quarried from Porcupine Mountain to construct the Canso Causeway, which is a 1.4-kilometer link between mainland Nova Scotia and Cape Breton Island.⁵³

⁴⁹ Mineral Resources in Our Lives, (*Investors' Schedule of Documents*, Tab C1081, p. 001684).

⁵⁰ Mineral Resources in Our Lives, (*Investors' Schedule of Documents*, Tab C1081, p. 001716).

⁵¹ Mineral Resources in Our Lives, (*Investors' Schedule of Documents*, Tab C1081, p. 001717).

⁵² Witness Statement of Dan Fougere, dated December 12, 2016, para. 3.

⁵³ Witness Statement of Dan Fougere, dated December 12, 2016, para. 13.

47. After lying dormant until 1978, Nova Construction Co. Ltd. of Antigonish, Nova Scotia bought the Porcupine Mountain Quarry to supply road building materials for the Provincial highway system.⁵⁴ In 1995, Martin Marietta Materials purchased the quarry, [REDACTED]

48. [REDACTED]

49. Shortly before the Investors invested in Whites Point, the Nova Scotia Government actively supported and facilitated Martin Marietta's expansion of the Porcupine Mountain Quarry. [REDACTED]

⁵⁴ Witness Statement of Dan Fougere, dated December 12, 2016, para. 14.

50. The production increase was accomplished with the full support of the Nova Scotia Government without any additional environmental assessment requirements. Mr. Fougere notes:

The increase in production of approximately 2 million tons per year from 2000 to 2008 was done with the support of the Government and without any additional environmental assessment requirements. Government approval to extend the operations permit for the Quarry for another 10 years was also granted in 2011 without any additional environmental assessment requirements.⁶⁰

2. Black Point

51. In 2016, Vulcan Materials Company, North America's largest aggregate producer, was granted approvals by the Governments of Canada and Nova Scotia to construct and operate a tidewater quarry and marine terminal at Black Point, in Guysborough County, Nova Scotia. The Black Point Quarry will crush up to 7.5 million tons of rock per year,⁶¹ for export by ship to the United States and the Caribbean.⁶²

52. [REDACTED]

Vulcan's environmental assessment for Black Point was expedited and Government approvals were granted in 14 months.⁶⁴

⁶⁰ Witness Statement of Dan Fougere, dated December 12, 2016, para. 10.

⁶¹ Black Point Environmental Impact Statement – Table of Concordance and Summary Report, February, 2015 (*Investors' Schedule of Documents*, Tab C 1092, p. 9).

⁶² Black Point Environmental Impact Statement – Table of Concordance and Summary Report, February, 2015 (*Investors' Schedule of Documents*, Tab C 1092, pp. 1 – 2).

⁶⁴ Letter from Margaret Miller to Frank Lieth, dated April 26, 2016 (*Investors' Schedule of Documents*, Tab C1091); Black Point, Environmental Impact Statement, February, 2015 (*Investors' Schedule of Documents*, Tab C1092).

53. Indeed, governmental support for Black Point went so far as to include the expropriation of private, historic land to ensure the Quarry's construction.⁶⁵ The famous property, known as "Fogarty's Cove", had been owned by the same local family since 1858 and is the subject of an iconic Canadian folk song.⁶⁶
54. In an affidavit sworn in support of the expropriation, Barry Carroll, Chief Administrative Officer of the Municipality of the District of Guysborough, attested to the government's motivation.⁶⁷ Summarizing Black Point's benefits to his community, Mr. Carroll said:
- Black Point Development is of enormous importance to the MODG in terms of the employment it will create both directly and indirectly during the construction and operation of the undertaking as well as the property tax and royalty revenue it will generate.⁶⁸
55. Quarries also continue to be supported and approved on Digby Neck. The Seabrook Quarry Expansion Project was recently approved to expand the existing 3.95 hectare quarry to approximately 90.5 hectares.⁶⁹ The proponents applied for the expansion on March 8, 2016, and received environmental approval from the Minister on April 20, 2016. The entire process took only 7 weeks.⁷⁰
56. Through policy, practice and direct action, the Government of Nova Scotia has historically recognized and continues to recognize the importance of quarrying to

⁶⁵ Affidavit of Barry Carroll, dated September 14, 2014 (*Investors' Schedule of Documents*, Tab C1088, para. 22).

⁶⁶ Josh O'Kane, "The Ballad of Fogarty's Cove" *The Globe and Mail*, April 18, 2016 (*Investors' Schedule of Documents*, Tab C1094).

⁶⁷ Affidavit of Barry Carroll, dated September 14, 2014, (*Investors' Schedule of Documents*, Tab C1088, paras. 14-16).

⁶⁸ Affidavit of Barry Carroll, dated September 14, 2014 (*Investors' Schedule of Documents*, Tab C1088, para. 13).

⁶⁹ See the outline of the proposed undertaking, Seabrook Notice – Registration of Notice for Environmental Assessment (*Investors' Schedule of Documents*, Tab C1093, p. 3).

⁷⁰ Seabrook Notice – Registration of Notice for Environmental Assessment (*Investors' Schedule of Documents*, Tab C1093); Letter from Margaret Miller to Gary Rudolph, dated April 20, 2016 and Environmental Assessment Approval (*Investors' Schedule of Documents*, Tab C1090).

the provincial economy, and the commercial value of Nova Scotia stone for construction aggregate production and export.

[REDACTED]

57. [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

58. [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

59. [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

60. [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
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[REDACTED]
[REDACTED]
[REDACTED]

[REDACTED]

61.

[REDACTED]

[REDACTED]

62.

[REDACTED]

[REDACTED]

[REDACTED]

63.

[REDACTED]

[REDACTED]

IV. CLAYTON FAMILY INVESTMENT IN WHITES POINT

A. CLAYTON FAMILY AGGREGATES BUSINESSES

1. Past and Present

64. The Clayton family's involvement in the aggregate business began in the 1950s, when Bill Clayton Sr. built their first plant, in Lakewood, New Jersey. [REDACTED]
[REDACTED]
[REDACTED]
65. Over the next 60 years, the Clayton Group became the largest ready-mix concrete supplier in New Jersey, [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
66. The Claytons have built a strong reputation for reliability and quality and grew their business based on that reputation.⁸¹ [REDACTED]
[REDACTED]
67. Their concrete has been used in many award-winning projects, including Route 70s Freedom Bridge, the Route 52 Causeway, and both State highways in New Jersey. They were recently honoured at the 52nd Annual New Jersey Concrete Awards for their work on the Newark Bay Bridge.⁸³

[REDACTED]
[REDACTED]
[REDACTED]

⁸¹ Witness Statement of William Ralph Clayton, dated December 15, 2016, para. 11.
[REDACTED]

⁸³ Witness Statement of William Ralph Clayton, dated December 15, 2016, para. 10.

[REDACTED]

68.

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

69.

[REDACTED]
[REDACTED]
[REDACTED]

70.

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

71.

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

72.

73.

a) **Tom Dooley**

74. Tom Dooley is a graduate of Georgetown University with extensive experience in both the concrete and aggregates industries.⁹² From 1977 to 1984, he worked in sales and management for ready-mix concrete plants in Texas, where he developed expertise in concrete products and production processes.⁹³

75. Mr. Dooley became the General Manager of a ready-mix plant in Longview, Texas,

76. In 1991, Mr. Dooley became the Sales Manager of the Riverdale Quarry.⁹⁶ He expanded Riverdale's sale of aggregate into the New York City and Long Island markets,

⁹⁶ Witness Statement of Tom Dooley, dated December 9, 2016, para. 18.

[REDACTED]

[REDACTED]

77.

[REDACTED]

78.

[REDACTED]

79.

[REDACTED]

80.

[REDACTED]

[REDACTED]

[REDACTED]

86.

[REDACTED]

B. JOHN LIZAK AND THE CHOICE OF WHITES POINT

87. The Claytons had researched the investment climate in Nova Scotia and discovered that the Government of Nova Scotia was aggressively seeking out companies willing to invest in quarries there.¹¹⁶

88. In March 2002, the Claytons retained their expert geologist and mineral appraiser John Lizak to investigate, assess, and report on potential quarry sites in Nova Scotia.¹¹⁷ Mr. Lizak had experience in hundreds of geoscience, mining and environmental projects throughout the world.¹¹⁸

89.

[REDACTED]

90. In April 2002, Mr. Lizak met with experts in the Nova Scotia and New Brunswick Natural Resource Departments, and he received information on potential sites, including an NSDNR multi-year Study of the North Mountain region. One of the

¹¹⁶ Witness Statement of William Richard Clayton, dated July 25, 2011, para. 8.

¹¹⁷ Witness Statement of John Lizak, dated July 8, 2011, para. 8.

¹¹⁸ Witness Statement of John Lizak, dated July 8, 2011, para. 3.

[REDACTED]

Nova Scotia Government officials he met [REDACTED] with was Dr. Dan Kontak, a very experienced and capable geologist who had been with the NSDNR for fifteen years. As Dr. Kontak, the author of the Study, explains in his Witness Statement:

Importantly the bottom and top flows consist of massive, very hard or durable and very fresh rock ideal for aggregate production.¹²¹

91.

[REDACTED]
[REDACTED]

[REDACTED] In April and May 2002, holes were drilled on the Whites Point property to obtain comprehensive information on the geology of the site.¹²³

92.

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

93. In his report dated December, 2002, Mr. Lizak wrote:

Physical lab tests, chemical lab tests, and examination of the core samples and outcrop exposures indicate that the Whites Cove site contains an advantaged, large reserve of high quality construction aggregate. The site contains in excess of 200 million tons (English) of in-place stone, which is ideally suited for quarrying, processing, shipping, and construction.¹²⁵

¹²¹ Witness Statement of Daniel Kontak, dated December 13, 2016, para. 8.
[REDACTED]

¹²³ Witness Statement of John Lizak, dated July 8, 2011, para. 6; **Lizak Exhibit 1**.
[REDACTED]

¹²⁵ Witness Statement of John Lizak, dated July 8, 2011, para. 6; **Lizak Exhibit 1**.

94.

[REDACTED]

95.

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

96.

[REDACTED]

97. Somewhat ironically, Vulcan Materials received its environmental approvals to construct the Quarry at Black Point within a mere 14 months from the date of the filing of its EIS. Vulcan's Black Point Quarry will produce up to 7.5 million tons of crushed stone annually for export to the United States.¹³⁰

[REDACTED]

¹³⁰ Letter from Margaret Miller, Minister of Environment to Frank Lieth re: Black Point Environmental Assessment, dated April 25, 2016 (*Investors' Schedule of Documents*, Tab C1091).

- [REDACTED]
98. [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
99. [REDACTED]
[REDACTED]
[REDACTED]
100. [REDACTED]
[REDACTED]

[REDACTED]

D. CLAYTON FAMILY COMMITMENT TO WHITES POINT

101. As the Tribunal concluded in the merits phase of this arbitration, the Investors relied on specific encouragements by the Nova Scotia authorities to develop a quarry at Whites Point.¹³⁵ The official support included a letter from Minister Balser to the Claytons:

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

¹³⁵ Award on Jurisdiction and Liability, para. 448.

I hope that you and your company will continue to move the project forward as I feel it has the potential to benefit both you and our area.¹³⁶

102.

[REDACTED]

[REDACTED]

[REDACTED]

103. Thus, the Clayton family committed themselves to Whites Point and, in the words of Minister Balser, they “moved the project forward.” Paul Buxton was hired to manage the Whites Point Project and lead the regulatory approval process.¹³⁹

104. Mr. Buxton was exceptionally qualified to support the Clayton’s Whites Point commitment. He is a Consulting Engineer who had lived and worked in the Annapolis/Digby area for more than 25 years,¹⁴⁰ and who had extensive experience managing many local environmental and economic projects, including the restoration of the historic town of Annapolis Royal.¹⁴¹

105.

[REDACTED]

¹³⁶ Witness Statement of William Clayton, Jr., dated December 15, 2016, para. 7; **Clayton Exhibit 3**.

¹³⁹ Witness Statement of Paul Buxton, dated December 13, 2016, para. 2; [REDACTED]

¹⁴⁰ Witness Statement of Paul Buxton, dated December 13, 2016, para. 34.

¹⁴¹ Witness Statement of Paul Buxton, dated December 13, 2016, paras. 34, 37.

[REDACTED]

[REDACTED]

V. THE WHITES POINT QUARRY

[REDACTED]

106. [REDACTED]

107. [REDACTED]

B. JOHN WALL IS QUARRY MANAGER

108. [REDACTED]

[REDACTED]

109. [REDACTED] Mr. Wall had over 25 years of experience in the construction and aggregate industries. He had managed aggregate quarries for Peckham Industries Inc., Tilcon New York Inc., Aggregate Industries, Mount Hope Rock Products Company, Braen Stone Industries Inc., Negev Airbase Constructors in Israel, as part of the Camp David Accord, and the Riverdale Quarry in New Jersey. Under Mr. Wall's management, the Mount Hope Rock Products' quarry in Wharton, New Jersey, became the tenth-largest hard-rock quarry in the United States.¹⁴⁵
110. In 2001, Mr. Wall founded Aggregate Solutions, LLC, which sold equipment and provided consulting services to the aggregate industries in the northeastern United States, including New York and New Jersey.¹⁴⁶
111. [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
112. [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
113. [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

¹⁴⁵ Witness Statement of John Wall, dated December 8, 2016, paras. 2-6.

¹⁴⁶ Witness Statement of John Wall, dated December 8, 2016, para. 8.

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

114. [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

115. [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

C. PAUL BUXTON IS PROJECT MANAGER

116. [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

117. As Mr. Wall and Mr. Buxton began planning the Quarry, they met with a Cabinet Minister in the Government of Nova Scotia, the Hon. Gordon Balser,¹⁵⁵ who toured Mr. Wall around the local Digby Neck area, introduced him to community members and repeatedly expressed his strong support for the development of the Quarry.¹⁵⁶

[REDACTED]
[REDACTED]
¹⁵³ Witness Statement of John Wall, dated December 8, 2016, para. 19; [REDACTED]
[REDACTED]

¹⁵⁵ Witness Statement of John Wall, dated December 8, 2016, para. 22; Witness Statement of Paul Buxton, dated December 13, 2016, para. 9.

¹⁵⁶ Witness Statement of John Wall, dated December 8, 2016, para. 22; Witness Statement of Paul Buxton, dated December 13, 2016, para. 9.

118. In the Spring of 2002, Bill Clayton Sr. and Bill Clayton Jr. travelled to Digby Neck, met with Minister Balser, and also toured the site and the community.¹⁵⁷ Minister Balser continued to encourage the Claytons to invest in the Whites Point Quarry and the Claytons were highly enthusiastic.¹⁵⁸
119. In July 2002, Mr. Buxton established a Quarry office in Conway, close to the town of Digby.¹⁵⁹ This office became the headquarters for Bilcon of Nova Scotia and served as Mr. Wall's base when he worked in Nova Scotia.¹⁶⁰ [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]

D. THE DESIGN OF THE WHITES POINT QUARRY

120. [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
- [REDACTED]
121. [REDACTED]
- [REDACTED]
- [REDACTED]

¹⁵⁷ Witness Statement of Paul Buxton, dated December 13, 2016, para. 12.

¹⁵⁸ Witness Statement of Paul Buxton, dated December 13, 2016, para. 12.

¹⁵⁹ Witness Statement of John Wall, dated December 8, 2016, para. 24; Witness Statement of Paul Buxton, dated December 13, 2016, para. 13.

¹⁶⁰ Witness Statement of John Wall, dated December 8, 2016, paras. 24-25.

[REDACTED]

[REDACTED]

[REDACTED]

126.

127. During the course of 2002, Mr. Buxton assembled data on the land and marine aspects of the site and engaged consultants for the environmental assessment process.¹⁷³ He met with the Nova Scotia Department of Environment and Labour, and the Federal Department of Fisheries and Oceans, and he developed plans that, by the end of 2002, resulted in *Navigable Waters Protection Act*¹⁷⁴ approval for the marine terminal.

128. In early January 2003, Federal and Provincial regulators advised Mr. Buxton that Bilcon would likely be required to carry out a Comprehensive Study Environmental Assessment, as was typically required for a quarry with a marine terminal.¹⁷⁵ Mr. Buxton told Mr. Wall that a conceptual description of the quarry and marine terminal would be required for the comprehensive study, and that a detailed design would be required at the subsequent Industrial Approval stage.¹⁷⁶

129.

¹⁷³ Witness Statement of Paul Buxton, dated December 13, 2016, para. 15.

¹⁷⁴ Witness Statement of Paul Buxton, dated December 13, 2016, para. 17 (*Investors' Schedule of Documents, Tab C1027*).

¹⁷⁵ Witness Statement of John Wall, dated December 8, 2016, para. 39.

¹⁷⁶ Witness Statement of John Wall, dated December 8, 2016, para. 40.

[REDACTED]

130. [REDACTED]

[REDACTED]

131. [REDACTED]

132. [REDACTED]

133. [REDACTED]

[REDACTED]

[REDACTED]

134. [REDACTED]

135. [REDACTED]

[REDACTED]

136. [REDACTED]

[REDACTED]

137. [REDACTED]

[REDACTED]

[REDACTED]

138.

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

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[REDACTED]

[REDACTED]

[REDACTED]

139. [REDACTED]

140. [REDACTED]

141. [REDACTED]

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142. [REDACTED]
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144. [REDACTED]
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148. [REDACTED]
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149. [REDACTED]
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150. [REDACTED]
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151. [REDACTED]
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[REDACTED]

152. [REDACTED]
[REDACTED]
[REDACTED]

153. [REDACTED]
[REDACTED]
[REDACTED]

E. OPERATION OF THE WHITES POINT QUARRY

1. Operating Hours and Personnel Requirements

154. [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

155. [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

156. [REDACTED] Mr. Wall and Mr. Buxton [REDACTED]
[REDACTED]
prepared an information document for the local community that contained more detail about personnel requirements and compensation. Bilcon received hundreds of formal job applications and verbal job inquiries for the Quarry positions.²²⁸

157. [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

158. [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

²²⁸ Witness Statement of John Wall, dated December 8, 2016, para. 76; **Wall Exhibit 7; (Investors' Schedule of Documents, Tab C1008)**; Witness Statement of Paul Buxton, dated December 13, 2016, paras. 21-23; **Buxton Exhibit 2; (Investors' Schedule of Documents, Tab 1029)**.

[REDACTED]
[REDACTED]
[REDACTED]

1999, 2000, 2001, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019, 2020, 2021, 2022, 2023, 2024, 2025, 2026, 2027, 2028, 2029, 2030, 2031, 2032, 2033, 2034, 2035, 2036, 2037, 2038, 2039, 2040, 2041, 2042, 2043, 2044, 2045, 2046, 2047, 2048, 2049, 2050, 2051, 2052, 2053, 2054, 2055, 2056, 2057, 2058, 2059, 2060, 2061, 2062, 2063, 2064, 2065, 2066, 2067, 2068, 2069, 2070, 2071, 2072, 2073, 2074, 2075, 2076, 2077, 2078, 2079, 2080, 2081, 2082, 2083, 2084, 2085, 2086, 2087, 2088, 2089, 2090, 2091, 2092, 2093, 2094, 2095, 2096, 2097, 2098, 2099, 2100, 2101, 2102, 2103, 2104, 2105, 2106, 2107, 2108, 2109, 2110, 2111, 2112, 2113, 2114, 2115, 2116, 2117, 2118, 2119, 2120, 2121, 2122, 2123, 2124, 2125, 2126, 2127, 2128, 2129, 2130, 2131, 2132, 2133, 2134, 2135, 2136, 2137, 2138, 2139, 2140, 2141, 2142, 2143, 2144, 2145, 2146, 2147, 2148, 2149, 2150, 2151, 2152, 2153, 2154, 2155, 2156, 2157, 2158, 2159, 2160, 2161, 2162, 2163, 2164, 2165, 2166, 2167, 2168, 2169, 2170, 2171, 2172, 2173, 2174, 2175, 2176, 2177, 2178, 2179, 2180, 2181, 2182, 2183, 2184, 2185, 2186, 2187, 2188, 2189, 2190, 2191, 2192, 2193, 2194, 2195, 2196, 2197, 2198, 2199, 2200, 2201, 2202, 2203, 2204, 2205, 2206, 2207, 2208, 2209, 2210, 2211, 2212, 2213, 2214, 2215, 2216, 2217, 2218, 2219, 2220, 2221, 2222, 2223, 2224, 2225, 2226, 2227, 2228, 2229, 2230, 2231, 2232, 2233, 2234, 2235, 2236, 2237, 2238, 2239, 2240, 2241, 2242, 2243, 2244, 2245, 2246, 2247, 2248, 2249, 2250, 2251, 2252, 2253, 2254, 2255, 2256, 2257, 2258, 2259, 2260, 2261, 2262, 2263, 2264, 2265, 2266, 2267, 2268, 2269, 2270, 2271, 2272, 2273, 2274, 2275, 2276, 2277, 2278, 2279, 2280, 2281, 2282, 2283, 2284, 2285, 2286, 2287, 2288, 2289, 2290, 2291, 2292, 2293, 2294, 2295, 2296, 2297, 2298, 2299, 2300, 2301, 2302, 2303, 2304, 2305, 2306, 2307, 2308, 2309, 2310, 2311, 2312, 2313, 2314, 2315, 2316, 2317, 2318, 2319, 2320, 2321, 2322, 2323, 2324, 2325, 2326, 2327, 2328, 2329, 2330, 2331, 2332, 2333, 2334, 2335, 2336, 2337, 2338, 2339, 2340, 2341, 2342, 2343, 2344, 2345, 2346, 2347, 2348, 2349, 2350, 2351, 2352, 2353, 2354, 2355, 2356, 2357, 2358, 2359, 2360, 2361, 2362, 2363, 2364, 2365, 2366, 2367, 2368, 2369, 2370, 2371, 2372, 2373, 2374, 2375, 2376, 2377, 2378, 2379, 2380, 2381, 2382, 2383, 2384, 2385, 2386, 2387, 2388, 2389, 2390, 2391, 2392, 2393, 2394, 2395, 2396, 2397, 2398, 2399, 2400, 2401, 2402, 2403, 2404, 2405, 2406, 2407, 2408, 2409, 2410, 2411, 2412, 2413, 2414, 2415, 2416, 2417, 2418, 2419, 2420, 2421, 2422, 2423, 2424, 2425, 2426, 2427, 2428, 2429, 2430, 2431, 2432, 2433, 2434, 2435, 2436, 2437, 2438, 2439, 2440, 2441, 2442, 2443, 2444, 2445, 2446, 2447, 2448, 2449, 2450, 2451, 2452, 2453, 2454, 2455, 2456, 2457, 2458, 2459, 2460, 2461, 2462, 2463, 2464, 2465, 2466, 2467, 2468, 2469, 2470, 2471, 2472, 2473, 2474, 2475, 2476, 2477, 2478, 2479, 2480, 2481, 2482, 2483, 2484, 2485, 2486, 2487, 2488, 2489, 2490, 2491, 2492, 2493, 2494, 2495, 2496, 2497, 2498, 2499, 2500, 2501, 2502, 2503, 2504, 2505, 2506, 2507, 2508, 2509, 2510, 2511, 2512, 2513, 2514, 2515, 2516, 2517, 2518, 2519, 2520, 2521, 2522, 2523, 2524, 2525, 2526, 2527, 2528, 2529, 2530, 2531, 2532, 2533, 2534, 2535, 2536, 2537, 2538, 2539, 2540, 2541, 2542, 2543, 2544, 2545, 2546, 2547, 2548, 2549, 2550, 2551, 2552, 2553, 2554, 2555, 2556, 2557, 2558, 2559, 2560, 2561, 2562, 2563, 2564, 2565, 2566, 2567, 2568, 2569, 2570, 2571, 2572, 2573, 2574, 2575, 2576, 2577, 2578, 2579, 2580, 2581, 2582, 2583, 2584, 2585, 2586, 2587, 2588, 2589, 2590, 2591, 2592, 2593, 2594, 2595, 2596, 2597, 2598, 2599, 2600, 2601, 2602, 2603, 2604, 2605, 2606, 2607, 2608, 2609, 2610, 2611, 2612, 2613, 2614, 2615, 2616, 2617, 2618, 2619, 2620, 2621, 2622, 2623, 2624, 2625, 2626, 2627, 2628, 2629, 2630, 2631, 2632, 2633, 2634, 2635, 2636, 2637, 2638, 2639, 2640, 2641, 2642, 2643, 2644, 2645, 2646, 2647, 2648, 2649, 2650, 2651, 2652, 2653, 2654, 2655, 2656, 2657, 2658, 2659, 2660, 2661, 2662, 2663, 2664, 2665, 2666, 2667, 2668, 2669, 2670, 2671, 2672, 2673, 2674, 2675, 2676, 2677, 2678, 2679, 2680, 26

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164. [REDACTED]
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170. [REDACTED]
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172. [REDACTED]
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174. [REDACTED]
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208. [REDACTED]
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209. [REDACTED]
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210. [REDACTED]
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213. [REDACTED]
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[REDACTED]
[REDACTED]

[REDACTED]

214.

[REDACTED]

VII. REGULATORY COMPLIANCE

215. But for the breaches of Articles 1102 and 1105 of the NAFTA, the Whites Point Quarry would have received environmental approval. The JRP Report identified only “community core values” as an adverse environmental effect,³⁰⁸ and the Tribunal has concluded that is not a factor to be considered under either provincial or federal statutes:

Mr. Estrin and Mr. Rankin both testified, however, that “community core values” as used by the JRP were not within the scope of environmental assessment contemplated by the Nova Scotia as well as federal Canada statute. They were matters of philosophical belief, not effects that could be assessed and mitigated. Although the point about the Nova Scotia statute is not decisive in the present case, the Tribunal agrees. The statutes are concerned with effects on actual biophysical and socioeconomic conditions rather than with matters of political or philosophical belief, such as that a local community should have a veto over a project even if the law does not so provide.”³⁰⁹

216. As Prof. Rankin noted in his expert report, the JRP could not legally proceed to do anything outside the four corners of the applicable legislation or the specific Terms of Reference under which the review took place.³¹⁰
217. Because the JRP offered no other reason to reject the project, the JRP would otherwise have logically been compelled to recommend approval of the Whites Point Quarry.

³⁰⁸ Award on Jurisdiction and Liability, para. 535.

³⁰⁹ Award on Jurisdiction and Liability, para. 528.

³¹⁰ Expert Report of Murray Rankin, dated December 21, 2012, para. 10.

218. The environmental assessment of the WPQ Quarry satisfied all of the relevant requirements of the federal and Nova Scotia EA processes. Most importantly, it demonstrated that with ordinary mitigation there would have been no significant adverse environmental impacts. If “core community values” were properly excluded as a relevant criterion, there would have been no reasonable basis to conclude that all EA requirements had not been satisfied. At that point, the statutory decision makers, the federal and the Nova Scotia Environment Ministers, would have had no reasonable basis for refusing to accept the results of the EA process with ordinary conditions, and the Quarry would have proceeded to the permitting stage in the usual course.
219. After receiving the JRP Report, the Federal Minister of the Environment and the Nova Scotia Minister of the Environment, each had to consider whether to approve the Quarry. The authority to make the decision is conferred by the *Canadian Environmental Assessment Act* (CEAA) and the *Nova Scotia Environment Act* (NSEA), respectively.³¹¹
220. There are, however, stringent legal constraints on the Ministers’ lawful exercise of their authority.³¹² Most fundamentally, both Ministers were constrained by the foundational principle of the rule of law.³¹³
221. As Dean Sossin observes, since the landmark case of *Roncarelli v. Duplessis*, the exercise of all discretionary authority “must be understood as bounded and limited by its statutory terms.”³¹⁴ And the authority must be exercised in accordance with the rule of law.³¹⁵

³¹¹ Expert Report of Lorne Sossin, dated December 10, 2016, para. 14, 16.

³¹² Expert Report of Lorne Sossin, dated December 10, 2016, para. 15.

³¹³ Expert Report of Lorne Sossin, dated December 10, 2016, para. 15.

³¹⁴ Expert Report of Lorne Sossin, dated December 10, 2016, para. 17.

³¹⁵ Expert Report of Lorne Sossin, dated December 10, 2016, para. 17.

222. In *Reference re Secession of Quebec*,³¹⁶ the Supreme Court of Canada described the fundamental constitutional bedrock the rule of law:

70 The principles of constitutionalism and the rule of law lie at the root of our system of government. The rule of law, as observed in *Roncarelli v. Duplessis*, [1959] S.C.R. 121, at p. 142, is "a fundamental postulate of our constitutional structure". As we noted in the *Patriation Reference*, *supra*, at pp. 805-6, "[t]he 'rule of law' is a highly textured expression, importing many things which are beyond the need of these reasons to explore but conveying, for example, a sense of orderliness, of subjection to known legal rules and of executive accountability to legal authority". At its most basic level, the rule of law vouchsafes to the citizens and residents of the country a stable, predictable and ordered society in which to conduct their affairs. It provides a shield for individuals from arbitrary state action.

[Emphasis added]

223. Prof. Rankin also discussed the rule of law in his expert opinion in the merits phase:³¹⁷

Administrative law is itself the natural outcome of the rule of law and the transcendent idea it encompasses: those exercising public authority must act within the scope of the authority granted to them by legislation. As expressed by the Supreme Court of Canada:

The theoretical basis of this idea is therefore unimpeachable (...): any grant of jurisdiction will necessarily include limits to the jurisdiction granted, and any grant of a power remains subject to conditions.³¹⁸

224. As Dean Sossin amplified, Canadian administrative law requires that all relevant factors must be considered in the lawful exercise of authority, with the corollary that all irrelevant factors must be excluded from consideration.³¹⁹

³¹⁶ [1998] 2 SCR 217 (*Investors' Schedule of Documents*, Tab C816).

³¹⁷ Expert Report of Murray Rankin, dated December 21, 2012, para. 27.

³¹⁸ *UES, Local 298 v. Bibeault*, [1988] 2 S.C.R. 1048, para. 118 (*Investors' Schedule of Documents*, Tab C818).

³¹⁹ Expert Report of Lorne Sossin, dated December 10, 2016, para. 22.

225. In the result, acting fairly and reasonably, regardless of the JRP's recommendation, there was no lawful basis in the circumstances on which Ministers could lawfully deny environmental approval.
226. Environmental approval would typically include conditions that Bilcon comply with the commitments it made in the environmental assessment process, [REDACTED] and the usual quarry conditions with which Bilcon would have easily and readily complied. [REDACTED]
227. Following environmental approval, Bilcon would have applied for and received industrial permits. Industrial approval ("IA") is granted by the Nova Scotia Ministry of the Environment under the *Environment Act*,³²² and relates primarily to terrestrial components. [REDACTED]
- [REDACTED]

228. During the JRP hearings, the Government of Nova Scotia provided an Undertaking that it had "no record of any project that had received an Environmental Assessment approval, but was subsequently denied approval under Part V [Industrial Permits] of the Environment Act."³²⁴ In its document production in this case, Canada also made the following stipulations:

Request 37: Canada stipulates that it has no examples where a proponent of a project which received environmental assessment

[REDACTED]

[REDACTED]

³²² Nova Scotia Environment Act, 1998 (*Investors' Schedule of Documents*, Tab C258); [REDACTED]

[REDACTED]

[REDACTED]

³²⁴ List of Undertakings, Public Hearings of June 16 to June 30, 2007 (*Investors' Schedule of Documents*, Tab C550); [REDACTED]

approval from the Government of Canada (under the version of the Canadian Environmental Assessment Act applicable to the Whites Point EA), and applied to the Department of Fisheries and Oceans, Transport Canada, or Natural Resources Canada for any permits, licences or authorizations required for the operation of the project, was denied those permits, licenses or authorizations.

Request 38: Canada stipulates that it has no examples where a proponent of a project which received Nova Scotia environmental assessment approval, and completed applications for Part V approval and/or other relevant permits, licences or authorizations required for the operation of the project, was denied that approval or those permits, licences or authorizations.

229. There can be no doubt that Bilcon would, in the ordinary course, have obtained the industrial permits necessary to operate the Quarry. [REDACTED]

230. [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

231. [REDACTED]
[REDACTED]

[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

VIII. FULL REPARATION FOR LOSS

232. The Tribunal has held that Canada breached the international minimum standard of treatment (Article 1105) and the national treatment standard (Article 1102) of NAFTA.³³¹

A. THE CHORZÓW FACTORY PRINCIPLE

233. The fundamental principle of international law for assessing the loss to the Investors is that the state must make “full reparation” to compensate for the loss caused by its conduct.³³² The simple purpose of reparation is to undo the harm caused by the breach and to restore the Investors to the position they would have been in if Canada had not breached its obligations under the NAFTA.

234. The classic expression of this basic principle of international law is clearly expressed in the *Case Concerning the Factory at Chorzów*, where the Permanent Court of International Justice said:³³³

The essential principle contained in the actual notion of an illegal act is that reparation must, as far as possible, wipe-out all the consequences of the illegal act and reestablish the situation which would, in all probability, have existed if that act had not been committed. Restitution in kind or, if this is not possible, payment of a sum corresponding to the value which a restitution in kind would bear; the award, if need be, of damages for loss sustained which would not be covered by restitution in kind or payment in place of it—such are the principles which should serve to determine the amount of compensation for an act contrary to international law.

235. Article 31 of the International Law Commission’s *Articles on State Responsibility*³³⁴ codifies the *Chorzów Factory* principle. It provides:

³³¹ Award on Jurisdiction and Liability, paras. 446 – 453 and 731.

³³² *S.D. Myers, Inc. v. Government of Canada*, UNCITRAL, First Partial Award, 13 November 2000 (“*Myers*”), (*Investors’ Authorities*, Tab CA313, paras. 311-313); See also Meg N. Kinneer, Andrea K. Bjorklund, et al., *Investment Disputes under NAFTA: An Annotated Guide to NAFTA Chapter 11*, Supplement No. 1, March 2008 (Kluwer Law International 2006), (“Kinneer”) (*Investors’ Authorities*, Tab CA311, p. 1135-16); and Patrick Dumberry, *The Fair and Equitable Treatment Standard: A Guide to NAFTA Case Law on Article 1105* (Kluwer Law International 2013) (“Dumberry”) (*Investors’ Authorities*, Tab CA312, p. 300-301).

³³³ *Case Concerning the Factory at Chorzów (Germany v. Poland)*, 1928 P.C.I.J (ser. A) No. 17 (September 13, 1928) (*Investors’ Authorities*, Tab CA327, p. 47).

Reparation

1. The responsible State is under an obligation to make full reparation for the injury caused by the internationally wrongful act.
2. Injury includes any damage, whether material or moral, caused by the internationally wrongful act of a State.

236. The *Chorzów Factory* standard has been adopted by tribunals determining NAFTA claims,³³⁵ and is accepted as authoritative. For example, the Tribunal in *ADC Affiliate Ltd. v. Republic of Hungary* noted:

There can be no doubt about the present vitality of the *Chorzów Factory* principle, its full current vigor having been repeatedly attested to by the International Court of Justice.³³⁶

237. In applying the *Chorzów Factory* principle, tribunals also universally adopt what Professor Dumbery describes as the “differential method” of assessing damages:

[B]y hinging on the PCIJ's famous *dictum* in the *Chorzow Factory* case, tribunals have often used the ‘differential method’ to calculate damages for non-expropriatory acts. As succinctly putted [sic] by the *Lemire* tribunal, ‘the purpose of the compensation must be to place the investor in the same pecuniary position in which it would have been if respondent had not violated the BIT’. This differential method consists of examining the investor's actual financial situation and comparing it with ‘the one that would have prevailed had the act not been committed’. In other words, the comparison is made with the situation which would have hypothetically prevailed using a ‘but for’ scenario.³³⁷

[Emphasis added]

238. In applying the “but-for scenario” to the calculation of full reparation, tribunals typically adopt the Discounted Cash Flow (“DCF”) valuation method for calculating the loss of future profits.³³⁸ [REDACTED]

³³⁴ *Draft Articles on Responsibility of States for Internationally Wrongful Acts*, adopted by the International Law Commission at its fifty-third session (2001), Article 31 (*Investors’ Authorities*, Tab CA314).

³³⁵ *Myers* (*Investors’ Authorities*, Tab CA313, para. 311).

³³⁶ ICSID Case No. ARB/03/16, September 27, 2006 (*Investors’ Authorities*, Tab CA323, para. 493).

³³⁷ Dumbery (*Investors’ Authorities*, Tab CA312, pp. 300-301).

³³⁸ Borzu Sabahi, *Compensation and Restitution in Investor-State Arbitration, Principles and Practice*, (Oxford: Oxford, 2011) (*Investors’ Authorities*, Tab CA324, p. 118).

[REDACTED]

239. [REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

240. Tribunals apply the DCF method where the future cash flow is reasonably ascertainable and not purely speculative.³⁴⁰ By any measure, the evidence in this arbitration shows that the Investors' future cash flow is fully ascertainable.

241. In this regard, the Tribunal in *Crystallex* said:

879. Furthermore, gold, unlike most consumer products or even other commodities, is less subject to ordinary supply-demand dynamics or market fluctuations, and, especially in the case of open pit gold mining as in Las Cristinas, is an asset whose costs and future profits can be estimated with greater certainty. The Tribunal thus accepts that predicting future income from ascertained reserves to be extracted by the use of traditional mining techniques—as is the case of Las Cristinas—can be done with a significant degree of certainty, even without a record of past production.

880. In short, the Claimant has established the fact of future profitability, as it had completed the exploration phase, the size of the deposits had been established, the value can be determined based on

³⁴⁰ *Crystallex International Corporation v. Bolivarian Republic of Venezuela*, ICSID Case No. ARB(AF)/11/2, April 4, 2016 (“*Crystallex*”), (*Investors’ Authorities*, Tab CA317, para. 874); *Compañía de Aguas del Aconquija S.A. and Vivendi Universal v. Argentine Republic*, ICSID Case No. ARB/97/3, Award, August 20, 2007 (“*Vivendi*”) (*Investors’ Authorities*, Tab CA320).

market prices, and the costs are well known in the industry and can be estimated with a sufficient degree of certainty.³⁴¹

[Emphasis added]

242. Similarly, in *Gold Reserve Inc. v. Bolivarian Republic of Venezuela*, the State cancelled the investor's construction permits to develop a gold and copper mine and ultimately terminated its mining concessions.³⁴² Although at the time the concessions were terminated the Investor only held mining rights to the undeveloped lands, it was nonetheless awarded substantial damages for loss of future profits.³⁴³

243. In this case, an award of lost profits is the most complete and appropriate measure of damages. [REDACTED]

244. [REDACTED]

245. [REDACTED]

³⁴¹ *Crystalex*, (*Investors' Authorities*, Tab CA317, paras. 879-880).

³⁴² *Gold Reserve Inc. v. Bolivarian Republic of Venezuela*, (ICSID Case No. ARB(AF)/09/1), September 22, 2014 ("*Gold Reserve*") (*Investors' Authorities*, Tab CA316).

³⁴³ *Gold Reserve* (*Investor's Authorities*, Tab CA316, paras. 690 – 91, 863).

[REDACTED]

246.

[REDACTED]

247. As in *Crystallex*, the Whites Point Quarry involved the uncomplicated extraction of a mineral from an ascertained reserve. Although aggregates are not an exchange traded commodity, they are a fully fungible product, and the Government of Nova Scotia itself recognizes the predictability and stability of the aggregate market:

*“Industrial minerals and construction aggregate production currently lead the industry and they have been steady, predictable sectors for several decades”.*³⁴⁴

248.

[REDACTED]

As the Government of Nova Scotia proudly proclaims:

*“Aggregates are among the most widely used materials in our contemporary society. They are required in almost all residential, commercial and industrial building projects. They also form a major component of many public works projects such as highways, underground services, bridges, railroads, airports, hydro-electric dams and wharves.”*³⁴⁵

³⁴⁴ Mineral Resources in Our Lives, (*Investors' Schedule of Documents*, Tab C1081, p. 001643).

³⁴⁵ Mineral Resources in Our Lives, (*Investors' Schedule of Documents*, Tab C1081, p. 001652).

249. As with the governments in *Crystallex* and *Sapphire*, the Nova Scotia Government completely understood the value of aggregates generally, and the value of North Mountain basalt in particular. In 2006, at the same time the Whites Point Quarry was being assessed by the Joint Review Panel,³⁴⁶ the Government of Nova Scotia continued to extoll the great mining potential of the North Mountain. Indeed, a key purpose of the Nova Scotia Department of Natural Resources has been throughout to promote mineral development, so that the Province would reap the benefits of increased employment and increased tax revenue.
250. The Nova Scotia Government's recognition of the profitability of quarries is amplified by its recent approval of the Black Point Quarry, which Vulcan is developing at a cost of \$80-110 million,³⁴⁷ In court proceedings contesting the Government's decision to expropriate private property to facilitate the Black Point Quarry, the Government justified its decision on the basis of economic benefits.³⁴⁸

³⁴⁶ An Overview of the Industrial Mineral Potential of the North Mountain Basalt (*Investors' Schedule of Documents*, Tab C1040).

³⁴⁷ Black Point Environmental Impact Statement – Table of Concordance and Summary Report, February 2015 (*Investors' Schedule of Documents*, Tab C1092, p. 5).

³⁴⁸ Affidavit of Barry Carroll, dated September 14, 2014 (*Investors' Schedule of Documents*, Tab C1088, para. 13).

[REDACTED]

251. [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

[REDACTED]

[REDACTED]

252. [REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

2. Costs

253. NAFTA Article 1135(1) and Articles 38 to 40 of the *UNCITRAL Arbitration Rules*, grant the Tribunal broad discretion to award costs. Accordingly, the Investors respectively request that the Tribunal order the Respondent to reimburse the Investors for all of their costs and expenses related to this arbitration.

[REDACTED]
[REDACTED]
[REDACTED]


254. The Investors respectfully reserve the right to submit additional information regarding their related costs and expenses, including:
- a. All legal fees and disbursements;
 - b. All other professional fees, including the fees and disbursements of experts;
 - c. Administrative and overhead costs, including the cost of management time;
 - d. The fees and expenses of the Tribunal; and
 - e. The costs of the PCA.

IX. RELIEF SOUGHT

255. The Investors respectfully request:
- a) An order that Canada pay the Investors full reparation damages [REDACTED]
- b) All legal fees and disbursements, and the costs of this arbitration.

ALL OF WHICH IS RESPECTFULLY SUBMITTED THIS 10th DAY OF MARCH 2017.


Gregory J. Nash


Brent R.H. Johnston


Chris Elrick

Appendix A - Opportunity for Export Aggregate

Appendix B - Industrial Mineral Potential in Nova Scotia

Appendix C – Addendum to VII: Regulatory Compliance

OPPORTUNITY FOR EXPORT AGGREGATE



The potential is here.

Are transportation costs and stone quality concerns making life difficult for you as an aggregate supplier, concrete producer or road builder?

Are you concerned about the security of your aggregate supplies for the future? Nova Scotia has a lot to offer:

A Proven Track Record

- For more than two decades Nova Scotia has been an industry leader in the marine transport of high quality stone products using bulk carriers and barges.
- Martin Marietta Materials Canada on the Strait of Canso is one of the largest tidewater stone quarries in North America, capable of loading 70 000 tonne Post-Panamax vessels.
- Currently more than 3 million tonnes of aggregate are being exported annually to destinations such as Savannah, Houston, Bermuda and the Ascension Islands.

The Maritime Advantage

- Nova Scotia's location on the Atlantic coast is 80 kilometres from the Northeastern United States with the capability of competitive shipping to the Gulf Coast and the Caribbean.
- 7400 kilometres of rugged coastline include sheltered harbours and water depths amenable to docking and loading large vessels.
- A moderate, coastal climate permits year-round shipping.
- Diverse geological resources along the coast are capable of producing high quality construction aggregate.

The Martin Marietta quarry on the Strait of Canso



NOVA SCOTIA

Natural Resources
Mineral Resources Branch

2006
Information Circular ME 65



Map of Nova Scotia showing the sites discussed in text

Opportunities

- Nova Scotia has undeveloped sites, near suitable tidewater, that are capable of producing high quality granite, limestone and traprock aggregate.
- Potential sites include the south shore of Chedabucto Bay, New Campbellton on the Bras d'Or Lakes and the North Mountain area along the Bay of Fundy.
- Some sites have the potential for stone reserves of several hundred million tonnes.
- An established and knowledgeable stone industry may offer opportunities for partnerships in new stone export ventures.
- There may be the opportunity for the co-production of limestone aggregate and cement grade carbonate at Glencoe and Glendale on Cape Breton Island.

A Welcoming Business Climate and Supportive Government

Nova Scotia and the Strait of Canso area have an excellent record in permitting new quarries and heavy industrial projects. New gypsum, coal, silica and crushed stone quarries have been permitted in Nova Scotia within the last five years. The Sable Offshore Energy Project, including offshore gas wells, sub-sea pipelines, a gas plant and the Maritimes & Northeast gas pipeline to Boston area markets have been approved.

In December, 2005, Anadarko received federal and provincial environmental permits to proceed with the construction of an LNG regasification plant at Bear Head, part of the Strait of Canso Super Port.

The Province of Nova Scotia is open for business and you are invited to contact us for further information.



Nova Scotia
Natural Resources
Mineral Resources Branch

1701 Hollis Street
Halifax, Nova Scotia
B3J 2T9 Canada

For more information contact:

R. J. (Bob) Ryan
Manager, Resource Evaluation
phone: 902-424-8148
E-mail: rjryan@gov.ns.ca
or visit our website:
<http://www.gov.ns.ca/natr/meb>



Nova Scotia
Natural Resources
Economic Development



NOVA SCOTIA MINING SOCIETY AGM

JUNE 01 – 02, 2006

MINING – CLEANING UP THE PAST; PREPARING FOR THE FUTURE

Technical Program

Thursday June 01, 2006 – Afternoon Session

Theme: Mining and Environment

- | | |
|-------------|--|
| 1:30 – 2:00 | Tar Ponds Remediation Project
Frank Potter , P.Eng., Acting Director, Sydney Tar Ponds Agency |
| 2:00 – 2:30 | Solidification/Stabilization of Mine Sites
Colin Dickson , P.Eng., Cement Association of Canada |
| 2:30 – 3:00 | Nova Scotia Power Air Emissions Study
Graeme MacKenzie , P.Eng., Project Manager, NSPI |
| 3:00 – 3:20 | ----- Break ----- |
| 3:20 – 3:50 | NS Mining Society Business Meeting No. 1 |
| 3:50 – 4:20 | CBDC Site Closure Program
Bob MacDonald , P.Eng., Director General Property and
Development Cape Breton Development Corporation |
| 4:20 – 4:50 | Industrial Mineral Potential in Nova Scotia, Opportunities for
Deep Water Aggregate Quarries
Bob Ryan, Phil Finck and Garth Prime , NS Department of
Natural Resources |
| 4:50 – 5:00 | ----- Session Closure ----- |

Friday June 02, 2006 – Morning Session

Theme: Resurgence of Coal in Nova Scotia

- | | |
|-------------|--|
| 8:30 – 9:00 | International Coal Pier Characteristics
Robert Kazamel , General Manager, Logistec |
|-------------|--|

Industrial Mineral Potential in Nova Scotia

Opportunities to Develop Deep-water Aggregate Quarries

P. Finck

Natural Resources



Shipping Distances

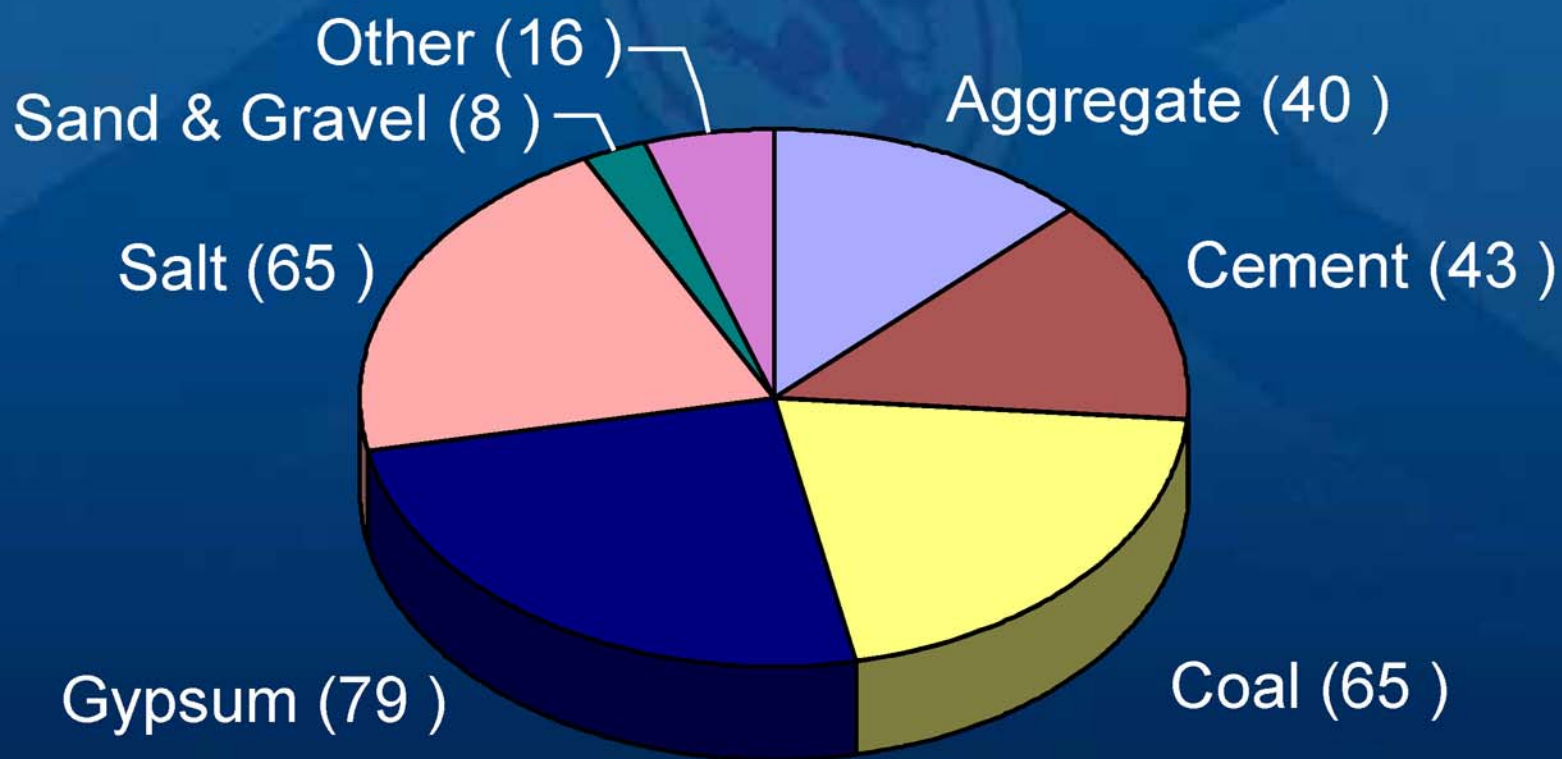
A map of North America and the surrounding oceans, illustrating shipping distances from Halifax, Canada. Yellow lines with arrows radiate from Halifax to various destinations, with distances labeled in miles. The destinations and distances are:

- Montreal: 1300 mi
- Toronto: 1300 mi
- Chicago: 2500 mi
- New York: 800 mi
- Boston: 600 mi
- Philadelphia: 600 mi
- Baltimore: 600 mi
- Norfolk: 600 mi
- Bermuda: 600 mi
- Kingston: 1900 mi
- Santo Domingo: 1900 mi
- Europe: 2700 mi
- Cape Town: 6400 mi
- Buenos Ayres: 5700 mi

Buenos Ayres
5700 mi

Mineral Production by Commodity, 2001

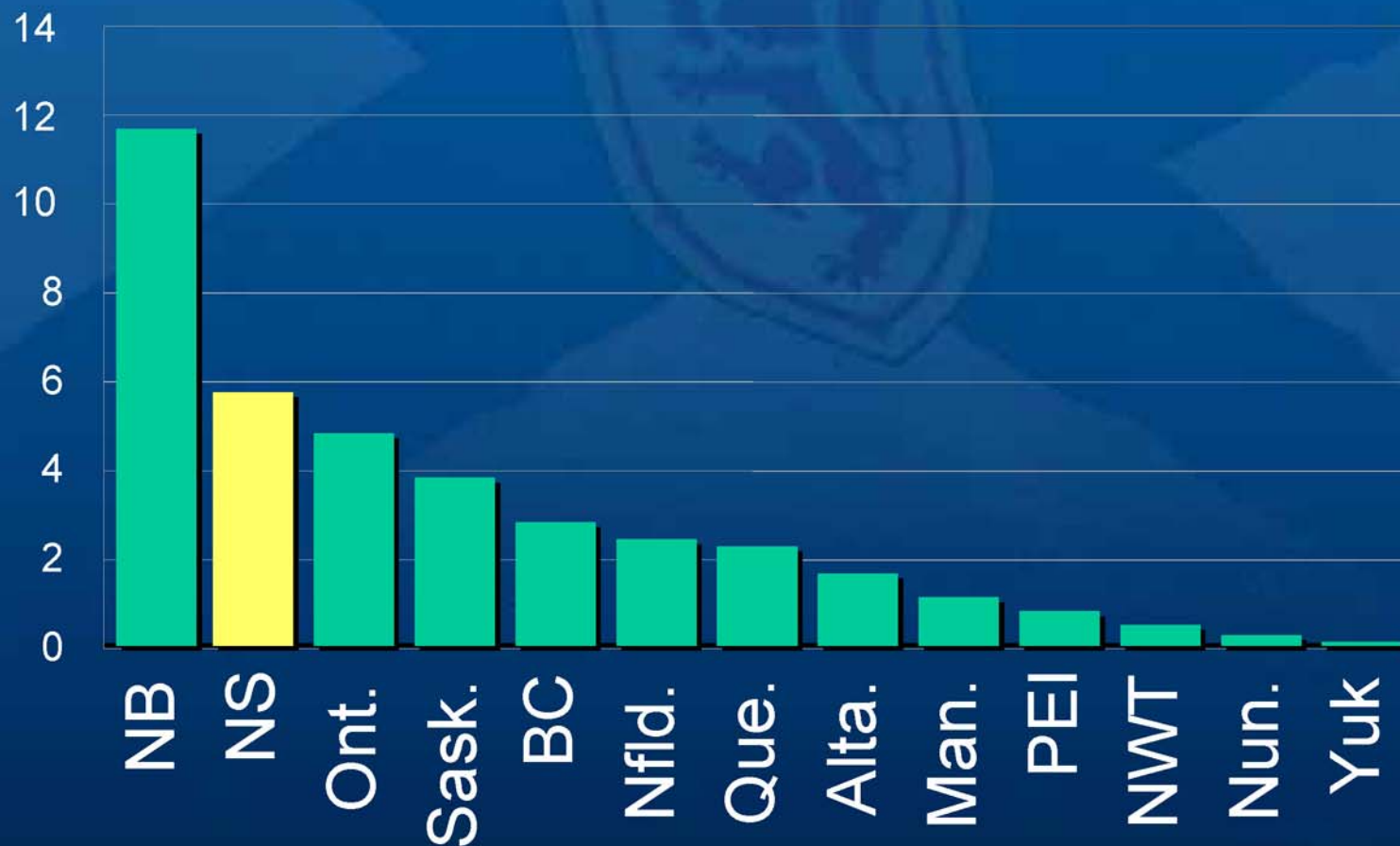
\$316 Million



Natural Resources



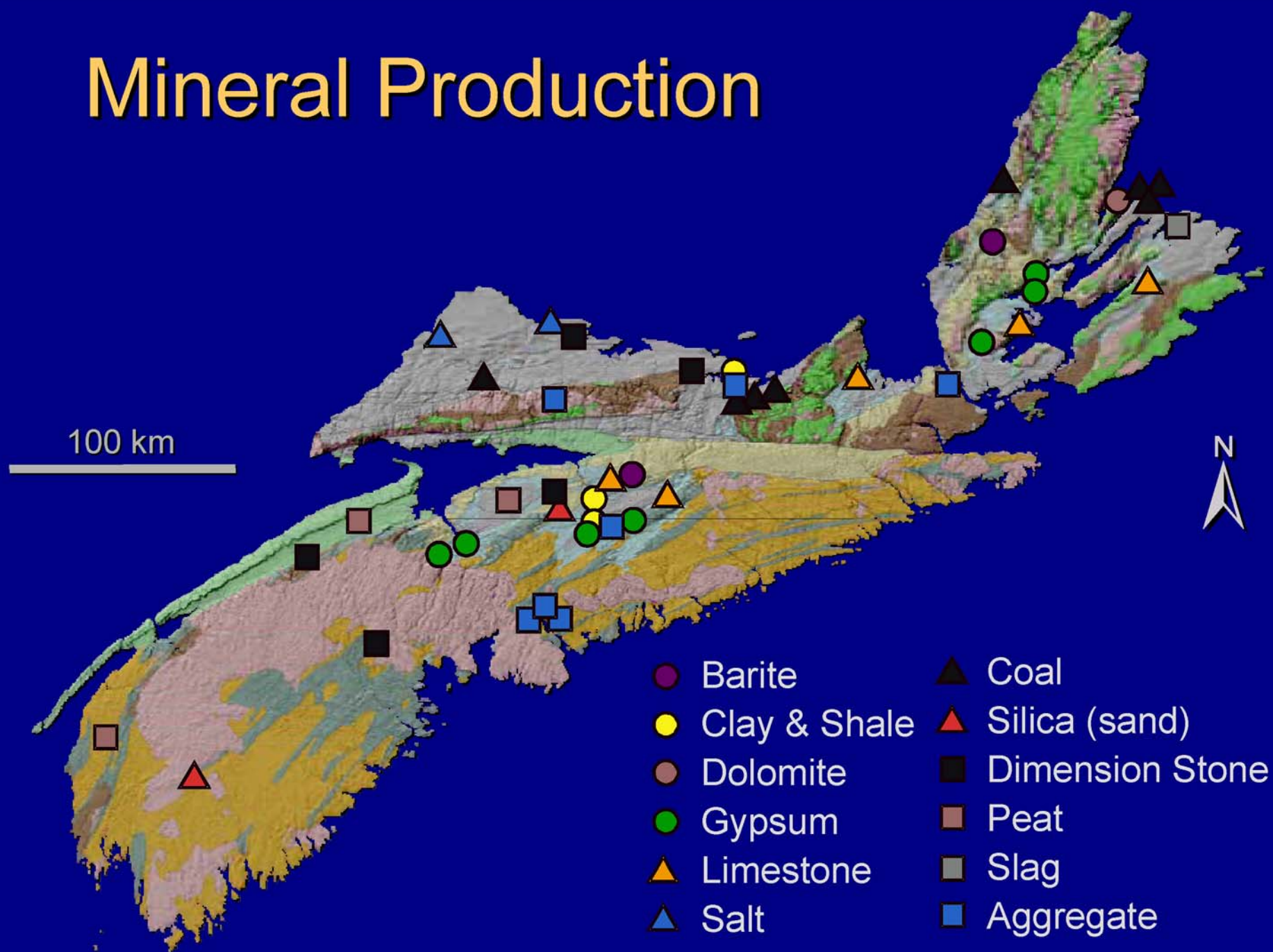
Avg. Value of Mineral Production / km²



Natural Resources



Mineral Production



Nova Scotia Mineral Production

Industrial Minerals	Amount (tonnes)	Value (\$000)
Anhydrite	180,000	
Barite	600	
Gypsum	7,200,000	
Limestone & Dolomite	700,000	
Peat	9,300	
Salt	900,000	
Silica	49,000	
<i>Total</i>		140,000
Structural Materials		
Building - Ornamental Stone	2000	
Clay Products	25,400	
Crushed Stone	7,800,000	
Sand & Gravel	2,750,000	
Cement	331,000	
<i>Total</i>		96,060
Total Mineral Production		236,060

Troy Quarry

- total production
10 M tones
- metasediment
& granite



Natural Resources



Conrad Brothers (Dartmouth)

- 7.5 M tonnes (domestic)
- 2.5 M tonnes (export)
- adequate supply



Natural Resources



Offshore Markets

- Martin Marietta
- operating near capacity
- exporting to the Gulf, East Coast & Caribbean



Natural Resources



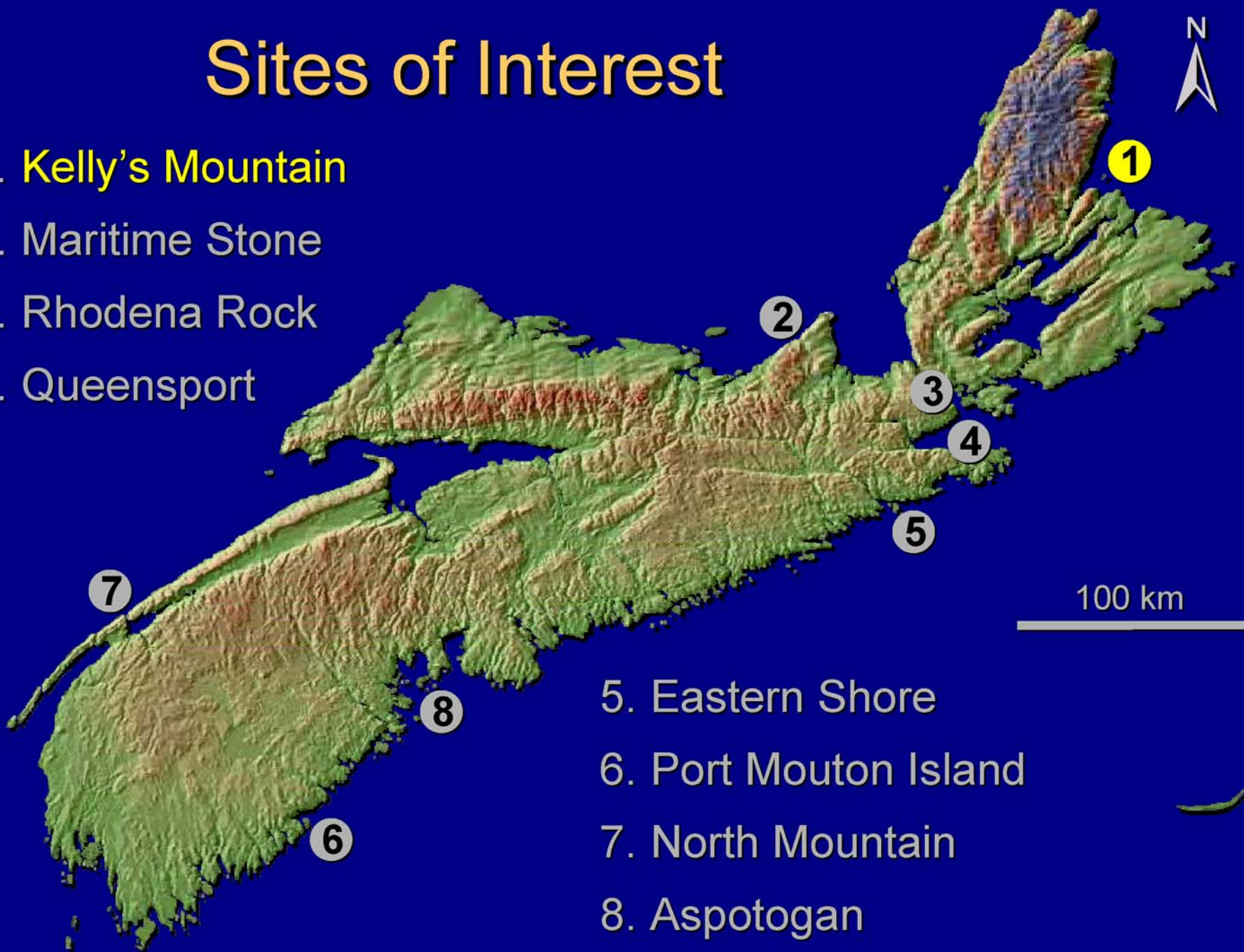
Sites of Interest

1. Kelly's Mountain

2. Maritime Stone

3. Rhodena Rock

4. Queensport



5. Eastern Shore

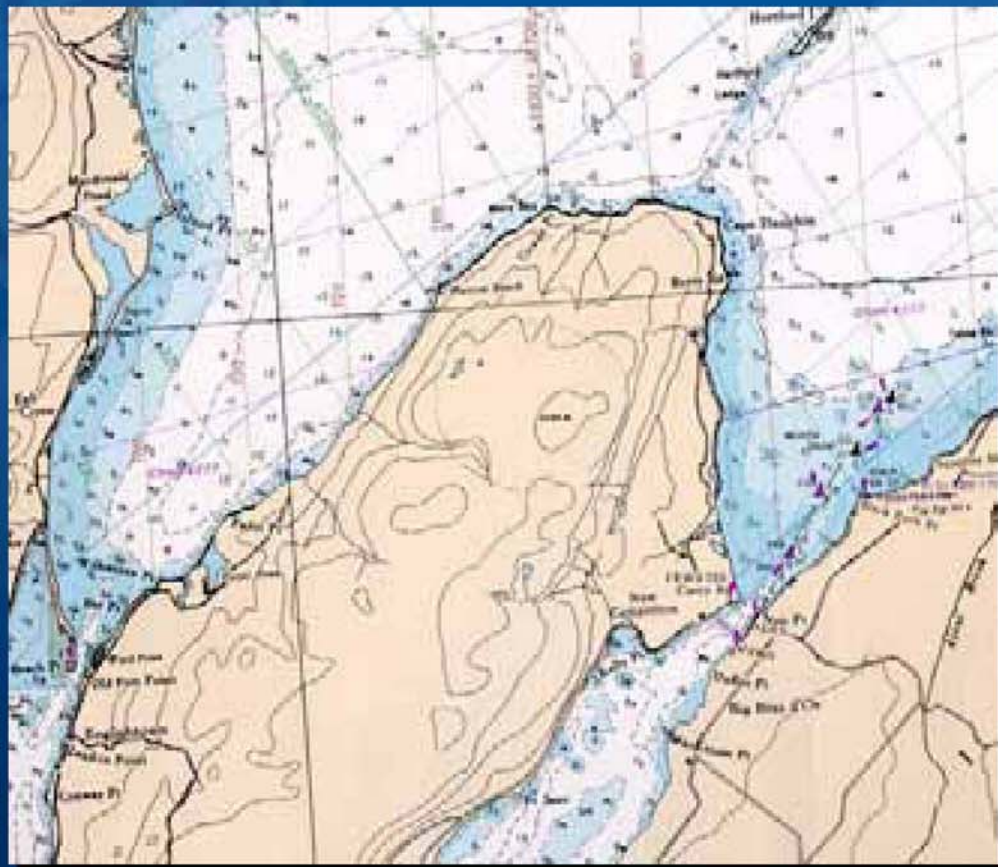
6. Port Mouton Island

7. North Mountain

8. Aspotogan

Kellys Mountain Area

- water depth
 - > 45 feet north side
 - < 30 K south channel
- elevation up to 300 m
- unlimited tonnage



Natural Resources

Kellys Mountain Area

- Crown Land Areas (North side)
- Scotia Limestone mining lease (south side)
- red granite, LA abrasion of 22
- unlimited tonnages

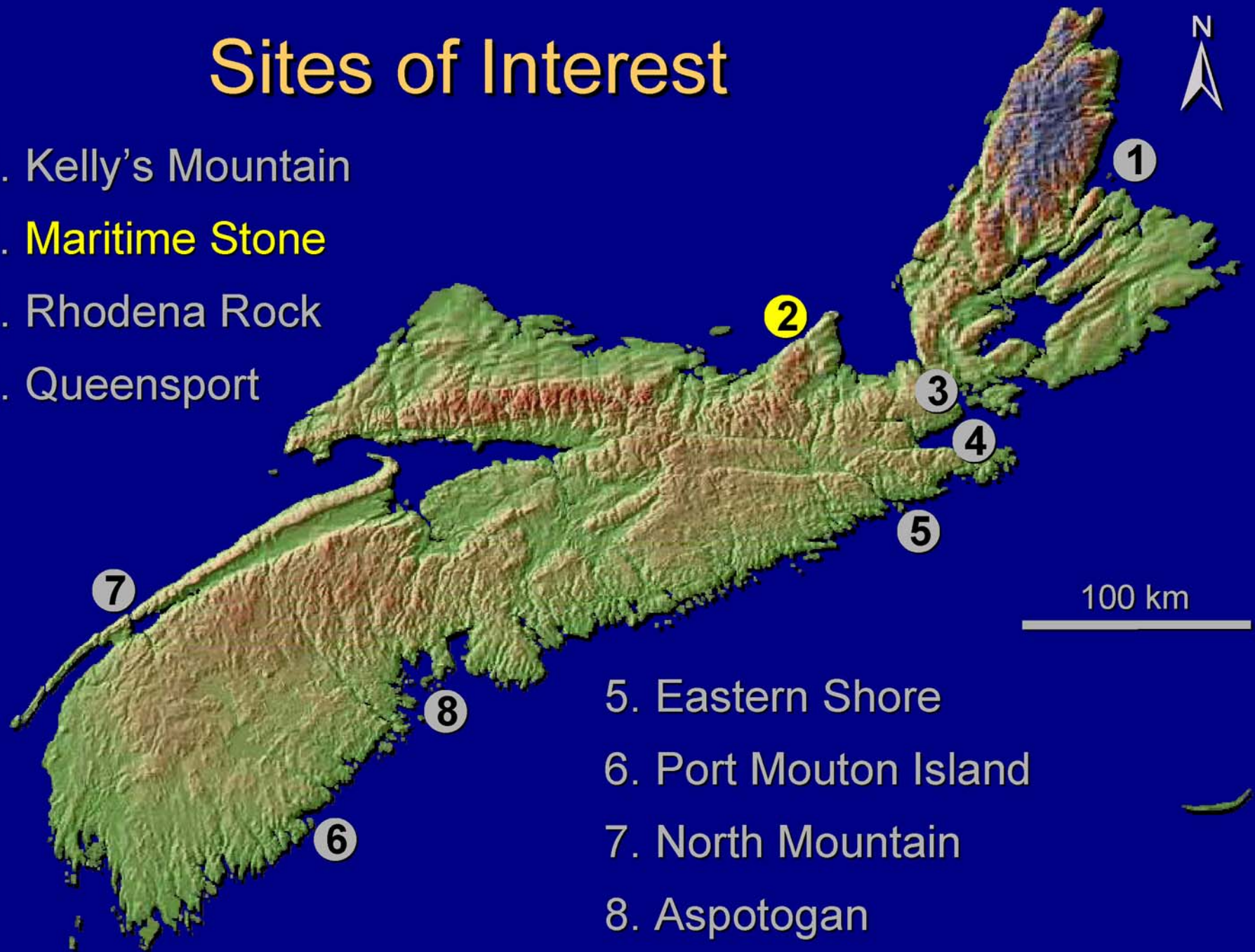


Natural Resources



Sites of Interest

1. Kelly's Mountain
2. **Maritime Stone**
3. Rhodena Rock
4. Queensport



5. Eastern Shore
6. Port Mouton Island
7. North Mountain
8. Aspotogan

Maritime Rock Quarry

- access to deep water
- ice free mid-March to January
- relatively isolated



Natural Resources



Shipping

- 30 K tonne through Canso Causeway
- north around Cape Breton Island



Natural Resources



Resource

- mafic granite
- LA abrasion of 17
- existing 4 hectare permit

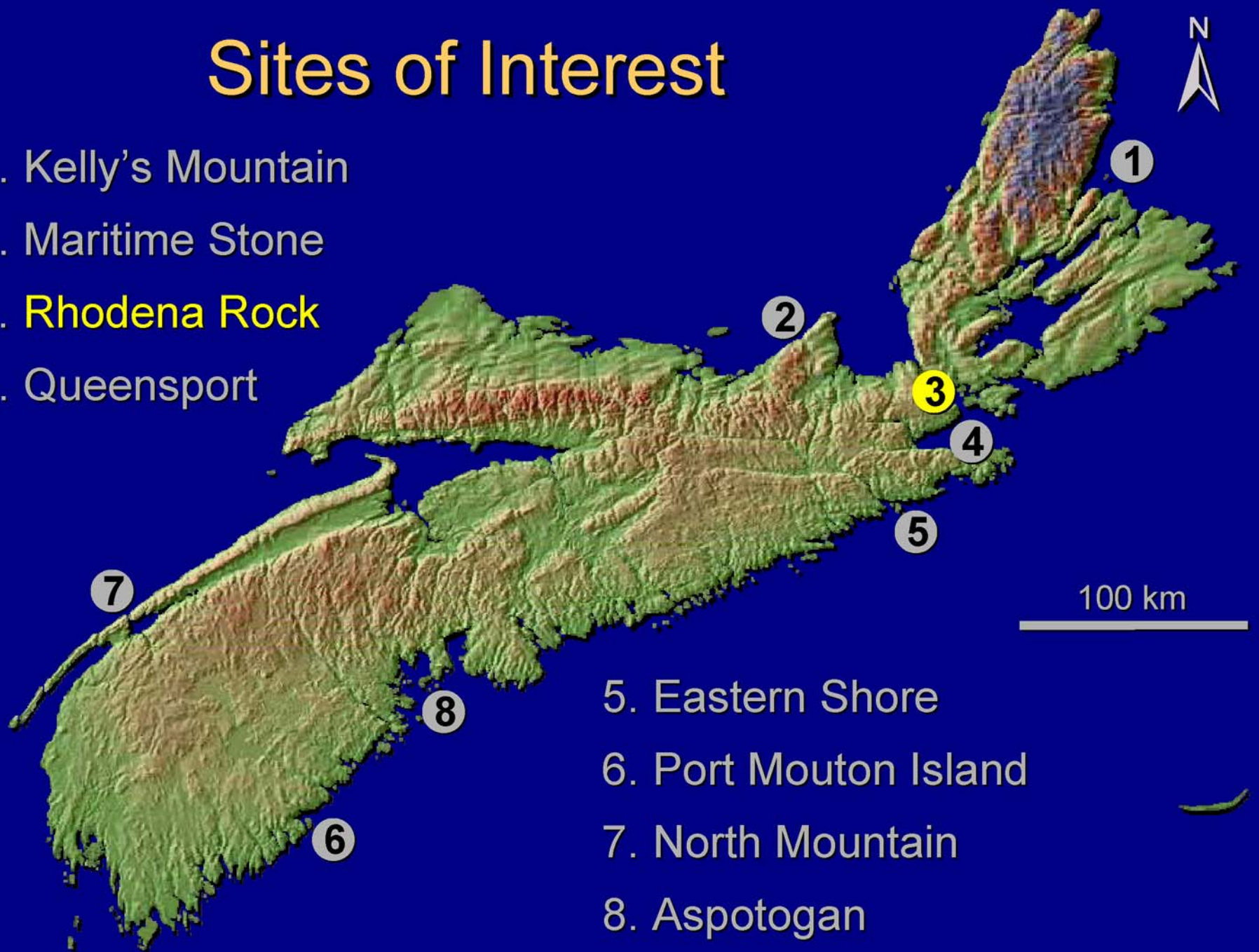


Natural Resources



Sites of Interest

1. Kelly's Mountain
2. Maritime Stone
3. Rhodena Rock
4. Queensport



5. Eastern Shore
6. Port Mouton Island
7. North Mountain
8. Aspotogan

Rhodena Rock



Located beside Martin Marietta's operation at Canso

Rhodena Rock

- mixed volcanics & granites
- deep water access by conveyor
- truck to Mulgrave
- high quality stone
- optioned by Lafarge
- tonnage?

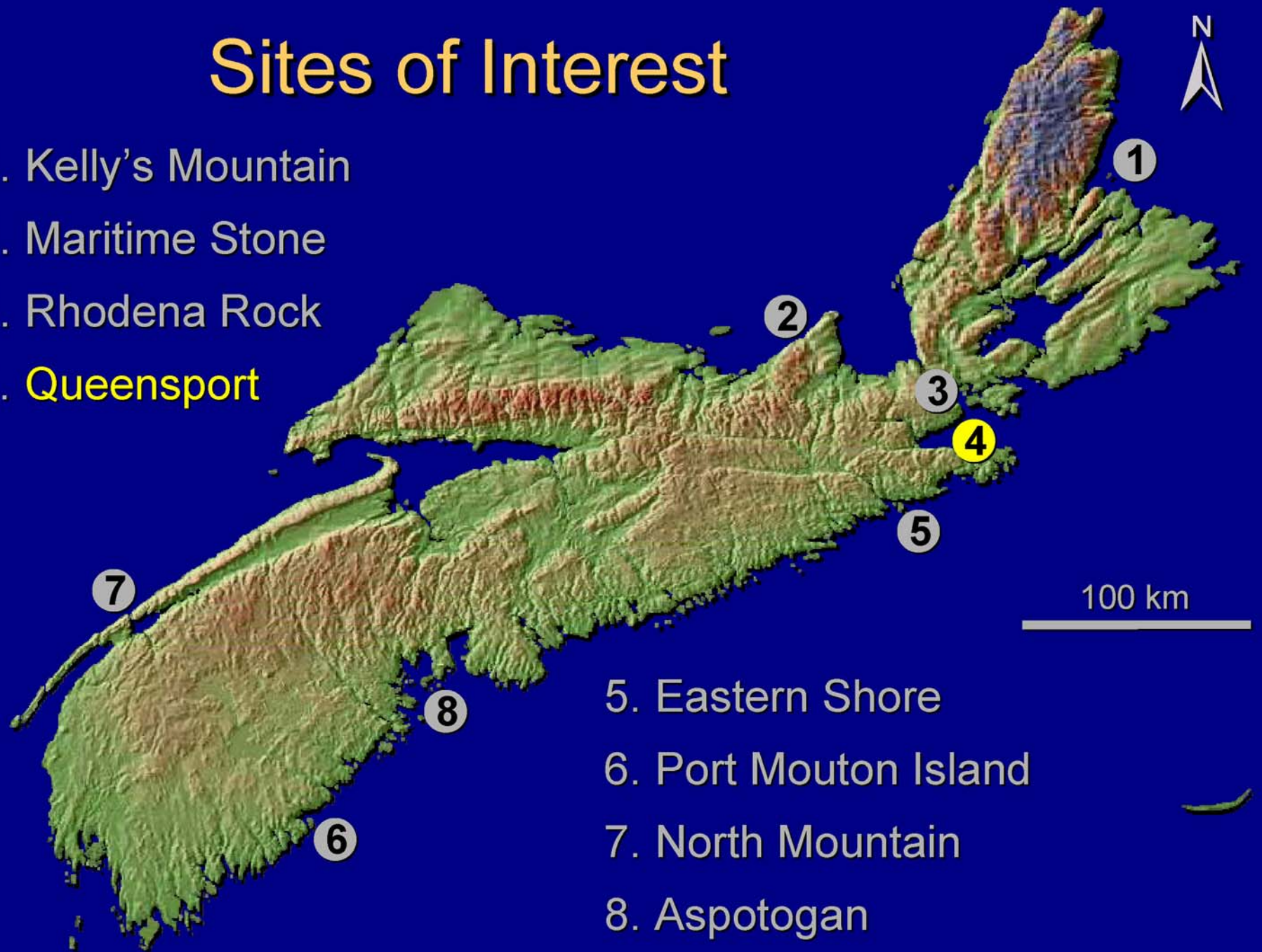


Natural Resources



Sites of Interest

1. Kelly's Mountain
2. Maritime Stone
3. Rhodena Rock
4. Queensport



5. Eastern Shore
6. Port Mouton Island
7. North Mountain
8. Aspotogan

Queensport Shore

(South of Martin Marietta)

- deep water
- no overburden
- unlimited tonnage
- grey granite, LA abrasion in low 20's
- very strong local support

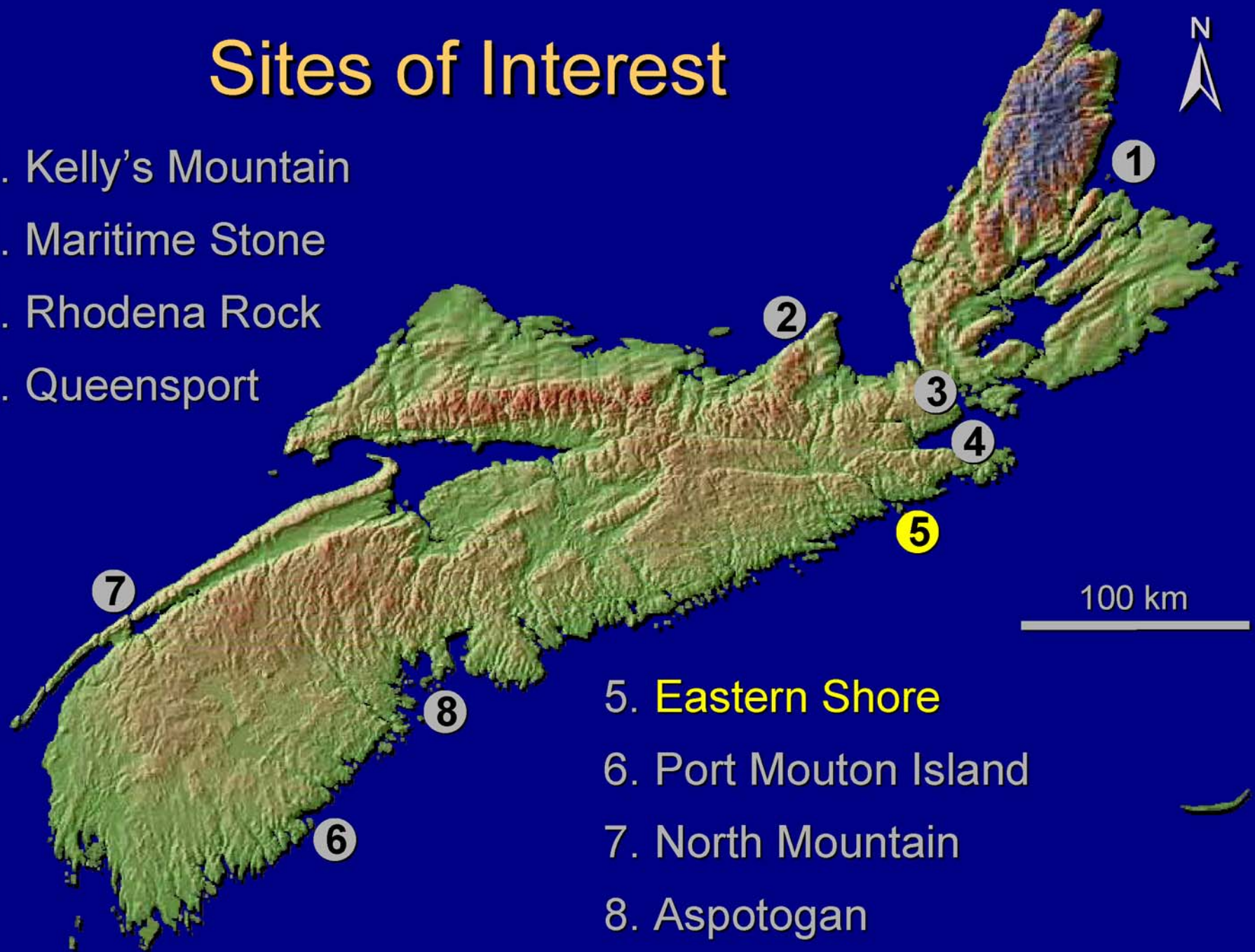


Natural Resources



Sites of Interest

1. Kelly's Mountain
2. Maritime Stone
3. Rhodena Rock
4. Queensport



5. **Eastern Shore**
6. Port Mouton Island
7. North Mountain
8. Aspotogan

Eastern Shore

- grey metasediment
- variety of locations with deep water
- LA abrasion 17 - 20
- alkali reactivity

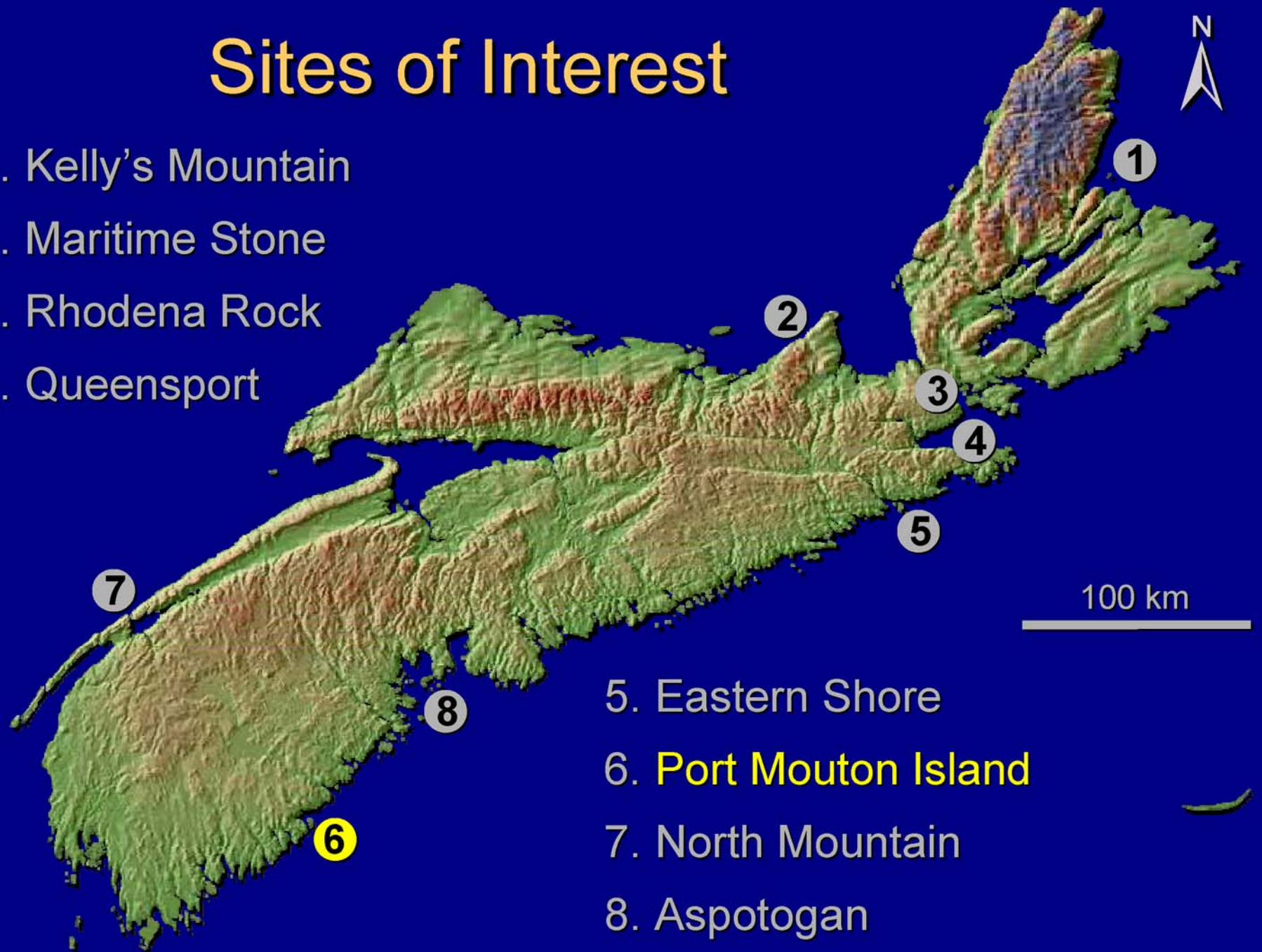


Natural Resources



Sites of Interest

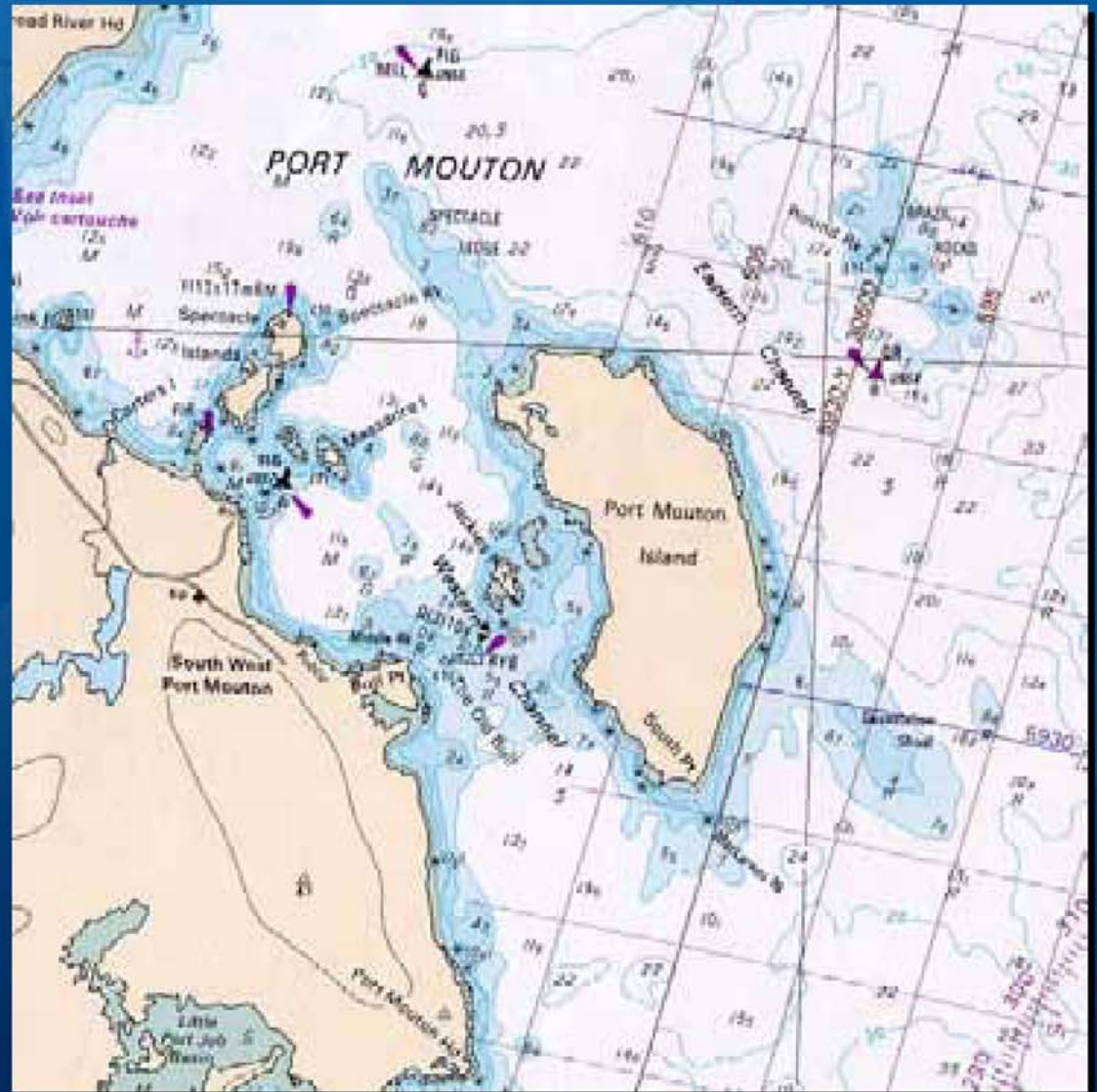
1. Kelly's Mountain
2. Maritime Stone
3. Rhodena Rock
4. Queensport



5. Eastern Shore
6. **Port Mouton Island**
7. North Mountain
8. Aspotogan

Port Mouton Island

- reasonably deep water



Natural Resources

Port Mouton Island

- elevation up to 50 m
- fine grained grey granite
- LA abrasion in mid-20's



Natural Resources



Port Mouton Island

- 100% Swiss owned
- available
- an island?
- beside a Federal Park
- require a different way of thinking



Natural Resources



Port Mouton Island

- closer to US than other sites
- make it a park?

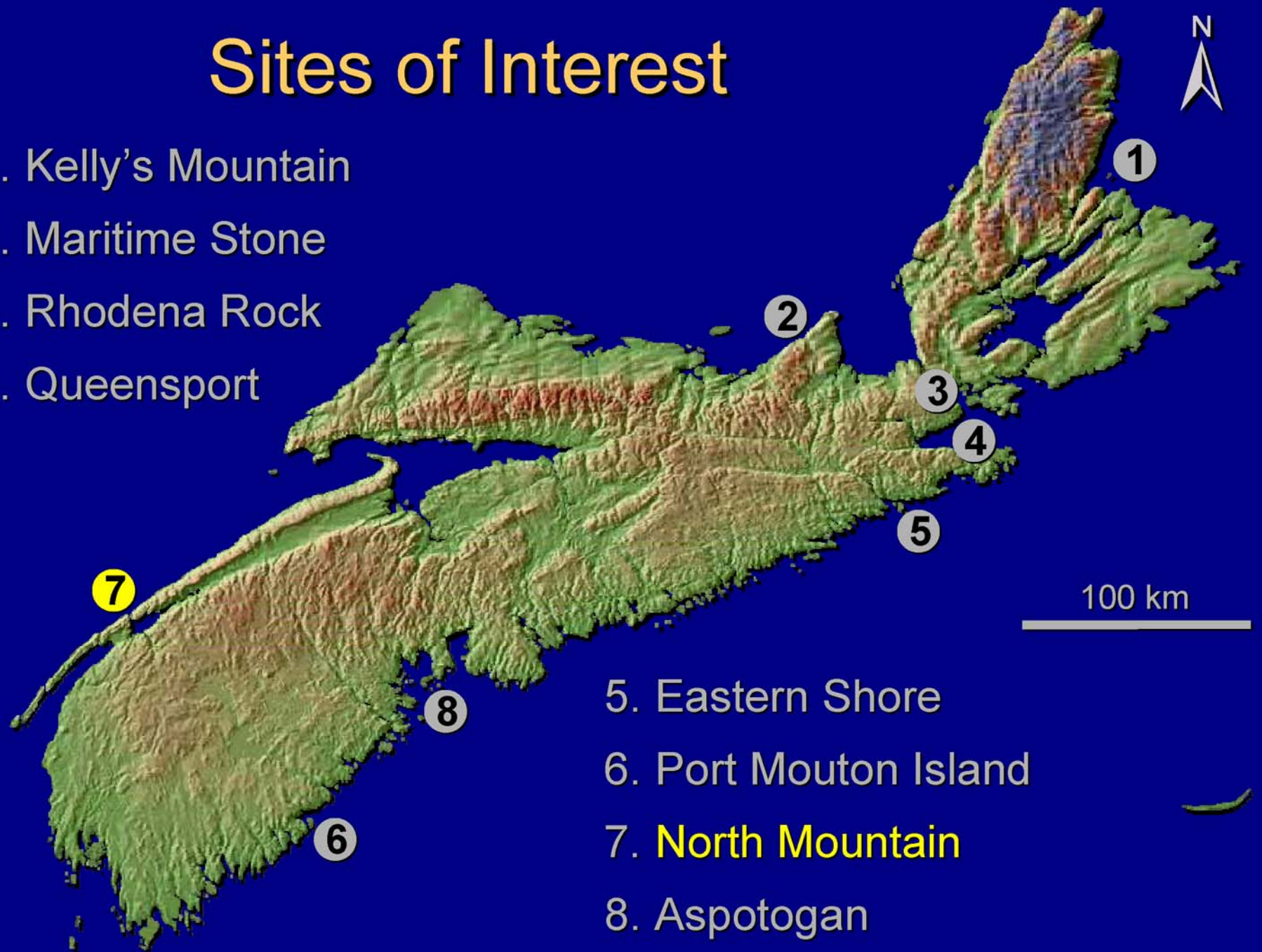


Natural Resources



Sites of Interest

1. Kelly's Mountain
2. Maritime Stone
3. Rhodena Rock
4. Queensport



5. Eastern Shore
6. Port Mouton Island
7. **North Mountain**
8. Aspotogan

North Mountain - Digby Area

- unlimited amounts of trap rock

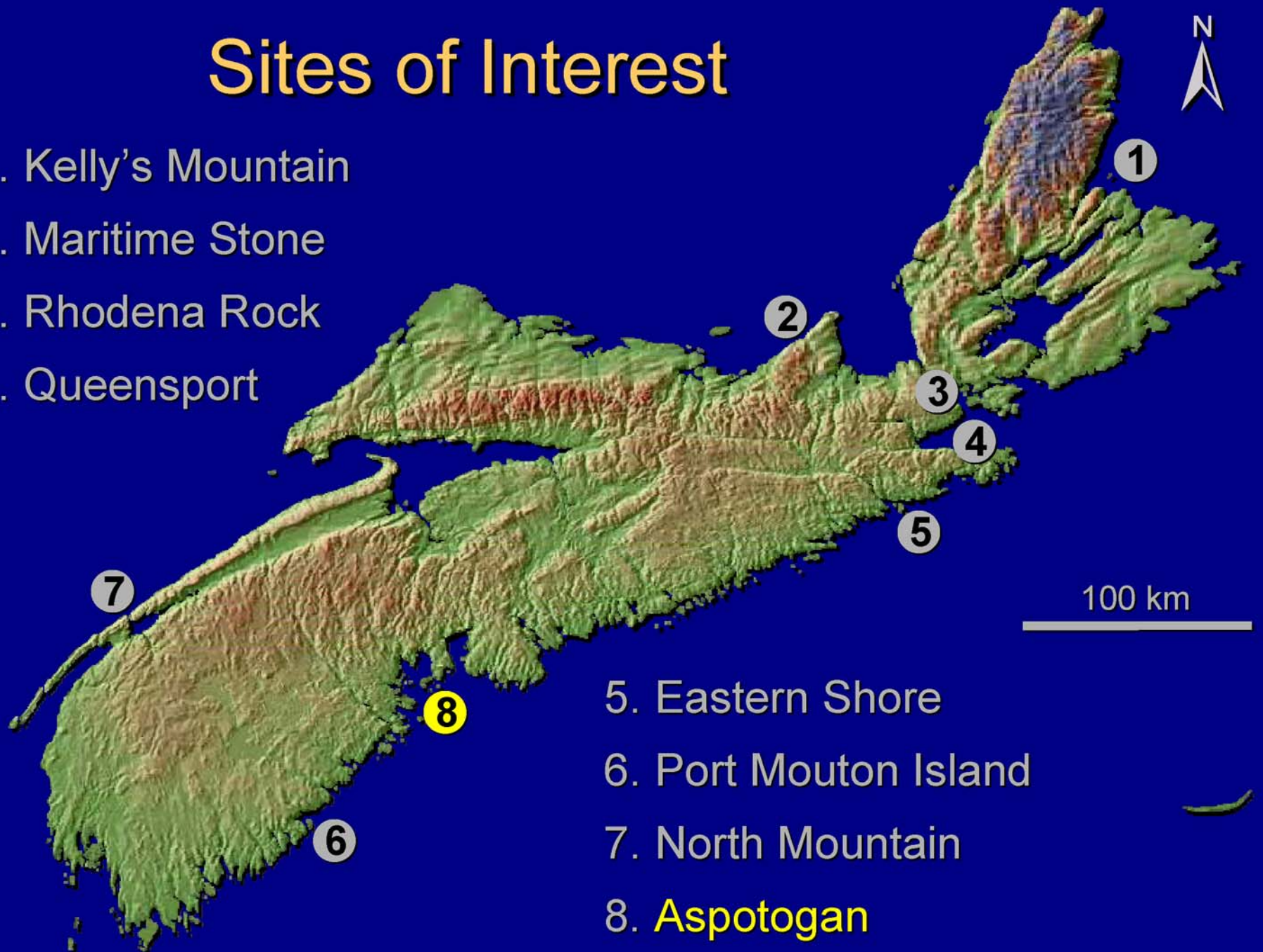


Natural Resources



Sites of Interest

1. Kelly's Mountain
2. Maritime Stone
3. Rhodena Rock
4. Queensport



5. Eastern Shore
6. Port Mouton Island
7. North Mountain
8. **Aspotogan**

Aspotogan - The Lodge

- grey - buff granite
- deep water
- LA abrasion in low 20's
- impossible to permit



Natural Resources



Can you permit a quarry in Nova Scotia?



Black Bull Resources

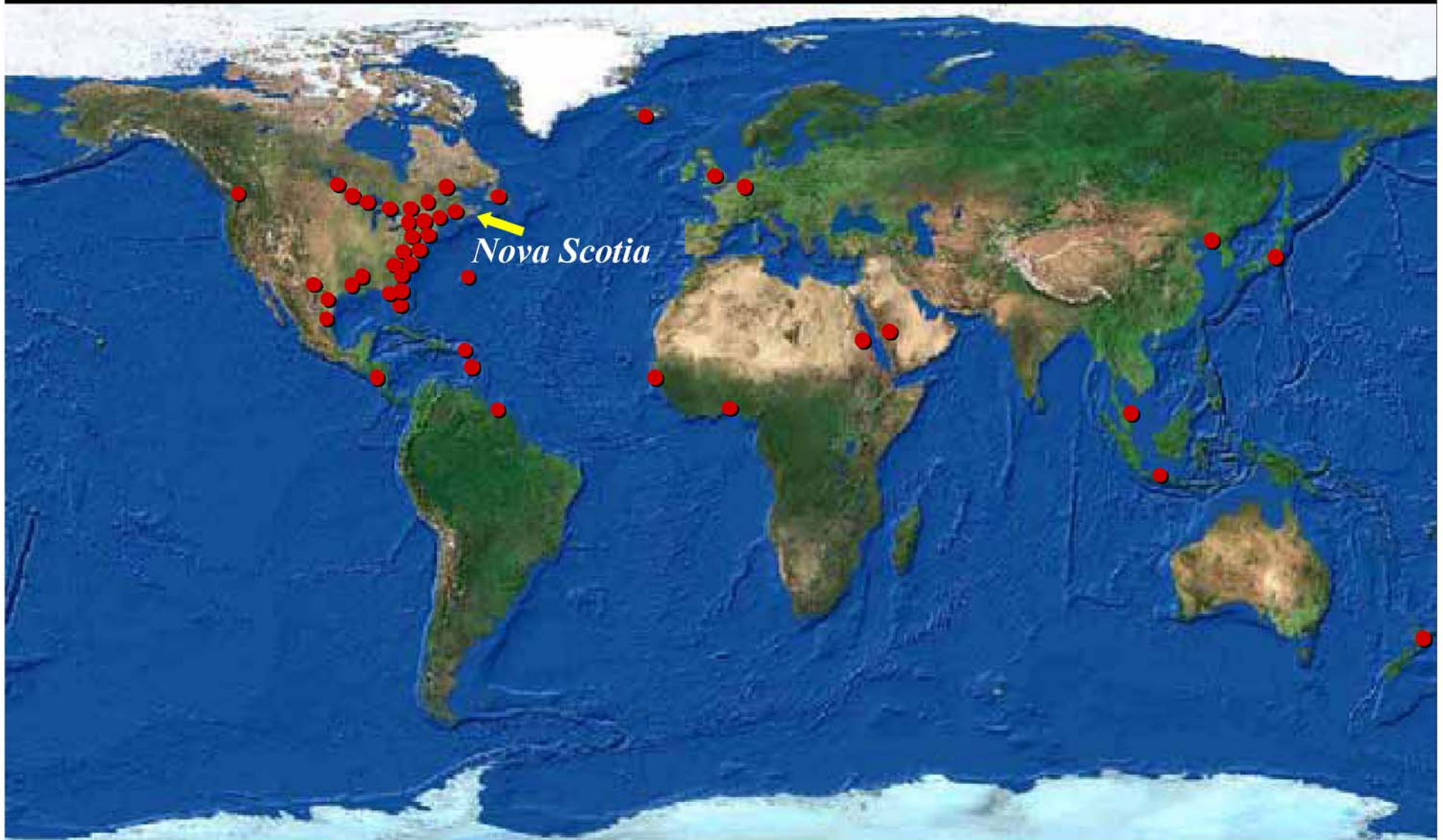
- Silica mine
- 100 m wide zone
- bounded by kaolinized granite
- mining to within 5 m of protected area
- permitted 27 Apr/04



Natural Resources

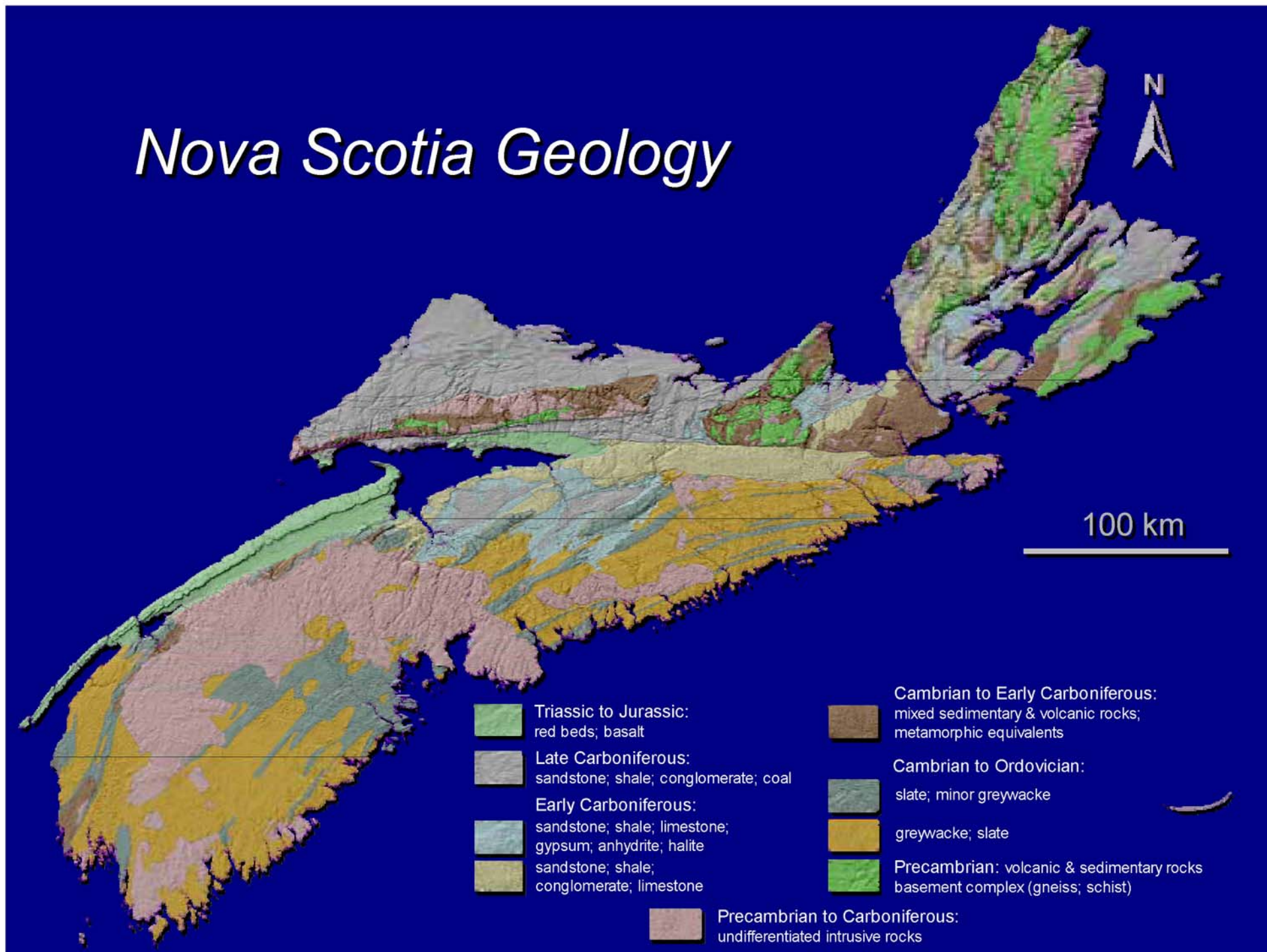


Destinations for Nova Scotia Mineral Products



Deep, Ice-free harbors provide Nova Scotia's mineral products with window on the world.

Nova Scotia Geology



PUBLIC VERSION - APPENDIX C

ADDENDUM TO PART VII: REGULATORY COMPLIANCE

1. The expert report of David Estrin makes clear that if the environmental assessment of the Whites Point Quarry was fairly and reasonably conducted, and did not take improper factors into account, the Quarry would have received environmental approval.¹
2. The Tribunal has already found that “community core values,” the JRP’s sole reason for not recommending approval of the Quarry is outside the scope of both the CEAA and the NSEA.² The environmental assessment of the Whites Point Quarry demonstrated that, with ordinary mitigation measures, the Quarry would be in full compliance with both the CEAA and the NSEA.³ The JRP therefore had no lawful basis to not recommend approval of the Quarry, and was instead lawfully compelled to recommend its approval.⁴ It also especially noteworthy that at no time did any government official advise the JRP that the Quarry ought not to be approved.⁵
3. Mr. Estrin also reviewed a number of comparator projects, which the Tribunal found were relevant in the merits phase of the arbitration, as well as the recent approval of the mega quarry at Black Point, Nova Scotia..⁶ It is obvious that these types of projects always were, and continue to be, routinely approved by both Canada and Nova Scotia.⁷ Indeed, much larger projects like the Blake Point Quarry, which involves the destruction of nearly 3 acres of the ocean floor, and 57 hectares of wetlands, received environmental approval.⁸ In short, as Mr. Estrin

¹ Expert Report of Gowling WLG (David Estrin), dated March 8, 2017, paras. 6, 115, 121 and 131 – 136.

² Expert Report of Gowling WLG (David Estrin), dated March 8, 2017, paras. 116 – 118; Liability Award, paras. 508, 525, 528 and 535.

³ Expert Report of Gowling WLG (David Estrin), dated March 8, 2017, paras. 43 – 48 and Appendix “D.”

⁴ Expert Report of Gowling WLG (David Estrin), dated March 8, 2017, paras. 508, 525, 528 and 535.

⁵ Expert Report of Gowling WLG (David Estrin), dated March 8, 2017, paras. 49 – 54.

⁶ Expert Report of Gowling WLG (David Estrin), dated March 8, 2017, paras. 16 – 18.

⁷ Expert Report of Gowling WLG (David Estrin), dated March 8, 2017, para. 130.

⁸ Expert Report of Gowling WLG (David Estrin), dated March 8, 2017, paras. 92, 95, 127 and 130.

PUBLIC VERSION - APPENDIX C

4. puts it, *"Since at least 2000, Nova Scotia never met a quarry or marine terminal project it did not like and approve."*⁹
5. In the result, the statutory decision makers, the federal Governor in Council and the Nova Scotia Minister of Environment, had no reasonable basis in the circumstances to lawfully deny approval of the Whites Point Quarry. There was no statutory basis to reject the project.¹⁰ They were advised the environmental assessment was flawed, and quarries and marine terminals have always been routinely approved by both governments.¹¹

⁹ Expert Report of Gowling WLG (David Estrin), dated March 8, 2017, para. 33.

¹⁰ See *supra* note 2.

¹¹ Expert Report of Gowling WLG (David Estrin), dated March 8, 2017, paras. 11 and 114 – 115.