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Résumé de l'article

Dans les années 1820, l'essor remarquable du commerce et de l'immigration transatlantiques donna lieu à de nombreux naufrages en Amérique du Nord britannique, où l'absence de phares côtiers dans les régions isolées posait un problème particulier. Des négociations débutèrent en 1826 entre les colonies maritimes, auxquelles s'ajouta le Bas-Canada, et le gouvernement impérial sur les moyens d'éclairer les côtes isolées, et le ministère des Colonies accepta en 1835 de financer la construction de phares sur les îles St. Paul et Scatarie, à l'entrée du golfe du Saint-Laurent, si les colonies finançaient leur entretien. Les trois phares et deux stations de sauvetage qui en résultèrent redéfinirent la sécurité de la navigation comme étant une responsabilité partagée entre les États impériaux et coloniaux dans le monde entier.

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ZACHARY A. TINGLEY AND ELIZABETH MANCKE

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A dramatic increase in transatlantic commerce and immigration during the 1820s resulted in numerous shipwrecks in British North America, with the lack of coastal lighthouses in remote locations a particular problem. Negotiations began in 1826 between the Maritime colonies plus Lower Canada and the imperial government on ways to light remote coasts, and in 1835 the Colonial Office agreed to fund lighthouses on St. Paul and Scatarie islands on the route into the Gulf of St. Lawrence if the colonies funded their maintenance. The resulting three lighthouses and two humane stations redefined navigational safety as a shared responsibility of the imperial and colonial states worldwide.

IN 1831, NEW BRUNSWICK'S "COMMISSIONERS OF SAINT PAUL'S ISLAND LIGHT-HOUSE" had a facility built and staffed "to provide for the relief of those unfortunate persons who may be thrown upon that Island."¹

1 Speech of Lt. Gov. Archibald Campbell to the Legislative Council and Assembly, 19 January 1832, *Journal of the House of Assembly of the Province of New Brunswick (NBAJ)*, 1832 (Fredericton: John Simpson, 1832), p. 2; Address of the House of Assembly to the Lt. Gov., 26 January 1832, *NBAJ*, 1832, p. 15. The name of the island, per the Canadian Geographical Names Database, is St. Paul Island. When we are quoting a 19th-century document, we maintain the spelling in the document, but otherwise use the current official spelling. We would also like to acknowledge the reviewers who carefully read this article and offered thoughtful reviews. We also acknowledge various audiences over the years, both formal and informal, who responded supportively to our sense that lighthouses told us more about early Canadian history than any of us had appreciated.

Zachary A. Tingley and Elizabeth Mancke, "Intercolonial Cooperation and the Building of St. Paul Island and Scatarie Island Lighthouses, 1826-1840," *Acadiensis* 51, no. 2 (Autumn/automne 2022): 60-90.

This public service is unusual because St. Paul Island is part of Nova Scotia, laying 25 kilometers off the northeast tip of Cape Breton and hundreds of kilometers from the nearest New Brunswick port. The island, however, was a navigational hazard for ships entering the Gulf of St. Lawrence, many of which were headed to New Brunswick ports but most of which were headed to Lower Canada. Beginning in 1826, New Brunswick's assembly and lieutenant governor had been reaching out to officials in Nova Scotia, Prince Edward Island, and Lower Canada (Quebec) – other colonies with ports on the Gulf of St. Lawrence – asking them to cooperate to address this shared navigational hazard. Disturbed by delays and the consequences of inaction, New Brunswick built the rescue station to mitigate harm and serve as a beacon. The rescue staff would save victims of shipwrecks, who would otherwise likely perish. Symbolically, the station's construction warned of the growing humanitarian crisis of shipwrecks on the passage into the Gulf of St. Lawrence and functioned as a clarion call for other governments to act. Others eventually responded. In November 1835 the Colonial Office notified New Brunswick, Nova Scotia, Prince Edward Island, and Lower Canada that the imperial government would finance the building of lighthouses on the southern route into the Gulf of St. Lawrence if the colonies would share the costs of their staffing and maintenance, to which they agreed. In 1839, two of three lighthouses were lit, one on St. Paul and another on Scatarie Island, with a second on St. Paul lit in 1840.²

The history of this five-jurisdiction agreement that resulted from intercolonial and transatlantic negotiations touches on a wide range of issues in Canadian, British imperial, and global maritime history. The St. Paul and Scatarie lighthouses were the first imperially financed lighthouses – albeit ones that the British North American colonies, and not the imperial government, paid to staff, provision, and maintain – which inaugurated the British imperial practice of building lighthouses on remote coasts worldwide, a development also undertaken by the French during this same era.³ Costly to build and

2 Letter from Glenelg to Lt. Gov. Campbell, 4 November 1835, *NBAJ*, 1836, pp. 14-15; Letter from Nova Scotia Lighthouse Commissioners to Provincial Secretary, 21 December 1839, T 1/3911, Treasury Board, Long Papers, 1840 papers, bundle 428: Lighthouses of North America, The National Archives (TNA), Kew, UK. All the colonies printed Lord Glenelg's letter in their 1836 assembly journals.

3 Theresa Levitt, "When Lighthouses became Public Goods: The Role of Technological Change," *Technology and Culture*, 61, no. 1 (January 2020): 144-72; Levitt, "The Lighthouse at the End of the World: Illuminating the French and British Empires," *Itinerario* 38, no. 1 (April 2014): 81-102. Levitt discusses the humanitarian issues that were contributing to

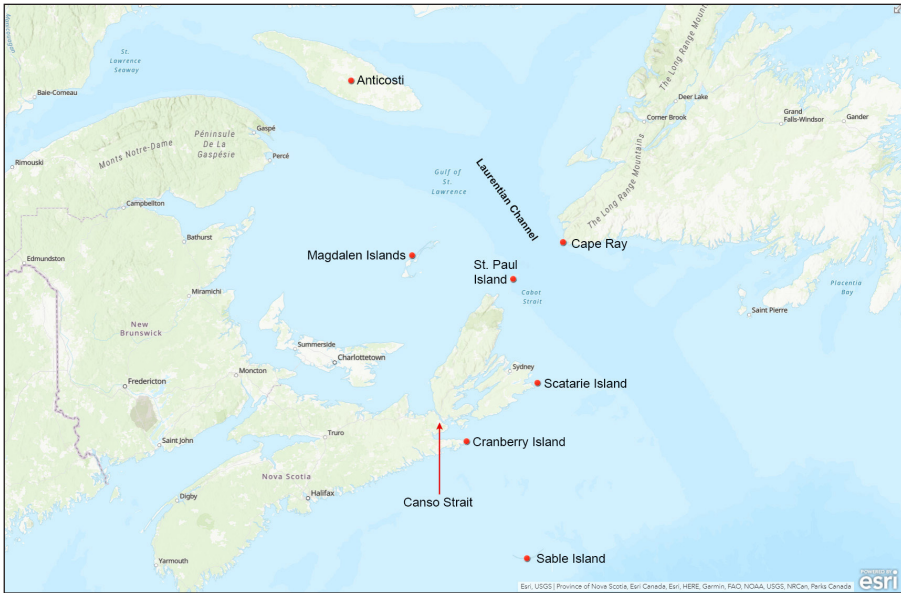


Figure 1 – St. Paul Island sits on the eastern edge of the Scotia Shelf or Bank before it drops down to the Laurentian Channel. Scatarie Island is off the southeast tip of Cape Breton. Sable Island, also discussed in this article, is south of Cape Breton on the southern edge of the Scotia Shelf. The Laurentian Channel is a deep submarine valley that separates two large underwater banks on the continental shelf, the Scotia Shelf or Bank around Nova Scotia and the Grand Bank around Newfoundland. The Laurentian Channel stretches from the Atlantic to the mouth of the St. Lawrence River and runs through the Gulf of St. Lawrence south of Anticosti Island. The Cabot Strait is the passage between Cape Breton and the southwestern tip of Newfoundland. The Strait of Canso is between Cape Breton and peninsular Nova Scotia with Cranberry Island off the Nova Scotia side.

Source: Esri, USGS, Province of Nova Scotia, Esri Canada, Esri, HERE, Garmin, FAO, NOAA, USGS, NRCAN, Parks Canada; the red arrow, dots and altered place names were all added by Stephanie Pettigrew.

maintain, and serving the needs of multiple jurisdictions, these facilities necessitated new kinds of shared governance. These public investments to enhance safe navigation developed in tandem with liberalism and calls for “free” trade, which meant reduced regulations and reduced costs.⁴ Yet in the

French decisions to improve illumination and invest in coastal lights. In 1811, Napoleon created the Commission des Phares, which continued after his defeat at Waterloo in 1815. In 1819 the Commission hired Augustin Fresnel to design a new kind of light that could be seen miles away. By the mid 1820s he had a new design, the Fresnel lens, made of many prisms held together on elaborate metal frames and so that it would refract the light into a single high intensity beam. The French began lighting coastal areas in the empire during the 1830s, first in Algeria.

- 4 A vigorous and ongoing debate over the history of free trade began with John Gallagher and Ronald Robinson, “The Imperialism of Free Trade,” *Economic History Review* 6, no. 1 (1953): 1-15, but this debate requires more consideration of the early modern antecedents – particularly the new “free trade” practices agreed to in the Peace of Utrecht in 1713.

British world, that so-called free trade relied on expensive navigational aids and shipping enhancements that were imperially or colonially funded. Although scholarship on 19th-century imperial free trade is robust, scholarship on navigational safety is comparatively scanty, whether studies of lighthouses, hydrographic charting of the seabed and coastlines, the training of pilots, the siting of buoys to mark safe channels, or the dredging of harbours.⁵

In Canadian history the 1836 intercolonial agreement on the St. Paul Island and Scatarie Island lighthouses was preceded by a decade of persistent colonial advocacy and came three decades before Confederation, the pinnacle of intercolonial cooperation. It touches on a range of largely unexamined issues. Scholarship on intercolonial cooperation before Confederation is negligible, save for the imperially mandated cooperation of the Canadas beginning with their union in 1841. The colonies in the Atlantic region, and New Brunswick in particular, began advocating for joint action on lighthouses in 1826, 15 years before. Second, histories of British North American shipping largely ignore topics concerning colonial financing of navigational safety and shipping infrastructure, from lighthouses to wharves to dredging of harbours to legislation regulating navigational safety.⁶ Yet these under-researched topics touch on related topics, ranging from linkages between maritime and land transportation to immigrant safety. Third, British North Americans used powerful moral arguments to advocate for investments in safe navigation and against the increasingly liberal and fiscally conservative positioning of the imperial government. Indeed, New Brunswickers justified their unilateral erection of a rescue station on another colony's territory on humane grounds. In 1826, the assembly had asked Lt. Gov. Howard Douglas to reach out to other

Our evidence indicates that debates over the moral economy and the liberal economy overlapped, rather than were sequential.

- 5 Ruth McKenzie, ed., "Introduction," in *The St. Lawrence Survey Journals of Captain Henry Wolsey Bayfield, 1829-1853*, 2 vols. (Toronto: Champlain Society, 1984-1986) is one of the few secondary sources for the pre-Confederation era. The primary documents are voluminous and many available on Canadiana Online: <https://www.canadiana.ca/>.
- 6 See the Atlantic Canada Shipping Project, 1976-1982, <https://www.mun.ca/mha/holdings/acsp.php>; Lewis R. Fischer and Eric W. Sager, eds., *The Enterprising Canadians: Entrepreneurs and Economic Development in Eastern Canada, 1820-1914* (St. John's: Memorial University, 1979); Lewis R. Fischer and Gerald Panting, eds., *Change and Adaptation in Maritime History: The North Atlantic Fleets in the Nineteenth Century* (St. John's: Memorial University, 1985); Fischer and Sager, eds., *Merchant Shipping and Economic Development in Atlantic Canada* (St. John's: Memorial University, 1981); Keith Matthews and Gerald Panting, eds., *Ships and Shipbuilding in the North Atlantic Region* (St. John's: Memorial University, 1978); and David Alexander and Rosemary Ommer, eds., *Volumes Not Values: Canadian Sailing Ships and World Trades* (St. John's: Memorial University, 1979).

colonies, noting their “humane motive of preserving our fellow-beings from the horrors of Shipwreck.” In 1835, the assembly deplored the inaction on building coastal lighthouses on the approach into the Gulf of St. Lawrence and “the reproach which necessarily attaches to the North American Colonies, in neglecting so necessary and humane an object.”⁷ These powerful invocations of a moral economy are again understudied in Canadian history and offer a striking qualification to historians’ examinations of the shift to a “liberal order framework” during the 1830s.⁸

This article focuses on the intercolonial and transatlantic negotiations that led to the building of St. Paul Island and Scatarie Island lighthouses and analyzes how British North Americans found ways to mitigate predictable navigational dangers that multiple colonies shared. In our analysis, we draw on the work of Elinor Ostrom and her scholarship on the shared governance of the commons to show how the building of the St. Paul and Scatarie lighthouses engendered a polycentric governing framework to provide the public good of safe navigation.⁹ Polycentric governance involves diverse governing bodies collaborating to provide a public good shared by multiple jurisdictions, to establish rules for a commons, and/or to develop regulations for use of common resources. In our study, the marine commons of the passage into the Gulf of St. Lawrence posed dangers to vessels sailing to ports in diverse jurisdictions.¹⁰ Building the St. Paul and Scatarie lighthouses involved providing public

7 6 February 1826, *NBAJ*, 1826, pp. 34–5; 10 February 1835, *NBAJ*, 1835, p. 355.

8 Ian McKay, “The Liberal Order Framework: A Prospectus for a Reconnaissance of Canadian History,” *Canadian Historical Review* 81, no. 4 (December 2000): 617–45; Michel Ducharme and Constant Jean-François, eds., *Liberalism and Hegemony: Debating the Canadian Liberal Revolution* (Toronto: University of Toronto Press, 2009).

9 Elinor Ostrom, “Beyond Markets and States: Polycentric Governance of Complex Economic Systems,” *American Economic Review* 100, no. 3 (June 2010): 641–72; Ostrom, *Governing the Commons: The Evolution of Institutions for Collective Action* (New York: Cambridge University Press, 1990); Ostrom, “The Institutional Analysis and Development Framework and the Commons Response,” *Cornell Law Review* 95, no. 4 (May 2010): 807–16; Ostrom, “Beyond Markets and States: Polycentric Governance of Complex Economic Systems,” *American Economic Review* 100, no. 3 (June 2010): 641–72; Charlotte Hess and Elinor Ostrom, eds., *Understanding Knowledge as a Commons: From Theory to Practice* (Cambridge, MA: MIT Press, 2007); Keith Carlisle and Rebecca L. Gruby, “Polycentric Systems of Governance: A Theoretical Model for the Commons,” *Policy Studies Journal* 47, no. 4 (November 2019): 921–46.

10 We distinguish between the “marine commons,” which is the natural environment including marine life, and “maritime commons,” which refers specifically to human activities in marine space; see Matthew McKenzie, “Reassembling the Greater Gulf: Northwest Atlantic Environmental History and the Gulf of St. Lawrence System” and Edward MacDonald, “Shell Games: The Marine Commons, Economic Policy, and Oyster Culture in Prince Edward Island, 1865–1928,” in *The Greater Gulf: Essays on the Environmental History of the Gulf of St. Lawrence*, ed. Claire E. Campbell, Edward

facilities (built commons) in remote locations. In the 19th century modernizing societies required a growing range of kinds of infrastructure that were not jurisdictionally specific, and thus required governments, often representing different jurisdictional entities – in this case four colonies and an empire represented by numerous bureaucracies, to collaborate. The recognition of a shared need to provide this infrastructure commons tended to flatten jurisdictional hierarchies and make polycentric governing more egalitarian than were empire and colonies. Our analysis also addresses the polycentric regulation of jurisdictionally shared commons – both the natural commons of marine space and the built commons of the public infrastructure of lighthouses and rescue stations.¹¹ These issues were not specific to British North America, but can be observed throughout the world and thus this study contributes to research on the importance of understanding options for the regulation of the natural commons and the built commons that we share.¹²

The marine imperative of intercolonial co-operation

In February 1832, the New Brunswick House of Assembly allocated £427 to cover the previous summer's expense of constructing a rescue station on St. Paul Island. A sweeping vision of the province's marine landscapes guided the assembly's proactive response to the regional and imperial needs that arose beyond the terrestrial boundaries of the province.¹³ St. Paul Island, in the Cabot Strait between Cape Breton and Newfoundland, lays approximately 250 nautical

MacDonald, and Brian Payne (Montreal and Kingston: McGill-Queen's University Press, 2019), 23, 192–223 for similar usage.

- 11 Ostrom's early work involved public infrastructure for irrigating farms in arid southern California, and thus involved federal infrastructure to move water from the Colorado River to irrigate thousands of acres of private farmland with public water.
- 12 The Stockholm Resilience Center at the University of Stockholm has an excellent website discussing the broad relevance of many of these themes; see <https://www.stockholmresilience.org/>. In another article, we will address how lighthouses in remote places undermine the classic argument in economics that lighthouses are a public good that can be supplied privately just as well as publicly; see R.H. Coase, "The Lighthouse in Economics," *Journal of Law & Economics* 17, no. 2 (October 1974): 357–76, who first explicated this argument. He only considered lighthouses along settled sections of coast in England and not on remote coasts.
- 13 24 February 1832, *NBA*, 1832, p. 78. For a contemporaneous example, in the 1831 session, the assembly began discussing a lighthouse on "the Westernmost [Machias] Seal Island," and on 25 March authorized the allocation of £750 for one on Machias Seal Island, on the southwestern entrance of the Bay of Fundy. By 1833 "the Commissioners of Light Houses in the Bay of Fundy" had the lighthouse built and staffed; see Minutes from 16 February and 25 March 1831, *NBAJ*, 1831, pp. 27, 138 and Minutes from 15 February 1833, *NBAJ*, 1833, pp. 42–3. To this day, the territorial ownership of Machias Seal Island is contested between Canada and the United States.

miles (or 500 kilometres) from the nearest New Brunswick port. Yet the New Brunswick assembly, supported by the lieutenant governor, understood the island as within the marine space over which it had a governance obligation, even if it did not have territorial jurisdiction, and used morally charged language to insist that it – and other colonial governments – were obliged to protect mariners and passengers headed to and from ports in the Gulf of St. Lawrence. Reflecting on the stalled initiative for intercolonial cooperation, the lighthouse committee noted that a “longer delay would be attended to with a repetition of the disastrous consequences so greatly felt heretofore . . . on an island so fatal to navigation and the lives of shipwrecked mariners.”¹⁴ Vessels heading to ports along the Northumberland Strait coast of the three Maritime colonies or to Lower Canadian ports put themselves in danger when passing by St. Paul Island. The other routes to enter the Gulf were through the Strait of Canso, with its own hazards, or to sail north around Newfoundland and through the Strait of Belle Isle, which frequently had icebergs in it and was not an option for most mariners.¹⁵ For the assembly in Fredericton, St. Paul Island was an unnecessarily dangerous part of New Brunswick’s marine landscape.

Geographically, New Brunswick is the only Maritime province that is truly both maritime and continental; Prince Edward Island is an island, and Nova Scotia is connected to the continent at the narrow Isthmus of Chignecto. New Brunswick, in contrast, has long land borders with Quebec and Maine. It critically linked the maritime and riverine transportation systems of post-1783 British North America and facilitated the year-round intercolonial movement of mail and goods along the Wolastoq/St. John River. During the 18th and 19th centuries, year-round express communications between military officials in Halifax and the governor general in Quebec was on the “Great Road of Communication” via the Wolastoq/St. John River; during the winter, it was the only viable route into the Canadas.¹⁶ To reach the river, travelers first had to safely navigate up the Bay of Fundy, one of the more challenging bodies of water in the world, to the port city of Saint John. New Brunswick’s distinctive geographical position, therefore, made intercolonial cooperation a governmental imperative and not an option.

14 16 February 1830, *NBAJ*, 1830, p. 74.

15 For a discussion of the challenges of navigation in the Gulf of St. Lawrence, see Normand Lafreniere, *Lightkeeping on the St. Lawrence: The End of an Era* (Toronto: Dundurn Press, 1996), 11–24.

16 W.E. Campbell, *The Road to Canada: The Grand Communications Route from Saint John to Quebec* (Fredericton: Goose Lane Editions, 2005).

From its earliest sittings, the New Brunswick assembly prioritized navigational safety. Lighthouse commissioners, first appointed in 1788 to oversee the building of Partridge Island lighthouse in the Saint John Harbour (activated in 1792), became a consistent part of the province's bureaucracy.¹⁷ The French Revolutionary (1792-1802) and Napoleonic (1803-1815) wars discouraged the building of discretionary marine infrastructure, though in 1809, Nova Scotia and New Brunswick activated the Brier Island lighthouse off the southwest corner of Nova Scotia and on the passage into the Bay of Fundy, jointly financing its building and operation.¹⁸ With the arrival of peace in 1815, the assembly began considering new infrastructure projects, including lighthouses, but high initial costs and petitions for lights on both the Bay of Fundy and the Northumberland Strait complicated decisions. By the 1820s, however, burgeoning trade and immigration necessitated an increase in investments in navigational safety.

In early 1826, two initiatives for intercolonial cooperation on lighthouses intersected. On 6 February, the New Brunswick assembly resolved to ask Lt. Gov. Howard Douglas to write the governor general in Quebec about the need for lights on "the uninhabited parts of the extensive Coasts, bordering on the Gulf of St. Lawrence." The resolution's preamble noted the "importance of maintaining Light-Houses in proper situations, upon the Coasts of Commercial Countries," but that such establishments had "been too long neglected by the British North American Colonies (Nova Scotia excepted)" and that it had resulted in people "prematurely consigned to a watery grave" or, "having escaped from the vessels in which they have been wrecked," dying on "the shores of the uninhabited parts of the extensive Coasts." Within a day Douglas

17 Partridge Island was included in the charter of Saint John, but the assembly insisted that the lighthouse be provincial; see Thomas Carleton, *The Charter of the City of Saint John in the Province of New-Brunswick* (Saint John, NB: William Durant & Co., 1811), p. 21; 28 George III – Chapter 4, "An Act to provide for the Support of a Light House, to be built upon Partridge Island," in *Acts of the General Assembly of His Majesty's Province of New-Brunswick passed in the year 1788 (Acts NB)* (Saint John, NB: J. Ryan, 1788), pp. 165-6; and Minutes, 24 July 1788, *NBAJ*, 1788, p. 112. All legislation is available on the open-source British North American Legislative Database, <https://bnald.lib.unb.ca/>.

18 Nova Scotia first asked for New Brunswick's support for the Brier Island lighthouse in 1803, to which the assembly agreed and began providing regular funding for it in 1807 and Nova Scotia activated the lighthouse in 1809; see Minutes from 14 February and 9 March 1803, *NBAJ*, 1803, pp. 9, 25; 47 George III – Chapter 14, "An Act to Appropriate the Public Revenue," *Acts NB*, 1807, p. 26; "List of Light Houses on the Coasts of Nova Scotia and Cape Breton, 27th June 1835," T 1/3911, 1835, TNA. Nova Scotia also built a lighthouse on Coffin Island off Liverpool in 1812; see "List of Light Houses on the Coasts of Nova Scotia and Cape Breton, 27th June 1835," T 1/3911, 1835, TNA.

responded to the assembly's resolution, reporting back on communications with the governor general and the lieutenant governors of Nova Scotia and Prince Edward Island regarding joint building of lighthouses as well as "an alteration in the mode of collecting duties on vessels passing Cranberry Island in the Gut of Canso" – one of three routes into the Gulf of St. Lawrence.¹⁹

In 1822, Nova Scotia activated the Cranberry Island lighthouse on the Atlantic edge of Chedabucto Bay leading into the Strait of Canso. For residents of Prince Edward Island, the strait was the shortest route between the Gulf of St. Lawrence and the Atlantic. The Nova Scotia assembly set the light duties at 4d (pence) per ton for provincial vessels, 6d per ton for non-provincial vessels, and 20s (shilling) per year for Nova Scotia-owned coasting vessels. Light duties on the vessels of Islanders were all collected at 6d per ton, with no annual maximum and no distinction between ocean-going vessels that might pass the lighthouse two times a year and coasting vessels that might pass it multiple times.²⁰ In 1825 the Prince Edward Island assembly discussed three years of grievances against Nova Scotia's management of Cranberry Island Lighthouse and passed ten resolutions detailing its concerns: the light duties were "an illegal exaction on property," were "excessive," and were higher than "light dues throughout the British and Irish Channels." The PEI assembly contended that the Gut of Canso should "of right [be] free and open to all his Majesty's subjects for the purpose of Navigation, without tax or impediment." In the ninth resolution, the assembly requested that Prince Edward Island's lieutenant governor contact Nova Scotia's lieutenant governor to negotiate a solution. Should those negotiations prove unsatisfactory, the tenth resolution asked the lieutenant governor to contact New Brunswick's lieutenant governor for support, which he did.²¹

In principle, New Brunswick supported light duties. A 1788 statute allowed for collecting light duties in Saint John harbour to finance the Partridge Island lighthouse; a 1793 amendment clarified the definition of coasting vessels. Initially, New Brunswick vessels paid 2d per ton and out-of-province vessels 4d per ton, but, in 1823, the assembly replaced the 1788 statute so that duties would

19 Minutes, 6, 7, and 8 February 1826, *NBAJ*, 1826, pp. 34–5, 38, 40 (quotations on 35 and 40).

20 3 Geo. IV, Ch. 25, "An Act to provide for the support of a Light-House erected on Cranberry Island, near the entrance of the Gut of Canso," in *The Statutes at Large, Passed in the Several General Assemblies held in His Majesty's Province of Nova-Scotia: from the Year 1817, to the Year 1826, Inclusive* (Halifax: John Howe and Son, 1827), 131–3.

21 Minutes, 27 February 1825, *Journal of the House of Assembly of His Majesty's Island Prince Edward*, 1825 (Charlottetown: James Douglas Haszard, 1825), pp. 23–4.

“be equalized upon all Vessels, whether belonging to the Port of Saint John, or any other place, British or Foreign,” making the light duty in Saint John 3d per ton for all large vessels and 10s per year for coasting vessels – a significant public statement about the need for intercolonial cooperation and equity. When Lt. Gov. Douglas approached the New Brunswick assembly with Prince Edward Island’s concerns, the assembly would not support the contention that light duties were illegal; but its own legislation clearly signalled that colonial lighthouses should be maintained with an equitable system of fees.²² In the assembly’s act to assure equitable light duties regardless of a vessel’s home port, we can see an awareness that regulations pertaining to marine space would require principles distinct from those applying to terrestrial space.

Nova Scotia’s practices for collecting light duties were susceptible to abuse, particularly at relatively remote lighthouses. Initially, Nova Scotia collected light duties for Sambro Island lighthouse at the entrance to Halifax Harbour (1758) and Shelburne Harbour lighthouse (1788) when ships departed and not when they arrived as was more customary. To address ships leaving without paying their light duties, the Nova Scotia assembly passed legislation in 1793 for the lieutenant governor “to appointment fit and proper persons Collectors of the said duties in the several ports, harbours, creeks and rivers in this Province” with the power “to seize and take such ship or vessel . . . and carry the same to the port nearest,” anywhere on the coast “southward and westward of Cape Canso.” The captured vessel would be turned over to a custom’s official and a five-pound fine, the light duty, and “all reasonable expenses” exacted. Two years later, the assembly mandated that light duties be collected when vessels arrived in Halifax or Shelburne; but the 1793 legislation remained active and applied to the collection of duties for the Cranberry Island lighthouse where there was no large harbour at which duties could be collected.²³ Instead,

22 28 George III – Chapter 4, “An Act to provide for the Support of a Light House, to be built upon Partridge Island,” *Acts NB, 1788*, pp. 165–6; 33 George III – Chapter 4, “An Act to Explain and Amend an Act intituled ‘An Act to provide for the Support of a Lighthouse to be built upon Partridge Island,’” *Acts NB, 1793*, p. 272; 4 George IV – Chapter 26, “An Act to alter and amend an Act intituled An Act to provide for the support of a Light-House to be built on Partridge Island,” *Acts NB, 1823*, pp. 41–3.

23 33 George II – Chapter 2 (Session 1), “An Act for regulating and maintaining a Light-House on Sambro Island”; 28 George III – Chapter 3, “An Act for Regulating and Maintaining a Light House at the Entrance of the Harbour of Shelburne”; 33 George III – Chapter 16, “An Act in amendment of, and in addition to, an Act, made in the Thirty-third year of the reign of His late Majesty, entitled, ‘An Act for regulating and maintaining a Light-House on Sambro Island,’ and in addition to, and amendment of an Act, passed in the Twenty-eighth year of His present Majesty’s reign, entitled, ‘An Act for regulating and maintaining

collectors could stop vessels anywhere and demand the light duties. A Nova Scotia legislative committee reported “that Ships, Foreign, Domestic, and European, passing through the Gut of Canso, have been much harassed.” Collectors would board vessels, and if the master had no cash for light duties the collector would impound a vessel’s equipment, such as sails, needed for transatlantic voyages. Shipping expenses were often handled on credit, and ship “masters being unprovided with Money have been frequently forced to give orders on individuals, many of which remain unpaid.” Not only did the collection process create intercolonial tensions, the committee reported that “the expenses of collection swallow up every thing – little or nothing goes to the general fund.” It recommended that the assembly accept the recommendation of the lieutenant governors of New Brunswick and Prince Edward Island, Howard Douglas and John Ready respectively, that each colony contribute a set amount and that vessels only pay light duties “at their respective Ports of destination.”²⁴

On 8 February 1826, Lt. Gov. Douglas reported to the New Brunswick assembly that he and Lt. Gov. Ready advised Nova Scotia to alter “the mode of collecting duties on vessels passing Cranberry Island.” The assembly agreed to provide a lump sum, determined by Douglas at £120 annually, “towards the support of the Light-House on Cranberry Island.” Sharing the financing of this lighthouse complemented its larger objective to improve navigational safety through intercolonial cooperation. By that date the assembly understood that not all lighthouses could be funded through light duties, but instead needed assembly appropriations and intercolonial cooperation. New Brunswickers, however, did not anticipate that once the colonies agreed on a mechanism for financing the Cranberry Island lighthouse their initiatives to build other lighthouses would stall for a decade. At the same time, it became clear that Nova Scotians did not fully appreciate the differential and collaborative financing of lighthouses. Nova Scotia collectors stopped at least one New Brunswick vessel for Cranberry Island light duties, prompting New Brunswick to shift resources into the rescue station on St. Paul Island, suspend payments for Cranberry Island (though they continued joint support for Brier Island),

a Light House at the entrance of the Harbour of Shelburne”; see British North America Legislative Database, <https://bnald.lib.unb.ca/>.

24 28 February 1826, *Journal and Proceeding of the House of Assembly of Nova Scotia, 1826* (Halifax: s.n., 1826), p. 578.

and increase the moral pressure for other colonies to cooperate on investing in safe navigation into the Gulf of St. Lawrence.²⁵

The Cranberry Island lighthouse played a critical role in the early development of polycentric governance for safe navigation in British North America. The politics that played out set three colonial governments on a path of intercolonial dialogue that was unlike anything that had come before. Bilateral colonial agreements, such as for the Brier Island lighthouse, would not address the challenges that passage into the Gulf of St. Lawrence posed. As the governments of New Brunswick, Prince Edward Island, and Nova Scotia came to terms with the magnitude of the challenge in the Gulf, New Brunswick led the way as it supported Prince Edward Island with calls for regional management of common responsibilities. Central to this dialogue was the moral language that had been integrated into the political discourse of New Brunswick after the construction of a rescue station at St. Paul's Island: mitigating known and predictable dangers was an obligation of government.

The technological imperatives of Maritime co-operation

In the century after the Napoleonic Wars (1803-1815), more than 12 million people from Britain and Ireland left for British settler colonies in North America, the Antipodes, and Southern Africa or for the United States – a movement of people that dwarfed the approximately 1.2 million who had left in the prior two centuries.²⁶ In absolute numbers, the sheer scale of migration meant more ships on the high seas and more shipwrecks and, in turn, pressure for enhanced navigational safety. Over the early modern era (ca. 1500-1800), European governments undertook diverse initiatives to improve maritime travel, from the decades-long search to find a practical way to measure longitude to dietary requirements to keep mariners healthy on long voyages to large government projects to chart coastlines.²⁷

25 8 and 13 February 1826, *NBAJ*, 1826, pp. 40, 56; 15 March 1827, *NBAJ*, 1827, p. 106; 28 March 1828, *NBAJ*, 1828, p. 122; 31 December 1828, *NBAJ*, 1829, pp. 34-5; 16 January 1830, *NBAJ*, 1830, p. 10; 24 and 25 March 1831, *NBAJ*, 1831, pp. 130-1, 138.

26 James Belich, *Replenishing the Earth: The Settler Revolution and the Rise of the Anglo-World, 1783-1939* (Oxford: Oxford University Press, 2009), 58, 73-4n42; James Horn and Philip D. Morgan, "Settlers and Slaves: European and African Migrations to Early Modern British America," in *The Creation of the British Atlantic World: Anglo-America in the Transatlantic World*, ed. Elizabeth Mancke and Carole Shammas (Baltimore: Johns Hopkins University Press, 2005), 22.

27 William J.H. Andrewes, ed., *The Quest for Longitude: The Proceedings of the Longitude Symposium, Harvard University, Cambridge, Massachusetts, November 4-6, 1993* (Cambridge, MA: Collection of Historical Scientific Instruments, Harvard University, 1996);

In North America, colonists financed lighthouses.²⁸ Nova Scotia's first assembly in 1758 appropriated £1,000 to build a lighthouse on Sambro Island in the entrance to Halifax Harbour, and the next year authorized the collection of light duties for its maintenance. After Loyalists settled Shelburne, the Nova Scotia assembly allocated £500 in 1786 and 1788 to build a lighthouse on Port Roseway.²⁹ During those same years, New Brunswick built its first lighthouse on Partridge Island at the entrance into Saint John Harbour. The pressing navigational challenge for Quebec/Lower Canada was safe passage on the St. Lawrence River. In 1788, the executive council approved an ordinance requiring ships to hire a pilot at Île du Bic when sailing up the river, or in Quebec when sailing down river. In 1805 Lower Canada institutionalized navigational safety by creating a Quebec Trinity House, modeled on the English corporation chartered as a mariners' charity in 1514. From licensing pilots to placing buoys to mark shipping lanes, Trinity House in England slowly assumed oversight, if not ownership, of diverse array of navigational concerns, including lighthouses, building its first one in 1609.³⁰

During the first decade of the 19th century, British North Americans began addressing safety on remote parts of their marine landscapes and not just on the harbours settled by colonists. In 1801, Nova Scotia built and staffed a rescue station on Sable Island, which had long been a shipping hazard for vessels heading to and from Europe. As well, building coastal lighthouses to mark dangerous sections of sparsely settled coasts, as distinct from harbour

J. Watt, E.J. Freeman, and W.F. Bynum, eds., *Starving Sailors: The Influence of Nutrition Upon Naval and Maritime History* (London: National Maritime Museum, 1981); Stephen J. Hornsby, *Surveyors of Empire: Samuel Holland, J.W.F. Des Barres, and the Making of the Atlantic Neptune* (Montreal and Kingston: McGill-Queen's University Press, 2011).

28 Eric Jay Dolin, *Brilliant Beacons: A History of the American Lighthouse* (New York: Liveright Publishing, 2016), 1-31.

29 32 George II – Chapter 8, "An Act for erecting a Lighthouse at the Entrance of the Harbour of Halifax"; 33 George II – Chapter 2 (Session 1), "An Act for Regulating and Maintaining a Light-House on Sambro Island"; 28 George III – Chapter 3, "An Act for Regulating and Maintaining a Light House at the Entrance of the Harbour of Shelburne"; 26 George III – Chapter 8, "An Act for Applying Certain Monies therein Mentioned, for the Services of the Year One Thousand Seven Hundred and Eighty Seven, and for Appropriating the Supplies Granted in this Session of General Assembly," all at <https://bnald.lib.unb.ca/>.

30 45 George III – Chapter 12, "An Act for the Better Regulation of Pilots and Shipping in the Port of Quebec, and in the Harbours of Quebec and Montreal, and for Improving the Navigation of the River Saint Lawrence, and for Establishing a Fund for Decayed Pilots, their Widows and Children" (25th March, 1805), in *Provincial Statutes of Lower-Canada, Being the First Session of the Fourth Provincial Parliament of Lower-Canada* (Quebec: P.E. Desbarats, 1805), pp. 68-94; G.G. Harris, *The Trinity House of Deptford, 1514-1660* (London: Athlone Press, 1969).

lighthouses at the entrances to major ports, emerged as a new priority. In the southeastern waters of the Bay of Fundy, Nova Scotia and New Brunswick jointly financed the Brier Island lighthouse, which was activated in 1809. That same year Lower Canada activated a lighthouse on Île-Verte on the lower St. Lawrence River, marking a major hazard on the route to Quebec and signalling hazards to mariners as they sailed up a narrowing river. Building and maintaining these remote coastal lighthouses posed new challenges: some geographical, some technological, and some jurisdictional.³¹

Geographically, coastal lighthouses were often sited on remote islands, promontories, or headlands – typically far from a safe anchorage and a settled harbour. Unlike harbour lights that guided mariners to port, coastal lights warned mariners to stay out at sea away from treacherous shores. These expensive establishments were difficult to construct and required careful management to assure that the people who lived and worked at them were adequately supplied with provisions, stores, and increasingly life-saving provisions and equipment in the event of wrecks; hiring vessels and crews to make regular resupply trips became part of lighthouse and rescue station maintenance. As well, remoteness made collection of light duties difficult if not impossible. Most coastal lights were not associated with a particular port of call, but instead served ships sailing through dangerous waters and headed to distant ports. The intercolonial negotiations in the 1820s over the financing for the Cranberry Island lighthouse, whether through collection of light duties or an agreed-upon contribution by colonial governments, was largely because it was a remote coastal lighthouse and not a harbour lighthouse, and few precedents existed for how best to pay for their maintenance.

Coastal lights also posed technological challenges: they needed powerful lights that were visible far out at sea to warn mariners away from dangerous shores, and those lights were sited at locations needing sophisticated engineering to access and build. During the 18th century skilled glassmakers and scientists experimented with new ways of refracting and reflecting light, using prisms and mirrors to enhance illumination. In 1811 Napoleon established the French Commission des phares and hired scientists to work on illumination, especially on how to make lights visible from further away. By 1820, a young French scientist, Augustin-Jean Fresnel, had created a superior light with dozens of carefully mounted prisms, rather than reflectors, that

31 Dunn Gardner, *Lighthouses (Colonies)* (London: House of Commons, 1847), 2, 4.

would refract and thereby compound the light. By comparison with older lights, these new ones were expensive and some came with mountings that allowed them to rotate adding yet another major expense. The growing sophistication of illumination also allowed for differentiation among lights, so that within a few years mariners would carry manuals describing the height of lights, whether they rotated or were stationary, and the timing of their flashes.³²

These geographical and technological challenges meant coastal lights posed new jurisdictional quandaries: they were expensive to build, requiring costly technology and engineering expertise; they were remote and needed assured delivery of supplies so that the staff and their families could survive; and the ports of call that benefitted from coastal lighthouses were often distant and in another jurisdiction from the actual location of the lighthouse. Nova Scotia, New Brunswick, and Prince Edward Island had already begun to adjust to some of these challenges. Two of the first coastal lights in British North America involved intercolonial cooperation: Brier Island in the Bay of Fundy and Cranberry Island near the Atlantic edge of Chedabucto Bay. While the colonies agreed to workable forms of collaboration for these two establishments, agreeing on how to build and maintain a lighthouse on St. Paul Island was far more difficult. The island was relatively distant from any sizeable port in Nova Scotia; Sydney, Cape Breton was approximately 150 kilometers to the south. The vessels that would benefit from the lighthouse(s) were headed primarily to ports in Lower Canada and New Brunswick, not Nova Scotia, and the establishment would require a staffed and provisioned humane, or rescue, station. How were duties to be collected to support lights on this remote coast? Was another financial mechanism needed? And what was the responsibility of the imperial government?

It took a decade for the British North American colonies and the imperial government to negotiate the jurisdictional and financial challenges that coastal lights posed and to agree on a system of shared governance that we describe as polycentric. From the beginning, New Brunswick advocated for intercolonial cooperation and financing based on proportional utility, while Nova Scotia and Lower Canada more frequently directed their concerns to the imperial government for resolution. The New Brunswick assembly avoided appealing directly to the imperial government until 1836, and only then after it had agreed to pay for lighthouse establishments on St. Paul and Scatarie. The

32 Levitt, "When Lighthouses became Public Goods."

history of these negotiations and the slow convergence towards a polycentric solution captures the challenges of finding interjurisdictional solutions to new infrastructure needs and the marine commons.

Negotiating a marine commons

In 1829 Governor General James Kempt wrote Newfoundland's governor, Thomas Cochrane, to ask that colony to contribute to building lighthouses on Cape Ray, on the island's southwest tip on the Gulf of St. Lawrence, and on St. Paul Island 20 leagues across from Cape Ray, which formed "the narrowest part of the channel leading between to the Gulf of St. Lawrence." The Lower Canadian assembly, Kempt explained, was considering lights on "the East and West Ends of the Island of Anticosti and at Point Des-Montes," which were in Lower Canada, but also thought lights were needed on Cape Ray and St. Paul Island, and that Newfoundland, New Brunswick, and Prince Edward Island should commit to their building and upkeep. Significantly, Kempt did not name Nova Scotia even though St. Paul Island was under its jurisdiction. Cochrane declined and explained that "trifling" few Newfoundland mariners sailed near Cape Ray while 600 vessels per year entered St. John's Harbour on Newfoundland's Atlantic-facing coast, which still lacked a lighthouse. He acknowledged "the great advantage that will arise to the commerce of St. Lawrence" from a lighthouse on Cape Ray, but it would serve the needs of other parts of British North America, not Newfoundland, and thus the costs should not be born by Newfoundlanders.³³

The Kempt-Cochrane correspondence captures the problem of using a terrestrial characteristic – Cape Ray as Newfoundland territory – as a constant rather than a variable factor in addressing navigational safety along sparsely settled coastlines and in a body of water as large and as heavily trafficked as the Gulf of St. Lawrence. The people who most frequently came ashore on the Gulf coasts of Newfoundland were French and American fishers, and their financial contributions to navigational safety were negligible. Ships sailing past Cape Ray to ports in Lower Canada and New Brunswick or eastward back into the Atlantic would derive far more advantage from a lighthouse there than would year-round British subjects residing in Newfoundland who lived overwhelmingly on Atlantic-facing coasts; lighting the Gulf littoral would not benefit them. In negotiating how best to finance navigational infrastructure,

33 James Kempt to Thomas Cochrane, 25 March 1829 and Thomas Cochrane to George Murray, Colonial Office, 3 May 1829, T 1/3911, 1838 & 1829 papers, TNA.

terrestrial jurisdiction became a variable, not a constant, to be weighed against other variables, such as who benefitted. In 1838 the Colonial Office in London, Trinity House in Deptford, England, the Admiralty, and the Newfoundland government again conferred on whether a lighthouse should be built on Cape Ray at the same time the St. Paul lighthouses were being built but decided against it. In the 1870s the Dominion of Canada agreed to contribute to an imperially financed lighthouse at Cape Ray, a recognition of the benefits accruing to Canadians and the empire. But even within a single imperial system, negotiations could take years; it took over four decades, for instance, to get a lighthouse at Cape Ray largely because the vast majority of beneficiaries of this lighthouse would never stop in Newfoundland.³⁴

One of the earliest transatlantic (as distinct from intercolonial) interventions in sharing the costs of navigational safety came in 1825 from Lt. Gov. James Kempt of Nova Scotia (1820-1828), when he wrote the Colonial Office concerning support for the Sable Island rescue station – the first in British North America. A sliver of sand approximately 43 kilometers long and only 1.2 kilometers at its widest point, Sable Island lays 170 kilometers southeast of Nova Scotia and was a notorious shipping hazard on the route between North America and Europe. In 1801, Nova Scotia inaugurated the rescue station and kept it stockpiled with provisions to feed 300 people for up to six months at a cost of approximately £400 per year. The primary beneficiaries were British subjects from other jurisdictions or foreigners, especially Americans, and not Nova Scotians. The station, Kempt opined, should “be considered a fit subject for the protection of His Majesty’s Government.” Kempt’s advocacy persuaded the imperial Treasury to support the station at £400 per year if Nova Scotia contributed an equivalent amount, an arrangement honoured until 1832, when the Treasury began reviewing all colonial funding commitments and cancelled it. The Sable Island rescue station is another case when territorial jurisdiction was challenged as the primary variable for assessing financial responsibility.³⁵ A decade later imperial officials could finally articulate the logic of why the British Treasury should help finance remote marine establishments. As Lord Glenelg noted in 1835 when he informed the colonies of the Treasury’s decision to fund the building of lighthouses on St. Paul and Scatarie Islands, “their

34 See the 1838 correspondence in T 1/3911, 1838 & 1829 papers, TNA, as well as William Smith, *The Lighthouse System of Canada* (Montreal: s.n., 1884).

35 James Kempt, “Memorandum relative to Sable Island a Dependency of Nova Scotia,” 25 June 1825, T 1/3911, 1840 papers, TNA; 8 February 1827, Kempt’s Message, *NSAJ 1827*, pp. 16-17.

Lordships consider [their building] as of national [i.e., British imperial] rather than of local [i.e., a provincial] interest.”³⁶ Unlike harbour lighthouses, which were unequivocally local, coastal lighthouses and rescue stations served diverse and far-flung constituencies, and thus their financing did not conform to conventional, land-based jurisdictional arrangements.

In 1826, when the New Brunswick assembly and lieutenant governor began reaching out to other colonies about building a lighthouse on St. Paul Island, they factored utility, responsibility, benefits, and costs into their plans. Lower Canada and New Brunswick, with Prince Edward Island a distant third, needed the St. Paul lighthouse the most. Although the island was Nova Scotia territory, a lighthouse there would offer little benefit to that colony and thus, in New Brunswick’s estimation, its financial responsibility should be less if any at all. This initial outreach was interrupted by tensions over collection of light duties for the Cranberry Island lighthouse and the New Brunswick assembly did not revisit it until 1829, when it unanimously resolved that a lighthouse on St. Paul Island “is absolutely necessary for the safety of Vessels sailing into or out of the Gulf of Saint Lawrence” and that the “Governments of Canada and Prince Edward Island” should join New Brunswick in providing “equitable” financial support for it.³⁷

By the late 1820s, navigational safety had become a pressing enough problem that multiple governmental bodies commissioned expeditions to assay options for lighthouses on the main route into the Gulf of St. Lawrence. In 1829, Rear-Admiral Sir Charles Ogle, commander-in-chief of the Royal Navy’s North American Station, sent J.W. Jones, Master of HM Sloop *Columbine*, to assess possible sites on the Cabot Strait. Jones reported that St. Paul Island was “the most advantageous place . . . in or about this great thoroughfare,” but also detailed the challenges. The NW side of the island has a cove and “a small Creek large enough for a Line of Battle Ship’s Launch (10 or 12 tons) to lay well sheltered and Stores could be landed whenever a Vessel could show herself off this side of the Island.” Much of the island has “perpendicular” or ironbound cliffs that make landings impossible. An admiralty mate on the expedition, “Mr Journey,” took readings of the longitude and latitude of St. Paul Island, which Jones compared to those “laid down on all the Charts at present in use,” and determined the latter were “inaccurate” and contributed to the “many

36 Letter from Glenelg to Lt. Gov. Campbell, 4 November 1835, *NBAJ*, 1836, pp. 14–15.

37 6, 7, 8 February and 1, 4, March 1826, *NBAJ*, 1826, pp. 34–5, 38, 40, 100, 107; 5, 9 February 1829, *NBAJ*, 1829, pp. 111, 114.



Figure 2 – “Sketch of St. Paul’s Island showing the situations of the lighthouses and buildings upon it. To accompany Report dated 19th Sept 1839.” The “Northern Light House” is on a separate island.

Source: Treasury Board, 1840 correspondence, T 1/3911, Long Papers, bundle 428: Lighthouses of North America, TNA.

Shipwrecks in the Gulf of St. Lawrence, the South Coast of Newfoundland, Cape Breton Island, as well as upon the Island itself.”³⁸

38 Report of J.W. Jones to Charles Ogle on St. Paul Island, 20 October 1829, T 1/3911, 1834 papers, TNA.

Shortly after the Royal Navy's expedition, the Lower Canadian government, supported by Trinity House Quebec, undertook its own assessment of St. Paul Island by sending a group in the summer of 1830 after the Lower Canadian assembly voted £2,000 towards a lighthouse if an agreement could be reached with the other colonies. The expedition was led by Robert Young, the head of the pilots, and John Adams, an architect, and included three representatives from New Brunswick as well as miners to assess whether granite could be quarried on the island. Young and Adams's report included a detailed list of the materials needed to build a lighthouse with living quarters and a rescue station, estimated at a cost of approximately £2,000.³⁹ New Brunswick's lighthouse committee disagreed with Young and Adams's recommendation that a single lighthouse be built on the island's highest point, instead recommending two lights at lower elevations. New Brunswick estimated the total cost to build the two lighthouses at £3,500, and that Lower Canada should pay two-thirds of it based on the number of vessels sailing for destinations in that colony.⁴⁰

In 1832, merchants of the City of London appealed to the Admiralty to inquire into lighthouses in British North America. It solicited reports from different colonies and commissioned another survey of the Gulf of St. Lawrence by the Admiralty's Chief Hydrographer Francis Beaufort. In his 1834 report, Beaufort described the challenges of siting a lighthouse on St. Paul Island given the fogs that frequently encircled it. Some people recommended a light on the highest point at 440 feet above the sea, while others recommended a low light, and still others recommended two lights. In his estimation, a light was necessary on St. Paul while "a second light is wanted on Scatarie Island . . . [where] numberless wrecks [are] Scattered on the neighbouring Shore." These lights should be of the best quality, with St. Paul's "of the best and strongest power and . . . on the revolving principle," and Scatarie could be of similar quality but "distinguished either by two lights or by an apparatus for short flashes or intermissions." Beaufort considered recommending a light on the Magdalen Islands, but thought that those islands could best be avoided with soundings. He did advise that a light on the northwest corner of Prince Edward Island would be "highly useful." Beaufort also opined on the debate over who should fund these lights – the colonies or the imperial government: given the

39 "List of the Documents and Plan referred to in the Message relating to the Erection of a Light House on St. Paul's Island," *Journals of the House of Assembly of Lower-Canada, Session 1831* (Quebec: Neilson and Cowan, 1831), pp. 105-19 (estimate of costs on pp. 110-12).

40 Report of the Committee on Light Houses, 24 March 1831, *NBAJ, 1831*, p. 132.

importance of the route, he felt it “may be fairly considered as coming within the protective aid of the Mother Country, not only in contributing to the expense of erecting but in enacting some means for their support.”⁴¹

By 1831 New Brunswick’s lighthouse committee had grown frustrated at the delays, noting in its report to the assembly that “the necessity for this establishment has long been evident” and “deplored that so much delay has arisen.” That summer Lt. Gov. Archibald Campbell authorized the expedition to St. Paul Island, which went prepared to build a rescue station as it likely benefitted from the detailed building recommendations in Young and Adams’s report. During the 1832 legislative session, Campbell announced that a rescue station had been built and urged the assembly to “persevere in directing your attention to works of this description; works which are as beneficial to Commerce, as they are honorable to Humanity.”⁴² The assembly needed no urging, but Campbell’s strong affirmation surely provided executive cover for the decision to build on another colony’s territory without clear permission to do so.

Colonists increasingly challenged imperial officials about the empire’s responsibility to contribute to the costs of navigational safety in North America, especially after Parliament and the Treasury began reducing imperial contributions to colonial budgets in the early 1830s. When they restructured imperial contributions to Nova Scotia’s budget in 1832, they eliminated the £400 contribution to support the Sable Island Rescue Station that James Kempt had negotiated in 1825. From the perspective of Nova Scotia, it signalled an abdication of imperial responsibility for the safety of subjects and in 1834 the assembly sent an impassioned petition to King William IV including “a bare enumeration” of the ten vessels that shipwrecked on Cape Breton in the last year, eight with British owners. Three ships carried 255, 143, and 114 people, respectively, most of them poor immigrants intending to restart their lives in British North America. Shipwrecks placed a huge strain on both “private charity” and the public treasury in Nova Scotia. During the 19th century, public assistance costs were generally charged to the home society; the petition noted that victims of shipwrecks in British-owned vessels were still British subjects from Britain and the cost of their care should not be born entirely

41 Francis Beaufort, “Report upon the Several Documents relating to the Lighthouses of the British Colonies in North America which have been Submitted to the Lord Commissioners of the Admiralty,” 29 July 1834, T 1/3911, 1834 & 1835 papers, TNA.

42 Speech of Lt. Gov. Campbell to the House of Assembly, 19 January 1832, *NBAJ*, 1832, p. 2.

by Nova Scotia. To expose “British subjects . . . to the Horrors and Dangers of Famine and Shipwreck upon the fatal coast of Cape Breton” when lighthouses could mitigate the dangers taxed the assembly’s confidence that the imperial government had any sense of shared responsibility with subjects in British North America.⁴³

On 4 November 1835, Lord Glenelg, the secretary of state for the colonies, wrote to the governors of Nova Scotia, Prince Edward Island, New Brunswick, and Lower Canada to inform them that the Lords of the Treasury, after seeking “the advice of scientific persons experienced in the navigation” of the Gulf of St. Lawrence, and impressed by Nova Scotia’s petition, including details on the previous year’s shipwrecks, finally recognized that that “if Light Houses were erected upon the Islands of Scatterie and Saint Paul, off the coast of Cape Breton, many of the Shipwrecks which now occur might be prevented.” They also opined that the issues were of “national rather than of local interest,” and therefore would ask Parliament for funds to build the lighthouses “provided that the Colonies, whose trade is to be benefitted by this measure, will engage to defray the expenses of their future maintenance.” The Treasury stipulated that once built, they should be placed under the “management of the Board for the direction of such matters, which already exists in Nova Scotia,” adhering to a conventional territorial allocation of administrative responsibility. Glenelg, however, had not confirmed with Nova Scotia that it would be agreeable to this plan, “because were I to await a Report from Nova Scotia, it would be impossible to submit it to those bodies during their approaching [legislative] Sessions.” After years of equivocation, addressing navigational safety in the Gulf of St. Lawrence had suddenly become a pressing priority for the Colonial Office.⁴⁴

New Brunswick’s assembly applauded the decision, but after watching earlier initiatives falter for lack of financially feasible plans it tasked its lighthouse committee with outlining different options, initially around some variation of New Brunswick and Lower Canada sharing the maintenance of a lighthouse on St. Paul Island and Nova Scotia and Prince Edward Island sharing the maintenance of a lighthouse on Scatarie Island. When the committee consulted Nova Scotia, however, that colony opined that given the location of both islands within its jurisdiction, and given Glenelg and the

43 “The Humble Address of the House of Assembly of the Province of Nova-Scotia,” 4 April 1834, *NSAJ* 1834, pp. 656–7.

44 Letter of Lord Glenelg, 4 November 1835, *NSAJ*, 1836, Appendix 9, pp. 44–5.

Treasury's stipulations, it needed to be involved in maintaining lighthouses on both islands. Nova Scotia estimated that the establishments proposed by the British would cost a total of approximately £1000 per year to staff and supply, and that Lower Canada should pay £500 of it and New Brunswick and Nova Scotia would each pay £250. The New Brunswick assembly thought the £1000 estimate was high, but it was done quibbling over details and voted to commit those funds.⁴⁵ It remained concerned, however, that after a decade of Lower Canada rebuffing its overtures for cooperation on lighting the Gulf littoral that it might rebuff the imperial overture as well, and delays would again ensue. To forestall that possibility, it asked William Crane and L.A. Wilmot, its delegation in London, to negotiate the colony's finances and to tell Glenelg that should colonial negotiations break down "we are authorised to state that New-Brunswick will make provision for the support and maintenance of the Light Houses on Saint Paul's."⁴⁶

Their concern was finally misplaced. All four colonies accepted the offer by the Colonial Office and Treasury, and in August 1836 they sent commissioners to meet in Chatham, New Brunswick, on the Gulf of St. Lawrence, to negotiate the conditions of their cooperation. In the first half of the carefully composed document that the commissioners called an "Award," they summarized "His Majesty's Government's" offer to finance the building of the lighthouses, their meeting "for the purpose of obtaining a Commission of Arbitration appointed by them with power of adopting a final award as to the site, structure and appointment of the annual expence of such Light Houses; or any arrangement better adapted to the exigencies of the case" as well as the authorization each commissioner had received to act on behalf of their respective colony. The second half of the award summarizes five points about what the commission agreed needed to be build and the financial commitment of each colony for the long-term maintenance of the facilities: Lower Canada, £500; New Brunswick, £250; Nova Scotia, £250; and Prince Edward Island, £30. Those payments were to be made by 1 July of every year.⁴⁷

45 29 January and 4, 6, 8, 9, 13 February and 4, 7, 10, 12, 14, 15 March 1836, *NBAJ*, 1836, pp. 29, 31, 49, 55-6, 60-1, 63, 82-3, 146, 159-60, 169-70, 175, 178, 185.

46 Letter from Crain and Wilmot to Lord Glenelg, 15 August 1836, in William Crane and Lemuel A. Wilmot, "Report from the Deputation of the House of Assembly to His Majesty's Government," *NBAJ*, 1837, Appendix, pp. xiii-iv.

47 "Report from the Commissioners of Lower Canada, Nova Scotia, Prince Edward Island, and New Brunswick, on Light Houses at Saint Paul and Scatterie Islands," *NBAJ*, 1837, Appendix No. 5.

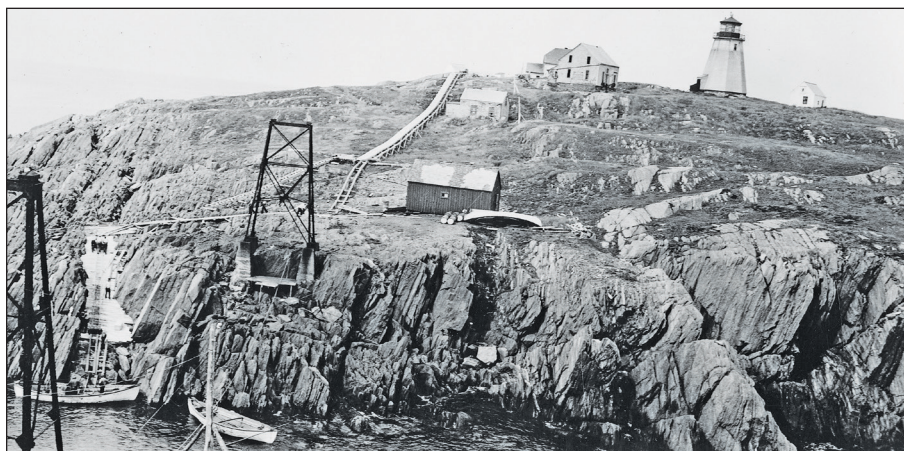


Figure 3 – “North-east light on northern island” separated from St. Paul Island by a channel.

Source: Clara Dennis, 1981-541, no. 543CB, Nova Scotia Archives (NSA), Halifax.



Figure 4 – The cable chair, a later installation to allow staff to transit from the main island to the north island station.

Source: Clara Dennis, 1981-541, no. 550CB, NSA.

Among the most striking details in the award are the summaries of what “His Majesty’s Government” would be building and the terms of maintenance. The commission agreed that three, not two, lighthouses would be built, two on St. Paul and one on Scatarie. The New Brunswick delegation had surely been the one to press for two lighthouses “at the extreme points so as to be conspicuous on entering and leaving the Gulf of St. Lawrence.” The 1830 report from the Lower Canadian team sent to St. Paul recommended a single lighthouse at the highest point. New Brunswick’s lighthouse commissioners had opposed that advice, which contributed to their decision to build the

rescue station in 1831. The intervening five years of first-hand experience on the island surely added weight to their advocacy for two lighthouses. The commission agreed on combined “Light Houses and Humane Establishments” – in other words with rescue stations – and they committed their respective colonies to “a continual supply of Provisions, Clothing, Bedding, Fuel &c for the use and assistance of ship wrecked persons.” Mindful of the environment, they stipulated that the “Keeper’s Houses, Stores or Warehouses” were to be built “detached from the Light Houses,” a protection in the event of fire, and with “frost proof Cellars to preserve provisions for the relief of Ship wrecked persons.” St. Paul would have a superintendent and six employees and Scatarie a superintendent and three employees, not counting wives and children, and would be staffed year-round, a long-term commitment by the four colonies that Nova Scotia as the administering government could not reduce.⁴⁸

Despite the agreement, it would take three seasons – the summers of 1837, 1838, and 1839 – for lighthouses to be built. Two were activated in December 1839, one on St. Paul, one on Scatarie; the light in the third was installed and activated in 1840. Nova Scotia oversaw construction, while the Colonial Office deputized Trinity House in England to order the lights and assure their delivery. The Treasury estimated the cost at £8000 but there were cost overruns, both in Nova Scotia’s expenses and in the cost of the lamps that Trinity House contracted to be built. Calls for explanations ensued. The documentary record indicates that members of Parliament questioned whether there was sufficient shipping to warrant the expense; in 1840 the House of Commons published an 85-page pamphlet listing all the ships that sailed between ports in British North America and Britain and Ireland in the years 1836, 1837, and 1838. More than 2,000 ships per year, employing over 25,000 persons, sailed between the North American colonies and Britain, and approximately 75 per cent of those vessels originated from or sailed to ports in the Gulf of St. Lawrence or the St. Lawrence River.⁴⁹ Since the end of the Seven Years War in 1763, the Gulf of St. Lawrence had quietly assumed not just an important role in the maritime world of Britain but a dominant one in North America. Lighthouses on the route into and out of the Gulf were not acts of excessive precaution, but rather a humanitarian and commercial imperative.

48 “Report from the Commissioners . . . on Light Houses at Saint Paul and Scatterie Islands.”

49 Custom-house, London, *A Return of Vessels which Cleared out at the British Northern Colonies in the Years 1836, 1837 and 1838, for the several Ports in the United Kingdom showing the Names, Tonnage, Number of Men, when and where Built, Length, Breadth and Depth, and the Port at which Arrived* (London: House of Commons, 1840).



Figure 5 – The Gulf of St. Lawrence, Sheet X, Cape Breton. Surveyed by Capt. Henry. W. Bayfield, R.N., assisted by Commodore Orlebar, Lieutenant J. Hancock, W. Forbes, Master & T. Des Brisay, Master Assistant, R.N. 1847-57. London: Admiralty, 1865.

Source: McGill Library Bayfield Charts Collection, <https://www.library.mcgill.ca/hostedjournals/bayfield.html>.

Conclusion

The intercolonial negotiations for lighthouses on the passage into the Gulf of Lawrence stretched more than a decade and involved four colonial governments and various offices of the imperial government including the Colonial Office, the Treasury, Parliament, the Admiralty, and Trinity House. They also had relevance for other shared concerns, including an intercolonial postal service and regulations to control American depredations in the Gulf fisheries.⁵⁰ The prominence of the Maritime colonies, particularly New Brunswick, in pushing for cooperation on maritime navigational safety and in arguing in terms of a humanitarian imperative suggests more proactive and assertive political cultures than is conventionally recognized. Significantly, New Brunswick seldom appealed directly to the imperial government by comparison with Nova Scotia and Lower Canada but, unlike those colonies, it did not host a large imperial presence like the North America station of the Royal Navy in Halifax or the Office of the Governor General in Quebec. Rather, it tended to press for intercolonial solutions in which imperial contributions and control were less significant.

Constitutional constraints made a polycentric governing arrangement preferable to a top down and centralized imperial solution. In its 1834 petition to the king the Nova Scotia assembly suggested that Parliament in Westminster might pass an act to levy an imperial light duty on shipping into British North America, recognizing that would be “an infringement of the Constitutional Right” that Parliament could not levy duties in the colonies as guaranteed by the 1778 Taxation of the Colonies Act. But amending that act would also require amending the 1791 Constitutional Act that had divided Quebec into Lower and Upper Canada because Parliament reconfirmed the 1778 act in that legislation. The implied colonial powers in the 1778 act, moreover, allowed the colonies to police inshore waters against American fishing incursions.⁵¹

50 See, for example, “Report from the Commissioners Appointed to take under Consideration the Subject of a Daily Mail Communication between Halifax and Saint John,” *NBAJ*, 1847, Appendix, pp. clxi-xix. The commissioners recommended that “to remove all obstacles, and secure unanimity, might not the whole affair be considered as a Post Office undertaking, and an arrangement entered into between Canada, Nova Scotia, and New Brunswick, similar to the one respecting the Light Houses on Saint Paul’s and Scatterie[?]” (clxiii).

51 Richard Yeomans, “From Olive Branch to Policing Stick: The Fishery and the Constitutional Transformation of the 1778 Taxation of the Colonies Act,” NiCHE blog, 24 September 2020, <https://niche-canada.org/2020/09/24/from-olive-branch-to-policing-stick-the-fishery-and-the-constitutional-transformation-of-the-1778-taxation-of-the-colonies-act/>.

The Treasury declined “to approve of the suggestion” that Parliament pass legislation for a light duty “to be levied either in the Ports of the Colonies concerned or on shipping clearing from British Ports for those Colonies.”⁵² This recommendation for a centralized imperial solution would have also created complications with collecting the light duties and then negotiating their distribution.

This study highlights the importance of the Gulf of St. Lawrence in Canadian history.⁵³ The paucity of scholarship on it is surprising, and we hope that this article will encourage more research. The size, geography, and varied use of the Gulf made interjurisdictional cooperation a necessity, and yet British North Americans had no precedents for framing policies and allocating financial responsibility when territorial jurisdictions did not line up neatly with the regulation and governance of marine space. British North Americans gradually crafted a set of reference points and principles to be incorporated into any solution. A repeated observation in the legislative resolutions, official reports, and transatlantic correspondence was that Nova Scotia should not have to pay the costs of building and maintaining lighthouses just because some islands and rugged coastlines lay within its terrestrial jurisdiction. The principle that emerged and that was adopted by all the colonies was as follows: when it came to responsibility for marine space and safe navigation, contiguous territorial jurisdiction does not always equate with financial responsibility and thus other jurisdictions should also assume responsibility. The primary beneficiaries of the St. Paul and Scatarie island lighthouses would be mariners and passengers headed to ports in the colonies of New Brunswick and Lower Canada and the thousands of British merchants and investors whose ships sailed through the Gulf of St. Lawrence. The governance, regulation, and financing of navigational safety needed a “national” response, while the administration of the lighthouses and rescue stations needed to be “local” in the parlance of the time. That arrangement would require new governing principles, ones that could honour colonial constitutions and financial equity. Quibbling over finances when humanitarian crises literally washed ashore with distressing frequency risked making ethics part of the flotsam and jetsam of economic expansion.⁵⁴

52 “The Humble Address of the House of Assembly of the Province of Nova-Scotia,” 4 April 1834, *NSAJ 1834*, p. 657; Treasury Minutes, 6 October 1835, *NBAJ*, 1836, p. 16.

53 Campbell, MacDonald, and Payne, *Greater Gulf*.

54 Nova Scotia passed legislation in 1801, the year the Sable Island rescue station activated, that proscribed the long practice of scavenging wrecks by local peoples; see 41 George III

These early coastal lighthouse establishments also offer some theoretical observations about the nature of marine commons, both natural and built, and the tailoring of polycentric governance solutions to suit diverse challenges and variables. First, acknowledging that shared responsibility might be the most effective solution to a common problem could often take a long time. Almost a decade separated New Brunswick's first invitation to the other colonies to cooperate on building a lighthouse on St. Paul Island (1826) and Lord Glenelg's letter advising four colonies that the Treasury had agreed to ask Parliament for funds (1835), and it took another four years to get the lighthouses built (1839). Polycentric governing solutions, by definition, involve multiple perspectives and multiple sets of priorities. For example, in Lower Canada the assembly balanced whether to invest in safe navigation on the St. Lawrence River or in the Gulf; the river was provincial jurisdiction and did not require intercolonial negotiations, while the Gulf was multi-jurisdictional. Prioritizing infrastructure on the river could justify ignoring needs in the Gulf. Moreover, jurisdictions are never equal in power and influence, and Nova Scotia and Lower Canada could each claim greater importance than New Brunswick and Prince Edward Island because they hosted imperial bureaucracies. But as Prince Edward Island realized in 1826, appealing to New Brunswick was a way to solve a problem with Nova Scotia over Cranberry Island. New Brunswick's avoidance of direct appeals to the imperial government was a recognition that imperial solutions would likely favour Lower Canada or Nova Scotia.⁵⁵ To enhance its negotiating power, it tended to pursue intercolonial solutions.

Polycentric solutions highlight the challenges and necessity of jurisdictions with differing forms and expressions of power collaborating. St. Paul Island was within Nova Scotia's territorial jurisdiction and thus that colony was technically responsible for it. It had less need for a lighthouse there than

– Chapter 14, "An Act for the Security of Navigation, and for preserving All Ships, Vessels and Goods, which may be Found on Shore, Wrecked or Stranded upon the Coasts of this Province, and for Punishing Persons who shall steal Shipwrecked Goods, and for the Relief of Persons Suffering Loss Thereby." New Brunswick passed similar legislation in 1840; see 3 Victoria – Chapter 68, "An Act relating to Wrecked Property." Both acts are available on www.bnald.lib.unb. These acts suggest that the socio-political responses to shipwrecks in British North America were not equivalent to long-standing practices in some parts of England for people to claim salvage from wrecks.

55 For example, in 1808, Lord Castlereagh opined that New Brunswick could be sacrificed to the Americans if they attacked, not realizing that the express communication route between the naval base in Halifax and the governor general in Quebec ran through New Brunswick; see Elizabeth Mancke, Mark McLaughlin, and David Bent, "'Their unalienable right and privilege': New Brunswick's Challenge to the Militarization of the British Empire, 1807-1814," *Acadiensis* 46, no. 1 (Winter/Spring 2017): 49-72.

did New Brunswick and Lower Canada, but it was unwilling to relinquish control to New Brunswick or Lower Canada despite repeated suggestions by New Brunswick that it would join with Lower Canada to build and maintain a lighthouse on St. Paul Island while Nova Scotia and Prince Edward Island could build and maintain one on Scatarie. That proposal, which New Brunswick fielded at least twice, found no purchase with the other colonies, probably because it involved a vision of maritime space that would put St. Paul Island within the jurisdictional sphere of other colonies. Restructuring territorial jurisdictions, even for a single uninhabited island, seemed a step too far. Ultimately, the humanitarian imperative provided both the critical impetus to act and a guide in decision-making. At the moment a shipwreck happens, the imperative for people in situ is conventionally to save lives and salvage property; jurisdictional and financial issues are reflexively suspended. That humanitarian imperative compelled New Brunswick to build a rescue or humane station on Nova Scotia territory in 1831, and three decades earlier for Nova Scotia to build one on Sable Island, even though Nova Scotia ships seldom wrecked on the island. When the imperial government recognized the humanitarian imperative, it became possible to work back to polycentric governance so as to develop new governing practices were appropriate for shared marine space.

The development of a polycentric governance system three decades prior to Canadian Confederation raises important questions about the motivations behind initiatives for the political union both in the Maritimes and in the Canadas. Were New Brunswick, Nova Scotia, and Prince Edward Island hesitant about a union with the Canadas because of their respective histories? Were challenges in the Gulf of St. Lawrence more important than challenges in the Canadas? Was John A. Macdonald's presentation of a unified dominion predicated on a Canadian dislike for the polycentric governance system that emerged three decades earlier? While the answers to these questions require further research, what is clear is that an entrenched form of polycentric governance, based on the shared management of the Gulf of St. Lawrence as a marine commons existed for over three decades before the British North America Act, 1867 was signed. Scholars have tended to look continentally for evidence related to Canadian Confederation, yet early expressions of polycentric governance suggest we might better begin by looking back to the sea.

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