

Information source and channel preference in marine policy development: A case study of the  
Nova Scotian Eastern Shore Islands Area of Interest consultation process

By

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### **Abbreviations:**

AESC-PEHA	Association of Eastern Shore Communities Protecting Environment and Historical Access
APES	Association for the Preservation of the Eastern Shore
CBD	Convention on Biological Diversity
DFO	Canada Department of Fisheries and Oceans
EIUI	Environmental Information: Use and Influence research program, Dalhousie University ( <a href="http://www.eiui.ca">www.eiui.ca</a> )
ENGO	Environmental Non-governmental Organization
ESFPA	Eastern Shore Fishers Protective Association
ESI AOI	Eastern Shore Islands Area of Interest
LFA	Lobster Fishing Area
MPA	Marine Protected Area
NGO	Non-Governmental Organization

### **Abstract:**

The ways in which environmental information is communicated and by whom are important factors in decision-making processes. The sources and channels that people receive environmental information from have the potential to change their attitude and decisions about an issue and should, therefore, be considered carefully. Understanding why people choose particular sources and channels for receiving such information may help to facilitate productive working relationships among diverse knowledge groups and foster communication among them. This project examined information-related activities of stakeholders during a consultation process for a Marine Protected Area (MPA) on the eastern shore of Nova Scotia, Canada. This study included a literature review and interviews of ten individuals from five unique stakeholder groups to determine their patterns of information use during this process, and the role that information played during a federal consultation procedure. The results of this study show that the human dimension is an essential factor to consider in MPA planning. More specifically, source of information and channel use, information uptake, and information use depend on a variety of personal and societal factors, including historical context, interpersonal relationships, and source trust. Consideration of these factors in resource management and planning could facilitate better working relationships between managers and stakeholders, especially when communicating about a dynamic and possibly contentious topic such as marine conservation.

*Keywords:* information use, marine protected areas, marine policy, consultation, communication, source, channel, trust, misinformation, context, stakeholder engagement, advisory committee, Department of Fisheries and Oceans

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## Chapter 1: Introduction

### 1.1. Situating the Context for Marine Conservation in Atlantic Canada

Canadian efforts to increase marine conservation targets began in earnest in October 2010 with the announcement of the Aichi Biodiversity Targets as part of the Convention on Biological Diversity (CBD, n.d.; DFO, 2019e). Target 11 is particularly important as it specifies that at least 10% of a country's territorial waters need some measure of protection by the year 2020. Prior to the Aichi targets, Canada had begun to implement Marine Protected Areas (MPAs). Eight of thirteen designated MPAs, as of 2019, had already been established. However, the number of MPAs is less important than the percent of waters receiving protection. At the time of the Aichi announcement, a paltry 0.22% of Canada's marine waters were protected by MPAs, which meant that considerable work was needed to meet the 10% target (DFO, 2019e).

The Aichi Biodiversity Targets placed global pressure on the Canadian federal government to proceed more quickly with marine conservation. Three government units, including the Department of Fisheries and Oceans (DFO), Parks Canada, and Environment and Climate Change Canada are able to designate marine protected areas within Canadian waters. Yet, it was DFO that allocated a great deal of attention to this endeavour. Within a year, two Areas of Interest (AOIs) for MPA consideration were announced in quick succession and more soon followed (DFO, 2017). Within the span of two years, four MPAs were successfully created (DFO, 2019c). Large, offshore conservation areas began to quietly appear; slowly, DFO managers and scientists worked to achieve the 10% target. Additionally, several fisheries closures contributed to Canada's overall protected area coverage (Lemieux et al., 2019). However, during this time, growing skepticism emerged about the effectiveness of the new MPAs and whether creating such areas as a legitimate protective measure was worthwhile (Callanan, 2018; Dehens & Fanning, 2018). Some scientists argued that marine protection was simply a front for restricting access to resources, and that collaborative advice obtained from stakeholders was being "thrown out" in order to advance the MPA designation process (McIsaac, 2018, p. 2; Bennett, Govan, & Satterfield, 2015). Participants directly involved in MPA consultation processes were similarly worried, stating that "we have been disappointed by the level of consultation or the effectiveness of the consultation process to date, and we are troubled by some of the science"; "DFO comes out and announces an area of interest without any

consultation whatsoever,” and that “they [DFO] are building a lack of trust” (Canada. Parliament. Senate. Standing Committee on Fisheries and Oceans, 2019, p. 4). Overall, a consensus developed that MPAs needed higher consultation standards (Gies, 2019).

In order to address these concerns, the Canadian government began to prioritize stakeholder consultation for future MPA implementation processes. In 2018, the National Advisory Panel on MPA Standards made collaborative engagement a priority, emphasizing that:

The government be transparent with local communities, Indigenous peoples, and stakeholders from the beginning and throughout the marine protected area establishment process, and in ongoing management of marine protected areas. (Bujold & Simon, 2018, p. 1)

This decision marked a necessary step to increase collaborative decision-making in marine conservation and was a commendable initiative for ensuring community engagement. Involving stakeholders in each step of the Marine Protected Area consultation process was seen as a credible way to demonstrate that “engagement” was not simply a word used to mollify invested parties.

Over time, Marine Protected Areas have become a topic of national interest, not only from a political standpoint, but also from cultural, economic, environmental, and social perspectives. Broadly, MPAs involve the management of natural resources by delineating zones in which certain activities are permitted and not permitted (IUCN, 2020). The consultation period leading to MPA designations, in particular, is heavily scrutinized, as it often invites very diverse publics, each with a uniquely vested interest in an MPA (Hogg, Noguera-Mendez, Semitiel-Garcia, Gray, & Young, 2017; Pajaro, Mulrennan, Alder, & Vincent, 2010). Furthermore, public involvement and local community support are often key predictors of the overall success of the MPA; therefore, the importance of the consultation process cannot be overstated (Christie et al., 2009).

As public awareness of MPAs increased over the past several decades, so too has the volume of information about these conservation initiatives (Helvey, 2004). Scientific papers, newspaper articles, grey literature, social media, and community organizations all contribute to a growing body of knowledge on marine protected areas. Information relating to MPAs can be conflicting, critical, hopeful, and encouraging, and helps to shape a wide variety of opinions on the best way

to protect the ocean (Singleton & Roberts, 2014). Despite the increased availability of information on MPAs, little study has been undertaken to try to understand the actual role of information in marine conservation, specifically within the MPA consultation process. Given the fact that information has the potential to influence people's attitudes and decisions, understanding its function within the context of marine conservation is critical (Wilkins, Miller, Tiak, & Schuster, 2018). Thus, this research project was designed to gain an understanding of information activity within a Canadian MPA consultation process.

A case study of the Eastern Shore Islands Area of Interest (ESI AOI) consultation process was conducted. The ESI AOI is a large, coastal zone adjacent to the eastern shore of Nova Scotia, Canada. The consultation process for this AOI has been ongoing since March 2018, and is expected to continue into December 2020 and possibly beyond 2020 (DFO, 2019a). Specifically, this research project examined how information moves to and from stakeholders, which information sources (e.g., friends, colleagues) and channels (e.g., online, print) they prefer, and how they use information within the consultation process. This study also aimed to understand whether the current strategies for information dissemination can be improved in order to meet the needs of stakeholders better.

The opportunity for this study was unprecedented for two reasons: first, a national election occurred in 2019. When the Liberal party was elected into power in 2015, a wave of environmental initiatives followed in its wake: investments in clean technologies and clean jobs, a carbon tax, free admission to National Parks, and an overhaul of the environmental review process that had been substantially restricted by the previous government (Liberal Party of Canada, 2019). The Liberal party platform made a commitment to marine protection and reaching the global goal of 10% protection of Canadian waters by 2020 (Liberal Party of Canada, 2019). However, this trajectory of environmentalism was not set in stone. At the beginning of this research project, it was not known whether another political party would come into power as a result of the October 2019 election, which could mean that the conservation initiatives of the government could change, increase, stall, or be discontinued altogether. Numerous initiatives were up for debate in the current political climate (Harris, 2019).

The second reason that this research is unprecedented is that a large, coastal MPA has never been implemented in Atlantic Canada. The ESI AOI is the first of its kind in this region. Furthermore,

the consultation process was ongoing during the data collection period of this project, presenting a remarkable opportunity to study this marine conservation initiative as it unfolded in real time. The continuous nature of the ESI AOI process during this case study also provided the possibility of incorporating stakeholder feedback directly into the consultation process. This outcome may serve to further strengthen communication between diverse knowledge groups within the context of marine conservation and more broadly in environmental decision-making.

## **Chapter 2: Background**

### **2.1. Information Supply**

In a typical day, humans are exposed to a staggering amount of information. In many cases, this deluge begins from the moment we wake as emails, text messages, or social media updates are received. Some argue that an increase in information availability initially began with the rise of the 24-hour news cycle (Sundem, 2011). Suddenly, people had access to a huge volume of news throughout the day, ranging from the mundane to the sensational. Others suggest that living in the Information Age has been responsible for our heightened need for information, now that many people have unlimited access at their fingertips at any given moment (Bonev, 2017; Holm & Soma, 2016). In order to make sense of the information inundation, people make decisions regarding what information to receive, trust, and use throughout their day (Renn & Levine, 1991; Wilkins et al., 2018). These decisions are born out of necessity as it is beyond the realm of possibility for a person to read, address, and act upon each piece of new information that is encountered. As a result, people form habits and take mental shortcuts in order to manage information use and evaluate sources (Hass, 2015; Heinström, 2006; Niemand, 2010; Nutley, Walter, & Davies, 2007). In addition to these strategies, the ways in which information is communicated to people can impact whether or not they use it (Wilkins et al., 2018). The following sections explore various factors relating to information use and their relevance within a marine policy context.

#### ***2.1.1 Information Channels and Sources***

This study examined factors relating to information use, including people's use of and preference for information sources and channels. Information source refers to the provider of the information, e.g., scientists or friends, whereas information channels refer to the conduits by which people access and provide information, e.g., online or in print (Wilkins et al., 2018). The use of information channels varies among people and can be influenced by factors such as age, race, ethnicity, or gender (Tucker & Napier, 2002). For instance, in one study researchers found that newspapers and television were preferred information channels among older people, while young people obtained most of their information online (Wilkins et al., 2018).

The use of information sources is equally variable. In fact, the use of information sources may be more complex than channel use, as it is influenced by personal characteristics of both the receiver and the source, such as biases, trust, and personal preferences (Wilkins et al., 2018). For example, researchers have found that people with higher education levels tend to have more trust in scientists, whereas older generations were less likely (Wilkins et al., 2018). Clearly, the ways in which information is communicated and by whom, can have a significant effect on the behaviour and mindset of those who receive it. Therefore, attention should be paid to the source and channel use of a target audience in order to communicate information effectively, as these patterns may determine whether the information is accepted and subsequently used.

In addition to information channels and sources, information use can be influenced by other factors, which are outside the realm of this study, including values, livelihoods, location, and age (Chen & Lu, 2019; McCallum, Hammond, & Covello, 1991; Nutley et al., 2007). These additional factors encompass a myriad of further elements, such as education level, time availability, attitudes towards research, and information interpretation skills, all of which contribute to the ways in which individuals frame their approach to research use (Nutley et al., 2007).

### ***2.1.2. Trust***

An additional predictor of information use is the level of trust between the information provider and the information receiver (Nutley et al., 2007; Tomkins, 2001; Wilkins et al., 2018). Source trust has become a topic of rising importance, given the significant role it plays in information use (Braten, Stromso, & Salmeron, 2011; Girling & Gibbs, 2019). In simplest terms, people are more likely to use information from a source they trust than one they don't (Wilkins et al., 2018). In fact, appraisal of the information source is often a precursor to evaluating the information itself; if the source is seen as trustworthy, the information it provides will be more readily accepted by the receiver (Steelman, McCaffrey, Velez, & Briefel, 2015; Wilkins et al., 2018). Comparatively, if an information source is not trusted, the information it provides will likely be overlooked, regardless of how factual or accurate it may be (Ongare et al., 2013; Wilkins et al., 2018). Trust can be built through interpersonal relationships; thus social networks, both informal and ad-hoc, become crucial tools that people use to sift through information and make timely decisions. Furthermore, trust can lead to a greater exchange of ideas, promote knowledge co-

production, and expedite the movement of research to larger, more diverse audiences (Aronson, et al., 2019; Nutley et al., 2007).

Understanding the relationship between trust and information use is becoming an integral part of effective resource management (MacKeracher, Diedrich, Gurney, & Marshall, 2018). Not only does trust help to foster communication among diverse user groups and institutions, it can also influence a range of positive outcomes, including the following catalog from MacKeracher et al.:

- 1) increase support of management decisions...;
- 2) minimize resistance to planning efforts...;
- 3) drive cooperation and compliance with regulations...;
- 4) promote stewardship...;
- 5) contribute to perceived legitimacy of management institutions...;
- and 6) relate to perceived benefits of protected area management. (Mackeracher, 2018, p. 25)

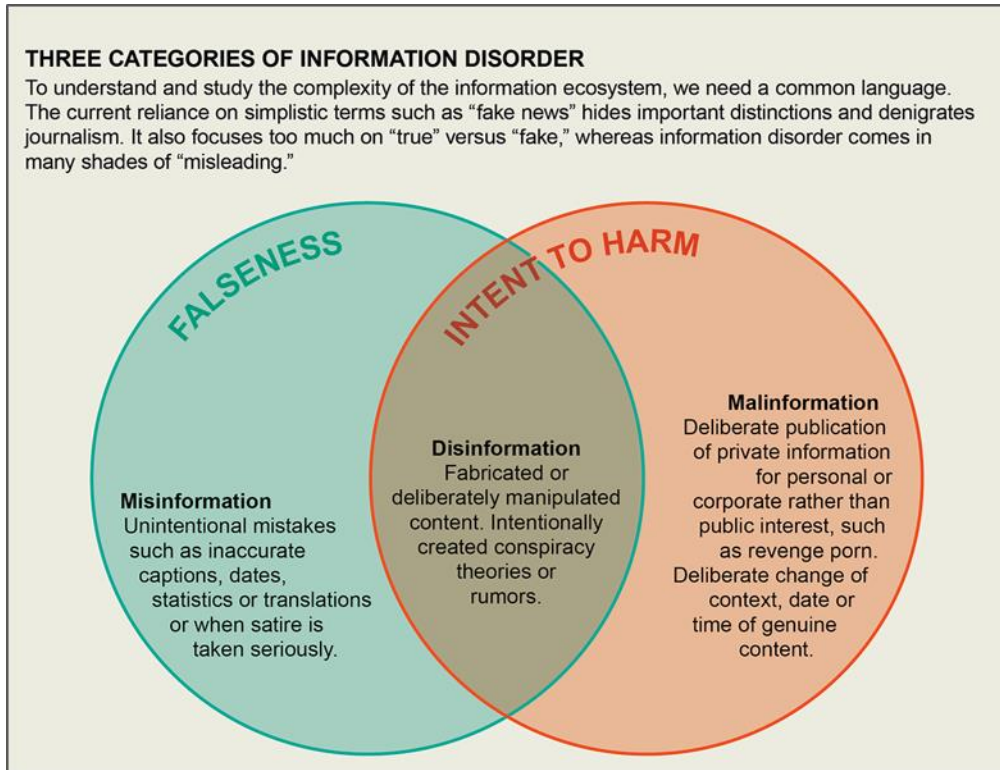
Thus, the role of trust is an important aspect to consider within protected area management, especially as it relates to information uptake and regulatory compliance.

### ***2.1.3. Misinformation***

Information use within resource management projects can be complicated by the increased prevalence of misinformation: the unintentional proliferation of incorrect information, such as captions, dates, or statistics (Wardle, 2019). Concern about separating true and false information is a relatively new subject, but is of particular relevance to this case study. Misinformation is part of an emerging suite of “information disorders,” which includes malinformation (genuine information shared to cause harm) and disinformation (false information shared to cause harm) (Wardle, Greason, Kerwin, & Dias, 2018). While dis- and mal- information may have malevolent intentions, misinformation is not necessarily malicious, but rather perpetuated by people online who are sharing it with others, unwittingly spreading falsehoods (Wardle 2019; see Figure 1).

**Figure 1**

*Three Categories of Information Disorder*



*Note:* reprinted from Wardle, 2019

Misinformation relating to environmental information and the potential impacts of misinformation on environmental initiatives, including marine protected areas, has begun to garner some attention in academic research and will likely continue to increase as ambitious MPA targets are set worldwide (Davis et al., 2014; Farrell, 2019; Munro, 2019). Misinformation can have profound implications for environmental policy processes. It can negatively influence people’s behaviours and attitudes about conservation initiatives and redirect conversations away from relevant issues that require greater attention and analysis (Davis et al., 2014). One needs to look no further for evidence than the current United States political arena, in which environmental misinformation is a divisive factor for much of the country (Gaworecki, 2019; Roose, 2018). The full influence of environmental misinformation and its impact on MPA support is not yet fully comprehended and will likely continue to evolve in scope. Thus, gaining



greater understanding of how people use environmental information and misinformation is a necessary task in order to comprehend its potential impact on society and policy (Wardle, 2017).

## **2.2. Marine Protected Areas**

Aspects of trust, source and channel use, and misinformation are important to consider during potentially conflicting processes, such as MPA implementation. MPAs, while a common conservation tool, remain a polarizing topic among various user groups. Established well, MPAs have the potential to increase ecosystem resiliency, help fish populations recover, and protect vulnerable species (Roberts, Hawkins, & Gell, 2005; Withers, 2019b). Well-managed MPAs require coordination across jurisdictional boundaries, a recognized need for protection, community support, and human resources to ensure regulatory compliance (Sale et al., 2014). More often than not these prerequisites are not met, and MPAs fail to achieve predetermined conservation objectives (Sale et al., 2014). Left in their wake are marine “paper parks”: conservation areas that exist solely on paper, without providing any tangible benefits (Pieraccini, Coppa, & De Lucia, 2016). As a result, the effectiveness and legitimacy of MPAs globally is questioned (Barcott, 2011; De Santo, 2013). Thus, when working closely with community members and stakeholders during marine conservation processes, issues about the merits of conservation approaches will inevitably arise. On a broad scale, these misconceptions and misunderstandings related to MPAs can hinder their effectiveness and negatively impact public opinion about their suitability as a tool for increasing biodiversity (NOAA, n.d.). On smaller scales, MPA misconceptions can divide communities, affect local livelihoods, and proliferate unfounded concerns. In order to address these potential challenges, considerable time and energy must be spent prioritizing human dimensions in marine conservation and understanding which methods of communication will contribute to a greater uptake of relevant and reliable information, and ultimately, to MPA support (MacKeracher et al., 2018; Pieraccini et al., 2016).

While many aspects can influence MPA success, this study examined the role of information and the methods of communicating relevant information to stakeholders during the early stages of a consultation process for an Area of Interest. Thus, a case study of the Eastern Shore Islands Area of Interest was undertaken to understand how stakeholders used information during the consultation process, and whether issues of trust and misinformation have impacted their information-related activities throughout the proceedings.

## Chapter 3: Situational Context

### 3.1. Lead up to Eastern Shore Islands as a Candidate for Federal Marine Protection

Canadian marine conservation takes many forms and can be designated by federal, provincial, or territorial bodies, via various legislative options, including the *Oceans Act*, the *Fisheries Act*, and the *National Marine Conservation Act* (WWF, 2019). The approach used most frequently for marine conservation in Canada is the establishment of Marine Protected Areas (MPAs), designated by the federal Department of Fisheries and Oceans through the *Oceans Act*. MPAs are protected parcels of ocean space, “managed to achieve long-term conservation of nature” (DFO, 2018). Besides biological benefits, well-managed MPAs can improve cultural, economic, and social wellbeing, by indirectly supporting local communities and industries (DFO, 2018).

The designation process for MPAs under the *Oceans Act* consists of five steps: 1) Selection of an Area of Interest (AOI); 2) Ecological/biophysical, social, cultural, and economic overview and assessment of the AOI; 3) Development of the regulatory intent and consultation with interested/affected parties; 4) Regulatory process and designation of the MPA; and 5) MPA management (DFO, 2019c; DFO, 2019d). While seemingly straightforward, designating an MPA can be a drawn out process, often lasting several years at minimum (Koropatnick, 2018). However, this extended timeline is often necessary for building long-term relationships, facilitating trust between stakeholders, and ensuring that priorities, concerns, and advice have been incorporated into the policy process to a reasonable extent.

The cold, temperate waters of the northwest Atlantic Ocean have long been targeted for conservation initiatives due to their productivity, abundance of indicator species, and capacity to support plentiful levels of biodiversity (King & Beazley, 2005). Eastern Canadian territorial waters are currently home to seven out of sixteen Marine Protected Areas, all of which are either relatively small (Musquash, Gilbert Bay, Basin Head, and Eastport) or located offshore (St. Anns Bank, The Gully, and Laurentian Channel) (DFO, 2019d). None of the implementation processes for these seven MPAs could be considered easy; each required a lengthy consultation period, input from stakeholders, and multiple iterations of site design (DFO, 2015; Ford & Serdyska, 2013). Nonetheless, given the size and location of the aforementioned MPAs, it is fair to say that their designation invited less controversy than a large, coastal MPA would have (Beswick, 2018;

Farran, 2018). It is arguably easier to implement large MPAs in remote, offshore areas rather than in coastal regions, primarily because community opposition and local concerns are lessened when the MPA is offshore (Farran, 2018). For example, the St. Anns Bank MPA, designated in 2017 and the largest area ever to be protected off Nova Scotia, covers approximately 4,300 km<sup>2</sup> of ocean space. In a coastal setting, this MPA would have posed a much greater challenge. Yet, St. Anns Bank was designated with little resistance, and “didn’t face an incredible amount of opposition” (S. Fuller quoted in Patil, 2016).

However, the trend of selecting modest or remote areas for MPA consideration in Atlantic Canada soon changed. On March 22, 2018, the Eastern Shore Islands, a large coastal region off Nova Scotia, was announced as an Area of Interest by the Canadian federal government (DFO, 2019a; see Figure 2). An MPA of this magnitude would be unique in Atlantic Canada, and the consultation process would be completely new as DFO had never initiated inshore marine protection on this scale previously (DFO, 2019a). To add to the complexity, the Eastern Shore Islands Area of Interest (ESI AOI) directly overlaps with a thriving lobster fishery, which supports many households along the eastern coast (Withers, 2019a). The ESI AOI announcement received a mixed response; some praised DFO for taking a proactive approach to conservation, while others were concerned about the potential impact that the MPA would have on the livelihoods of adjacent coastal residents. Over several months following the announcement, supporters of the MPA were largely muffled by a vocal opposition, predominantly composed of community members from the eastern shore and surrounding area (Primed24, 2018).

**Figure 2**

*The Eastern Shore Islands Area of Interest*



*Note:* reprinted from DFO, 2019a

### **3.2. Profile of the Eastern Shore Islands**

From an ecological perspective, selection of the Eastern Shore Islands as an Area of Interest was not surprising. The coastline is pristine, dotted with hundreds of rocky islands, sand beaches, and historic fishing villages. Beneath the waves, marine life flourishes; beds of eelgrass and kelp support healthy populations of juvenile fish species, including Atlantic cod, white hake, and

pollock (DFO, 2019a). The island topography offers prime foraging grounds for variety of seabirds, including the Harlequin duck and the Roseate tern, both of which are listed under the Species at Risk Act (DFO, 2019a).

The primary economic driver of the Eastern Shore region is the inshore lobster fishery. Under regulation since 1873, the lobster fishery is often touted as being “the backbone of the local communities of the Eastern Shore” (DFO, 1997; DFO, 2019a). Communities consistently benefit from landings from the lobster fishery, and many local families are dependent on the fishery for income. There are three lobster fishing areas (LFAs) on Nova Scotia’s eastern shore, two of which partially or completely intersect with the Area of Interest: LFA 31b, and 32 (DFO, 2004c). Within the two LFAs in the AOI, approximately 145 active lobster license holders bring in an average of \$11.9 million dollars annually (DFO, 2019a). Given their importance to the local economy, a strong sense of support for the fishers exists along with a commitment to ensuring the lobster harvest continues indefinitely in this region. The reliance on the lobster fishery is amplified by the fact that little else supports the economic growth of Eastern Shore communities. The overall population of the shore is declining, and youth outmigration is a concern shared by many who live there (Bundale, 2017). Schools and hospitals are closing, tourism is expanding at a glacial pace, and job opportunities for young professionals are scarce (Bundale, 2017).

Despite these evolving concerns, residents express an immense sense of pride in their community, and a keen commitment to sustain the environment for future generations. The connections between locals and their environment is palpable; many people depend upon the environment for some aspect of their wellbeing, whether mental health, economic, or cultural. As a result, a strong undercurrent of conservation ethic is found throughout the region. Resource users, namely fishers, are also very knowledgeable about the region, having spent a large portion of their lives on the water. Over time, they have contributed valuable information to the knowledge of their industry. One of the best examples is the v-notch program, a conservation project formed by the lobster fishers along the eastern shore that aimed to protect mature female lobsters and improve overall population growth (Fishermen and Scientists Research Society, n.d.). Ongoing since 2000, this program is just one example of how residents are environmental stewards in their own right.

### **3.2. Historical Context of the Eastern Shore**

Despite the environmentally forward mindset of the inhabitants, the Eastern Shore has a fraught history with external conservation interventions. The most infamous example, relevant to this case study, is the failed Ship Harbour National Park. In 1972, the federal and provincial governments approved the development of a new national park centred around the community of Ship Harbour (Froese-Stoddard, 2013). The park was slated to encompass 362 km<sup>2</sup> and provide a scenic escape for tourists while remaining conveniently close to Halifax. However, in the ensuing months, it became increasingly clear to local residents that the park might cause them more harm than anticipated. In the years leading up to the announcement of the park, residents struggled to resolve unanswered questions and rumors that plagued the development. Direct contact did not exist between park officials and residents, which might have helped to quell their reservations. Instead, the lack of government transparency lent an air of fear to the entire process. Furthermore, many examples of publicly circulated information turned out to be entirely inaccurate. For instance, the initial size of the proposed park was one sixth the size of the final blueprint (Froese-Stoddard, 2013). In another case, park officials attempted to placate residents who were worried about expropriation, stating that this tactic would “be kept to a minimum” (Froese-Stoddard, 2013). This statement, too, turned out to be false. It became apparent with the release of the park boundaries that 90 permanent residents and 167 summer residents would need to be relocated to make room for the land acquisition (Froese-Stoddard, 2013).

In response to this federal initiative, a community organization, called Association for the Preservation of the Eastern Shore (APES), was mobilized to try to stop the national park from proceeding (Hammond, 2018). This development was ultimately a successful endeavour and is generally thought of as a victory for the Ship Harbour community and surrounding citizens of the Eastern Shore. However, the national park was much more than a misguided attempt at conservation. The experience shaped the public perception of government initiatives for the foreseeable future. While some community members draw a distinction between Parks Canada circa 1972 and the Department of Fisheries and Oceans circa 2018, others maintain a firm sense of distrust towards all government agencies due to past mistakes (Beswick, 2018).

Discussion of Ship Harbour National Park is included in this report, not to draw a comparison between it and the Eastern Shore Island Area of Interest, but to illustrate the historical context of

the Eastern Shore and the levels of trust and mistrust that some people hold for institutions, including DFO and Parks Canada. The distinction between federal departments is not always made in Eastern Shore communities (i.e., DFO vs. Parks Canada); rather, all government is held at arm's length. Given the past events that took place in this area, the announcement of the ESI AOI was met with some trepidation by residents who feared it would be a repeat of the national park experience.

### **3.3. Consultation Process for Eastern Shore Islands Area of Interest**

Given the history of the Eastern Shore Islands and residents' past experiences with conservation interventions, it was important for the Department of Fisheries and Oceans to approach the ESI AOI with a plan for openness and transparency, and a commitment to genuine consultation. Prior to the ESI AOI announcement on March 22, 2018, DFO took steps to meet with potential stakeholders, including non-governmental organizations (NGOs), fishers, and Indigenous groups in order to fully comprehend the situation that they were entering into including potential challenges and public perceptions. During this pre-planning phase, DFO was also in the process of forming the Advisory Committee, which would eventually become a 35-person group, composed of stakeholders of various backgrounds, created to provide feedback and advice to DFO throughout the consultation process (for further details see Chapter 4 page 19 below; DFO, 2019a). In addition to the Advisory Committee, DFO also created a Fishermen's Working Group, comprised solely of members of the Eastern Shore Fishermen's Protective Association (ESFPA). The ESFPA is one of the primary stakeholders on the Eastern Shore, and its inclusion in the AOI consultation process was essential.

As described in previous chapters, misinformation is a challenge facing marine resources managers, including those involved in MPA implementation processes. In an effort to address specific cases of misinformation that were present during the ESI AOI consultation process, DFO implemented a Frequently Asked Questions segment on its website dedicated to discussing the most consistent concerns voiced throughout the consultation process (DFO, 2019a). The questions focus on issues relating to concerns that the MPA would close the lobster fishery, that the MPA would have a no-take zone in which fishing would be banned, that MPA regulations would change frequently, and restrictions would be implemented on land-owners, all of which were addressed by DFO in an effort to circulate correct information. Furthermore, DFO

facilitated three official Advisory Committee meetings, three Fishermen's Working Group meetings, and two community open houses, as well as many unofficial gatherings after the ESI AOI was announced, all of which involved sharing information and addressing community concerns.

The last official Advisory Committee meeting was held on March 28, 2019 (DFO, 2019b). According to DFO representatives, the consultation process was proceeding well at that time, and stakeholders appeared to consider DFO's efforts for consultation as genuine. However, the ESI AOI consultation is a dynamic, evolving process, which became apparent on May 8<sup>th</sup>, 2019, when the Minister of Fisheries and Oceans, Jonathon Wilkinson, arrived at the Ship Harbour Legion on the Eastern Shore for a meeting regarding the AOI in the middle of the lobster fishing season. He was met by more than a hundred protesters, including lobster fishers who tied up their boats in order to attend the meeting. This provocative, costly action illustrated the seriousness of their opposition to the ESI AOI, as each fisher would likely lose several thousand dollars for the single day (Withers, 2019c, see Figure 3). Not only was the timing of the meeting inconvenient for fishers, arguably the most prominent stakeholder group in the consultation process, but little advance notice was provided for other community members on the Eastern Shore. Following the meeting, Minister Wilkinson promised to return to the Eastern Shore before the end of summer to resume discussions with interested stakeholders and determine the potential for further productive working relationships with Eastern Shore residents (Lubczuk, 2019).



**Figure 3**

*Protesters and Attendees Outside East Ship Harbour Legion*



*Note:* Reprinted from Withers, 2019c

This second meeting between Wilkinson and ESI AOI stakeholders was held in Tangier on August 15, 2019 (Lubczuk, 2019). Several major statements were made by the Minister during this gathering: first, the MPA process as a whole for the Eastern Shore Islands was “effectively suspended”; second, DFO would appoint an impartial facilitator who would be responsible for facilitating ongoing conversations with community members and organizations about their priorities and future visions for the region; and third, a timeline for the implementation of an MPA on the Eastern Shore would not be predetermined (Lubczuk, 2019). In the wake of Wilkinson’s second meeting, the future of the ESI AOI was unclear.

Given the evolution and uncertain trajectory of the current ESI AOI consultation process, this research report provides a snapshot of information use within a marine policy process at a pivotal moment in time. The combination of historical context, political pressures, trust, mistrust, and diverse stakeholder groups make the ESI AOI consultation a uniquely suitable process to illustrate information use and the associated factors that may relate to the ultimate success or failure of the conservation initiative.

## **Chapter 4: Methods**

### **4.1. Research Question**

The primary goal of this research project was to understand the role of information within the consultation process for the ESI AOI. The case study examined how information flows in and out of the Advisory Committee and aimed to elucidate how the flow affects the information use of those involved in the consultation process. This project was guided by the following research question: Do Advisory Committee members use and prefer particular information sources and channels during the ESI AOI consultation process and what factors influence this information behaviour?

### **4.2. Interview Guide Construction and Ethics Approval**

This study used a qualitative approach to investigate the research questions about information behaviour within the Eastern Shore Islands Area of Interest (ESI AOI) consultation process. Interviews were conducted with Advisory Committee members involved in the consultation process and representatives from the Department of Fisheries and Oceans. The interview questions were developed and tested within the Environmental Information: Use and Influence (EIUI) research program at Dalhousie University. The interview questions and guiding principles were selected based on existing literature examining patterns of information use, as well as guides for conducting effective and inclusive federal consultation processes in Canada. Selected supporting documents were included in the analysis that had been developed by natural and social scientists in connection with the Department of Fisheries and Oceans Canada, and U.S. Geological Survey, Ecosystems Mission Area Wildlife Program (DFO, 2004a; DFO, 2004b; Wilkins et al., 2018).

This study required ethics approval before interviews could be conducted. Given the unsettled nature of the ESI AOI consultation process, it was important that the participants were fully informed about the purpose and the research project process. Therefore, prior to conducting interviews, all participants were required to sign a consent form. The consent form, as well as interview guides, were included in the ethics application. The ethics application was approved on July 19, 2019, and data collection was initiated soon after (see ethics approval Appendix A).

### **4.3. Interviews**

Data collection was completed in August and September of 2019. The population for this study consisted of Advisory Committee members and government representatives involved in the ESI AOI consultation process. As mentioned in Chapter 2, the Advisory Committee consists of a diverse group of stakeholders, encompassing an array of opinions and perspectives. Both Advisory Committee members and government representatives have a vested interest in the outcome of the AOI and were therefore the focus of this study.

The Advisory Committee is composed of 35 members from a variety of backgrounds, including lobster fishers, non-governmental organizations, and academia (DFO, 2019b). This study aimed to conduct interviews with as many Advisory Committee members as possible. However, due to a privacy policy, DFO did not publicly release individual names of Advisory Committee members. Thus, searches were conducted in publicly accessible sources for contact information of members of the committee. In addition, as interviews were conducted interviewees were asked for contact information of committee members.

Invitations were sent via email to 19 known members of the Advisory Committee, of which eight agreed to be interviewed. Two government representatives also agreed to be interviewed. Each participant was sent a consent form which was signed prior to the start of the interview (see Appendix B and C). Each participant was interviewed individually, either over the phone, or in person. The interviews ranged from 40 minutes to two and a half hours in length. Two interview guides were created: one for Advisory Committee members and a second for government representatives. The interview questions were semi-structured, allowing the researcher to focus on questions related to the research questions of the study, while allowing flexibility for a natural conversation to occur. Each interview question was designed to uncover information pathways and information use among members of the Advisory Committee and government representatives. The two separate interview guides are not included in this study report in order to preserve anonymity of the participants for whom the guides were created. Since the participants were assured anonymity, this precaution was taken to prevent possible identification of individuals. A generalized interview guide can be found in Appendix D).

For the purpose of this study, interview participants were grouped into five broad representative categories: government, environmental nongovernmental organizations (ENGOs) and academia,

industry, community groups, and First Nations groups (Table 1). Each interview transcript was assigned a code based on the interviewee’s stakeholder category (e.g., Industry A). While DFO grouped Advisory Committee members in a slightly different way for the consultation process, to maintain anonymity the groups were revised for this study to avoid categories with only one representative. The revision of categories prevented inadvertent identification of an individual participant. The list of names was kept separate from the interview transcripts so as to protect the anonymity of all interview participants.

**Table 1**

*Categorization of Interview Participants for the Eastern Shore Islands Area of Interest Consultation Process (DFO, 2019a)*

<b>Categories for study</b>	<b>Total number of representatives</b>	<b>Number of interview participants</b>
Government (federal, provincial, local/municipal)	11	2
ENGOs + Academia	4	1
Industry	12	2
Community groups	8	4
First Nations/Indigenous Peoples	6	1
<b>Total:</b>	<b>41</b>	<b>10</b>

To supplement the interview data, key publications were reviewed, including primary literature, government reports, and community bulletins.

#### **4.4. Grounded Theory**

Grounded theory is a methodology that enables the researcher to form hypotheses based on empirical data (Strauss & Corbin, 1994). Personal experiences are often reported in the form of qualitative data, collected during interviews with participants. Theories generally arise solely from the collected data, although existing grounded theories can be used if appropriate.

Throughout the application of this methodology, the researcher is responsible for facilitating, “a continuous interplay between analysis and data collection” (Strauss & Corbin, 1994, p. 273).

The role of information in a Marine Protected Area consultation process can be varied, complex, and influential. Multiple factors may impact information use within such a process, including historical, societal, and economic elements. Given the intricate nature of such a practice, it was necessary to gain insights from those with firsthand experience. Grounded theory helped to derive themes and core concepts based on these firsthand experiences (Lai & To, 2015).

#### **4.5. Content Analysis**

With the permission of the participants, each interview was audio-recorded and later transcribed verbatim in Word, copied into Excel, and coded for content. The content analysis process was completed in three stages: an initial round of coding to determine specific codes for each relevant interview response, a broader grouping of associated codes into categories, and a final restructuring of categories into overarching themes of all interviews. An independent check of the coding was completed by another researcher for reliability and consistency of the coding.

#### **4.6. Observation of the Consultation Process**

In addition to interviews, the researcher attended two public meetings for the Eastern Shore Islands Area of Interest, which were facilitated by DFO. The meetings were both informal, “open-house” style information sessions, and formal, discussion-based gatherings. All of the meetings were held in communities along the Eastern Shore, including Tangier and Moser River. Informal meetings were held from 10:30 AM – 6:30 PM on weekdays, allowing interested persons to drop in at any time throughout this period to speak with the DFO representatives and gather information. These meetings were open to any interested person and did not require pre-approval to attend. The formal meetings required interested parties outside of the Advisory Committee to RSVP approximately one week prior to attendance. Members of the community outside of the Advisory Committee and DFO were granted observer status and were not allowed to contribute during the meeting unless discussions were opened to the public. Thus, during these meetings, the researcher observed and took notes on issues related to information (dissemination, format, sharing, misinformation, etc.).

#### **4.7. Data Results**

Chapter 5 presents the results from the interviews completed for this study. The chapter is organized in two main sections, based on the interview guides for each target audience: Advisory

Committee members and government representatives. Each main section is divided into multiple sub-sections.

## **Chapter 5: Results**

This chapter is organized into two sections. The first presents the results of interviews with the Advisory Committee members for the Eastern Shore Islands Area of Interest (ESI AOI) and provides an analysis of the patterns of information use and insights about information behaviour in the consultation process. The second section presents the results on similar subjects from the perspective of government representatives. Two separate interview guides were created for this study, which necessitates the two sections of results. Key themes that emerged from these results, from both aforementioned perspectives, are Advisory Committee, information sources and channels, social media, conflicting information, misinformation, trust, and informal communication.

### **5.1 Advisory Committee**

The Advisory Committee for the ESI AOI is composed of a diverse group of stakeholders, each representing a particular perspective of the area. Each interview participant brought those unique views into responses to the questions addressed in this study. The interview sample is noted in Table 1. One interviewee represents First Nations/Indigenous perspectives in Nova Scotia, another represents academic institutions and NGOs in Halifax, two are members of relevant marine industries to the Eastern Shore, and four are members of community groups within the boundary of the ESI AOI. Each participant responded to questions from the viewpoint of the representative categories, and are referred to by category in this chapter, for example, Community Group A, or Industry B.

#### ***5.1.1 Advisory Committee Meetings***

Advisory Committee meetings were the primary venue where information was distributed in the ESI AOI consultation process. Each meeting was approximately five hours long and was held in towns and villages along the Eastern Shore. The format of meetings was variable, but often involved DFO giving a presentation or recap, with time for discussion after each new piece of information was provided. Advisory Committee members were often asked to share new updates, concerns, or questions that may have arisen since the previous meeting. According to DFO, the Advisory Committee meetings were intended to serve as a “forum to share information, exchange views, and provide advice on MPA design prior to designation” (DFO,

2019a). Unlike other avenues of community consultation on the possibility of a coastal MPA, Advisory Committee meetings were only open to members, as well as members of the public who requested access.

### ***5.1.2 Involvement***

Above all, this case study illustrates the fluid, dynamic nature of the ESI AOI consultation process. The Advisory Committee itself was no different. Involvement in the Advisory Committee varied throughout the consultation process. Members were added, excluded, replaced, and alternated for the duration of the proceedings, which occasionally presented a logistical challenge. The primary method for decisions about inclusion into the Advisory Committee involved initial meetings that DFO held in communities along the Eastern Shore prior to and after the AOI announcement. These targeted meetings with potential stakeholders in the region were held to determine appropriate candidates for the Advisory Committee after the AOI was announced. Following these discussions, DFO refined the final membership list. However, some Advisory Committee members had already been aware of the potential MPA. Whether or not stakeholder representatives were approached before the announcement, i.e., given a “heads up” of the AOI, was largely connected to interpersonal relationships, both between stakeholders and DFO, and among different stakeholder groups. For example, the representative for Community Group A stated, “We have a long standing relationship...we were given a heads up...just before the announcement.” Similarly, First Nations A reported that the announcement “didn’t catch us by surprise. You could see it coming from 1000 miles away.” Industry A also confirmed a long standing relationship with the department and was involved prior to the announcement.

In terms of membership criteria, a firm line defining who could or could not serve on the Advisory Committee did not seem to exist. Rather, DFO aimed to secure a variety of expertise and perspectives and also representatives of larger groups, i.e., any that might have a stake in marine conservation in the area. This approach to populating the committee resulted to approximately 35 people attending Advisory Committee meetings. On several occasions, the large size of the Advisory Committee led to logistical challenges, including few opportunities to participate in a meaningful way (Community Group D), limited time with group members (Industry A), and specific topics dominating meetings, such as issues surrounding the lobster



fishery (Industry A). One community group member stated: “it seemed like there was never enough time at those meetings” (Community Group A).

In contrast to the limitations of meetings, some aspects of the Advisory Committee were looked upon favourably by members. All of the interview participants, except Industry A, stated that the flow of information during Advisory Committee meetings was a two-way dialogue; that is, information flowed among committee members and DFO representatives, rather than DFO simply providing a one-way flow of information. Many Advisory Committee members praised DFO, saying, “They’re definitely not just going through the motions...they’ve been extraordinarily careful to not make this a rubber stamp process where it’s not real conservation” (Community Group C). However, the committee member from Industry A did not appear to share this sentiment. When asked whether the flow of information in Advisory Committee meetings appeared to be two-way, this interviewee denied that was the case and claimed that DFO had driven the process.

### ***5.1.3 Information***

According to the Advisory Committee members, the types of information provided during Advisory Committee meetings encompassed many subjects, including ecological, economic, and geological. Specific examples of discussion topics included comparable MPA case studies, information relating to specific sectors such as oil and gas, significance of marine benthic habitats, and ecological features of the AOI (Community Group B & C). Some participants stated that the primary type of information was “scientific or factual” but would “inevitably go over to the emotional side and the social side of things” (Community Group D).

The types of information presented at the meetings were rarely outwardly criticized or judged; in fact, Community Group C stated: “That’s exactly the kind of information we were trying to receive.” However, many comments were made regarding the need for additional types of information. In fact, every interviewee expressed a desire to have seen either the risk assessment, the socioeconomic impact study, or both. Industry Group B stated: “I’m most interested in the economic data, you know, what has happened to our population? What has happened to our school enrollment? What is the average age in the community?” Community Group B expressed a similar need, saying that they “were looking for the non-fisheries-based industries that go on in the Eastern Shore, and also very specifically the population and demography.”

At the time of the interviews, a contract to complete the socioeconomic profile for the Eastern Shore Islands Area of Interest had been awarded to Gardiner Pinfold, a consulting company based in Nova Scotia (M. Westhead, personal communication, March 15, 2019). A preliminary draft of the study had been released; however, it fell short of the expectations of some Advisory Committee members. “I have only seen a draft and it didn’t really give anything in terms of what I was interested in” (Community Group B). Similarly, another interviewee commented: “The first version was released and frankly, it was very incomplete” (Industry B).

Some interview participants expressed a desire to see a written commitment from DFO, guaranteeing that the MPA regulations could not be quickly changed if a new political party came into power. One interviewee stressed:

So let’s say the Minister says, which he did, ‘No effect on lobster fishing. No effect on recreational fishing. No no-take zone. No oil exploration.’ He puts it in writing. And then tomorrow he gets kicked out of office because it’s a new election. And the new guy or gal that comes in, how easily can they change what was done? So I think what would have been nice to hear up front was whatever we agree to will be semi-permanent in the sense that any subsequent government would really have to go through legal hoopla, hoops, a difficult process to make any changes. Like the constitution. (Community Group D)

This opinion was not shared by other committee members. When commenting on a fellow stakeholder who asked for such assurances, Community Group B interviewee stated: “They [DFO] can’t say into perpetuity. No, because this is legislation...They’re looking for guarantees that are so slim for anyone in our society, on any subject, under any government. It’s just not happening.”

The format of information, such as brochures, reports, or videos, was mentioned during the interviews, in response to a question about the way information was arranged, or presented in Advisory Committee meetings. The preferences for particular formats was mentioned by the interviewees, as well as several recommendations for increasing the accessibility of information. The respondents are not a homogenous group which is reflected in their diverse preferences for information formats during Advisory Committee meetings. Three community group representatives expressed a desire for a short, comprehensive, hard copy summary. This form of information provides documents they could refer to and would allow more time to examine the

information outside of meetings (Community Group A & D). With regard to accessibility of the information, one interviewee pointed out that: “A lot of us aren’t scientists, you know, so [it would have been helpful] to have a chance to look over it...and be able to have that in writing” (Community Group A). This participant also stated: “PowerPoint presentations or anything visual, I think it’s good.” Another committee member commended on the choice of information formatting, saying: “I really appreciate having those technical documents...There was newsletters, there was information on the website, there were documents...all professional and well done” Community Group B).

The Advisory Committee recommended repeatedly that DFO alter the traditional methods of disseminating information during the consultation process. The coastal communities adjacent to the AOI are almost exclusively rural (Capital Health, 2014). To this point, the participant for Community Group A commented that “not everybody has a computer to look at the DFO website.” To address these concerns and follow through on the advice of several Advisory Committee members, DFO supplied a community newsletter and distributed it to residents along the coast. This step was looked upon favourably by many of this study’s respondents, with the Community Group C interviewee saying: “They were learning that they had to think about how they had to communicate with the community at large, which they hadn’t necessarily done in the past.”

The participants were asked to reflect on their information use patterns after receiving information during an Advisory Committee meeting. Generally, they said one of two things: they would share it, or they would use it to be more personally informed. Six out of seven interviewees (one interviewee was not asked) who were asked about information use said they would share it with other people, including their representative organizations (Community Group A, B, & D; First Nations A; Industry A & B), while two said they would also use it to further their personal knowledge base (Industry B & Community Group D). Another participant expressed the view that use of information from Advisory Committee meetings meant it was incorporated into government reports associated with the ESI AOI, such as the socioeconomic study (Academia + NGO A).

#### ***5.1.4 Role of the Advisory Committee***

Creation of an advisory committee is common practice in the implementation of MPAs in Canada, and such committees are established during the consultation process, both for offshore and onshore MPAs. The Advisory Committee for this particular coastal MPA was larger than offshore MPAs in the region. The role of the ESI AOI Advisory Committee was frequently discussed throughout the consultation process and reported in public documents. Not only did DFO emphasize that the Advisory Committee was a forum to share concerns and ideas, it was a mechanism for citizens to help design a site that they agreed with and would allow them to continue to benefit from their environment, both currently and in the future (DFO, 2019a). This study was interested in determining whether Advisory Committee members felt the assigned role was appropriate for the Eastern Shore context.

Some members blatantly did not agree with the role of the Advisory Committee, or felt that the position of committee members was not adequately communicated during the consultation process. The participant from Industry Group A was the most vocal cynic of the role, commenting that: “What it became was a group where DFO could come and present information and feel like they had done the consultation process.” A stakeholder from the Academia + NGOs group also critiqued the role, saying that “DFO stumbled a bit...we don’t have experience in coastal MPAs...and how you do sharing and decision making.” Other interviewees wanted a more involved role in the management and ongoing discussion of the MPA, rather than simply providing advice for a set time period (Community Group A). For example, the representative for Community Group C stated that “there was a clear end date for the Advisory Committee...That became an issue very early on.” The Advisory Committee members felt that they had put considerable work into the ESI AOI and a defined end date was unsettling. A collaborative, co-management model for the ESI AOI was proposed by the Minister of Fisheries and Oceans during his second appearance, and praised by multiple interviewees during this study (Community Group A & C).

Other Advisory Committee members, namely those who had previous experience in federal consultation processes, accepted their position on the committee, even to the point of resignation. The interviewee from Community Group B put it succinctly:

They're the federal government. To me, their role was clear, and our role was advisory. And when you're an adviser, they can take it or they can leave it. They're not going to do what I say, I have no authority. I'm just a citizen.

This acknowledgement was echoed by the representative of Community Group D, who commented: "Who am I to think something is the way it is? I don't know." Other members used the Advisory Committee as a way to offer feedback to both DFO and their respective community groups on updates and concerns (Community Group D). Some viewed the Advisory Committee in a more idealistic way, believing that it could buoy local interest in the MPA and promote equitable sharing for all in the area by allowing people to have input into a proposal that they would support and care for (First Nations A).

## **5.2 Information Sources and Channels**

During the interviews, the participants were asked to identify various aspects of their use of information sources and channels during the ESI AOI consultation process. They were given a list of potential information sources to consider and asked to identify two they use a) most frequently, and b) least frequently when looking for accurate information about the ESI AOI (see Table 2 and Table 3 below). Similarly, the participants were asked about their use of information channels (see Table 4 and Table 5 below). The responses were tallied and are shown based on source and channel use. The participants were also asked to reflect on any discrepancies between their use and preference of information sources and channels throughout the consultation process (see Section 5.2.2).

### ***5.2.1 Frequency of Information Use***

The federal government was the most frequently used information source by Advisory Committee members when seeking accurate information about the ESI AOI. Every interviewee, regardless of stakeholder category, identified the federal government as one of their two most frequently used information sources (see Table 2). Community organizations were the second most frequently used information source, with half of the participants including such organizations as one of their top two choices. These two sources were followed by conservation groups, with two participants utilizing them most frequently during the consultation process. Local news and scientists internal to their organizations were identified only once by

participants, while local/municipal government, provincial government, universities, national news, family/friends/neighbours, and scientific organizations were not mentioned (Table 2).

**Table 2**

*Most Used Information Sources by Advisory Committee Members When Seeking Accurate Information about the Eastern Shore Islands Area of Interest*

<b>Information source use frequency: Most</b>	<b>Number of responses: 16 (two choices per respondent)</b>
Federal government	8
Community organizations	4
Conservation groups	2
Local news	1
Other (internal scientists)	1
Local/Municipal government	0
Provincial government	0
Universities	0
National news	0
Friends/family/neighbours	0
Scientific organizations	0

Half of the interviewees identified the provincial government, local/municipal government, and national news as one of two sources they would use the least for accurate information for the ESI AOI (see Table 3). These sources were followed by friends/family/neighbours, with two participants stating that they would not use this group of individuals for accurate information. Finally, conservation groups and universities were identified once by interview participants as being a source they would use the least. Scientific organizations, community organizations, local news, and federal government were not selected by Advisory Committee members in this study.

**Table 3**

*Least Used Information Sources by Advisory Committee Members When Seeking Accurate Information about the Eastern Shore Islands Area of Interest*

<b>Information source use frequency: Least</b>	<b>Number of responses: 16 (two choices per respondent)</b>
Provincial government	4
Local/Municipal government	4
National news	4
Friends/Family/Neighbours	2
Conservation groups	1
Universities	1
Scientific organizations	0
Community organizations	0
Local news	0
Federal government	0

Meetings and gatherings were almost unanimously chosen as one of two most frequently used information channels, with seven out of eight of interview participants stating that this was where they sought accurate information about the ESI AOI (see Table 4). The next most frequently used information channel was online communications, particularly email, which was noted several times as being a major method of communication in this consultation process. Online content, printed content, and talking with other people were all identified by two participants as being an information channel used most frequently. Talking with other people was seen as an informal information channel, as opposed to meetings and other gatherings, which were seen as part of the official consultation process. Visual media available on cable or satellite TV, recorded media, and live audio were not mentioned by any participant as being one of their most frequently used information channels.

**Table 4**

*Most Used Information Channels by Advisory Committee Members When Seeking Accurate Information about the Eastern Shore Islands Area of Interest*

<b>Information channel use frequency: Most</b>	<b>Number of responses: 16 (two choices per respondent)</b>
Meetings and gatherings	7
Online communications	3
Online content	2
Printed content	2
Talking with other people	2
Visual media on cable or TV	0
Recorded media	0
Live audio	0
Teleconferencing	0
Visual media online	0
Other	0

When asked to choose the two information channels they would use least frequently to seek accurate information about the ESI AOI, six out of eight interview participants identified recorded media (see Table 5). Three interview participants identified teleconferencing and visual media on cable or TV as a channel used least frequently. Two participants selected live audio as an information channel that they would use least frequently, while one participant mentioned online content, specifically social media. No participant mentioned visual media online, meetings or gatherings, online communications, printed content, or talking with other people as a channel used infrequently (Table 5).



**Table 5**

*Least Used Information Channels by Advisory Committee Members When Seeking Accurate Information about the Eastern Shore Islands Area of Interest*

<b>Information channel use frequency: Least</b>	<b>Number of responses: 15 (two choices per respondent, one respondent chose one)</b>
Recorded media	6
Teleconferencing	3
Visual media on cable or TV	3
Live audio	2
Online content (specifically social media)	1
Visual media online	0
Meetings or gatherings	0
Online communications	0
Printed content	0
Talking with other people	0
Other	0

### **5.2.2 Preference**

As previously mentioned, the interviewees were asked whether a discrepancy existed between their use of and preference for particular information sources and channels. Out of the total number of participants, 37.5% indicated no discrepancy between use and preference for information sources (Industry A, Community Group B, & C). The representative of Industry B expressed no preferences at all for information sources, stating instead: “I don’t have any predetermined preference. I take my information where I can find it.” Other Advisory Committee members commented that their use of information sources was not necessarily their own personal preference but instead depended on the context. For example, the Community Group A interviewee mentioned that “if we were in a consultation process re: fish farms, I would seek information from the provincial government, but because it was a federal initiative, that was part of the reason why I got my information from the organization that is leading this.” This sentiment was echoed by both Community Group D and Industry B interviewees, who stated “I

gotta have... any group that was directly related to what was going on” and “It could come from so many different sources depending on what’s taking place,” respectively. In terms of any discrepancy, the representative of First Nations A was the only outlier. When asked whether preference for and use of information sources was different, this interviewee preferred more information from local and municipal governments as their views were not always expressed to the fullest extent.

All of interviewees stated their most used channel was also their most preferred, indicating no discrepancy between use and preference. For example, as one interviewee stated simply: “I think everyone used that [channel] because that’s what they prefer to use” (Community Group C). In this consultation context, this observation appears to correctly characterize all of the interviewees.

### **5.3 Social Media**

Within the ESI AOI consultation process, social media was a pervasive, dynamic information source and channel. Its role was multifaceted throughout the proceedings. In order to gain an understanding of Advisory Committee members’ views about social media, they were asked whether they used social media, their views on it as an information channel, and to reflect on its contribution to the entire conservation initiative.

Despite its popularity, no interviewees actively used social media within the consultation process in either posting or commenting on matters relating to the ESI AOI. Instead, the participants’ use of social media was either indirect or nonexistent. Out of eight Advisory Committee members, two stated that they use social media as they would any other information channel: they were not active users, and only used social media platforms to determine what other community members were thinking. For example, the representative of Community Group B stated: “I just use it as another source of information. It’s handy because you get a flavour of unofficial information. Nobody is vetting it.” Similarly, the Community Group A interviewee noted: “It was an important information channel for me in terms of finding out what other groups were thinking.”

The rest of the interviewees (representatives of Industry A and B, Academia + NGO A, First Nations A, and Community Groups B and D) all stated that social media was not an important information channel during the consultation process and they did not actively use any of the

platforms. For some interviewees, not using social media was simply because they were not familiar or comfortable with it. For example, the Industry B representative admitted: “I wouldn’t know Facebook if I fell over it. I’ve sent two tweets in my life. Social media is way down on my radar.” The First Nations A interviewee shared a similar sentiment: “I don’t even have social media accounts.” Some participants accepted social media as an information channel, but they did not find it important for their own personal use for matters relating to the ESI AOI. Others in the Advisory Committee actively did not use social media during the process, and made a point to un-tag themselves from pictures and refrain from online posting, in order to not arouse suspicion of their views (Academia + NGO A).

The participants’ views about social media were varied, but the majority of responses skewed towards the negative. Some participants, such as the representative of Industry A, were wary of social media, stating that, while they were comfortable with social media, they were aware that many filters were needed. Others, such as the Community Group B interviewee, approached it with a more positive outlook: “I recognize the significance of the social media for my society and how public policy is done – I recognize it. So it’s very important. And it’s the way most people operate. For this purpose, I’m okay with that.” However, this perspective was not unanimously held by other stakeholders. The representatives of Industry B and First Nations A, both of whom do not use social media, called it “hurtful,” “poisonous,” and that it has “helped to proliferate misinformation.” Community Group C interviewee, another non-user, stated that social media have simply helped to “massage public opinion” about the consultation process, and have helped to validate many views online, regardless of accuracy. Notably, those Advisory Committee members who use social media, both actively and passively, offered primarily positive or neutral comments about it, while Advisory Committee members who do not use it or are unfamiliar with it, voiced primarily negative comments.

#### **5.4 Conflicting Information**

Public engagement processes involving diverse stakeholder groups will inevitably invite conflicting information and opinions. The same was the case in the ESI AOI consultation process. Conflicting information was a reoccurring theme among the comments of many participants. In this context, conflicting information is defined as two or more pieces of information that contradicted each other. When asked to reflect on instances in which they may

have encountered conflicting information during the consultation process, 50% of the participants stated that they had encountered information that seemingly contradicted information provided by DFO (Industry A, and Community Group A, B, & D). These two stakeholder categories approached this issue in different ways. Community Group A, B, and D interviewees tended to believe DFO, stating that they would be inclined to trust expertise and that if “the DFO science people are telling me something about the ocean, I’m going to probably accept that” (Community Group B). Community Group A echoed this statement: “Usually I accept what DFO is saying, because they’re the ones that are sort of presenting what the rules and regulations are.” Industry A’s views differed, however; rather than deferring to the federal government, this interviewee tended to use information from the fishing industry, as the latter data was regarded as more recent than DFO’s. Industry A claimed that DFO and academics often used dated data in presentations. When asked whether turning to the more recent data from the fishing industry would typically occur, this interviewee confirmed that step would be taken. First Nations A believed the largest source of conflicting information was perpetuated by the premier of Nova Scotia who, according to this stakeholder, “doesn’t understand what an MPA is.” Others, including Community Group B, cited the Association of Eastern Shore Communities Protecting Environment and Historical Access (AES-PEHA) as the primary proponent of conflicting information and misinformation. Regardless of stakeholder category, all participants agreed that conflicting information had been present during the consultation process. However, Academia + NGO A drew the following distinction: “I think there’s a lot of conflicting information...but not in the process itself.... It was external to the process.”

#### ***5.4.1 Reconciling Conflicting Information***

The participants were asked to explain their techniques for reconciling conflicting information, prompted by the question: “If you were presented with two pieces of information and they didn’t coincide with each other, what would you do?” (see Table 6). Three out of eight participants stated that they would refer to scientific information, either from DFO or from academics who were knowledgeable about the topic (Community Group A, B, & First Nations A). Industry B and Community Group D explained that they would consistently seek additional information sources in an effort to determine the truth of the matter. Academia + NGO A also employed this strategy, but allowed the media to assist, explaining, “The only way I dealt with it was reaching

out to the media and trying to get them to pull it apart a bit...get the right story out of it.” As previously mentioned, the Industry A representative generally referred to industry information, especially when the scientific data and information from academics or DFO were not current. Community Group C preferred to simply accept the uncertain nature of information during the ESI AOI process, pointing out that definitive answers to many of the scientific quandaries within this context were not often available.

**Table 6**

*Stakeholder Strategies for Reconciling Conflicting Information during the Eastern Shore Islands Area of Interest Consultation Process*

<b>Strategy for reconciling conflicting information</b>	<b>Total number of responses: 8</b>
Defer back to DFO/academia	3
Seek additional information	2
Defer back to industry data	1
Let the media untangle the “real” facts	1
Accept uncertainty	1

### **5.5 Misinformation**

Misinformation was another reoccurring theme among the responses of the interviewees to questions about the ESI AOI consultation process. According to Wardle (2018), misinformation is the unintentional spread of false information, such as photo captions, or dates. Wardle also defined disinformation as the intentional perpetuation of conspiracy theories or rumours (2018). A distinction between mis- and disinformation was not drawn during interviews with Advisory Committee members, rather all perceived false information was categorized as misinformation. While both mis- and disinformation was mentioned by the interview participants, in this analysis all instances have been considered misinformation, i.e., unintentional. The motivation of those who spread false information was unknown, and to assume malicious intent in all instances would likely be inaccurate. Thus, motivation was omitted from this analysis. While some misinformation may have contributed to conflicting information within the ESI AOI consultation

process, for the purpose of this analysis, misinformation and conflicting information were treated as two separate concepts.

### ***5.5.1 Examples of Misinformation***

The interview participants were asked to identify instances when they encountered what they believed to be misinformation during the ESI AOI consultation process (see Figure 4, p. 40). The most commonly mentioned examples of misinformation related to property issues, and the possibility of additional regulations being enforced on members of the marine harvesting industry (Figure 4). Property issues included concerns over land expropriation and decreased real estate values as a result of implementing an MPA on the eastern shore. Interviewees for Industry A, and Community Groups A, B, & D mentioned this type of misinformation. Industry B explained that “most specifically, [you believe] that you’re at risk that your property will be expropriated... Nothing could be further from the truth. But it has been widely said and widely believed.” Misinformation relating to the introduction of additional regulations included concerns about increased restrictions on the lobster fishery, and the implementation of a no-take zone in the MPA. This example of misinformation was provided by representatives of Community Group A, B, & D, as well as First Nations A. Some interviewees mentioned several instances of misinformation relating to pacing issues, which included claims that the MPA would be completed by the end of 2020 after DFO agreed that it would not be, and that decisions regarding crucial aspects of the MPA had already been decided, such as the shape or zone designations. For example, when asked about occurrences of misinformation, the interviewee for Community Group B explained, “Well, for instance, the whole reason there’s an AOI is to get an MPA, the decision has already been made by Ottawa.” This interviewee also had a similar example: “The misinformation was really, really serious. At one of the meetings, they [AESC-PEHA] said DFO hadn’t consulted with people.” When the representative from Community Group B confronted this issue, they were told to sit down by the meeting organizers. Additionally, the Community Group A representative mentioned misinformation pertaining to external influences exerting power over the consultation process: “You hear this stuff about outside sources, outside forces interfering and sort of controlling the agenda, when in fact, I don’t believe that was true.” The representative of Industry B took this even further, stating: “the provincial government is very much a part of this. They’re a big part of the problem. They’re

spreading misinformation with the best of them.” Interference by the provincial government was confirmed by another participant who stated: “They had staff down there...who was actively meeting with groups and fishermen to oppose and say, ‘you’ve got to oppose this, you’ve got to oppose this...so that didn’t help” (Academia + NGO A).

As mentioned in section 5.3, misinformation was often shared over social media. When asked about DFO’s efforts to combat this online misinformation, several interviewees suggested that more steps at mitigation should have been pursued, and that the government response time was too slow compared to the speed at which social media was spreading inaccuracies. The Community Group B interviewee provided the following explanation:

And there’s a lot of that Facebook discussion. They express a lot of views there that I find to be misinformation...The government kept trying to answer questions but they were slow to do that because they had to have a rationale for why they were saying things, when really the others could just say anything at any time through social media or these other sources...Yes, that was a significant weakness of the process.

The Community Group A interviewee echoed this description by noting that: “There were several occasions where we said, ‘this stuff that is getting said is wrong. You need to counter it, you need to correct it.’”

**Figure 4**

*Themes of Misinformation Present during the Eastern Shore Island Area of Interest Mentioned by Interviewees*



## **5.6 Trust**

Trust was an omnipresent topic of discussion during the interviews and within the consultation process generally. Aspects of trust and mistrust related to nearly every facet of the ESI AOI proceedings and depending on the context could simultaneously benefit or harm the consultation process. Since trust is a multidimensional concept, analysis of the interviewees' comments about trust is presented in three sections: trust in information, trust in sources, and mistrust. However, these categories are not mutually exclusive.

### **5.6.1 Trust in Information**

At times, trust in information was nearly inseparable from trust in sources of information. The degree to which participants trusted information was more frequently related to the level of trust they had in the source providing the information, rather than the quality of the information itself. Except for the representatives of Community Group B, and Industry A and B, the participants



referred to their trust in sources when they were asked what trust in information meant to them. For example, the First Nations A interviewee said that trust in information was simply knowing the source and the source's motivation. Similarly, trust in information was directly linked to trust in sources for the representative of the Academia + NGO A group, who tended to accept information from people they confidently trusted. Along the same lines, interviewees from Community Group A and C trusted information from sources with previous experiences on similar subjects and with whom they had past working relationships, highlighting the importance of interpersonal connections as a way to promote information use.

However, the remaining Advisory Committee members approached information more skeptically. Community Group B interviewee did not defer only to trusted sources, but considered a diversity of options: "Trust in information is essentially trying not be naïve about information, that it can be skewed for purposes, all different purposes...I have diversity in the sources that I refer to, to see if there's consistency in the message." Industry B interviewee approached information in a similar manner: "I accept very little at face value. I'm a cynic in terms of where people are coming from." Both Industry A and B participants mentioned that they would not trust *any* information before conducting their own additional assessment to confirm the accuracy and legitimacy of the facts provided.

### ***5.6.2 Trust in Information Sources***

The participants were asked to identify sources of information that they would trust to provide accurate information about the ESI AOI and they were also prompted to identify characteristics about that source that would increase their trustworthiness. Both Industry A and B interviewees declined to identify individual sources that they would trust; instead, they explained that they trust no sources within the consultation context without first identifying the source's bias. The Industry A interviewee explained that each source had the potential to be trustworthy and all information was accurate to a certain degree of bias. The Industry B participant took a similar stance when asked about trustworthy sources:

I trust all of them a great deal, and none of them overwhelmingly, if that isn't too inconsistent. All things being equal, I'm prepared to receive information and a point of view from virtually any source. But I'm going to filter that right from the get-go and I'm going to be very aware

that the source that I trusted implicitly on one issue yesterday, I might not trust at all on another issue today.

When asked if there were qualities that would make a source seem more trustworthy, the Industry B interviewee concluded that if a source were community-focused, i.e., not participating in the consultation process to “feather their own nest,” confidence would likely be placed in that source. The representative of Academia + NGO A had a similar response when asked to identify sources that would be trusted. This interviewee explained that rather than having specific sources to contact, the interviewee simply trusts people, and trusts the relationships made during the process. “I tend to trust information that comes from people I trust. Which is why I invest a lot in the human relationship side of things...it’s the people at the core, like do I trust that person?” (Academia + NGO A).

The remaining interview participants all stated that they were more likely to trust DFO and the researchers at universities (Community Group A, B, C, & D; First Nations A). On this view, the Community Group D participant stated: “I’m assuming that whatever DFO or universities put out there is factual and that’s the way it is.” Trust in these two sources was often related to expertise, and experience with similar consultation processes. The Community Group A interviewee stated: “For me, where I go to information that I believe is trustworthy is those organizations that I believe have the most experience and that have dealt with these issues the longest.” In other cases, some interviewees are simply more likely to trust individuals with a science background (Community Group C).

When the participants representing Community Groups and First Nations A were asked what qualities make a source more trustworthy, the criteria they used were varied, but generally included characteristics such as “past experience,” “credibility,” “objectivity,” “accuracy,” and “honesty” (Community Group A, B, C, & D). Honesty was a key factor that contributed to trust in a source. For example, the Community Group D interviewee spoke about DFO as follows: “they actually admitted that they did something wrong. And admitting that you have made an error or an omission builds trust...admitting that you made a mistake or something wasn’t done or approached right builds confidence, builds trust.” Other community group participants also appreciated the objective nature of the information that DFO provides: “They’re just painting a

picture of what's there. That's kind of core information and it's on that that I base my trust" (Community Group B).

### ***5.6.3 Mistrust***

During the interviews, the Advisory Committee members were asked to identify sources that they would not trust to provide them with accurate information within the ESI AOI consultation process. The words "mistrust" and "distrust" were used interchangeably by all participants except for First Nations A, who made a distinction between the two words. This participant stated that:

Mistrust means that whatever comes out of your mouth doesn't matter because I don't believe it at all. Distrust means I'm [on the] same side as you but whatever you say, I'm going to go back and check it. I'm inclined to believe you but I'm not going to say exact same thing because I haven't done my homework.

For consistency, mistrust will be used as an inclusive term to describe instances where participants felt a lack of trust or regarded someone as untrustworthy.

The existence of mistrust between members of the Advisory Committee was confirmed by all interview participants. Some believed that mistrust existed among all stakeholders, even those who urged similar outcomes during the process, such as NGOs and Indigenous groups (First Nations A). This general mistrust was explained by the short time frame and the lack of opportunity for committee members to get to know each other (First Nations A). Others explained that there was mistrust between DFO and industry groups, such as fishers (Industry A; Academia + NGO A). Fishers and NGOs were also identified as not trusting each other, as well as not trusting NGOs and the provincial government (Academia + NGO A). In fact, one participant was straightforward in saying: "I don't trust the provincial government. That's the one. Because they have ulterior motives" (Academia + NGO A). Mistrust in the provincial government was echoed by the Industry B participant (see section 5.5.1). Instances of intra-sectoral mistrust were also mentioned, specifically within community groups. The Community Group B and C interviewees both identified AESC-PEHA, a fellow community group on the Eastern Shore, as being untrustworthy during the consultation process, and an unreliable source of accurate information.

Notably, the mistrust for a member of a particular stakeholder group did not necessarily apply to *all* members of that group. For example, the Academia + NGO A participant expressed not trusting the fishermen, yet during a different part of the interview noted a development of “a bit of a trusting relationship with some of the fishermen who are totally against the MPA.” This separation of trust also applied to the government. For example, as a member of the federal government, DFO is both trusted and mistrusted by the interview participants, whereas the provincial government was primarily mistrusted (Academia + NGO A). This inconsistency is also demonstrated by the participant from Community Group B, who had identified different community groups as sources who could and could not be trusted to provide accurate information about the ESI AOI. These differences in trust decisions illustrate the heterogenous nature of stakeholders within the consultation process.

Many interview participants identified the historical context of the eastern shore as an inescapable influence of the mistrust that pervaded the consultation process (see section 3.2). The memory of the Ship Harbour National Park initiative permeated the consultation process and presented a challenge to the completion of ESI AOI from the beginning. When speculating on the mistrust present within the community, the Academia + NGO A participant explained: “The people who had fought the national park were going to fight this too...It’s all psychological, emotional. It has nothing to do with any kind of logic. It really doesn’t. It’s historical context.” Another statement by Community Group A supports this view about mistrust of government by community members: “Unfortunately, it’s one of the few areas, I think, where communities can really have some input but because of people’s past experiences with other types of so-called conservation, they don’t believe this is a true, consultative process.” Other participants did not fault DFO for the national park experience but pointed out that DFO carries the legacy of fraught relationships with previous governments, which translated into a lack of trust for DFO:

And the other thing was, of course this isn’t DFO’s fault, they have a legacy. There’s a legacy here, right or wrong, correct or incorrect. The perception here is that you can’t trust DFO. You can’t. You can’t trust government. Whether or not that’s 20-60 year old perception, that’s the perception. And it’s a hill that they have to climb, right out of the shoot, so they didn’t deal with that properly. (Community Group D)

It was often stated during interviews that the historical mistrust present within community members along the Eastern Shore meant some Advisory Committee members had predetermined opinions about the ESI AOI or drew comparisons to the national park. The Industry B participant said: “The community rushed to judgement to oppose the MPA without any knowledge of what the process and the real nature of the MPA would represent.” Most of the participants commented that it didn’t matter what the information was or what format it came in; some people had made up their minds to oppose the MPA from the onset (Academia + NGO A; First Nations A; Community Group A & D; Industry A). This perspective was seen as a hindrance to the ESI AOI consultation by some interviewees, particularly as some individuals who opposed the introduction of an MPA were members of the Advisory Committee. Some committee members disagreed with the decision to allow those who were opposed to the MPA to sit on the Advisory Committee, such as, the participant from Industry B:

Many have predetermined that they oppose the concept, yet sat on the Advisory Committee, which I found just astounding. Not acceptable. Why would you sit on a committee to create something when you’re publicly opposed to it from the get-go?

Another factor contributing to mistrust was timing of the consultation process. For example, several interviewees noted that a gap of a two-three month period of time occurred after the ESI AOI was announced during which community members were not given any follow up information, nor did DFO visit the communities to explain what would happen in the future. This period of high uncertainty “left a space for the opposition to start to foment and start to distrust, saying ‘DFO isn’t talking to us, what does it mean?’ It was too long. It was two months, three months. It was too long” (Academia + NGO A). This view was echoed by the Community Group D interviewee who also commented about that time period: “But for several weeks, if not for a couple months I think, had passed, allowing people to talk and stew, and really get worked up against it.” In another case, participants expressed that the timing of Advisory Committee meetings led to mistrust among members. Both Community Group A and First Nations A interviewees stated they didn’t trust other committee members because they didn’t have time to hear from them or interact with them during meetings: “It’s because we haven’t been around

each other long enough on this Advisory Committee that this distrust is still there” (First Nations A).

## **5.7 Informal Communication**

While trust is usually difficult to gain and relatively easy to lose, one of the best ways to build it is to foster relationships (MacKeracher et al., 2018). Within the ESI AOI consultation process, one of the most common ways Advisory Committee members bonded with each other was by engaging in informal communications, which were defined as coffee breaks or side discussions, any contact occurring “along the margins” (Academia + NGO A). Often, these informal interactions would occur within the Advisory Committee meetings during a coffee or lunch break. For example, Academia + NGO A explained:

The most useful part of Advisory Committee meetings are lunchtimes and coffee breaks. And before the meeting and after it ends. That’s when I get all my work done. That’s when I ask someone how their wife is doing, you know? Create those relationships.

Similarly, the Community Group C participant stated: “I think from what I’ve observed, at all Advisory Committee meetings you can see everybody making a point of talking to other people during the coffee breaks about something, which I think is healthy.” Other Advisory Committee members preferred to communicate informally over the phone, by email, or in person outside of meeting times (Industry A & B interviewees).

Besides creating relationships, informal communications helped to facilitate a greater understanding among Advisory Committee members, which may not have been possible in a formal meeting setting. When asked what purpose the side discussions served, some participants indicated that it helped to build understanding of perspectives and mandates of fellow stakeholders (Industry A). The participant from Community Group D offered a similar explanation: “I like it because it confirms some of the things we were surmising but it also brings to light other perspectives that I or we maybe didn’t have before.”

## **Government and the Consultation Process**

The remaining sections in this chapter are based largely on interviews with government representatives. The government category included staff of federal, provincial, and municipal

government departments. The perspectives of the government representatives are drawn from responses to a similar set of questions as were posed to the members of the Advisory Committee (see Appendix D).

## **5.8 The Advisory Committee**

Consultation about marine conservation on the Eastern Shore began before the March 22, 2018 announcement of the ESI AOI. The Department of Fisheries and Oceans had been conducting meetings in the Eastern Shore area about including the Eastern Shore Islands (ESI) in a broad MPA network plan since 2016. During 2016/2017, DFO held a “a series of targeted meetings” in order to consider various options for a coastal MPA, before settling on the ESI as the most feasible candidate for marine protection. Following this decision, the ESI AOI was officially announced, and then more formal consultation “really started up in earnest” (Government A).

### ***5.8.1 Establishing the Advisory Committee***

The next step DFO took to initiate the consultation process was to create an Advisory Committee. As mentioned in section 5.1.2, specific criteria for selecting stakeholders seemed not to have been set in creating the committee. The loose membership criteria was intentional, as the Government A interviewee confirmed: “Really, the point of the Advisory Committee is to get a variety of expertise and perspectives.” The desire to receive a diversity of views meant that size of the Advisory Committee “got huge really quickly,” which was an important feature, as it promoted openness within the consultation process (Government A and B). Additionally, observers were allowed to attend Advisory Committee meetings, which was an option not previously provided by the federal department. While this strategy also led to a very large number attending meetings, it helped create a sense of participation, allowing people to see what was occurring through each stage of the process, and promoted the understanding that the federal government was not “doing anything behind the scenes or giving people different pieces of information” (Government A).

### ***5.8.2 Advisory Committee Meetings***

When asked to reflect on the Advisory Committee meetings, the Government A interviewee concluded that “they all behaved themselves surprisingly well, every single time. It was collegial...everybody, including observers, always really behaved themselves.” However,

despite the cooperative nature of the Advisory Committee, government representatives expressed disappointment about the consultation process as it unfolded. As one government participant noted: “things kind of got derailed” (Government A). One reason for the lack of progress was the heavy workload and time commitment required from committee members that was necessary to move forward with the AOI. While thinking about this aspect, the Government B interviewee pointed out that many matters needed to be considered in establishing an MPA: “Reflecting back...there’s probably some pace issues that...could have [been] addressed.” The Government A representative agreed with this view: “especially for a coastal site” there may have been “pretty innocent thinking” about the speed at which the advisory process could proceed. However, while the length of the Advisory Committee process often involved many hours of activity, the timeframe was seen as necessary to the process: “You could spend two or three hours on something as opposed to 20 minutes. And I think you have to build that into a process, which is time together” (Government B).

Primarily scientific information, such as an ecological overview, marine harvesters’ profiles, and risk assessment updates, was provided by DFO during the Advisory Committee meetings. Specific types of information needed to be discussed, however, and time was allocated to hear from the Advisory Committee at each meeting, and facilitate a two-way dialogue (Government A). The objective of the meetings was to avoid committee members only experiencing “talking heads and no time for discussion.” Instead, the agendas were designed to allow committee members to hear from other participants and gather ideas (Government A). Thus, Advisory Committee members were invited and encouraged to present on topics related to the AOI.

With regard to the format of information, DFO acted directly on the advice of the Advisory Committee. While the typical format of information disseminated by the DFO representatives included emails, reports, or visual presentations, some members of the committee suggested that it would be beneficial to offer community newsletters in the form of a short, clear brochure, which could be distributed to homes along the eastern shore (see section 5.1.3). The federal department accepted this advice, though some government interviewees agreed that it should have been completed earlier in the process (Government A). One of the government interviewees also noted that the website designated to the consultation process “could have been more extensive” (Government A).



DFO was also aware of the criticisms raised within the Advisory Committee relating to the supply of information, especially the interest in obtaining access to the ecological risk assessment. Many Advisory Committee members stated that they would have liked to have seen the risk assessment completed earlier in the consultation process. However, from the federal government's perspective, responding to this request for information was one of the most difficult aspects of the entire proceeding. As one Government interviewee explained:

It's so frustrating, because it's total chicken and egg because if you come in with all the answers, they [committee members will] say well you know what you're doing, this is fake consultation. But if you come in with the kind of clean slate...which was, 'hey...there's some things here that are special, let's talk about it,' they're frustrated. (Government A)

In this case, preparation of the lengthy 400 page risk assessment was not initiated prior to the consultation process because DFO wanted to fully engage with the stakeholders throughout the complete process, from beginning to end. One government interviewee reflected on this strategy and noted that "getting that ecological risk assessment done a lot sooner, maybe even before...engaging the community" would mean information was available to begin discussion with the stakeholders (Government A).

Responding to the information needs of the stakeholders was an issue in light of conflicting information. DFO was responsible for facilitating the Advisory Committee meetings, and in the process, received advice from a diverse group of stakeholders. Inevitably, different stakeholders and rightsholders contributed conflicting advice. Receiving contradictory input presents a challenge to a government department that may feel it has to "appeal to everybody" (Government B). How the department facilitating the consultation process chooses to reconcile conflicting information means noting "what everyone says" and recognizing that consensus may not be reached (Government A).

## **5.9. Information Channels**

The government representatives were asked to identify the information channels that were used most frequently to provide information to stakeholders during the consultation process. The interviewees noted that meetings and online communication, specifically email messages, were used most frequently and that those channels were also preferred by the government. The speed

at which information could be provided via these two channels was viewed as a benefit. One participant stated these channels were standard “for just ease of getting these out the door...Print goes through multiple approval levels, it takes a long time, it’s not fast...emails are still reviewed but they don’t go quite so slow” (Government A). The Department was aware that the preferred channels were slow in providing information in some instances, but within the usual constraints of a government department, steps were taken to keep stakeholders as informed as possible.

### **5.10 Misinformation**

The government interviewees observed problematic misinformation during the ESI AOI conservation initiative. Misinformation created an atmosphere of confusion and mistrust at various points throughout the process and was “a huge stumbling block” for the federal government (Government A). According to the government interviewees and also other Advisory Committee members, the issue was not false information disseminated within the consultation process itself. In fact, there was agreement that DFO did well to curtail inaccuracies during meetings and other gatherings (Government A; Academia + NGO A; Community Group C). Rather, misinformation circulating external to the consultation process was the most problematic, often because DFO could not react fast enough to correct it (Community Group B). Social media was a popular channel for spreading false information, since it provided “a platform for the sharing of misinformation very quickly” (Government A). This misinformation was difficult to address, since DFO was “not nimble to respond or clarify because everything needs to go through clearance” (Government A). In some cases, the Department was unable to provide the correct information to the mainstream media. One technique that DFO implemented in an effort to manage the misinformation issue was to create a Frequently Asked Questions section on ESI AOI website. The effectiveness of this strategy was not tested in this study.

Examples of misinformation noted by the government representatives were very similar to those described by Advisory Committee members (see section 5.5.1, Figure 4), including property issues, possible additional regulations, and external interference in the consultation process (Government A & B). Differences existed in aspects related to pacing issues, as described earlier, and the speed at which decisions about regulations are made. Misinformation about the latter included the view that regulations could be easily modified. As one government interviewee noted, this was a “simplistic view,” which implied that “once the minister has

control of the area,” regulations could be changed “overnight.” This government interviewee emphasized that “regulations are a real pain to change” (Government A). Yet, despite assurances from DFO that regulations would not “change overnight,” this rumor persisted.

### **5.11. Trust**

As mentioned in the previous section, providing facts to counteract instances of misinformation by itself was not enough to mitigate incorrect information. The federal department was not only dealing with false information, but a mistrust of authority figures and the historical experiences with related government departments (Government A & B). Thus, whatever commitment that DFO made to the Advisory Committee members during the ESI AOI consultation process, “there’s still...trust that it’s not going to happen” (Government B). No matter what government body pursued conservation work, previous experiences with government is a legacy in the area. While some Advisory Committee members were known to distrust DFO, the majority of participants in this study expressed confidence in DFO as a source of accurate information (see section 5.6.2). However, those who decidedly did not trust DFO were vocal about their position, and used their mistrust to rally agreement for their cause. The community group AESC-PEHA was named as the primary group that did not trust DFO. Government representatives noted that the actions taken by this vocal opposition group spread confusion in the community. One government interviewee stated: “They’re very, very vocal and they have strong claims that they represent...big numbers of people that are opposed to the MPA, which I would say that’s probably misinformation as well” (Government A). Another government interviewee stressed that these claims were not only false, but their persistence undermined the consultation process, and sowed uncertainty among Advisory Committee members, even those in support of the MPA. Mistrust about DFO “transcends everything” (Government B).

## **Chapter 6: Discussion**

This chapter integrates findings from the study results by presenting five main themes, which demonstrate: 1) the need to find a balance between predetermined information and genuine consultation; 2) source use, channel use, and source trust are context dependent; 3) concerns exist regarding information dissemination, specifically on factors relating to timing; 4) information external to the consultation process had a disproportionate influence on the outcome of the process; and 5) the most common form of information use among Advisory Committee members was sharing. These themes, in addition to findings from relevant literature, are used to support recommendations for use by federal policy makers or managers on best practices for information dissemination and communication strategies during a community consultation process. Through this discussion, it is possible to explore whether the information needs of Advisory Committee members were being met during this process and how information – and misinformation – contributed to the current status of the suspended conservation initiative on the Eastern Shore.

### **6.1. Striking a Balance: Information Needs versus Open and Transparent Consultation**

The need for more comprehensive, recent data about the communities along the Eastern Shore emerged as a theme from the interviews with both Advisory Committee members and government representatives. Data related to demographics, personal values, and annual incomes are not readily available (see section 5.1.3). The communities along the Eastern Shore are mostly rural and are spread across several provincial counties, making it difficult to collect consistent census information due to overlapping jurisdictional boundaries and lack of available data (Nova Scotia, 2019). As a result, some residents in the area are not aware of fundamental information about their communities and their environment. They expressed a need for such information in order to address pressing issues, such as youth outmigration and aging populations (Ivany, d'Entremont, Christmas, Fuller, & Bragg, 2014). This theme was present in interviews conducted for this study. When asked about what information was missing from the ESI AOI consultation process, the majority of interviewees identified their eagerness for socioeconomic data (see section 5.1.3). Staff in the Department of Fisheries and Oceans (DFO) was aware of this knowledge gap, and appreciated why Advisory Committee members requested the information.

However, prior to receiving requests for such information, DFO had made the decision to begin the ESI AOI consultation process with a “blank slate,” i.e., not determining the information requirements in advance. Instead, the Department intended to engage with the stakeholders on every aspect of the AOI from the inception of the process (see section 5.8.2). The DFO staff members were well aware of the potential consequences of a federal department entering discussion with stakeholders from the Eastern Shore with prearranged plans for how a conservation initiative would play out. One needed to look no further back than the 1972 effort at creating a national park to see how public reactions could transpire if this method was applied a second time (Froese-Stoddard, 2013). Thus, the Department began the consultation process for the ESI AOI with the intention to make it as open and transparent as possible in order to distance the present conservation initiative from the collective memory of the Ship Harbour park experience. While well-intentioned, this strategy encountered difficulty. Advisory Committee members wanted information that DFO was not able to quickly supply, and the delay allowed uncertainty and misgivings to develop into mistrust and misinformation (see section 5.6.3).

In hindsight, both the government and advisory committee interview participants agreed that completing the risk assessment and socioeconomic profile prior to beginning the community engagement would have been beneficial (see section 5.8.2). Providing tangible, relevant information to stakeholders may have resulted in more structured discussions during the formal meetings and provided much needed information for community members to consider. Yet, this step goes against basic principles of best practices for marine resource consultation processes. Canada’s National Advisory Panel on Marine Protected Area Standards points out that communities are primarily concerned that their involvement is often “too little too late,” and that decisions are already made without their input (Bujold & Simon, 2018, p.11). To address this concern, the panel recommended collaborating with communities and maintaining transparency through every stage of an MPA implementation phase, from beginning to end (Bujold & Simon, 2018).

In setting up the consultation process for a coastal MPA, the government’s plan for open collaboration from the onset was not always welcomed by all stakeholders on the Eastern Shore. Frustrations emerged, questions arose, and people sought answers that the government could not promptly provide. Furthermore, implementation of an MPA is usually a lengthy process, often

taking several years at a minimum (Office of the Auditor General, 2012). Expecting full, ongoing engagement from residents for an extended time period is not always feasible. People have jobs, commitments, and families; in essence, they have lives. In the words of a government representative: “There was a point where they just didn’t want to talk anymore” (Government A). From the perspective of the interview participants, the best way to balance these competing concerns in future community consultation processes would be for government bodies to enter into engagement proceedings with preliminary information at their disposal, such as draft forms of proposed assessments, including risk and socioeconomic profiles. This practice would allow for community feedback to be incorporated into information development plans from the beginning, while still providing a point from which the process could begin. Proactive community consultations could serve as a conduit by which these draft assessments are formed. By speaking with community members in informal settings prior to any official commitments, government bodies could anticipate the information needs of residents that may arise during future conservation initiatives which could guide preparation of their preliminary assessments accordingly. While DFO staff held a series of targeted meetings during 2016/17 to assess the feasibility of an ESI AOI, they chose to not begin the risk assessment before community engagement commenced. While an admirable decision, the analysis of the interviews with the Advisory Committee members indicates they preferred being provided with some information initially.

## **6.2. Context is Key: Exploring Information Source, Channel Use, and Source Trust**

Several of the questions in the interviews focused on the participants’ use of and preference for information sources and channels during the ESI AOI consultation process. The variation in use and preferences highlighted in the interviews supports previous research on this subject (Wilkins et al., 2018). Source and channel use is individualized and can be influenced by a variety of personal factors. Within the ESI AOI consultation process, the most used information source was the federal government (see section 5.2.1, Table 2). Every interviewee, regardless of stakeholder category, confirmed that they would turn to the federal government to obtain accurate information. Furthermore, several interviewees stated that when they were faced with conflicting information, they would likely defer to information provided by DFO (see section 5.4.1). Both of these results highlight the importance of context and how circumstances influence the use of

information sources. The interviewees often commented that since DFO was facilitating the ESI AOI consultation, it made sense to turn to the departmental staff to fulfill information needs. In contrast, the two other levels of government, municipal/local and provincial, were identified as information sources that would be used least by interview participants. National news was also an infrequent information source, primarily due to lack of media coverage on this topic at a national level.

The most notable theme to emerge from the interview responses regarding source trust was that participants trusted DFO more than other sources of information. Trust in DFO was often attributed to assumptions of objectivity, experience, credibility, expertise, and accuracy, characteristics which have been found in related research studies (see section 5.6.2; Brewer & Ley, 2013; MacKeracher et al., 2018). Despite the uncertainty that surrounded the ESI AOI conservation initiative, trust in government bodes well for the uptake and acceptance of environmental information disseminated by DFO, as source trust is often a heuristic used by people to determine whether or not they should use information (Brewer & Ley, 2013).

However, studies have also shown that trust in government and political systems can have potentially detrimental effects as well. Specifically, citizens with high levels of trust for political systems find it easier to negate their role in environmental policy processes, as they believe “the system” will take care of things (Paloniemi & Vainio, 2014). Several participants displayed this phenomenon during the interviews (see section 5.1.4). Some comments made by participants hinted at feelings of disempowerment within the consultation process, and that, regardless of the Advisory Committee advice, the government would act as it saw fit, as citizens did not hold any individual power to influence the process outcome (see section 5.1.4). Whether this duality of government trust and citizen sense of disempowerment had any impact on the outcome of the ESI AOI consultation process was not explored in this study. However, stakeholders who were comparatively *empowered* and *mistrusting* of DFO are considered by some participants to have played a significant role in the suspension of the ESI AOI process. Conversely, the two other levels of government, municipal/local and provincial, were identified as information sources that would be used least by interview participants. This pattern may hint at intergovernmental inconsistencies or a lack of coordination among levels of government (see Table 3, section 5.2.1), which is discussed further below (see section 6.4).

While none of the interview participants for this study stated feelings of mistrust towards DFO, they often referred to other Advisory Committee members who they claimed did (see section 3.3 and 5.6.3). Understanding what motivates trust and mistrust in government is essential for the creation of meaningful policies and to ensure higher levels of regulatory compliance (OECD, 2013). Within the ESI AOI consultation process, the primary reason for mistrust in DFO was a historical legacy, despite DFO not being involved in the major incidents that led to the mistrust, such as Ship Harbour National Park proposal, which was pursued by Parks Canada. The interviewees explained that often people did not distinguish between branches or levels of government, choosing instead to treat all authority figures with skepticism and doubt as a result of past experiences. Unfortunately, several participants concluded that DFO was limited by what it could have done to assuage the enduring worries of Eastern Shore residents. This view seemed to also be held by DFO as an explicit strategy for dealing with the historical level of discomfort with government was not obvious in the consultation activities. The strength of past experiences on the Eastern Shore highlights the importance of acknowledging and incorporating historical context into consultation processes, as it can greatly impact the trust and uptake of information.

The most used information channel during the ESI AOI consultation process was the meetings and gatherings, which were identified by nearly every interview participant as being a crucial method for gathering information (see section 5.2.1, Table 4). Many interviewees pointed out that the meetings were useful, not only for receiving data and information, but for speaking with fellow stakeholders, forming relationships, and creating bonds among individuals and groups. The meetings were also used to facilitate informal conversations between stakeholders, which were described as the most helpful part of Advisory Committee gatherings. It is, therefore, important that conservation managers prioritize time for stakeholders to connect with each other in informal ways. Such opportunities were not sufficient for some Advisory Committee members, who mentioned that they would have preferred more time to communicate in person with other members, and that the speed at which meetings were conducted did not help to build trust among stakeholders. The existing mechanism for MPA implementation was seen as a hindrance in facilitating interpersonal connections in the ESI AOI consultation process. One interviewee describing the implementation process as “clinical” (Government A). As it stands now, the implementation of an MPA follows a linear, five-step process that government managers are expected to follow (DFO, 2019c). However, every MPA is different, and the



process should be flexible to accommodate the needs of stakeholders, not necessarily a predetermined, fixed formula. In order to facilitate community support in future marine conservation projects, especially coastal-based projects where many groups are involved, government representatives must be willing to incorporate stakeholder advice and feedback into the implementation process when appropriate, and plan for deviations from a tight timeline depending on the needs of community members.

### **6.3. “That was very poor timing”: Coordination Issues during the ESI AOI Consultation Process**

While the interview questions for this study did not ask about issues regarding timing of activities in the consultation process, many conversations with the participants covered this topic. Four examples of questionable timing were repeatedly mentioned by Advisory Committee participants: 1) the two-three month period at the beginning of the consultation process during which communications between DFO and community members did not occur; 2) the ongoing belief that the MPA would be fully established by 2020; 3) the timing of the first meeting of the Minister of Fisheries with residents on the Eastern Shore; and 4) the slow response time of DFO to address misinformation in the community. Individually, each of these situations caused uncertainty and unease in the community; together, they weakened the entire consultation process.

Government representatives stated that consultation began in earnest soon after the ESI AOI was officially announced, (see section 5.8). However, many Advisory Committee interviewees noted that there was an extended period of time directly after the announcement in which the community was not contacted and did not receive any information (see section 5.6.3). According to these participants, this time lag provided those who opposed the MPA an opportunity to organize themselves and rally others to support their cause (see section 5.6.3). Some participants indicated that if DFO could have improved in any stage of the consultation period, it would have been to avoid the two-three month delay. This timing, while likely out DFO’s control, was nonetheless detrimental to building community support for the AOI conservation initiative (anonymous, personal communication, September 20, 2019). Furthermore, the gap was not in line with DFO’s own Consultation Framework, which states:

Documentation and background materials are provided to clients and stakeholders, and to the general public if applicable, at the earliest possible time (e.g., consider providing material one month in advance of consultations, or longer if the issue is complex or expected to be controversial). (DFO, 2004a, Guideline 5.5, page vii)

DFO likely knew that the ESI AOI consultation process would be both complex and controversial, yet the Department did not provide enough information to stakeholders at a time when it was particularly needed (see section 5.8.2).

Another timing issue was related to the implementation timeline for the MPA. Some interviewees mentioned that the end of 2020 was an early projected completion date for the MPA, which would coincide with the Aichi Target 11 timeline and ensure the ESI AOI would count towards Canada's goal of 10% marine protection (see section 5.5.1; CBD, n.d.). While this date was likely a preliminary estimate by DFO, it made an impact on several Advisory Committee members. Even after DFO removed this expectation from presentations and objectives, the "2020 deadline" was a concern often raised during meetings in the consultation process, with many community members and stakeholders fearing that the process would be pushed through in order to contribute to global targets (see section 5.5.1, 5.10). DFO admitted that, in hindsight, the intention to establish the ESI MPA by 2020 was naïve, especially considering the ESI AOI was its first initiative at creating a coastal MPA in Atlantic Canada (Lubczuk, 2019). However, the timing estimate was also understandable, considering the political pressures placed on the department at the time. To deliver on Aichi Target 11, DFO would have to move quickly in order for the ESI AOI to contribute to Canada's overall percent coverage. Some participants acknowledged the difficult position that DFO was put in as a result of international targets, but unfortunately, the deadline set a negative tone in the consultation process.

The Minister of Fisheries' first meeting with residents on the Eastern Shore was a third timing issue (see section 3.3). The poor scheduling of this gathering was widely acknowledged. Not only was little advance notice given to the community, the meeting also occurred during lobster fishing season for two nearby fishing areas (LFA 31b and 32). The timing of this meeting was another example of actions taken by the federal government that did not meet its own protocols stated in the Consultation Toolbox:

Consideration is given to the time of day and time of year for holding consultations (e.g., consider that the general public is more available after normal working hours and that certain industries might be busier during particular seasons). (DFO, 2004b, Guideline 3.3, p. vi, emphasis added).

While extenuating circumstances may have prevented the Minister from changing his visit date, the meeting was a significant misstep. There seemed to be little concern for the community's circumstances with regard to the meeting schedule, and a lack of foresight for how it might affect the attitudes of particular stakeholders in the region. In the aftermath of Wilkinson's meeting, some participants mentioned that the community attitude soured towards the entire ESI AOI consultation process, whereas prior to the meeting, it appeared that progress was being made and eastern shore communities were being receptive to DFO's engagement efforts.

Timing was also mentioned by Advisory Committee interviewees in relation to the response capacities of the federal government for dealing with misinformation, specifically on social media. Most interviewees agreed that DFO was too slow in responding to inaccuracies on social media, which was an unavoidable weakness (see section 5.5.1). As noted in sections 5.9 and 5.10, government representatives acknowledged this shortcoming, and recognized that efforts to address misinformation were not as effective as they could have been. The response time was primarily due to the requirement for content review within the department and policies limiting what employees could post online. The following paragraphs from the Fisheries and Oceans Canada Value and Ethics Code outline approved practices for social media use by DFO employees:

As DFO and Coast Guard employees, our public comments can easily be seen by others as the voice of the Department. With this in mind, we cannot publicly comment on the Department's position on any subject unless it is part of our official duties and that it complies with the Departmental National Media Relations and Spokesperson Policy.

When authorized, before making public comments, we must make every effort to obtain accurate information and facts by consulting with the proper colleagues and stakeholders to address sensitivities and not going outside the scope of our knowledge and expertise. We must avoid expressing personal opinions on DFO and/or Coast Guard policies and programs, limiting our public comments to factual information. (DFO, 2012, Section 7)

Responding to misinformation on social media was likely not part of DFO's official duties during the consultation process for the ESI AOI. While the DFO staff did attempt to mitigate the misconceptions in the community by integrating an FAQ section into the ESI AOI website, the speed at which social media allowed misinformation to spread was nearly unmanageable. Content restrictions followed by the federal government department coupled with an opposition that was very active on social media was a continuing challenge for DFO during the consultation process.

In the future, DFO could apply several potential strategies to address misinformation on social media. First, it may be beneficial to incorporate a social media literacy learning module into current and future community consultation processes on the Eastern Shore and in other areas more broadly. Put simply, media literacy is the ability to analyze and communicate messages in a variety of forms (Pfaff-Rudiger & Riesmeyer, 2016). At smaller scales, this strategy would compliment Canada's national efforts at tackling misinformation online (Funke & Flamini, 2019). Furthermore, this proactive approach encourages critical thinking strategies among social media users during public consultations in addition to enabling stakeholders to become responsible stewards of their own online habits. It may also be worthwhile to revisit Canadian federal government policies regarding social media and examine the potential of enacting new regulations that facilitate misinformation intervention strategies. If the ESI AOI consultation process is any indication, government inaction on social media is no longer an adequate strategy to deal with misinformation effectively (Bradley, 2017). In today's digital age, the impact of social media on public policy decisions is apparent and federal consultation procedures should respond to this environment (DePaula & Dincelli, 2018; Harrop & Jang, 2015). Moving forward, proper timing should be prioritized in all aspects of marine conservation initiatives, thus avoiding comments like the following from an interviewee, which summarizes several events during the ESI AOI consultation process: "That was very poor timing" (Government A).

#### **6.4. External Forces and Influential Sources**

The analysis of the interviews revealed that factors external to the ESI AOI consultation activities had a greater impact on the process than internal factors (see sections 5.4 and 5.10). The majority of interview participants agree that the consultation process was adequate, except for several logistical issues (see section 6.3). DFO provided accurate, scientific information that

appeared to be trusted by the majority of the interview participants for this study. However, several interviewees commented on the disproportionate impact of extraneous influences detrimental to the consultation process, most notably the widespread misinformation present within the community (see sections 5.5.1 & 5.6.3). Thus, the role of information during the consultation process quickly transitioned to focus more on the role of *misinformation*. For the most part, information circulated during the ESI AOI process was intended to educate stakeholders, offer different perspectives, and facilitate discussions. Misinformation promoted faulty thinking and disrupted the efforts of those in support of the MPA, to a much larger degree than anyone was equipped to manage.

With regard to specific external influences, several interviewees identified the provincial government as a source they would not use nor trust when gathering accurate information about the ESI AOI. Several participants also accused the provincial government of circulating misinformation to stakeholders during the consultation process and stated that some provincial government representatives encouraged community members on the Eastern Shore to continue their opposition of the MPA (see section 5.5.1 & 5.6.3). At minimum, these activities indicate different objectives and strategies among levels of government in Nova Scotia. As a federal government department, DFO is tasked with working towards global marine conservation goals and biodiversity targets among other regional and national policies. The province of Nova Scotia, in contrast, has emphasized the importance of sustainable economic growth and development, in order to address the implications of its aging population and declining rural communities (Ivany et al., 2014). While the priorities of both national and provincial governments have great potential to be complementary, examples of conflict between the two levels of government are public knowledge. Several high ranking members of Nova Scotia's provincial government have been outspoken about their misgivings about MPAs, including the Minister of Fisheries and Aquaculture, and the Premier of Nova Scotia (Laroche, 2018; Withers, 2018). In the past, the Premier has even "chastised" DFO for not consulting with the province prior to designating potential sites for marine conservation (Laroche, 2018).

The difference of views between the federal and provincial government about MPAs affected the ESI AOI consultation process. The disagreement demonstrated a lack of collaboration across jurisdictional boundaries and undermined the influence of both governmental sectors. For future

marine conservation endeavours, efforts should be taken to achieve collaboration among levels of government and their respective interests. Several best practices are available to promote cooperation. First, the two levels of government could focus on stakeholders' shared values for the study area in order to emphasize similarities and understate differences (Mason, Lim-Camacho, Scheepers, & Parr, 2015). In the case of the ESI AOI, the similarities could include maintaining traditional livelihoods, strengthening economic diversification, and encouraging youth retention in rural communities. These topics were flagged across stakeholder groups and government institutions as being priority topics for consideration and could serve as discussion points for people to rally around if conflicting views exist, which is often the case. By uniting around shared concerns, coordination of efforts could be facilitated better. A second approach could be a slight restructuring of power arrangements during decision-making stages of the consultation process. Specifically, granting all levels of government equal influence when formalizing agreements on management actions, while allowing each level to retain implementation power over its discrete jurisdictional areas, could promote collaboration (Margeta, 2001). In DFO's own Consultation Framework, this model is described as "Negotiated Arrangements," in which "Government delegates authority for decision-making to other groups, or shares decision-making powers, or manages cooperatively" (DFO, 2004a). Negotiated arrangements have been successfully implemented in other countries with similar marine spatial conflicts (Coast Learn, n.d.; Ivancic, 2003). While this approach may seem somewhat radical, it could mitigate or neutralize concerns that interviewees identified in this study who expressed fears that DFO will carry out processes regardless of community discontent. This approach would also ensure that all levels of government are committed to presenting a transparent, joint front, an important prerequisite for successful marine management (Scherer et al., 2014).

### **6.5 Sharing is Caring: Information Use during the ESI AOI Consultation Process**

Information sharing was the leading method that interviewees identified when they were asked to describe how they used information during the ESI AOI consultation process (see section 5.1.3). In total, 86% of the interviewees stated that sharing information was their primary form of information use. Often without prompting, participants described the importance of circulating information to relevant parties, and keeping people informed of the proceedings when appropriate. On the surface, the strong inclination to share information was due to the fact that all

of the interviewees represented organizations and had a duty to report back to their constituents. However, when probed further on why they felt sharing information was very important, a variety of justifications emerged, including formulating opinions, validating information, correcting misinformation, gaining alternative perspectives, and raising awareness. Clearly, sharing information was not seen as a mere duty, but a way of promoting transparency, critical thinking, and greater understanding among fellow Advisory Committee members.

Recent studies have demonstrated that the value of sharing information is multifaceted and variable (Liao, McComas, & Yuan, 2017; Schwartz, et al., 2019). From a biological perspective, sharing may be driven by inherent social needs, and is positively reinforced by neurological pathways in our brain (Baek, Scholz, O'Donnell, & Falk, 2017). From a social perspective, sharing information can promote relationship building via personal interactions (Hersberger, Rioux, & Cruitt, 2005). This exchange of information, in turn, can improve trust relationships between people and help to reduce conflict in contentious scenarios not unlike the ESI AOI. With regard to Canadian consultation processes specifically, sharing information is often encouraged, as it can “ensure continued relationships with stakeholders” and maintain transparency (DFO, 2004b). Additionally, sharing information can empower people to challenge their own perspectives and support collective decision-making (Allen, Bosch, Kilvington, Harley, & Brown, 2001). Thus, the tendency of the interview participants to share information during ESI AOI consultation process was generally viewed as a positive feature.

While the existing guidelines for disseminating information during federal consultation processes in Canada sporadically mention the benefits of sharing information, it is primarily in reference to government departments distributing information to stakeholders, rather than within and among stakeholder groups (DFO, 2004b; Treasury Board of Canada Secretariat, 2007). In future consultations, it may be beneficial to specify the importance of intergroup information sharing and provide opportunities for this activity to occur. For example, in Health Canada's *Guidelines on Public Engagement*, it is suggested to create an online forum that would allow stakeholders to “share their views with others and discuss issues” (Health Canada and Public Health Agency of Canada, 2016, p. 17). Within the Eastern Shore Islands case study, this practice could be as simple as a Facebook group for people to reflect and review the process in real time. To ensure

respectful conduct, this online forum would likely have to be moderated by a third party, but considering the potential benefits, creating such a resource would be worth investigating further.



## **Chapter 7: Conclusions and Next Steps**

The results from this case study demonstrate that the factors influencing information-related activities of the Advisory Committee members for the Eastern Shore Islands Area of Interest (ESI AOI) are varied and complex, yet innately human. Incorporating the human dimensions into marine policy planning is gradually becoming mainstream, but more emphasis is needed on this topic in future research (Christie et al., 2017). The contextual factors surrounding information use are crucially important to promote the uptake of environmental information and should be prioritized in consultation processes. This observation is particularly relevant in situations of conflict or low levels of trust, such as the recent experience in the Eastern Shore region. However, cases like the ESI AOI are not unique. With implementation of marine protected areas growing in popularity as a conservation practice, complex and adversarial conditions similar to the ESI AOI will invariably be evident in other communities. By entering consultation processes with a deeper understanding of community networks, stakeholder relationships, and historical biases, marine managers can anticipate information needs, prioritize time to promote working relationships, and proactively address expected challenges, all of which were issues stressed by the interview participants in this case study. Furthermore, emphasizing human aspects in conservation planning will ensure a greater probability of successful implementation of MPAs in future endeavours.

### **7.1 Study Conclusions**

Research has demonstrated the value of effectively communicating environmental information and how people's attitude and behaviour can change as a result of information dissemination techniques (Wilkins et al., 2018). The goal of this current research project was to examine the information-related activities of Advisory Committee members and government representatives within the ESI AOI consultation process, and determine whether areas for improvement in information practices existed within this case study. A mixed method approach was used to identify information use patterns within the process. Qualitative interview data were analyzed along with observations of meetings and a literature review to gain an understanding of the information needs of interviewees, and the role information played within this dynamic context.

The Advisory Committee is a heterogeneous group, which was illustrated by the variety of views identified in this project, in addition to media accounts of this study (Withers, 2019c).

Contrasting personal, political, or professional agendas of actors within the ESI AOI consultation process led to different strategies of information use. For example, the provincial government was not in favour of furthering Marine Protected Area implementation in Nova Scotia (Laroche, 2018). Many interviewees claimed that, in order to prevent the MPA from being implemented, the provincial government circulated misinformation and supported the opposition of the ESI AOI from its inception (see section 5.5.1 & 5.6.3). Conversely, the Department of Fisheries and Oceans (DFO) was responsible for carrying out a political agenda and an environmental conservation objective that supported the implementation of the ESI AOI. DFO staff attempted to correct the misinformation that was present among Eastern Shore communities, educate those involved, and create a two-way dialogue between those stakeholders who opposed the initiative (see section 3.3 and 5.1.2). These two divergent approaches highlight the complex role of information activity that was present within the ESI AOI consultation process; information was used to both inform and to disrupt.

Social media was another topic that drew a broad range of opinions and was used in multiple different ways (see section 5.3). In some cases, social media was actively not used, or simply served as another information channel to increase users' knowledge about the ESI AOI. In others, social media was used to proliferate misinformation at a speed that was unmanageable for the federal government. While social media were seen by some participants as tools for equalizing opportunities for involvement of concerned stakeholders in this context, they were just as vehemently described as a "poisonous" mechanism that contributed to the suspension of the entire consultation process (Industry B).

Despite the diversity of viewpoints, some patterns among Advisory Committee members and government representatives did emerge during the data analysis. For example, the federal government, particularly the Department of Fisheries and Oceans (DFO), was the most used and trusted information source during the consultation process (see section 5.2.1, Table 2 & section 5.6.2), while meetings and gatherings were the most used information channel (see section 5.2.1, Table 4). The fact that DFO was a frequently used and highly trusted information source suggests that not only is situational context critical for information source use, information provided by the government will likely be accepted more readily by Advisory Committee members than other sources (Wilkins et al., 2018). The frequent use of meetings and gatherings

as an information channel illustrates the importance of interpersonal connections among Advisory Committee members, who often stated that meetings were the most important part of the consultation process, and expressed their desire for more time to get to know other members (Academia + NGO A; First Nations A).

Sharing information was another pattern of information use that emerged from this study. Nearly every participant stated that they would pass along information that they received during Advisory Committee meetings to other interested parties (see section 5.1.3). While the interviewees stated that this practice was often because they had a duty as a representative of a broader organization, they also felt that sharing information was a way to build trust and gain additional perspectives from their fellow Advisory Committee members. This activity further supports the importance of facilitating interpersonal relationships among stakeholders in conservation initiatives. In addition to their information sharing habits, Advisory Committee members agreed that insufficient socioeconomic data was provided during the consultation process. Every interviewee noted that additional types of information would have increased their understanding, not only of MPAs, but of their own communities (see section 5.1.3).

Perhaps most notably, this study identified the variety of factors that can impact the uptake and use of information within a consultation process, and the importance of understanding these factors prior to and during marine conservation initiatives. The most prominent factor within this case study was arguably the historical context of the Eastern Shore, and residents' experiences with past conservation initiatives. The mistrust towards government institutions as a result of Ship Harbour National Park proposal led to a swift opposition towards the ESI AOI. Those opposed to the ESI AOI were vocal about their discontent and used social media as a platform to rally others. This situation was further exacerbated by several timing-related issues during the consultation process which fuelled the opposition's cause, including a two-three month period in which DFO did not consult with community members and the government's inability to individually address inaccuracies on social media as they occurred. The current postponement of the ESI AOI consultation process was argued to have been a consequence of both historical factors and poor timing (see section 6.3), which emphasizes the importance of identifying and understanding factors that can affect information use during marine policy processes.

## 7.2. Recommendations

Through interviews, this study uncovered several overarching themes that characterize the information-related activities of in the Advisory Committee. These themes form the basis of five recommendations for environmental managers that may benefit future marine policy consultation and implementation processes, specifically relating to information dissemination, information use, and trust in information.

1) Proactively assess the information needs of stakeholders that may arise during consultation processes and plan accordingly. In the case of the ESI AOI, a desire for socioeconomic data was shared by numerous Advisory Committee members across different stakeholder groups. Had DFO initiated the preparation of the socioeconomic study before the consultation process began, the information needs of community members and stakeholders could have been addressed more promptly, which could also contribute to a shared sense of co-production of information (Djenontin & Meadow, 2018; Hejnowicz, Hartley, & Gilbert, 2018; van der Molen, 2018). In this scenario, there was a perceived trade-off between meeting the demands of stakeholders and engaging in open and transparent consultation. While difficult and time consuming, achieving a balance between the two is a necessary hurdle to overcome during complex community engagement processes.

2) Provide opportunities in which stakeholders can establish interpersonal relationships with each other. The interview participants stated that it would have been beneficial for more time and opportunities to build trust with their fellow Advisory Committee members, especially with those who were less vocal during meetings. While the Advisory Committee meetings were generally viewed as useful, the breaks within those meetings were seen as even more valuable to the interviewees, as they were informal and less tense and structured. Government representatives were supportive of this recommendation and agree that the MPA implementation process is not as flexible as preferred. This shared perspective illustrates the importance of including informal discussions as an activity during marine conservation consultations.

3) Prioritize appropriate timing of activities during the consultation processes. This study has shown that poor timing can negatively affect the success of public engagement, especially in regions where marine conservation support is already lacking. Every effort should be made to ensure timely dissemination of information, accessible meeting schedules, and reasonable

deadlines for completing consultation tasks. Achieving these objectives will stem from a comprehensive understanding of local and regional complexities for the area in which the conservation measure, such as an MPA, will be designated.

4) Explore the impacts of social media on the consultation processes and how they could be addressed. Based on the results from this study, one strategy could be to offer a social media literacy course at the beginning of the consultation process in order to promote critical thinking and online responsibility. This recommendation is in line with Canada's anti-misinformation strategy, and could potentially curb online misinformation during consultation processes that government departments and agencies have difficulty addressing. Another, more long-term alternative would be to re-examine the current social media policies guiding civil servants. The existing regulations are not equipped to deal with misinformation in a timely manner, and in the case of the ESI AOI, this limitation was a serious issue.

5) Give attention to intergovernmental relationships and policy positions. The lack of collaboration across provincial and federal levels of government during the ESI AOI consultation process was problematic. It demonstrated disagreement between the two levels of government and undermined the progress of the AOI consultation. Conflicting information was presented to members of the Advisory Committee, which contributed to views about differing agendas of various groups, trust in information, and preferences for particular information channels. Collaboration on institutional priorities is important for harmonizing management of marine spaces (Clark, 1992; Kenchington & Crawford, 1993). Strategies for achieving this outcome include emphasizing shared goals and values, or equitable distribution of power, and transparency in information available during the decision-making stage of the process.

6) Reiterate the importance of information sharing within consultation processes, with a renewed focus on sharing *among* stakeholders, rather than simply *to* stakeholders. Sharing was the number one example of information use within the ESI AOI consultation process and it should be encouraged, albeit responsibly to mitigate the challenges posed by misinformation. In accordance with Health Canada Guidelines on Public Engagement, an online forum could be created to stimulate relevant discussions and serve as a common information channel during the consultation process (Health Canada, 2016).

### 7.3 Next Steps

Future studies could help to address some of the limitations present in this research project. Ten participants representing all of the stakeholder groups were interviewed for this study, which is considered adequate for an exploratory, qualitative study. However, in future studies the sample size could be increased in order to broaden the scope of this line of inquiry. A larger sample size would present an opportunity to obtain further details about information use by stakeholders in the ESI AOI consultation process that may not have been encountered in the experience of the participants interviewed in this case study.

Due to scope limitations, this study did not include demographic characteristics of the interviewees as a potential influence on information-related activities, but would be an interesting topic for future work. Previous research has found that factors such as race, gender, age, and livelihood have an effect on the use of information sources and channels, and the level of source trust (Wilkins et al., 2018). Incorporating these variables into future studies could shed light on the additional factors that influence information use.

This study focused on the role of information and the use of information sources and channels by Advisory Committee members in Atlantic Canada; thus, future studies may compare the results from this research to conservation consultation processes in other communities in the country to determine whether geographic location could be an additional influence on preferred information source and channel use. For example, Canada's newest MPA is Tuvaijuittuq, located off Ellesmere Island, Nunavut. While fewer people are present in the communities adjacent to Tuvaijuittuq compared to the Eastern Shore, it would be an interesting study site to compare information use patterns among stake- and rightsholders in both locations (DFO, 2019f).

This study was completed during a unique moment in time; not only was the research conducted during a federal election year when political factors contributed to the complexity of the consultation process but this process was undertaken to plan the first large coastal MPA in Atlantic Canada. Thus, the results of this study represent a snapshot in time which may not be fully representative of other marine consultative processes in Canada. It would be interesting to apply similar research methodology in studies on future coastal MPAs in Atlantic Canada in order to compare and contrast the results in each setting.

Finally, this study demonstrated that context was a major theme related to information source use and trust. All of the interview participants identified the Department of Fisheries and Oceans as one of their primary sources for accurate information about the ESI AOI. However, several participants also mentioned that their choices would likely change depending on the initiative, i.e., if the process was not being facilitated by the federal government. Future work could follow up on these statements by examining the information source and channel use of stakeholders in consultation processes led by institutions other than the federal government. Such work could extend understanding of the influence of context on information use during consultation processes. As one interview participant stated succinctly: “The context within which information is provided is critical to how that information is taken up” (Academia + NGO A).

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## Appendix A: Ethics Approval from the Dalhousie Faculty of Management



Faculty of Management Graduate Student Ethics Approval for a  
Course-based Project

July 19, 2019

Hali Moreland,

I am pleased to inform you that I have reviewed your project “Information source and channel preference: A case study on the Eastern Shore Islands Area of Interest consultation process” (file no. 071919), for the course MARA5002 (Graduate Project) under the supervision of Dr. Bertrum MacDonald, and have found the proposed research involving human participants to be in accordance with the *Faculty of Management Ethics Review Policy for Course-based Projects* and the *Tri- Council Policy Statement on Ethical Conduct for Research Involving Humans (TCPS2)*. This project has received ethics approval.

This approval will be in effect until and not exceeding December 24, 2019 (fourteen days from the final date of classes for the 2019 Dalhousie Fall Semester). It is your responsibility to immediately report any adverse events involving participants to both your instructor and to the Research Ethics Officer. Please note that any significant changes to the research methodology, consent form or recruitment materials must be resubmitted to Research Ethics Officer for review and approval prior to their use.

Congratulations on your successful Faculty of Management Graduate Student Ethics Approval for your Course-based Project. I wish you all the best as you begin this next phase of your research. Should you have any questions regarding ethical issues at any point during your project, please do not hesitate to contact me.

Sincerely,



Janet Music, MA, MPA

Faculty of Management Research Ethics Officer  
Rowe 4013  
Dalhousie University  
PO Box 15000, Halifax, NS B3H 4R2  
[jlmusic@dal.ca](mailto:jlmusic@dal.ca)

## Appendix B: Advisory Committee members interview consent form



Information channel and source preference in marine policy development: A case study on the Eastern Shore Islands Area of Interest consultation process

We invite you to take part in a research study examining the role of information during the Eastern Shore Islands Area of Interest consultation process. This project is being led by Hali Moreland, a graduate student with the Marine Affairs Program at Dalhousie University, Halifax, Nova Scotia, Canada, and supervised by Dr. Bertrum MacDonald of Environmental Information: Use and Influence (EIUI) with Dalhousie University's School of Information Management in the Faculty of Management. The information below tells you about our research and what you will be asked to do. It also tells you about any benefits, risks, inconveniences or discomforts you might experience.

To help us understand how Advisory Committee members' use and interact with information during the Eastern Shore Islands Area of Interest consultation process, we invite you to participate in an interview. We ask you to focus on your role as a member of the Advisory Committee and answer interview questions from that perspective. You will be asked to answer questions in a semi-structured interview at a date and time of your convenience, either in person, by phone, or by Skype. The time requirement for this interview will be no more than one hour.

Your participation is voluntary and you may withdraw from the interview at any time prior to completion of the interview. You may also withdraw your interview submission at any time prior to September 1, 2019. With your permission, quotations from your interview may be attributed to your stakeholder category (i.e., "Community Group A") in reports from this research. Participation in this study may not benefit you directly, but the findings may uncover new insights about information use that can be applied to future public engagement scenarios. We believe there will be no danger to you greater than what you experience in your daily life.

It is your decision whether you want to take part in this research project. Even if you do take part, you can leave the study at any time for any reason. There will be no negative consequences to yourself. Please note that after September 1, 2019, all participant data will be analyzed and you will no longer be able to withdraw your interview data from the study. You may also choose not to answer questions in the interview. In that case, you may skip any question that you are uncomfortable answering for whatever reason.

All information you give to the researcher will be kept private. When we share our project findings in our final graduate project report, in our annual class presentation, "Making

Waves,” or at workshops/conferences, we will only talk about stakeholder group results. This means that it will not be possible for you to be identified. Any identifying information about you (like your name) will be kept in a separate file from the interview transcript/notes, in a locked cabinet in the office of the Environmental Information: Use and Influence research program in the School of Information Management at Dalhousie University or in a password-protected, secure computer file.

If you agree to participate in this research project, please fill out and sign this consent form. We are happy to share our results with you after December 2019. If you wish to receive a copy of the summary report, please provide your e-mail address below, or contact us via email any time after December 2019.

For any questions, concerns, or more information about the study, please contact Hali Moreland ([hali.moreland@dal.ca](mailto:hali.moreland@dal.ca); 306-961-5779) or Dr. MacDonald ([bertrum.macdonald@dal.ca](mailto:bertrum.macdonald@dal.ca); 902-494-2472). If you have any difficulties with, or wish to voice concern about, any aspect of your participation in this study, you may contact Janet Music, Faculty of Management (FoM) Research Ethics Officer at Dalhousie University, for assistance ([janet.music@dal.ca](mailto:janet.music@dal.ca)).

I have read the explanation about this study or it has been read to me. I understand what I am being asked to do and my questions about the study have been answered. I know that participating is my choice and that I can leave the interview at any time prior to completion of the interview or withdraw from the study prior to September 1, 2019. **I understand that by completing this form, I am providing informed consent.**

Please check each of the following conditions (as applicable)

- I agree to audio recording of the interview.
- I agree to use of substantial direct quotations from my interview in reports and publications arising from this research.
- I agree that the use of quotes from my interview will be attributed to my stakeholder group, not to me personally.
- I would like to receive a summary of the reported results of this study after its completion in December 2019. I may be reached for this purpose at the following email address:

\_\_\_\_\_.

**By signing this consent form, you are indicating that you fully understand the above information and agree to participate in this study.**

\_\_\_\_\_  
PARTICIPANT'S SIGNATURE    DATE

\_\_\_\_\_  
RESEARCHER'S SIGNATURE    DATE



## Appendix C: Government representatives interview consent form



### Information channel and source preference: A case study on the Eastern Shore Islands Area of Interest consultation process

We invite you to take part in a research study examining information use during the Eastern Shore Islands Area of Interest consultation process. This project is being led by Hali Moreland, a graduate student with the Marine Affairs Program at Dalhousie University, Halifax, Nova Scotia, Canada, and supervised by Dr. Bertrum MacDonald of Environmental Information: Use and Influence (EIUI) with Dalhousie University's School of Information in the Faculty of Management. The information below tells you about our research and what you will be asked to do. It also tells you about any benefits, risks, inconveniences or discomforts you might experience.

To help us understand information use and dissemination patterns by the government representatives during the Eastern Shore Islands Area of Interest consultation process, we invite you to participate in an interview. You will be asked to answer questions in a semi-structured interview at a date and time of your convenience, either in person or by phone. The time requirement for this interview will be no more than one hour.

Your participation is voluntary and you may withdraw from the interview at any time prior to completion of the interview. You may also withdraw your interview submission at any time prior to September 25, 2019. With your permission, quotations may be attributed to your stakeholder category (i.e., "government representative") in reports from this research. As all responses will be treated anonymously, quotations will not be attributed to you. Participation in this study may not benefit you directly, but the findings may uncover new insights about information use that can be applied to future public engagement scenarios. We believe there will be no danger to you greater than what you experience in your daily life.

It is your decision whether you want to take part in this research project. Even if you do take part, you can leave the study at any time for any reason. There will be no negative consequences to yourself. Please note that after September 25, 2019, all participant data will be analyzed and you will no longer be able to withdraw your interview data from the study. You may also choose not to answer questions in the interview. In that case, you may skip any question that you are uncomfortable answering for whatever reason.

All information you give to the researcher will be kept private. When we share our project findings in our final graduate project report, in our annual class presentation, "Making Waves," or at workshops/conferences, we will only talk about stakeholder group results. This

means that it will not be possible for you to be identified. Any identifying information about you (like your name) will be kept in a separate file from the interview transcript/notes, in a locked cabinet in the office of the Environmental Information: Use and Influence research program in the School of Information Management at Dalhousie University or in a password-protected, secure computer file.

If you agree to participate in this research project, please fill out and sign this consent form. We are happy to share our results with you after December 2019. If you wish to receive a copy of the summary report, please provide your e-mail address below, or contact us via email any time after December 2019.

For any questions, concerns, or more information about the study, please contact Hali Moreland ([hali.moreland@dal.ca](mailto:hali.moreland@dal.ca); 306-961-5779) or Dr. MacDonald ([bertrum.macdonald@dal.ca](mailto:bertrum.macdonald@dal.ca); 902-494-2472). If you have any difficulties with, or wish to voice concern about, any aspect of your participation in this study, you may contact Janet Music, Faculty of Management (FoM) Research Ethics Officer at Dalhousie University, for assistance ([janet.music@dal.ca](mailto:janet.music@dal.ca)).

I have read the explanation about this study or it has been read to me. I understand what I am being asked to do and my questions about the study have been answered. I know that participating is my choice and that I can leave the interview at any time prior to completion of the interview or withdraw from the study prior to September 1, 2019. **I understand that by completing this form, I am providing informed consent.**

Please check each of the following conditions (as applicable)

- I agree to audio recording of the interview.
- I agree to use of substantial direct quotations from my interview in reports and publications arising from this research.
- I agree to the use of quotes from my interview will be attributed to my stakeholder group, not to me personally.
- I would like to receive a summary of the reported results of this study after its completion in December 2019. I may be reached for this purpose at the following email address:

\_\_\_\_\_.

**By signing this consent form, you are indicating that you fully understand the above information and agree to participate in this study.**

\_\_\_\_\_  
PARTICIPANT'S SIGNATURE    DATE

\_\_\_\_\_  
RESEARCHER'S SIGNATURE    DATE

## Appendix D: General interview instrument for study participants

### Introduction

1. Let's begin by you telling me about your involvement within the Eastern Shore Island consultation process.

*Probe questions:*

- How did you get involved in the consultation process?

### Advisory Committee meetings:

*For the rest of the interview, I'd like you to focus on the Advisory Committee meetings, rather than other formal or informal meetings that you might have been involved in.*

2. In a typical meeting of the Advisory Committee, how does information flow? Mostly from government representatives to committee members? Or does information flow among all members?

3. What types of information have you received or disseminated during Advisory Committee meetings?

*Probe questions:*

- Is the information you want or were looking for supplied to you during the Advisory Committee meeting?
- Is the information provided during the Advisory Committee meetings answer questions you may have had about the Eastern Shore Islands Area of Interest?

If yes:

- Please give me an example.

If no:

- Were there any questions left unanswered by the information you received?
- Were these unanswered questions addressed in the Advisory Committee meetings?
- If they were addressed in the meetings, why do you feel the questions remained unanswered?

4. Do you prefer to receive or disseminate a particular format of information, for example, a short briefing note, a video, or a scientific paper?

*Probe questions:*

If yes:

- Please describe your preference further (possible probes: style of writing, layout of information, use of visuals, length of document, etc.)

5. In your opinion, what is the role of the Advisory Committee for the Eastern Shore Islands Area of Interest?

**Information channels:**

*I'm interested in the information channels you use and prefer. Channel refers to where you go to get information, such as online or in person.*

**[provide interviewee with list of potential information channels on separate sheet of paper - give them time to review it].**

**Information channels:**

Meetings or gatherings (advisory committee meetings, town hall gatherings, community meetings etc.)

Online communications (social media, emails, etc.)

Online content (newspapers, blogs, websites, brochures, reports, etc.)

Printed content (newspapers, newsletters, brochures, etc.)

Visual media online (videos, social media, etc.)

Teleconferencing

Visual media on cable or satellite (T.V. shows etc.)

Recorded media (podcasts etc.)

Live audio (radio, etc.)

Talking with other people in person (friends, family, colleagues, etc.)

Other (please specify) \_\_\_\_\_

6. Please identify the two information channels **[list provided above]** you use *most* frequently and the two information channels you use *least* frequently.

*Probe questions:*

- Please explain your choices

7. When looking for information about the Eastern Shore Islands Area of Interest, which of these channels **[list provided above]** do you *prefer* to use?

*Probe questions:*

- Please explain.
- Probe for any discrepancy between channel use frequency and preference

8. Considering the consultation process so far, have you used the same information channels during this period?

*Probe questions:*

If yes:

- Please explain.

If no:

- What has changed?
- Which information channels did you use at the start of the consultation process?
- Which information channels do you use now?
- Was there a reason for the switch?

9. To what extent is social media important an information channel for you?

**Information sources:**

*Now I'd like you to speak further on information sources: the people or organizations that give information to you.*

**[provide interviewee with list of potential information sources on separate sheet of paper - give them time to review it].**

**Information sources:**

Federal government (DFO, etc.)

Provincial government (Intergovernmental Affairs, etc.)

Local/Municipal government (Halifax Regional Municipality, etc.)

Conservation groups (Oceans North, Canadian Parks and Wilderness Society, etc.)

Universities (Dalhousie, Saint Mary's, etc.)

National news (CBC, Globe and Mail, etc.)

Local news (Eastern Shore Cooperator, The Chronicle Herald, etc.)

Friends/family/neighbours/colleagues

Scientific organizations

Community organizations (Eastern Shore Fishers Protective Association, Association for the Preservation of the Eastern Shore, Wild Islands Tourism Advancement Partnership, etc.)

Other (please specify) \_\_\_\_\_

10. Please identify the two information sources **[list provided above]** you use *most* frequently and the two information sources you use *least* frequently.

*Probe questions:*

- Please explain your choices

11. When you look for information about the Eastern Shore Islands Area of Interest, which of these sources [**list provided above**] do you *prefer* to use?

*Probe questions:*

- Please explain.
- Probe any discrepancy between frequency and preference

12. Considering the consultation process so far, have you consulted the same information sources over time?

*Probe questions:*

If yes:

- Please explain.

If no:

- What has changed?
- Which information sources did you use at the start of the consultation process?
- Which information sources do you use now?
- Was there a reason for the switch?

13. Have you ever encountered conflicting information about the Eastern Shore Islands Area of Interest?

*Probe questions:*

If yes:

- How did you reconcile the information?

14. Generally, what does trust in information mean to you?

15. Which of these sources [**list provided above**] do you *trust* to provide accurate information about the Eastern Shore Islands Area of Interest?

*Probe questions:*

- What is it about an information source that makes you trust it? (e.g., You consider it an official source, knowledgeable, credible, accurate, reliable, source has experience providing information on similar stories/events, community oriented, engaging, familiar, related)
- How do you determine whether you will trust an information source?
- Do you think the creator/author/generator of the source is knowledgeable about marine conservation, particularly in the Eastern Shore Islands?
- In general, do you trust everything you receive from this source?

- Have you ever questioned information received from this source, either in conversation with others or by yourself?

16. Are there any information sources **[list provided above]** that you do *not* trust to provide you with accurate information about the Eastern Shore Islands Area of Interest?

- Please explain.

17. You mentioned that you trust source A, B, and C **[referring to question 15]** the most. Has your trust in each source remained the same during the consultation process?

*Probe questions:*

If yes:

- How have they maintained your trust over time?

If no:

- Have they become more or less trustworthy over time?
- Please explain.

18. Do you communicate with other members of the Advisory Committee or with government representatives outside of “formal meetings,” i.e., coffee breaks, side discussions, etc.?

- Please explain [with regard to extent or frequency]

19. Do you seek information about the Eastern Shore Islands Area of Interest outside of formal consultation meetings?

*Probe questions:*

If yes:

- Where do you look for the information?
- Why do you seek information there?

If no:

- By saying no, do you mean that you find all the necessary information during Advisory Committee meetings?
- Have you gotten most of your information about the Eastern Shore Islands Area of Interest from sources *within* the Advisory Committee (i.e., other members, government) or *outside* (i.e., family members, social media)?

### **Information use:**

*The next questions will focus on your information use during the consultation process.*

20. Please tell me how you use the information that you receive during an Advisory Committee meeting (e.g., tell a friend, post in a Facebook group, talk to a journalist, reference it in a report, etc.).

21. Have you ever received information during an Advisory Committee meeting that changed your mind about an aspect of the Area of Interest?

*Probe questions:*

If yes:

- What was the information?
- What was it about that information that helped you to change your mind?

22. Have you passed on any information that you receive during an Advisory Committee meeting to others?

*Probe questions:*

If yes:

- Typically, who do you pass information along to?

23. Have you ever received or encountered what you thought to be misinformation during the Eastern Shore Islands consultation process?

*Probe questions:*

If yes:

- Please explain.
- Did it contradict other information you had received?
- What did you do with this misinformation?
- Did this misinformation arrive via one of the channels we discussed previously?

If yes:

- Which information channel?

24. Do you believe misinformation had an influence on the outcome of this consultation process?

*Probe questions:*

- Please explain.

25. Do you feel that your understanding of Marine Protected Areas has changed as a result of participating in the Eastern Shore Islands Area of Interest consultation process?

- Please explain.

## **Conclusion:**

*In light of the questions I have asked, would you like to add anything further about your information use during the Eastern Shore Islands Area of Interest consultation process?*

*The interview is now complete! Thank you very much for your time.*