

Vulnerable Waters, Anti-fracking Solidarities, and Blue Theologies: Toward a New Brunswick Case Study between the Global and the Local¹

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Abstract

This case study explores the spiritual dimensions of environmental activism in the context of water security and the political economy of shale gas industrialization in the overlapping territories of the Wabanaki nations and the province of New Brunswick during the period 2011–14. The findings stress the importance of taking spiritual dimensions of cultural narratives into account when public conflicts arise on how to negotiate the ongoing partnership between the environmental and economic values that are both needed to support the public interest in a sustainable future. The findings also stress the importance of further research in blue theologies.

Résumé

La présente étude de cas explore les dimensions spirituelles de l'éco-activisme dans le cadre de la sécurité de l'approvisionnement en eau et de l'économie politique de l'industrialisation du gaz de schiste sur le chevauchement des territoires des Wabanakis et du Nouveau-Brunswick au cours de la période allant de 2011 à 2014. Les résultats soulignent l'importance de tenir compte des dimensions spirituelles des récits culturels lorsque des conflits publics naissent et sur la façon de négocier l'association en cours entre les valeurs environnementales et économiques qui sont toutes deux nécessaires en vue d'appuyer l'intérêt public pour un avenir durable. En outre, les résultats mettent en lumière l'importance de mener d'autres recherches dans le domaine des «théologies» de l'eau.

It is with great anguish that the Wabanaki People, the indigenous people of the Wolastok, this Beautiful River, look about us and we see yet again an assault on our sacred homelands: shale gas, deadly chemicals; the total disregard for the water, the gift of life that was given to us....The Wabanaki People have not given our consent for exploration for fracking, or for the production of shale gas in our traditional lands and territories. The earth, she is alive; and she is beautiful, she is home to many, and not just humans. She is water, with boundaries and limitations, and very delicate balances. She is also hurting right now.

— Alma Brooks, Maliseet elder, public rally statement, Provincial Legislature, Fredericton, NB, 1 August 2011

We are the rivers, the Kennebecasis, the Salmon River, the mighty Miramichi, the Wolastok St. John River, the Scuduwabskuk St. Croix River....We are the watersheds, the lakes, the marshes, the aquifers.

— MC, public rally statement, Provincial Legislature, Fredericton, NB, 19 November 2011

What we do to the water, we do to each other. When we care for the water, we care for each other. If we abuse the water cycle, we do violence to each other. How we treat the water affects how we treat each other.

— MC, public rally statement, Provincial Legislature, Fredericton, NB, 23 November 2011

The first citation above from a public statement by Maliseet Clan Mother Alma Brooks, along with similar statements made at numerous other public rallies, seems to express what Melissa Nelson refers to as “the ongoing responsibility [of indigenous peoples] to take care of their sacred waters” (84). The second and third citations, made by a non-native activist at the same anti-fracking rally, express what Gary Chamberlain, in his book *Troubled Waters*, refers to as a “new water ethos” (9): a water-related consciousness and solidarity (172). Numerous other public rallies took place in the period 2011–14 when some thirty groups formed in the second half of 2011 under the banner of the New Brunswick Anti-Shale Gas Alliance (NBASGA, <http://www.noshalegasnb.ca>).

The impact of citizen networks on government policy and business practices is debated and contested, not least in grassroots movements themselves. These networks are also relevant with respect to environmental coalitions and actors related to a wide range of ecological issues such as biodiversity reduction, climate change, or water scarcity at regional, national, and global levels. The extent to which citizen-mobilized groups and initiatives change the course of government policy or corporate practice, whether by direct action and protest, by advocacy and education, or by lobbying and direct involvement in government agencies or shareholder meetings, remains a subject of continuing and widespread interest. Contrary to the late modern expectation that Western societies have been completely secularized, many social commentators and academics have emphasized the resurgence of spiritual dimensions of citizen-based activism (Hutchison).²

This case study situates the task of exploring the spiritual dimensions of environmental activism in the context of water security and the risks associated with the political economy of shale gas industrialization in New Brunswick. Typically, water security is framed as a human right to access and use clean water for meeting the full range of basic human needs. Threats to water security and related rights arise from issues of water scarcity, water distress, water-borne pollution, as well as the fair and equal access to the distribution of water sources. This study of public opposition to hydro-fracking in New Brunswick identifies and interprets the spiritual and/or religious narratives of water-security activism.³ It seeks thereby to emphasize the importance of taking the spiritual/religious dimensions of cultural narratives into account when public conflicts arise on how to negotiate the ongoing partnership between the environmental and economic values that are both needed to support the public interest in a sustainable future. This study seeks to explore and examine the spiritual/religious concerns that have infused some of the public opposition to fracking as a water-security issue. While specialist analyses of the religious and spiritual dimensions of water sustainability have brought multiple variables into the research from a variety of religious traditions (Chamberlain; Gerten; Bergmann and Gerten), the impact of hydro-fracking on water security has not been factored into the religious interpretations of water security to date. Therefore this study offers a situated narrative amidst the risks to water security arising from the political economy of shale gas industrialization in New Brunswick, with a grounded analysis of the spiritual discourses emergent in networks of resistance to fracking.

This inquiry relies on the transcripts of approximately twenty videographed statements at public rallies made by NBASGA actors and group representatives published in the public domain on YouTube; press releases by NBASGA member groups; as well as hundreds of posts in public activist Facebook groups such as “New Brunswick is Not for Sale,” “Say No to Shale Gas,” and the “Maliseet Grand Council” between May 2011 and December 2014⁴. These materials, supplemented by field notes, furnish the qualitative data used to generate composite observations relevant to the case study. The diversity of spiritual and multiple forms of secular discourses in the resistance network provided the particular lens through which these public statements and posts were analyzed. It is the overlapping of

spiritual perspectives and religiously textured positions with secular claims that raises several lines of inquiry related to water security in New Brunswick. A central line of inquiry relates to whether there is common ground or separate positioning among the various narratives and claims of resistance: is there evidence of a blended water spirituality or of culturally separate water spiritualities across local grassroots organizations animating the opposition to shale gas? And, if so, what kinds of roles did it (or they) play in water activism? This central question generates a series of subquestions:

- To what extent were the environmental ideologies that shaped the resistance network affiliated with some variable of particular religious traditions, if at all?
- What kinds of discursive blending did water activists engage in when placing spiritual discourses alongside scientific, political economic, and legal discourses out of concern for water quality and sustainability in the resistance to fracking?
- Insofar as environmental ideologies were linked to religious or spiritual identities, how and in what ways were these ideologies and identities correlated with each other?
- Insofar as there were linkages between environmental ideologies and religious or spiritual identities, how and in what ways did these linkages support indigenous-settler alliances and interreligious dialogue?
- Insofar as they supported interreligious dialogue or indigenous-settler alliances, did such exchanges and partnerships reinforce prevailing social boundaries between out-groups or involve social border-crossing and emergent social formations in civil society?
- How did actors and groups organized to protect water security understand the significance of their alliance for the larger framework of the peace and friendship treaties between indigenous nations and the federal/provincial crown governments?

The Water Cycle and Hydro-Fracking in New Brunswick: From Integrity to Risks

New Brunswick consists of twelve river basins with nearly a hundred watersheds that drain into two separate ocean environments to the east and the south, where nearly 50 percent of the landmass is less than one metre to groundwater (Arp, Connor, Murphy, and Ogilvie). The land surface, in other words, is densely saturated and shapes the continuous drainage of fresh water. This dynamic movement between interconnected flows and bodies of fresh water plays host to numerous energy transfers, food webs, and interdependent biological communities, both in water and on land.

The interdependent waterways that define the topography of New Brunswick are also host to the modern political confederacy of the Wabanakik, “The People of the Dawn,” including the neighbouring traditional and unceded national territories of the Peskotomuhkatiyik (Passamaquoddy), Wolastoqiyik (Maliseet), and Mi’kmaq (Micmac) peoples.⁵ In response to settler incursion, the Wabanaki Confederacy was established in the early 1700s to negotiate terms of co-existence with the British Crown on behalf of the Penobscot, Abenaki, Passamaquoddy, Maliseet, and Micmac nations. These negotiations produced nation-to-nation treaties that remain politically and legally binding to this day under Canadian and international law with reference to Article 35(1) of the *Constitution Act, 1982*. In New Brunswick, the traditional boundaries of the sovereign national homelands of the Wabanaki are defined by watersheds. Specifically, the sovereign territory of the Passamaquoddy nation is marked by the watersheds and neighbouring river systems on both sides of the Scuduwabskuk/St.Croix River

emptying into the Bay of Fundy. The sovereign territory of the Maliseet nation includes all watersheds flowing into the Wolastok/St. John River, also emptying into the Bay of Fundy. And the sovereign territory of the Micmac nation involves the lands connected to several watersheds, notably the Restigouche, Nepisiquit, Miramichi, and Bouctouche Rivers, emptying into the Northumberland Strait. The boundaries of New Brunswick as a provincial jurisdiction overlap with only a part of the larger united territory of the Wabanaki Confederacy.⁶

Taking the water cycle and especially water connectivity in Wabanaki/New Brunswick lands into account is pivotal for adequately understanding the 2011 outbreak of opposition to fracking on a provincial scale. The hydro-fracking industry made inroads in New Brunswick when the David Alward Progressive Conservative government welcomed and accommodated development in 2011. In response, the New Brunswick Anti-Shale Gas Alliance emerged and with independent Wabanaki partners organized a coalition network of opposition. Under licences obtained from the Department of Natural Resources of the government of New Brunswick, a suite of fracking companies including SWN, Corridor Resources, and Windsor Energy, with proven capacity to deploy full-scale fracking operations in the continental U.S., invested over \$50 million in exploration activities under contract, determining that natural gas could be extracted at various sites in the Frederick shale play (Brown; CBC). The Frederick shale play overlaps to a great extent with the lowland bio-region of New Brunswick, including significant parts of Passamaquoddy, Maliseet, and western Mi'kmaq territories. Hydrogeologists have calculated that 63.6% of New Brunswick's surface area, primarily in the lowland bio-region that contains eight out of twelve river catchment basins and their watersheds, consists of wetlands and soils where the depth-to-groundwater is less than 200 cm (Arp et al.). The network of opposition to fracking that emerged was unprecedented. For the first time in the diverse histories of colonization, Native, Acadian, and Anglophone groups united to find common cause across ethnic, linguistic, and ideological lines.

This unique eruption of opposition was situated in the wider context of the continental political economy of fossil fuel extraction. Next to the joint Tar Sands and Trans-Canada pipelines industrial complex, hydraulic fracturing represents a distinct energy sector in the global political economy of multinationals based mostly in the U.S. Hydraulic fracturing—or fracking, as it is widely known—implements horizontal drilling techniques using high-volume pressure and explosive charges to break up shale rock formations in order to release shale-trapped methane or oil deposits. The hydrocarbons are then captured for processing and distribution. Fracking exploration and production has been accommodated and integrated into the national energy sector in the last five years by the neoliberal petro-state in Canada in willing provincial jurisdictions, notably Alberta and British Columbia. On a global scale, this expansion to obtain oil or methane through fracking is also being pursued in the U.S., the UK, China, India, South Africa, and Brazil. Likewise, shale gas extraction has been commercialized on an industrial scale in the Dakotas, Texas, Arkansas, and Pennsylvania. By contrast, hydro-fracking has been banned in the states of Vermont and New York, while moratoria involving various conditions are in place in Quebec, Newfoundland, Nova Scotia, and New Brunswick. After capitalizing on an anti-shale gas vote in the provincial election of 22 September 2014, the Brian Gallant Liberal government announced its moratorium on new exploration and development licences in December 2014, subject to a provincial commission with a public consultation mandate to investigate and make recommendations concerning the future viability of the industry.⁷

High-volume, horizontal-drilling hydraulic fracturing for shale-trapped methane represents a form of energy extraction that has justifiably been described as unconventional by proponents and as invasive by opponents. Fracking as an extraction process is deemed exceptional by both proponents and opponents

due to the sheer magnitude of the volume of fresh water required per well-shaft during well installation and well production, since fresh water is not only drawn but removed from the local supply of water transfers. The extraction process is appropriately called innovative and high-risk due to the toxicity of the chemicals (lubricants, biocides, and germicides) that are ground-injected through the high-volume, high-pressure water flush of the drill-bore establishing the well-shaft during the shale breakup phase. In addition, opponents emphasize that the extraction process involves the release of radioactive, heavy elements from the fractured shale (e.g., uranium, strontium, radon) known to be toxic to human health and wildlife. These elements join the flowback water directed to the well surface during extraction, where it is then collected as wastewater requiring treatment or at least storage. Much like wastewater from nuclear electricity production, there is no available technology to neutralize or purge radioactive or other heavy elements from fracking wastewater in compliance with public health standards. Unlike nuclear wastewater, however, there is no national or provincial regulation or regulatory body responsible for fracking wastewater storage and management. Opponents further emphasize that fossil fuel energy obtained through fracking could also be detrimental due to the levels of CO₂ emissions involved in the production, distribution, and use of shale gas when compared to other conventional energy sources, let alone when compared to CO₂ levels emitted through the renewable energy sector.

A comprehensive historical narrative of the multiple actors and many locales of the coalition network resisting fracking has yet to be written, although *Debriefing Elsipogtog* (Howe) makes a significant contribution. Some key actors in the New Brunswick Anti-Shale Gas Alliance (NBASGA) and independent partners operated in multiple groups. Not all groups were equally invested in the decision-making and action plans of the NBASGA or its partners. Other groups and partners wove in and out of the formal umbrella of the alliance. There were one-off collaborations, long-term affinity groups, as well as intragroup and intergroup rivalries. The networks of resistance consisted of committed activists, opportunists, community groups, professional groups, municipalities, and native councils organized across a horizontal network of fluid partnerships and formal alliances. Collectively, they mounted an effective nonviolent opposition on several fronts. The network organized public education drives and hosted university-based symposia with business and science experts from U.S. jurisdictions with highly developed fracking industries. It staged press conferences, press releases, and interviews with mainstream media and public radio; conducted letter-writing and editorial campaigns; and utilized indie alternative media, web-based knowledge portals, and social media networks. The province-wide resistance also engaged in direct political lobbying of elected officials, key ministers in the Alward Cabinet, and mounted a civil suit legal challenge to the government's exploration licences. In addition, the provincial network organized a sequence of public rallies and protests over two-and-a-half years, and engaged in non-violent civil disobedience on the front lines of fracking operations. Those lines of action were noteworthy for the depth and scope of their research-driven activism, their communications capacity, and their decentralized spontaneous social cohesion.

Opposition to shale gas industrialization in New Brunswick addressed several overlapping concerns, including but not limited to the following:

- the threat to water quality;
- the absence of demonstrable local economic benefit;
- the boom-bust cycle of resource economics;

- the long-term fiscal burden of deferred costs and negative externalities placed by the industry on public infrastructure and the public health-care system;
- the absence of provincial capacity to monitor, let alone enforce the regulation of industry behaviours;
- a weak regulatory regime, coupled with a weak royalty regime and no funds committed to financing regulation costs in the provincial budget;
- the loss of business opportunities in agricultural, technological, and tourist sectors;
- the loss of property values for homeowners;
- the implicit denial of fossil-fuel-driven climate change.

While proponents of fracking relied on industry-embedded science to back their claims, opponents had a series of public-interest and independently peer-reviewed research reports to back up their positions. A succession of public-interest reports urged the precautionary principle (and thereby a moratorium or ban) for several reasons: (1) the absence of conclusive evidence that fracking operations were safe for watersheds, posing no risk of harm to the water supply for wildlife or humans; and (2) the presence of studies that were tracking evidence concerning water contamination due to methane migration underground, well-construction failure, and toxicological issues (Department of Health, NB; Department of Health, New York; Council of Canadian Academies). In addition, peer-reviewed hydrogeological studies conducted in U.S. jurisdictions with shale gas industries in operation provided mounting evidence of water contamination from hydraulic fracturing (Gregory et al.; Osborn et al.; Warner et al.; Ferrar et al.; Fontenot et al.; Entekin et al.). Shale gas opponents were articulate about the nature of the water cycle, freshwater transfer, and connectivity through all stages of a watershed, the vital role played by freshwater formations in the nutrient and energy cycles of aquatic communities (both flora and fauna), and the vital significance of these waterscapes for the ecological, health, and economic services they provide to human populations.

The anti-fracking alliance presented its case in both secular and spiritual narratives, producing a chaotic crisscross of legal, political economic, scientific, and environmental discourses. Depending on the context of audience and speakers, these discourses sometimes involved the technical jargon of specialists, while others were mashed into common sense kitchen-table talk. One and the same individual or group frequently travelled between the poles of technical and informal discourse, and remained entirely comfortable shifting between or blending different types of talk according to the needs of the situation. As a result, different perspectives were drawn from hydrogeological science; Aboriginal law concerning indigenous sovereignty and inherent title, including the right to free, prior, and informed consent; mechanical engineering; legal research into water rights in common law; political debates surrounding issues of consent, government legitimacy, public trust, and accountability; whether law enforcement agencies were protecting the public interest or subservient to corporate interests; as well as spiritual values and religious elements related to water. As a decentralized resistance movement, these strands of distinct viewpoints and discourses were not systematically organized into a coherent conceptual model but spontaneously self-organized into a collective chorus.

Three Strands of Spiritual/Religious Narratives

The data point to distinct strands of discourse in the water issues emphasized during the resistance to shale gas industrialization. In terms of spiritual discourses that wove in and out of the debates and dialogues surrounding the integrity of the water cycle, water security, and the probabilities of irreversible harm to fresh waters in New Brunswick, there were three distinct trends that emerged.

The first was a uniquely Wabanaki language of water kinship that blended ecological, metaphysical, and political claims into a seamless, environmentally situated fabric of holistic knowledge, social economic rebuilding, a ceremonial way of life, and a culturally transmitted identity. Wolastoqiyik and Mi'kmaq activists frequently defended the water as sacred, as a spiritual element that is the source and sustainer of all of life, a source of energy and healing. They also affirmed water as an intimate personal family relation, as a grandmother and guardian of the health of their family kinship circles. In addition, they frequently named water as a living, sacred being that is dynamic and creative, a communicative personality and life-giver.

Second, there was a spiritual solidarity with water that was non-indigenous and without religious affiliation, inspired by and grounded in experiences of the interdependence of the web of life connected through the water cycle. Statements here emphasized how the entire society on a personal and collective level is embedded in and indebted to a much larger, all-encompassing and interconnected water community. This is an autonomous stream of spiritual discourse, not marked by ethnocultural memory and the decolonizing struggle, nor by the conventions of a specific historical religious tradition. It seems more tacitly akin to something along the lines of David Suzuki's *Sacred Balance* with its blend of earth sciences and post-secular, post-traditional spirituality.

Third, there was evidence of a religious discourse of social justice, based on norms of social ethics. These norms relate to equitable access to and distribution of the benefits of fresh water for the common good, and of the public water commons as a collective right that governments have a duty to protect with evidence-based public policy from the pressures of commercial exploitation, for the benefit of the economically disadvantaged. This discourse is notably compatible with and historically related to—even if detached from—Jewish,⁸ Christian, Muslim, and Indigenous traditions of social ethics involving communicative norms of distributive justice. In this discourse, the secular and the spiritual coexist without any obvious historical, ideological, or practical separation.

While distinct, these three spiritual perspectives on water sometimes were thrown together, and at other times detached and individualized when advanced during protests, media events, and social media posts. While illustrative, this recognition of spiritual narratives is by no means complete. Nevertheless, it provides a window to further explore religious diversities and their intersection with water consciousness in the provincial context of New Brunswick and elsewhere. The extent to which spiritual narratives are sufficiently relevant to motivate and mobilize a widespread public opposition that is united on a common front, when the delicate balances and interdependent exchanges of water are under assault, remains an open question in the absence of hard empirical data. The capacity, however, of spiritual narratives to relate to the secular findings of water sciences, wildlife management, economic growth, and political federalism respecting Aboriginal rights remains an active component of the environmental network in water-based activism in multicultural New Brunswick. These three strands of spiritual/religious discourse show that it makes sense to explore whether and to what extent

spiritual/religious narratives serve to support or hinder sustainable interactions with the freshwater cycle in territories of the Wabanaki nations co-inhabited by contemporary New Brunswickers.

Diversity in Blue Theology Perspectives

The importance of these spiritual/religious narratives for negotiating the ongoing partnership between the environmental and economic values can be indexed by recent research in religious studies into water sustainability in an era of anthropogenic (i.e., induced by human economic activity) climate change. Gerten and others have argued for including the analysis of religious and spiritual factors in relation to understanding human-caused climate change and mitigating related environmental crises, including water insecurity. In addition, there is an emerging trend in eco-theology exploring the religious and spiritual significance of water and the intersection of human interests with water communities (Chamberlain; Francis and Shaw). The impact of hydraulic fracturing and its repercussions for water distress, however, have not been factored into these analyses. The intersection of water issues and religious studies is commonly referred to as blue theologies.⁹ Trends in blue theology suggest an interpretive framework for how the three spiritual/religious strands of discourse in water-based activism can be understood.

Blue theologies are a subset of broader eco-theologies that represent the particular faith experience of specific groups or individuals in relation to specific environmental concerns or consciousness, either from the inside as a participant or from the outside as an observer (or from somewhere on the spectrum between those two endpoints). In all the pluralistic ambivalence of the category of theology, Eaton notes in her groundbreaking work, *Introducing Ecofeminist Theologies* (71), that eco-theologies can be *reactionary* (disputing and denying ecological dimensions to religious identity) or *apocalyptic* (claiming a divine or sacred plan fulfilled through ecological ruin and distress). Eaton points out, however (71–2), that eco-theologies are “constructive” when they adopt a *rejectionist* agenda (abandoning historical religions as intrinsically anti-environmental for the sake of a post-secular environmental spirituality), an *apologetic* agenda (retrieving the ecological sensitivities from within the traditional sources of a historical religion and showing that it is eco-relevant), or a *critical reformist* agenda (reorienting historical religions in light of the complex ecological processes that surround and transcend the human species).

In these three senses, eco-theologies are also sometimes referred to as *green* theologies. While conventional or mainstream theological issues have been largely preoccupied with social and human needs, green theologies represent and promote a paradigm shift whereby traditional theological interests in narrowly humanistic concerns (with a focus on, for example, the church, synagogue, sangha, or mosque as a site for improving the well-being of humankind) are broadened to include the full spectrum of planetary well-being (with a focus on the well-being of the community of diverse species in an eco-habitat). In terms of recurring ecological issues, climate change (to a great extent) and biodiversity conservation (to a lesser extent) tend to mark the prevailing environmental interests of eco-theologies. By contrast, recent eco-religious discourses have taken a decisively *blue* turn—grounded in spiritual connections to and practical engagements with water security amid threats of scarcity and water-related conflicts. While research on water and religious identities still pales in comparison to research focused on climate change or biodiversity, this is rapidly changing.

Research in this niche—adopting the specifics of the water element and water science as gateway to the study of spiritual/religious identities—cites the global water differential: namely, that 97 percent of the water on planet Earth consists of salt water, while the remaining 3 percent is fresh water, with approximately 0.5 percent locked in the two polar ice caps and glaciers. The remaining sixth of the 3 percent subsists and circulates as surface or subsurface fresh waters in the water cycle. Some studies in indigenous blue theology recognize the water cycle as an ongoing and continuous reference point (Nelson; Bédard; Williamson-Teller; Davidson-Hunt and Berkes). Additional studies in hindu traditions recognize particular manifestations of the water cycle such as rivers as manifestations of the goddess (Haberman; Drew). Distinctly muslim references in blue theology approach water as a common good subject to norms of distributive ethics and collective rights (Faruqui; Al-Damkhi). Nonetheless, the use of the term “theology”—blue or otherwise—can be politically controversial both inside and outside the academy. It can prompt a variety of protests, ranging from disruptive heckling to skeptical distance to aggressive argumentation. In the current analysis—and specifically in reference to blue theologies—the term “theology” is intentionally constructed as a diverse, open-ended, and incomplete metaphor for spiritual engagements with water.

Two trends in blue theology remain significant for the eruption of networks of resistance in New Brunswick, each involving the contrast between comparative and particular approaches. Some blue theologies are intentionally multireligious and comparative in scope, aligning the water-related ceremonies, theologies, and values of several religious traditions side-by-side or blending them. Others are intentionally tradition-specific in scope, representing the water-related rituals, worldview, and practices of a particular religious tradition, separate from others. Some remain quite global or planetary in their scope, interests, and outlook; others are national, regional, or deeply localized in the immediate niche habitat.

The global comparativist approach—seen in Chamberlain’s *Troubled Waters* (2008), Francis and Shaw’s *Deep Blue: Critical Reflections on Water, Nature and Religion* (2008), and Hughes’s *Religion, Law and the Present Water Crisis* (2013)—emphasizes cross-cultural cooperation and trans-cultural fusion in order to establish common ground, a blended language across religious boundaries, and a unifying ideological framework for ethical and policy positions concerning water. In seeking a universal relevance, the comparativist approach is transcontinental, transnational, and trans-religious.

The local, particularist approach emphasizes cultural autonomy and separateness, delineating a uniquely occupied ground, a culturally specific language, and distinct ideological cohesion as the framework for ethical and policy positions concerning water. Several religious traditions are separately represented in particularist blue theologies: hindu (Haberman; Drew); muslim (Faruqui; Al-Damkhi); christian (Ferris; Grey; Hughes; Peppard), and indigenous (Bédard; Nelson; Williamson-Teller; Davidson-Hunt and Berkes).

In sum, blue theologies cycle between the global and the local, whether comparativist or particularist, blending across cultures or maintaining particular cultural boundaries. They offer an array of interpretive frameworks for analyzing water spiritualities amid human-caused water stress at the outset of the twenty-first century.

Mapping the Relation between the Local and the Global

I conclude this case study by identifying some constructive lines of inquiry that map out a research agenda that engages the spiritual/religious perspectives protecting New Brunswick waters by resisting the harms associated with the fracking industry. Importantly, the research and public policy issues provide an opportunity to explore the treaty relationships underlying indigenous and settler relations in Wabanaki/New Brunswick lands. Further inquiry can make two distinct contributions. First, it can expand on research into options for involving spiritual/religious elements in the resolution of conflicts and negotiating a balance between environmental and economic values in the context of the peace and friendship treaties in Wabanaki/New Brunswick. Second, more research can factor the political economy of hydro-fracking into a discipline-based research agenda for blue theology in relation to water security in the post-carbon transitional economy, both locally and globally.

The first line of inquiry relates to the three types of spiritual discourse involved in the public debates. To what extent and in which contexts do water activists opposed to fracking involve these three streams of spiritual discourse in their activism, if at all? Do water activists relate to these discourses as insiders or outsiders, or both? To what extent are these types of spiritual discourse converging or diverging in relation to each other? What kinds of dialogues and partnerships are shaped by these three streams of spiritual discourse? For example, how do non-indigenous activists aligned with a solidarity or justice approach to the water issues prompted by fracking relate to the Wabanaki spiritual imaginary of kinship with water-spirits? By contrast, how do Wabanaki activists energized by their kinship with water in the struggle for self-determination in unceded homelands relate to the concerns of water justice or water solidarity emphasized by non-indigenous partners? Is there evidence for cross-cultural exchanges and, if so, how are these exchanges negotiated with respect to their opportunities and risks? These exchanges point to the emergent issue of an unprecedented reworking of indigenous-settler relations in the public opposition to fracking.

Similarly, how does a focus on the interaction between spiritual narratives and water activism affect the renewal of indigenous-settler relations? The issue of alliances between indigenous and settler peoples related to environmental issues (but not fracking) has been the subject of recent investigation (Simpson; Barker; Fitzmaurice; gkisedtanamoogk; Regan; Smith and Sterritt; Davis and Shpuniarsky; Wallace; Wilkes). In the Wabanaki/New Brunswick context, what are the opportunities and risks for a renewed alliance based on the peace and friendship treaties on unceded sovereign territories of the Mi'kmaq, Wolastoqiyik, and Peskotomuhkatiyik nations? Situated on the unceded territories of three distinct nations in the Wabanaki confederacy, New Brunswick is the site of both colonization by the settler society and decolonizing self-determination by the original indigenous peoples, not merely in the past but in the present. What are the risks and opportunities for the working partnerships of an indigenous-settler reconciliation concerning water security and water management? In this context, the three spiritual discourses identified earlier suggest the possibility of an alliance between indigenous and non-indigenous activists to protect the fresh waters from industrialized fracking. In what ways do Wabanaki, francophone, and anglophone partnerships on an environmental front such as the public opposition to fracking set into motion new opportunities as well as risks in the struggle of Wabanaki peoples to assert their aboriginal title and involve their traditional ecological knowledge in the environmental co-management of public lands—also, for both Wabanaki and settlers to decolonize their political economic as well as legal relationship, at the collective as well as interpersonal levels? The uses and performances of the three types of spiritual discourse by activists in their opposition to fracking allows the question of alliances between indigenous and settler peoples to be raised.

The second line of inquiry relates to fracking as a spiritual-religious issue. Is the effort to introduce and commercialize shale gas even tagged as a religious or spiritual issue for water activists in New Brunswick? To what extent do religious variables (sacred texts, rituals, group practices, traditional beliefs, contemporary teachings) mobilize activists in New Brunswick to oppose or support shale gas industrialization? If there are religious variables at play, how multireligious are those variables in scope and how religiously diverse are the affiliations of the mobilized public? In addition to Wabanaki and secular spiritual water activists, are there any christian, buddhist, muslim, hindu, jewish, neo-pagan, or other religiously affiliated water activists who find spiritual engagement a significant factor in their opposition to shale gas industrialization in New Brunswick? Conversely, is there any evidence of religiously based *promotion* of shale gas industrialization? In other words, to what extent are religious variables (sacred texts, rituals, group belonging, traditional beliefs, contemporary teachings) involved in sustainable water behaviour that integrates a direct knowledge of the freshwater cycle—or conversely, involved in and correlated with the exploitative management of water resources in the energy sector? What are the variables within particular religious traditions that allow those to (re)affirm their spiritual appreciation for the full range of water connectivities in the freshwater cycle? Given the mounting evidence for the involvement of religiously based engagements in preventing and mitigating climate change (Veldman, Szasz, and Haluza-Delay; Lysack; Morrison, Duncan, and Parton), it is plausible that the commercialization of fracking in the USA and Canada is provoking similar engagements in freshwater concerns.

A related line of inquiry relevant to the New Brunswick research agenda concerns the relative absence or at least low public profile of any christian-based opposition to industrial fracking. What accounts for the conspicuous absence of public statements of christian perspectives or narratives in the public resistance to shale gas industrialization? Can this absence be attributed to the selective range of documentary data, or is there a prevailing public silence in New Brunswick churches related to this controversy—or even a tacit endorsement of the fracking industry? According to Statistics Canada's 2011 National Household Survey data on religious identities in New Brunswick, 84% of New Brunswickers are affiliated with various forms of Christianity in over thirty denominations. Do christian water activists simply adopt and adapt elements of the Maliseet or solidarity or distributive justice narratives, or do they fold their own environmental theology into their activities? In their survey of christian positions on biodiversity conservation, Van Houtan and Pimm determined that christian considerations of biodiversity conservation as a religious issue range from indifferent, to skeptical, to minimalist, to integral. That is to say, while some christian positions were indifferent toward biodiversity conservation as an issue of intrinsic religious value, others were skeptical or uncertain that biodiversity conservation was a religious issue at all. Still others recognized it is remotely religious but less important than socioeconomic issues, while some recognized and integrated biodiversity conservation as an intrinsic religious issue that engaged the whole range of christian identity and tradition (scripture, ritual, ethics, theology, and prayer). In a separate study on religious identities, environmental policy, and climate change mitigation in the USA, Jones, Cox, and Navarro-Rivera established indicators of religious support for climate change direct action, climate change sympathy, and climate change skepticism. What often accounted for these differing religious evaluations were attitudes toward biological and evolutionary science.

Is there a similar pattern of religious evaluations of water security and water activism by christian organizations in the context of fracking in New Brunswick? Do christian views of water conservation in the context of fracking fall into the typical indifferent, skeptical, minimalist, or engaged categories? Is there evidence of christian-based prevention of fracking, sympathy toward the opposition

to fracking, or skepticism about fracking as a high-risk economic behaviour? At issue is whether christian-affiliated water activists involve their religious worldview in their opposition to fracking, express their religious worldview through a particular environmental ideology concerning water, or, in the absence of a religious worldview relevant to water issues from within their own faith tradition, adopt a religiously relevant worldview from elsewhere. Further to this, are christian water activists able to turn to their local faith communities to mobilize support for opposition to fracking, or do they have to take their water activism underground and avoid local religious conflicts related to their water consciousness?

The unique exception to the prevailing silence is a statement prepared by the Environmental Working Group of the Maritime Conference Church in Action Committee of the United Church of Canada. Its 2012 statement, "Calling for a Moratorium on On-Shore Shale Gas and Coal Bed Methane Development," provides a brief but unique sample of faith-based environmental ethics supporting at least a precautionary and temporary halt on the exploitation of shale gas in New Brunswick, Nova Scotia, and PEI. Since it is the product of a specialized committee, and with no specific action plan except to distribute the call to clergy and their United Church congregations within the Maritime Conference, the document does not help to gauge the range or extent of impact this call may have prompted in the public opposition to fracking in New Brunswick.

In mapping these lines of further inquiry, this case study supports the finding that the spiritual/religious dimensions of citizen-based environmental activism are potential factors for resolving the conflicts in public policy involving energy and environmental sustainability. In addition, this study addresses Gerten's call in 2011 for a systematic assessment of the capacities of religions and spiritualities to respond to climate change as a sacred issue (49). What is essential is that Gerten's call be modified to include engagement with the full spectrum of freshwater integrity. Toggling between the local and the global offers a defining moment in any research agenda resonant with comparativist and particularist blue theologies. Importantly, this openness provides a situated perspective to contend with the ongoing debates about energy, the environment, and decolonizing treaty relationships in Wabanaki/New Brunswick lands.

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Endnotes

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² While the secular, on the one hand, and the spiritual and/or religious, on the other, are typically contrasted as exclusive if not contradictory, this is not always or entirely the case. The interactions between the secular and the spiritual or religious are capable of multiple different patterns at institutional and personal levels. One and the same social group or individual often performs a variety of identity-based expressions and tasks in a complex mingling of secular and religious scripts, norms, values. At

times, assertions of identity place secular and religious impulses in mutually exclusive or competitive positions relative to each other. At other times, groups or individuals negotiate a mutual accommodation if not collaborative neighbouring of the secular and the spiritual/religious in their lives.

³ In both popular and specialist discourses, the distinction between spirituality and religion is often constructed as a hard separation. The patterns of distinction between spirituality and religion are multiple and complex. For some individuals and communities, the spiritual is separate from and independent of religion, specifically the organized institutional religion of historical faith traditions. Spirituality, in this view, is impeded by religion and fares better without it. For other individuals and communities, spirituality is compatible with and inseparable from religion; they enhance each other. Where religious tradition grounds and channels spirituality, such spirituality completes and fulfills the religious purpose. Others find themselves living between religious traditions, and their spirituality is the personal blending of multiple religious frameworks, affiliated with each of them yet independent and detached with a vitality and purpose of its own. For yet others, spirituality and religion co-exist in their personal lives, but are maintained separate without a direct influence on each other.

⁴ My standpoint as a researcher is from the position of a professional university educator who at the same time was involved as an insider with the activist networks that I sought to observe and analyze. During this time period, I was involved in the activities of various member groups in the NBASGA. I was therefore directly involved as a participant in water-security activism rather than a clinically removed observer. With a situational identity as both an active participant and embedded observer, the participatory action framework provided a disciplined focus on what Jerome Bruner has called “narrative knowledges” centred on the communication of meaning as distinct from “computational knowledges” centred on the calculus of information.

⁵ Wabanakik translates as “The People of the Dawn” since their lands on the eastern shorelines of the continental shelf are the first lands to be lit by the rising sun each morning. The Wabanaki Confederacy consists of five distinct sovereign indigenous nations of the Dawn-People: the Micmac, the Maliseet, the Passamaquoddy, the Penobscot and the Abenaki nations. The confederate territory of the Wabanakik encompasses all of New Brunswick. The boundaries and surface of New Brunswick overlap with parts of the traditional territories of the Peskotomuhkatyik/Passamaquoddy, Wolastoqiyik/Maliseet and Mi’kmaq/Micmac nations only; the Penobscot and Abenaki nations overlap with Maine, Vermont, and southeastern Quebec. The traditional territory of the Peskotomuhkatyik nation also extends into Maine; the traditional territory of the Wolastoqiyik nation extends into eastern Maine and southeastern Quebec; and the traditional territory of the Mi’kmaq nation extends into the Gaspé, including Prince Edward Island, Nova Scotia, and Cape Breton Island. In the 1700s the Wabanaki Confederacy negotiated nation-to-nation treaty relationships with the British Crown. These treaties set forth terms of mutual accommodation, co-existence, and resource sharing between sovereign nations that did *not* involve the surrender, sale, transfer or ceding of territory by the indigenous nations of the confederacy to the British Crown. The peace and friendship treaties remain valid under international law, since neither party to the treaties has sought to abrogate or derogate or in any way terminate the treaty relationship between sovereign nations. In Canada, with the repatriation of the federal constitution in 1982, duties in the treaty relationship with the Crown were transferred under joint-jurisdiction to the federal and provincial system of government. The inherent aboriginal title of these confederate indigenous nations, along with their treaty rights, is to some extent recognized in the Canadian *Constitution Act, 1982*, section 35(1): “The existing aboriginal and treaty rights of the aboriginal peoples of Canada are hereby recognized and affirmed”; as well as in the *Canadian Charter of Rights and Freedoms*, section 25: “The guarantee in

this Charter of certain rights and freedoms shall not be construed so as to abrogate or derogate from any aboriginal, treaty or other rights or freedoms that pertain to the aboriginal peoples of Canada including (a) any rights or freedoms that have been recognized by the *Royal Proclamation of October 7, 1763*; and (b) any rights or freedoms that now exist by way of land claims agreements or may be so acquired.” Several decisions of provincial and federal courts, including the Supreme Court of Canada, have evolved to interpret the recognition of inherent aboriginal title and treaty rights in a variety of jurisdictions across Canada asserted in the *Charter* and *Constitution*. See Gaffney and Paul as well as Bear Nicholas.

⁶ This case study from time to time uses the term “Wabanaki/New Brunswick” to emphasize the nation-to-nation treaty relationship as a relevant dimension of water topography and water security.

⁷ The New Brunswick Commission on Hydraulic Fracturing published its three-volume report on 22 February 2016 with mixed signals as to the future viability of the industry, leaving the full range of options open to the government, which for its part has been noncommittal in its initial reception of the report.

⁸ This study adopts the convention of leaving the first letter of an adjective referring to a religious tradition in the lower case (as in “hindu rituals” or “muslim values”); but the first letter of a proper name in the upper case (as in “Hinduism recognizes a vast multiplicity of gods and goddesses” or “Muslims practice a community-based fast during the month of Ramadan”).

⁹ A historical note about the term “theology”: originating in ancient Greek mythologies about the gods and goddesses, the term *theos logoi* can be translated as discourse *about* the divine or sacred as well as communicative action *by* the divine or sacred. The original uses of the term were pre-christian and even pre-jewish, originating in Hellenic poetry (Homer, Hesiod) and philosophy (Parmenides, Plato, Aristotle). The Hellenic root word was later transferred into and adapted by jewish, christian and muslim writers in antiquity and the Middle Ages. With reference to the historical evolution of the concept, the term has become multireligious and multicultural in scope, malleable and constantly reinvented. Through each shift and innovation, the term has both accumulated and shed various meanings. During this historical transfer across the language games of various cultures, some meanings have been marginalized or lost, while others stabilized and entrenched. Over the millennia, the term has at times been a contested battlefield for competing ideological and political rivalries. While the term is objectionable on many counts, it is also adaptable. In this sense, the blue theology trend does not represent a homogenous, let alone coherent, explanatory model, although as a pluralistic diversity of voices and perspectives, it plausibly signals an emergent niche within the green paradigm shift.

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