

Engaging Not for Profit Leadership: Community Change in Environmental Sustainability

by

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**Abstract**

The following study is an action-oriented research project completed in partnership with a small not-for-profit organization in southern Alberta. Using a framework of constructivist ontology, two research methods, survey and focus group, were employed to create a community narrative. This information was analyzed and then used to inform a set of findings, conclusions, and recommendations that the organization used to establish its future goals, activities and focus areas as it generates its next strategic plan. All research associated with this project was completed in adherence to the Royal Roads University Research Ethics Policy.

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### **Executive Summary**

The following study is an action-oriented research project that was completed in partnership with Environment Lethbridge, a small not-for-profit organization located in southern Alberta that seeks to create a more sustainable community through education and engagement. Through this research process, I worked with the organization to explore a community needs assessment, lead discussions with the Board of Directors, and ultimately made some recommendations about what should be considered for the organization's next three year planning cycle. This project answered the questions how might Environment Lethbridge build a strategic plan that enhances environmental literacy and sustainability in the community? What types of environmental work are important to the community? Are there gaps in the current strategic plan that need to be addressed? How can we meet the community where they are to better address current perceptions of environmental work in a way that spurs them into action? What are we doing now that the community feels is helping them live more sustainably? What are we doing now that needs to change? For this project, I studied scholarly literature on the topics of environmental communication and environmental leadership. It is evident from the literature that public perceptions and civic engagement in environmental communications help build capacity for community collaboration and social movements which influence change on small and large scales. Environmental communication plays a key role in environmental leadership. Strong and persuasive leaders use strong and persuasive communication practices to influence changes in attitudes and behaviour of individuals and groups. For my methodology I used the Action Research Engagement method developed by Rowe, Graf, Agger-Gupta, Piggot-Irvine (2013) because it supports action-oriented research projects up to the point of

recommendations. This methodology was informed by Community Based Participatory Action Research methodology in that I worked with the community to gather opinions and experiences to help shape my recommendations to my partner organization. In terms of data collection, I used two methods. First, an anonymous survey was sent to community members who belong to the organization's email list and Facebook page. From the data collected in the survey I built a presentation for the organization that explored the themes I pulled from the survey. Next, I facilitated a focus group method with the organization to ask them a series of questions based on the themes presented to them from the survey. When both methods were complete, I deidentified all the data, combined it into one document and broke it out into several groupings based on similar themes which informed my findings and conclusions. The critical theme that ties all the findings, conclusions, and recommendations together is people are at the heart of change. Environment Lethbridge needs to focus on expanding its network of community followers and building partnerships with other like-minded groups and organizations to maximize the impact of its efforts toward building a more environmentally sustainable community. For Environment Lethbridge, the next steps were to identify priorities for the next planning cycle and build them into a strategic plan that acted as both a roadmap and north star. The implications of this study outlined how essential it is for the organization to communicate with the community, meet community needs and build supporters that fuel change and create a more sustainable future.

### **Reference**

Rowe, W., Graf, M., Agger-Gupta, N., Piggot-Irvine, E., & Harris, B. (2013). Action research engagement: Creating the foundations for organizational change. Victoria, BC: Action Learning, Action Research Association Inc.



### **Chapter 1: Focus & Framing**

Working with a partner organization, leading an action-oriented change project, learning new skills, and creating a positive change in my community is not something I could have imagined myself undertaking when I began my master's program. I partnered with Environment Lethbridge, a local not-for-profit organization that seeks to create a more sustainable community through education and engagement. During this research process, I worked with this organization to explore a community needs assessment, lead discussions with the Board of Directors, and ultimately made some recommendations as to what should be considered for the organization's next three year planning cycle.

This topic was important to me because I have been passionate about the environment and sustainability practices for my entire life and in the context of today's world, environmental considerations are becoming more crucial than ever. For Environment Lethbridge, this topic was important because it addressed the mandate outlined in its mission and vision statements and helped the organization gain a better understanding of current conditions and community interests so it could envision appropriate goals for the next three year planning cycle.

Within this topic, my principal inquiry question is: How might Environment Lethbridge build a strategic plan that enhances environmental literacy and sustainability in the community? In addition to this question, I generated several sub-questions to help better understand and answer my main topical question. These sub-questions include: What types of environmental work are important to the community? Are there gaps in the current strategic plan that need to be addressed? How can we meet the community where they are to better address current perceptions of environmental work in a way that spurs them into action? What are we doing now that the

community feels is helping them live more sustainably? What are we doing now that needs to change?

### **Significance of Inquiry**

As a result of this inquiry, Environment Lethbridge will be able to provide educational programming and initiatives that meet the community where it is. By considering the findings, the organization will be able to tailor programming for the community to help move them towards more sustainable behavior, starting from where they are now and taking into account what they feel is important. Infusing the wants and needs identified by the community into the creation of programming and opportunities should improve engagement by community members and, in the long term, lead to more sustainable behaviors from them. Additionally, using the findings and recommendations will help the organization set some priorities that more strongly connect the community to its vision, mission, and organizational goals through its next strategic plan. Ideally, this will move the community toward a more sustainable future by providing individuals with the knowledge and tools they need to live more sustainably within a local context.

It is now accepted by most of the scientific community that climate change is no longer an arguable occurrence, and our time to reverse the process is getting short. It is also widely understood by environmentalists and sustainability practitioners that it will be the actions of individuals rather than blanket climate-action policies made by governments that will have the biggest impact on creating measurable change.

**Organizational Context and Systems Analysis**

Environment Lethbridge is a small, not-for-profit organization comprised of an Executive Director (ED) and a nine member volunteer Board of Directors. This group was directly involved in the research project through the focus group exercise, and led the decision-making processes along with the ED. The ED has provided me with an inside perspective of how the organization operates and acted as a resource for the industry.

Outside of this core group, the organization has a group of volunteers, community partners, and engaged individuals that support its goals and programming. Additionally, the community at large participates in the educational programs the organization provides and benefits from the work it does on a more indirect or general basis. There is also a connection to the local, provincial, and federal governments as current and potential funding sources (see Appendix J). Looking at this system more deeply, Ison (2008) presented a perspective on systems thinking in action research that I believe fit my project perfectly. “[S]ystems thinking and practice are a means to orchestrate a particular type of conversation where conversation, from the Latin, *con versare*, means to ‘turn together’ as in a dance” (p. 152). The importance of communication and civic engagement and action as it relates to sustainability will be explored more fully in Chapter 2.

In the case of individual action and adoption of more sustainable actions across our communities, existing mental models may be holding individuals back from making changes in their behaviour. Senge (2006) asserted “new insights fail to get put into practice because they conflict with deeply held internal images of how the world works, images that limit us to familiar ways of thinking and acting” (p. 163). Across our communities, there are likely many mental

models that could be holding individuals back from making more sustainable choices. For example, one mental model might include an image that driving to work each day is a necessity and a different mental model of riding a bike to work each day conflicts with this picture. Another example could be a parent that has always packed their child's lunches in a plastic bag because it is quick and easy, but they can't visualize how switching to a re-useable container could be just as easy and efficient because of their existing mental model surrounding this activity. Senge (2006) contended "problems with mental models arise when they become implicit – when they exist below the level of our awareness" (p. 166). In the first example, the person is likely aware that riding a bike to work has both personal health and environmental benefits but proceeds to drive to work anyway. In the second example, the parent likely knows that single use plastic bags are not an environmentally friendly choice but continues to purchase and pack lunches in them every day. Resistance to change may stem from this type of habitual behaviour that is rooted in existing mental models and the existing structures that support the persistence of the status quo (Senge, 2006).

Meadows (2008) wrote about how seeing the relationship between structure and behaviour can help us understand how systems work and how to shift them into better patterns of behaviour. Put another way, taking a systems approach can help Environment Lethbridge build an understanding of the current behaviour patterns in the community by opening up a dialogue around environmental action, then use that information to create opportunities for new or different behaviours to emerge. If Environment Lethbridge can understand what is causing the community to participate (or not participate) in important initiatives, it can make adjustments to the implementation strategy to increase the adoption of the desired behaviour. Although this is a

simple example of a single feedback loop (Meadows, 2008; Senge, 2006), I contend this strategy could be applied to the larger system, and over time, improve the environmental habits of the community as a whole. For the organization, feedback loops can act as a sort of monitoring system to track progress toward changes in behaviour and attitudes. In the case of sustainability, and more specifically, this project, feedback loops can be used by EL to monitor the uptake of its initiatives individually or the success of its campaigns more broadly. This information can allow the organization to gauge how much it has influenced individuals to change their mental models and where more work needs to be done. I recognize there are a complex range of factors that influence behavioural change including values, context, social norms etc.. However, I would consider more complex factors behind individual or societal behavior change outside of the control of the organization and consequently out of scope for this project.

From my perspective, the methods that were employed during this research were meant to open up dialogue about environmental practices in my community and continue a conversation with Environment Lethbridge about how it can adapt to better support community needs into the future. After this project is complete, it will be up to the organization to continue those conversations with the community and support individual action through programs and education.

### **Overview of Thesis**

Throughout the remainder of this paper, the research will be explored and I will discuss the findings, conclusions, recommendations, and future activities in more depth. In Chapter 2, I review relevant literature related to environmental communication and environmental leadership. In Chapter 3, I review the Action Research Engagement and Community Based Participatory

Action Research methodologies, survey and focus group research methods, project participants, study conduct, and the data analysis process. This chapter will also discuss ethical implications for the study, proposed outputs, and the contributions it made to the organization and the community. In Chapter 4, the project findings and conclusions are revealed and the scope and limitations of the inquiry are discussed. In the last chapter, study recommendations that examine next steps, organizational implications, and implication for future inquiry are discussed. Before I explore the study in more detail, I will start with a review of relevant literature on the topics of environmental communication and environmental leadership. These two topics are significant to this inquiry because they add validity to my findings and support the conclusions and recommendation in this project.

## **Chapter 2: Literature Review**

For this project, I researched two main topics: environmental communication and environmental leadership. These two topics are pertinent to this study because environmental communication and environmental leadership go hand-in-hand to support and inspire individual, organizational, and community environmental action toward sustainability.

### **Environmental Communication**

Most scholars can agree it was the 1962 publication of Rachel Carson's book, *Silent Springs* that sparked the beginnings of environmental consciousness on a broad scale for the first time. I recognize there are diverse cultural and traditional views and understanding of the relationships between humans and nature; however, for the purpose of this study I will focus on the viewpoints represented in the literature I reviewed.

In her book, Carson brought to light the harmful impacts of man-made pesticides on the environment which "raised public awareness about the fragile nature of the environment and the intricate interconnectedness of the ecosystem" (Harris, 2017, p. 68). Subsequently, many different eco-centred movements and studies emerged as a result of new levels of awareness and concern for the future of the planet. A few years later in 1969, environmental communication was identified in academic literature for the first time as a sub-genre in the field of environmental education in the first edition of the *Journal of Environmental Education*. The first article was written by Schoenfeld (1969) and featured a discussion about the connection between environmental education and communication as two sides of the same topic (Jurin, Roush, & Danter, 2010). This publication marked the beginning of academic interest in environmental communication matters.

The next year, the inaugural Earth Day celebration and the signing of the National Environmental Policy Act in 1970 ushered in a new era of environmental action to North American and European countries. According to Harris (2017) the Earth Day celebration that year constituted the first grassroots environmental movement when 20 million Americans gathered in public spaces to call for environmental protection. She added, environmental movements like the one seen on this Earth Day “result from deep ecological concern in ordinary people about threats to their natural habitat as a result of unsustainable development activity” (Harris, 2017, p. 65). As environmental awareness spread, the subject of environmental communication gained prominence in academic circles at the same time.

Soon, environmental communication became recognized as a field in its own right. Over the next three decades, the notion of the environment and its connection to mass media grew in popularity as many environment-centred communications publications appeared (Jurin, Roush, & Danter, 2010; Cox & Depoe, 2015; Katz-Kimchi & Goodwin, 2015). In the first two decades, the field experienced a range of topics, approaches, and processes based upon shared assumptions about the relationships between communication and the environment and the ideological, social and cultural contexts that communication occurs (Cox & Depoe, 2015). Senecah (2007) suggested the field of environmental communications “emerged as the result of a layering of signification over time by different pathways by a diverse group of communication scholars” (p. 22). During this same time, the field was institutionalized as it became the subject of academic textbooks and was introduced into post-secondary classrooms (Jurin, Roush, & Danter, 2010; Cox & Depoe, 2015; Katz-Kimchi & Goodwin, 2015). In the late 1980s and early 1990s, the pioneers of environmental communication “took academic, research, and service risks



to shape, nudge, raise familiarity with, and build legitimacy for [the field]” (Senecah, 2010, p. 23).

Some examples of major milestones in the field’s development include the first Conference on Communication and Environment held in 1991, the inaugural publication of the journal of *Environmental Communication* occurred in 2007, and the establishment of the International Environmental Communication Association in 2011. Institutionalization processes such as these “have conferred a more definite academic identity to individuals working in the field and have helped raise the profile of environmental communication as a sub-field in the communication discipline and across the interdisciplinary field of environmental studies” (Katz-Kimchi & Goodwin, 2015, pp. 367-368).

Today, the field of environmental communication is multifaceted and multi-disciplinary. “It intersects with numerous other sub-disciplines of mass communication scholarship, such as science communication, risk communication, and journalism studies, as well as other fields such as the sociology of social movements and public health” (Comfort & Park, 2018, p. 863). I agree with Comfort and Park’s (2018) notion that environmental communication must take a multifaceted and multidisciplinary approach aimed at meeting the different needs of its diverse intended audiences. As a result, much of the teaching and scholarship about environmental communication taking place today “challenges conventional academic orientations, which tend to reproduce dominant Western premises of ‘nature’ as a separate, passive back drop or a mute store of resources” (Milstein, Pileggi & Morgan, 2017, p. 2). Instead, it centres on a broader approach where context, culture, social norms and geographic location are all considered at the same time (Jurin, Roush, & Danter, 2010). Milstein et al. (2017) asserted educators, as

environmental communicators, “facilitate contending with how to make sense of our roles in ecological phenomena, how to respond individually and as communities and institutions, and how to enable ourselves and nurture others to be agents of restorative change” (p. 1).

Environmental matters touch everyone, everywhere, simultaneously. Consequently, environmental communication must be able to meet people where they are and share messages relevant to them in an effort to trigger action.

Beyond academic and journalistic implications, most scholars agree that environmental communication plays an important role in public perceptions about environmental issues and can influence public behaviour and civic decision making. Flor (2004) defined environmental communication as “the application of communication approaches, principles, strategies and techniques to environmental management and protection. Put another way, it is the deliberate exchange of environmental information, knowledge, and even wisdom” (p. 4). According to Hallgren (2017), “Environmental communication takes place in a large and varied number of social situations, situations that all differ in character” (p. 68). Zerva, Grigoroudis, Karasmanaki and Tsantopoulos (2021) stated, “environmental communication can become the link between relevant stakeholders and citizens because it has the ability to affect citizens’ views and attitudes while providing useful information on climate actions” (p. 7707). Similarly, Brulle (2010) suggested successful environmental communication needs to have a collaborative element. He believed it was imperative to establish common goals through democratic, broad based discussions to address environmental issues. Flor (2004) added environmental communication shouldn’t rely passively on sources or media to distribute messaging. Instead, it should encourage public participation and empower audiences to become active sources of information.

To help steward an active engagement process, Brulle (2010) proposed a new social vision where long term community interests are developed through enlightened self-interest and awareness as a means to engage citizens and foster change. “Rather than just informing the public of and eliciting support for various elite policy positions, environmental communication needs to aim at developing messaging procedures that involve citizens directly in the policy development process” (Brulle, 2010, p. 93). Consistent with Brulle’s (2010) sentiments, Senecah (2010) added “[t]hese collaborative [communication] processes are increasing exponentially at local to global scales about every kind of environmentally related issue...they play powerful roles in not only addressing thorny ecological issues, but also building civic capacity and community attachments” (p. 29). Even though the field of environmental communication has relied heavily on civic engagement to encourage action and influence change, it is worthy to mention that attempts to drive civic action through government and institutional influence have not always been effective. In 2007, Cox (2007) took a somewhat radical stance in his article *Nature’s “Crisis Disciplines”: Does Environmental Communication Have an Ethical Duty?* published in the first edition of the *Environmental Communication* journal where he called out the field of environmental communication a crisis discipline. In his article, Cox (2007) likened the field of environmental communication to the field of conservation biology and suggested the work of scholars in the field become two-fold. First, scholars should identify “the failures, distortions, and/or corruption in human communication about environmental concerns” (p. 18) while at the same time recommending alternatives to enable a human response to “signals of environmental stress in ways that are appropriate to human and biological well-being” (p. 68). Senecah (2010) argued the crisis was actually “about the lack of humans who are willing to

productively engage each other about environmental situations... [and] people have become increasingly cynical about all levels of civic life to address [environmental situations]" (pp. 26-27). Although Cox's (2007) article and subsequent teaching lectures signalled a turning point in the discourse of the field, further discussion of environmental communication as a crisis discipline is outside of the scope of the project.

It is evident from the literature that public perceptions and civic engagement in environmental communications help build capacity for community collaboration and social movements which can influence change on small and large scales. Environmental communication emerged from a new sense of awareness about the negative impact human actions have had on the natural world, and an obligation to raising awareness and inciting action toward a more sustainable future. The next section will explore, environmental leadership as an essential counterpart to environmental communication which, when combined, generate meaningful, impactful, and long-lasting change.

### **Environmental Leadership**

It is hard to engage with popular media without witnessing a narrative about the impact climate and environmental change is having on our planet. Although we are beginning to see environmental leadership at the forefront of organizations, scientific studies, educational campaigns, and social movements today, the idea of leadership and the environment is relatively new. Through their research, Akiyama, An, Furumai, and Katayama (2013) found there was little linkage between the environment, education, and leadership in academic research until the early 1900s. It wasn't until nearly a century later that the field began to gain traction as an emerging area of interest among academic leadership studies in the 1990s (Akiyama et al., 2013). One of

the first widely accepted definitions of environmental leadership was written by Berry and Gordon in 1993 when they described it as "the ability of an individual or group to guide positive change toward a vision of an environmentally better future" (p. 3). This definition is still frequently cited in the literature about environmental leadership and holds weight as a standard description of an environmental leader today. It is a widely discussed theory that environmental leadership was born out of the concept of transformational leadership, some authors equate them as the same thing. Berry and Gordon (2006) asserted a new form of leadership "was first recognized in organizations with an environmental purpose because they were most often faced with problems that were long term, complex, and with a particular need for integration across disciplines" (p. 83). Similarly, Akiyama et al. (2013) noted transformational leadership has often been the centre of studies about environmental leaders. However, they also suggested there are not any universally accepted leadership theories in the study of environmental leadership. Along with the wide and varying theories used to study environmental leadership comes equally as many definitions. For the purpose of this study, I accept Gallagher's (2012) broad definition of environmental leadership as "*a process by which Earth's inhabitants apply interpersonal influence and engage in collective action to protect the planet's natural resources and its inhabitants from further harm* [italics in original]" (p. 5).

The environmental movement joined with mainstream culture in the early 2000s and began to gain traction in research and academic circles (Western, 2010); however, there continues to be relatively little research done specifically on environmental leaders and leadership (Akiyama et al., 2013; Redekop, 2018). Despite this, environmental leadership is a vital topic to explore in this study because it can be viewed from an organizational, systemic, and

individual perspective. Christensen (2012) asserted “Environmental leaders understand the importance of complexity and integration in both the environmental systems they manage and the organizations they lead” (p. 13) and understand effective leadership stems from having a clear vision for the goals they wish to achieve. Further, Dechant and Altman (1994) found organizations that manage environmental issues effectively have a mission and values statement that promotes environmental advocacy. Environment Lethbridge seeks to build leadership capacities in the organization and give the community tools to become environmental leaders on an individual and group level. Gallagher’s (2012) exploration of the true meaning of environmental leadership in the context of today’s complex world revealed environmental leadership takes place in organizations and “in diffuse networks of stakeholders” (p. 6) where environmental leaders must work to change mind-sets and motivate individuals toward collective action. Similar to the field of environmental communication, “Effective environmental leaders assess the extent of a challenge by the spatial and temporal scale of a physical or biological process, as well as its cultural, social, and institutional elements, rather than trying to destroy or redefine boundaries” (Akiyama et al., 2013, p. 24). Environmental communication plays a key role in environmental leadership. Strong and persuasive leaders use strong and persuasive communication practices to influence changes in attitudes and behaviour of individuals and groups. It is my assertion that this project has provided Environment Lethbridge with the tools it needs to build a new strategic plan that will help it lead, motivate and engage the community towards more progressive environmental action.

### **Chapter 3: Methodology**

For the purpose of this study, two complementary methodologies were used to guide and develop a research process to produce reliable results and meet the desired outcomes of the organization. First and foremost, I used the Action Research Engagement (ARE) model developed by Rowe, Graf, Agger-Gupta, Piggot-Irvine, and Harris (2013) because it supports action-oriented research projects up to the point of recommendations. This methodology was informed by Community Based Participatory Action Research (CBPAR) methodology (Burns, Cooke, & Schweidler, 2011) in that I worked with the community to gather opinions and experiences to help shape my recommendations to my partner organization. Herr and Anderson (2005) suggested “methodological considerations depend on the context within which the study is undertaken” (p. 8). Supporting the ARE methodology by taking a CBPAR stance directed the research to focus on the community and find out what was important to them. The community narrative built from the data I collected was used to establish a path forward for the organization that will lay the foundation for the change the community expressed it wanted to see. Rowe et al. (2013) contended the goal of the ARE methodology is to work with an organization to “enhance their understanding of what needs to change through situation analysis, and set direction for the change through visioning and strategic planning” (p. 19). Combining these two methodologies offered a balance of community participation while factoring in the context of the study’s objective and timeframe. Burns, Cooke, and Schweidler (2011) proposed CBPAR “seeks to change issues that are critical to communities and focuses on engaging community members in research directed at addressing their social concerns” (p. 5). The mission and core values of Environment Lethbridge speak directly to this very definition. According to its current Strategic

Plan (2018), the mission of Environment Lethbridge is to inspire and equip “people to create widespread community action and engagement towards sustainability” (Environment Lethbridge, p. 2) and its core values include partnership and collaboration, diversity and respect, community action and appreciation, science-based decision making, and environment sustainability. The motivation behind this study stems from a desire by EL to generate a better understanding about how to serve the community better. In preparation for EL to do this, it needed to establish what is important to the community so it can address those issues more directly and effectively.

The two methods used in this study, community survey and focus group, contributed to a better understanding of the ontological and epistemological perspectives of the community. With the constructivist nature of action-oriented research being so centred on human interaction and engagement for the purpose of understanding, it was important for me, as a researcher, to gain a thorough understanding about how the community creates its reality and builds understanding to know how best to influence its actions and perceptions for a more sustainable and environmentally conscious future. More specific details about the methods and study conduct used will be discussed more comprehensively in the following sections.

### **Data Collection Methods**

For this action-oriented research inquiry, I used two qualitative methods of research that engaged the community and the organization at different levels and in varying capacities. Coghlan and Brannick (2005) described several broad characteristics of action research methods which I have adopted to help shape my own framework for this project. The characteristics include using a “scientific approach to study the resolution of important social or organizational issues together with those who experience these issues directly” (p. 4); creating a democratic and



collaborative partnership with members of the organization or system being studied and including them in the process; and making research concurrent with action. Using this framework to build engagement opportunities enhanced my relationship with the organization, ensured they were included in every step of data collection, and engaged them in the research process.

More specifically, I conducted an anonymous online community survey followed by a focus group with the board and ED. I chose a survey method because it has several advantages that supported my research efforts. Online surveys offer an opportunity to collect information from a broad audience at low cost while ensuring anonymity for participants and the data was recorded in a digital format which saved time in the collection and analysis stages (see survey questions in Appendix A). For participants, online surveys are convenient to fill out and often encourage larger participation rates than other forms of surveys, although it is important to note that surveys commonly receive low response rates compared to sample size. Some other disadvantages to online surveys include potential to get responses from individuals outside of the intended sample group, lack of computer skills or familiarity with programs on the part of participants, invalid or unconstructive answers, and unclear purpose or instructions that cause survey abandonment and result in a poor experience for participants (Lefever, Dal, & Matthiasdottir, 2006; Evans & Mathur, 2005).

In addition to a survey method, I used a focus group method to engage the board and ED directly, using the themes discovered through the survey research to guide the conversation (see focus group questions in Appendix B). This method gave members of the organization an opportunity to identify meaningful areas and bring together their ideas with the themes outlined

by the community to determine some organizational priorities. Advantages to focus groups are they provide an economical way of gathering views of a group when compared to a series of individual interviews, they encourage spontaneity and allow participants to build upon ideas, and they offer a safe and supportive space where individuals may be inclined to share more openly. Some disadvantages of focus groups are: they can rely on the skills of the moderator to produce quality results, recording devices needed for data collection can make some participants uncomfortable and less willing to contribute, individual participants can be more or less articulate and outspoken than others which can skew the overall narrative, and consensus can be difficult to obtain (Sim, 2001).

Throughout my research, I practiced first-person inquiry by being cognizant of my own thoughts and experiences as they happened. Second- and third-person inquiry took place during conversations with my inquiry team and through the methods I have described above. Using these three inquiry perspectives together formed a developmental action inquiry process that could help discover and attend to the changing needs of the organization and the community into the future (Torbert & Taylor, 2008; Coglhan, 2019).

### **Project Participants**

In this study, there were three groups of participants that made up the Inquiry Team and method participants. One person was chosen to participate as an Inquiry Team member to assist with data validation processes. She was a good fit for this role because she is familiar with action-oriented research processes, lives in a different city and is an outsider to the organization, which prevented any bias, ethical or power-over issues. Prior to her participation, she signed a

confidentiality agreement (see Appendix C) to ensure all data was treated appropriately. Two other groups of participants arose from the methods undertaken in the study.

As discussed in the previous section, two methods of engagement were implemented during this project: survey and focus group. The first method I deployed was a community survey that was used to build a community narrative. “Community narratives use qualitative research tools in a collaborative process with community members...to eventually paint a picture of a community context or initiative” (Olson, Cooper, Viola & Clark, 2015, p. 43). This process helped establish a common set of perceptions held by the local community members and built stories around them. Environment Lethbridge has a large list of email newsletter subscribers, a short list of community stakeholders including volunteers, engaged citizens, and partner organizations, and a broad social media following. The email subscribers and community stakeholders received a direct email invitation to participate in the survey, and there was a general call out through the organization’s Facebook page to invite those followers to participate. In total, Environment Lethbridge has around 800 email subscribers, 10-15 community stakeholders, and 3,000 Facebook followers. In total, 34 people participated in the 10-15 minute long survey.

Voluntary participants were asked to fill out anonymous individual surveys to gather data from a broad audience of engaged citizens. Saldana and Omasta (2018) would likely classify the individuals approached to do this survey as a purposive sample because they were selected based on previous engagement with or interest in Environment Lethbridge. At a minimum, the participants were connected to Environment Lethbridge via the organization’s Facebook page. The invitation letter can be found in Appendix D and the informed consent survey preamble can

be found in Appendix E. There were no power-over issues associated with this method because participants completed the survey anonymously. The general public was not invited to engage in this method because it was not as likely that they would have participated in or could identify and evaluate the programs and initiatives offered by Environment Lethbridge in recent years. They were also less likely to be up to date on current environmental issues or trends and may not have been as aware of the environmental needs in the community.

The second research method employed was an online focus group that included the ED and Board of Directors. I offered an alternative or secondary appreciative interview process for any individuals that had additional thoughts, stories, or information to share outside of the focus group, but none of the participants wanted or needed to disclose additional details. Saldana and Omasta (2018) explained how focus groups allow for individual thoughts and experiences to be shared and can “help individual participants remember things that they might not have alone” (p. 143). The combined interview method incorporated Lipmanowicz and McCandless’ (2014) idea of appreciative interviews which “start the work by focusing on the root causes of success” (p. 138). This group received an emailed letter of invitation to participate in the focus group (see Appendix F) and were provided with a digital informed consent form at the same time (see Appendix G). In total, the exercise took just over two hours and seven of the nine board members and the ED participated. I excluded people from outside the organization in this sample group because this method was used to drill down on the themes from the survey and identify what would be important, manageable, and achievable for the organization as it moves into the future planning process. Focus group participants will be responsible for next steps and for the implementation of the project recommendations at the end of this study. Because of that, it

would have been ideal if the ED and entire Board of Directors could have participated in this method, but two board members were not available to attend the session. In the next section, the study conduct will be discussed in more detail for each of the research methods.

### **Study Conduct**

**Survey.** Since I didn't have any insider knowledge of, or experience in the field of environmental sustainability, I drafted a set of survey questions and shared them with the ED to check for topical accuracy and collected any additional feedback. Once the questions were finalized, they were shared with the board in advance to collect feedback and none was offered. Next, the survey was pilot tested on my Inquiry Team for clarity, understandability and errors, then updates were made based on her feedback. I included information about informed consent in the survey preamble to ensure participants understood how their responses would be used prior to the start of the survey. The survey was released to the public with a two week window for responses. When the survey closed, I collected the anonymous qualitative data, coded it into similar response categories using a colour coding process, and amalgamated it into themes. The raw data and themes were shared with my Inquiry Team to check for validity and personal bias on my behalf. Once the data was checked by the Inquiry Team, it was used to build a presentation (see Appendix H) that outlined the key learnings from the community participants and was presented to the organization. The intent of the presentation was to provide information about the current state of environmental work according to the community so the members of the organization could use it as a reference point for topics and discussions that occurred during the focus group method.

**Focus group.** In preparation for the focus group method, I created a series of questions meant to bring attention to the broader picture about sustainability in the community and how EL could affect positive change and support the community in proactive ways. The questions were shared with the ED in advance to check for topical accuracy, then shared with my Inquiry Team for feedback. I briefly met with the board and ED during one of their regularly scheduled meetings to invite them to participate in the focus group method and answer any questions they had about the project prior to the session which was to be held after the next board meeting. Consent forms were distributed by the ED as part of the emailed board package prior to the meeting and participants emailed their signed forms back when they confirmed their meeting attendance. The ED collected the forms and forwarded them on to me prior to the start of the meeting. This procedure was used because it made it easy for the board members to receive the information and reply with their consent through an existing process.

Once the questions were finalized, they were placed individually on a digital flip chart that was employed as a shared document during the focus group method. For this method, we gathered online using a Zoom meeting and participants were asked the questions one at a time and encouraged to share a response using appreciative dialogue. Individuals had the opportunity to voice their thoughts out loud or record them on the flip chart for each question. To avoid any potential power-over scenarios between the board and ED, I facilitated the discussion and the whole organization participated together as equal parties. The meeting was recorded, and a transcript was made from the recording that generated an account of what was said, but did not include any personally identifiable information about who was speaking.

When the transcript was complete, the data was analyzed and colour coded using the same process as was applied in the survey method, then all the deidentified data from both methods were combined and broken out into themes. The themes were then checked by the Inquiry Team for accuracy and bias. To do this, the team was sent the original raw data and the coded data. They examined the original data and compared it with the coded data to check for unintentional bias, discrepancies or disparities in the themes I uncovered. Once the validity and accuracy of the themes were confirmed by the Inquiry Team, I shared a draft version with the ED and we met to discuss what the themes meant for the organization and what would be the most logical ways forward. From there, I developed a set of findings, conclusions and recommendations that were shared and discussed with the ED over several meetings. In these meetings, we explored what the major focus areas, strategic priorities, and next steps would be for the organization to put the data obtained in this study into action through the process of strategic planning, and later implementation.

**Data analysis and validity.** The data collected from the survey, which was made up of a mix of multiple choice and open answer questions, was broken up into categories, then coded. Chenail (2012) explained “coding of the content can produce categories as researchers discern linking patterns between or among the individual codes” (p. 72). In my coding process, I grouped the data by question for a preliminary analysis, then I pooled all the response data together to look for patterns in responses, organized it into themes based on those similarities, and created a community narrative based on what I found. The data were shared with my Inquiry Team to check for personal bias and ensure confirmability of my findings. To do this, the team was sent the original raw data and the coded data. They examined the original data and compared it with

the coded data to check for unintentional bias, discrepancies or disparities in the themes I presented. Jensen (2012) described confirmability as “the degree to which the results of the study are based on the research purpose and not altered due to researcher bias” (p. 112). Once confirmability was established by my Inquiry Team, I used the community narrative to produce a presentation that was given to the organization highlighting the categorized findings. As discussed in the previous section, the second round of data collection was done in the form of a focus group with the members of the organization. Combining the focus group transcript and digital flip chart data, I coded and categorized the responses using the same process to what was done with the survey data. Once this process was complete, the focus group data was combined with the survey data and I commenced the process for a third time. Rodgers (2012) explained how an iterative process like the one I used was normal in qualitative research projects. “Qualitative inquiry typically involves a design that constantly changes or emerges through the iterative processes of data collection and analysis and requires that the researcher make frequent decisions that can alter the course of the study” (Rodgers, 2012, p. 44). Firmin (2012) also supported this validation process and added sometimes codes that originally appeared to be a theme don’t turn out to be supported enough by the data; however, other codes can surface that occur repeatedly. “These reoccurring coded phrases, terms, and expressions (and the like) formulate constructs that seem to be shared by most or many of the participants of the study. When sufficiently grounded in the data collected, they become the study's themes” (Firmin, 2012, p. 869).

With each iteration of analysis, I kept an audit trail as I coded and re-coded the data and new realizations came to light. To add further credibility to my codes and themes, I used a



member checking process by which I shared my process, memos and audit trail, along with the categorized data with the ED. As the subject matter expert and my key contact with the organization, this step also utilized the member checking method to ensure the analyzed data was relevant to the organization and would be useful in future strategic planning exercises. After I finalized the themes and categories from the data, I wrote up the finding and conclusion section and supported the connections between the codes and the empirical evidence I found in the data with quotations pulled directly from participant data which added further credibility to my findings (Chenail, 2012).

### **Ethical Implications**

As I undertook the different forms of research involved in this project, I upheld the core principles outlined in the Tri-Council Policy Statement on Research Ethics which are respect for persons, concern for welfare, and justice. The first principle describes the most important thing to consider in terms of Respect for Persons is autonomy of decision making, meaning that participants were able to give free, informed, and ongoing consent to participate in this project (Canadian Institutes of Health Research, Natural Sciences and Engineering Research Council of Canada, & Social Sciences and Humanities Research Council of Canada, 2014). In order to ensure this happened during my research, participants were provided up front with information about the study and how their data would be handled. Once they consented to participate, they had the freedom to withdraw from the study at any time.

The next principle, Concern for Welfare, is connected to the impact of a study on individuals or groups in terms of health (mental, physical and spiritual), economic, social, and physical circumstances (Canadian Institutes of Health Research et al., 2014). To help mitigate

any possible negative impact on my participants, I involved the ED and my inquiry team member during the design process of the focus group method to verify the design would not have an impact on the individual welfare of my participants. Additionally, I made sure that all the data I collected was de-identified before it was shared. The survey method was completed anonymously, so there was no concern for welfare present in that method.

The last principle of Justice focusses on fairness, equity and respect for participants (Canadian Institutes of Health Research et al., 2014). To attend to this principle, I offered all board members an equal opportunity to participate in the focus group method, and the anonymous survey was made available to everyone signed up to the Environment Lethbridge newsletter or Facebook accounts. Since I am not a member of the organization and do not hold any power over the ED, board, or community of followers, my influence on individual participation was minimal to nil.

### **Shared Outputs**

As part of this study, three outputs were shared with the organization as a means to bring new insights about the community and build strategies that will set EL up with clear priorities for the next three year cycle. The first output was the presentation given to the organization that outlined the themes discovered from the community survey which highlighted some specific areas of need and interest within the community. The second was a set of themed and de-identified data that contained all the raw information collected from the two research methods which offered a broader picture of the state of environmental work in the community the organization can use to identify its priorities for its new strategic plan. The third was an executive summary of the project which provided the key learnings from each chapter of the full

thesis including an overview of all the major themes, recommendations, conclusions, and implications discovered through this research. To help the organization mobilize the information into action, I had several debriefing sessions with the ED to discuss findings and conclusions of the research and what the implications were for EL as well as how it might begin an implementation process. The organization had a planning retreat to decide on its main priorities for its next strategic planning cycle where study findings and recommendations were discussed as part of the planning process. After the retreat, the ED worked to formalize a plan for the next three years.

### **Contribution and Application**

The research and information collected throughout this project has been made available to Environment Lethbridge to revisit any time in the future and as a reference point to look back on to see how much it has accomplished. The data collected in the community survey provided the organization with a timely snapshot of community wants and needs that will inform decision making, planning, and initiatives related to community outreach and educational programming as well as enhance the link to their mission and vision statements as the organization finalizes its next strategic plan. The community at large will benefit from this project because they will reap the reward of more targeted and relevant initiatives, activities, and educational content that will be delivered by the organization. Additionally, the new knowledge discovered through this research will lay the groundwork for its new strategic plan which will inform the way EL works with and for the community now and into the future.

### Chapter 4: Inquiry Project Findings and Conclusions

In this chapter, I discuss the findings and conclusions of this study and explore how they help answer my thesis question and sub-questions. My main thesis question is how might Environment Lethbridge build a strategic plan that enhances environmental literacy and sustainability in the community? My sub-questions are: What types of environmental work are important to the community? Are there gaps in the current strategic plan that need to be addressed? How can we meet the community where they are to better address current perceptions of environmental work in a way that spurs them into action? What are we doing now that the community feels is helping them live more sustainably? What are we doing that needs to change?

I will begin with a list of findings, then move into a more in-depth exploration of the themes with supporting evidence from the participants. Finally, I will outline my recommendations based on the information I collected during my research, the themes I found and how they relate to my thesis question and sub-questions (see Appendix I for additional participant responses).

#### Study Findings

**Table 1**

*Study Findings*

Finding Number	Description
1	Waste and Consumption Reduction
2	Local Food Sustainability
3	Climate Resiliency

4 Messaging and Communications

5 Engaging New Demographics and Building Partnerships

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**Finding one: waste and consumption reduction.** Over the past three years, EL has been focusing much of its effort on waste reduction. The data collected in this study showed that there was still much interest from the community in this topic. The main theme that came out of this finding was a majority of the participants were clear about how they thought the organization should remain focussed on waste reduction programming and educational opportunities including at home and personal waste reduction, food waste reduction, and composting because they felt these were still key issues.

In light of the changes in behaviour due to the pandemic, participants said they were ordering more online and using more single use items. One participant stated when the pandemic started, they “Initially became much less concerned about my use of disposable products (used a lot more take-out packaging, disposable disinfecting wipes, masks, latex gloves).” Another participant said they had “increased use of single-use items” another agreed and said they had an “increased usage of one-time use products.” A different participant said that during the pandemic, there has been a “much higher emphasis on single-use plastics/disposable items (e.g. some grocery stores not allowing reusable bags to be used) over reusable [which] makes it hard to commit to waste reduction actions.” One thing that was mentioned by a large majority of participants was specifically the need to reduce plastic waste and single use items from the consumer cycle. Several participants went as far as condemning consumer behaviour, saying that we were living in a wasteful society. One participant said, “people are ordering more online and creating extra waste” another noted “instead of eating in restaurants we have been ordering take

out which also means more waste” and a third admitted they had been “ordering online more, [creating] too much packaging waste.”

In addition to plastic waste reduction, participants were interested in organic waste reduction through composting and food diversion practices. One participant said, “compost and green waste education” was important to them, another said EL needs more “composting [and] organics focus.” A third participant felt “food waste and redirection of food from landfills” was an important area to focus on, and a fourth participant added that “Compost and green waste education” should be EL’s focus over the next three years. Although it is out of the scope of the organization’s mandate, it is also relevant to mention that over two thirds of participants indicated a curbside compost program was needed in the city of Lethbridge. One participant said, “I think a curbside organics program would be the single most impactful waste reduction initiative”. Another participant noted how “it should be the responsibility of the municipal government to fund those services.” Overall, participants were happy with the work EL has been doing with regard to sustainability. One participant said EL should “continue with waste reduction,” another said it should “continue with existing initiatives”, and a third participant said it should “maintain existing core programs.” A different participant encouraged them to “continue to build on your success” and several participants said EL was doing a great job. The themes and data presented in this finding illustrate how the community is behind the organization in its work on waste and consumption reduction and believes it is still relevant.

**Finding two: local food sustainability.** Local food sustainability initiatives and education has not been an area of environmental work that EL has put much emphasis on in the past, but it is evident from the data collected that the community feels it is important. The main

theme that arose from this finding is that there is an interest in local food sustainability and in supporting local food initiatives in the community.

Several participants showed an interest in growing their own food or participating in community food projects. One participant noted how the pandemic “increased my desire to produce more...food from home.” A different participant said they would like to see “more urban gardens [and] more fruit trees in town” and another participant said that “perennial gardens and fruit trees” were important to them. One participant said EL should be “promoting more community gardening.” Another participant said EL should promote “the availability of community gardens and stuff like that” because there are many people “living in apartments or smaller homes and rentals, and they might not have that availability, but yet, there is an availability for them” in the city.

In addition to an interest in growing their own food and participating in community food projects, participants also showed an interest in supporting the local food economy. The phrase “food sustainability” or “food security” was mentioned by over 26% of people who participated in the survey. One participant said they would like “easier access to local products” and a different participant said they would like to learn more about “ways to support local economies.” A different participant stated they felt “local/regional food supply” was an important issue, and a fourth participant said, “we need more... locally produced goods and locally produced vegetables.”

The data revealed that some participants recognized how a higher cost can be associated with supporting local or sustainable food and how that cost could be a barrier for some residents. One participant said, “if a person is struggling to maintain their budget and food sustainability

means...that they're going to have to pay more, then that becomes a problem." Overall, participants showed an interest in locally grown food, whether that means growing more in their own garden, participating in community gardening projects, or supporting the local economy by purchasing locally grown produce.

**Finding three: climate resiliency.** The third finding, and one of the more popular themes that came out of this study, was climate change and climate resiliency. The main theme attributed to this finding illustrated how the community is cognizant of climate change, is interested in sharing that message, and wants to promote and embrace adaptations that can help improve climate resiliency. This finding also showed there is a particular interest in green transportation and green energy when it comes to climate action in the community.

Participants indicated they were interested in green transportation and want to reduce the use of fossil fuels and increase alternative transportation options. To reduce the consumption of fossil fuel, participants would like EL to encourage the purchase and increased use of electric vehicles, the installation of charging stations, and promote more active forms of transportation in the community. One participant said, "Promote and encourage the sale of electric vehicles and other methods of reducing use of fossil fuels." A different participant said, "vehicle emission restrictions" were needed, and another participant said they wanted to see people "driving less ... walking and biking more." Many participants shared that sentiment and said they felt EL should encourage people to bike more. One participant said "year round cycling promotion," another participant said "support for active transit." Several participants shared they would like more bike lanes and "better cycling infrastructure" to support biking in the city.



Together with greener transportation, participants described an interest in increasing access to and use of more green energy resources. One participant said they were interested in “renewable energy and battery storage technology growth; shift to green energy.” Another participant said, “availability of green energy,” and a different participant stated, “We need more solar roof, [and] small urban wind turbines that can sit on top of a flat roof.” A fourth participant said, “Urban energy (solar and wind)” and a different participant said, “energy sustainability.” Another participant said “Car charging; residential solar; energy efficiency renovations” were important.

In addition to transportation and alternative green energy sources, the data illustrated that participants felt there is a need for more educational opportunities and conversations about climate resiliency. One participant said “Energy, climate, education,” were the most important issues right now. A different participant said EL should “Explain to the public what is not sustainable, and why.” Another two participants mentioned they felt there was a need to have climate adaptation conversations. The information shared in this finding revealed there is an appetite in the community for some new technology, different ways of getting around, and a need for more conversations and education around climate change and resiliency.

**Finding four: messaging and communication.** In this finding, two main streams of communication topics emerged out of the data about how the organization communicates to the community and what types of messaging the community wants more of. More specifically, the main theme for this finding was that the community prefers to receive information about environmental issues and learn about EL initiatives and events through personal forms of

communication. The second part of this theme showed the community wants to bring messaging about environmental issues to the forefront as the pandemic winds down.

Out of the participants who took the survey, 55.9% said they rely on friends or word of mouth as their main source of information about ways to take action on environmental issues. Since the start of the pandemic, participants made clear comments about how they were not feeling as engaged with environmental issues when compared to the previous year. One participant said, since the start of the pandemic, “I must specifically go into the websites and social media to see what is happening. In-community events are not the same or word does not spread the same”. Another participant said they were feeling “disconnected.” A different participant said, “I think at some point you have to be personal... You can look someone in the eye and you can talk straight to them, you know they're there.” Participants also said they rely on public engagement and in-person events as mediums to share information about environmental issues and initiatives as well as learn about environmental trends and ways to get involved.

Because participants recognized that environmental actions and conversation have been sidelined as a result of the pandemic, many participants said they thought EL should direct messaging in a way that brings environmental actions and issues back to the forefront of people’s minds as the pandemic comes to an end. One participant said EL should start “Recentering environmental issues as a topic of conversation. We've lost momentum due to COVID”. A different participant said “The recentering of environmental issues” was essential as the pandemic comes to an end. Another participant said it was a good time for “relearning habits and introducing new ones.” The data from this finding revealed that the community is looking forward to getting back to pre-pandemic activities.

**Finding five: engaging new demographics and building partnerships.** As I noted earlier, EL is a very small organization and its ability to reach broad and diverse audiences through its own communications and recruitment efforts is limited due to small staffing levels. The central theme that arose from this finding was participants felt EL needed to expand its reach to include broader audiences, and that partnerships and collaborations would be a great way to engage new demographics.

Several participants mentioned they would like to see EL make an effort to connect with the youth movement as up and coming environmental ambassadors. One participant said, “They're becoming more engaged, they're starting to really have an opinion and they're really wanting to get out there.” Another participant said, “I also don't want to miss out on that energy that we're seeing in students and the youth.” A different participant said there was an “Opportunity to connect with the 18 to 24 year old demographic,” and two other participants mentioned they felt youth engagement was important.

Participants also suggested it would be beneficial to engage a more diverse constituent base to help raise awareness about environmental issues in the local area. One participant said, “there's a significant part of the Lethbridge population that has no knowledge of environmental issues.” Another participant said, “There's a lot of folks in Lethbridge and broader that are not engaged by environmentalism.” To help build a broader and more diverse following, some participants noted they thought engaging individuals from different groups was important. “I think diversification within and outside of EL would be good” noted one participant. Another participant said, “For me, I'd really like to concentrate on trying to get input or participation

from minority groups,” A different participant said EL should be “inviting some new perspectives to the board or to support program development, as advisors.”

Other participants felt EL should be creating diversity through building partnerships with other like-minded organizations and groups. One participant said EL should be “examining ways to connect with and support other related initiatives and organizations in a Lethbridge context, building partnerships.” Another participant said, “Increase outreach to community groups to partner with on environmental initiatives.” A different participant said they saw an opportunity to look at the partnerships and connections EL already has and build that into the next planning cycle. When talking about ways to provide resources and information, one participant noted that “the whole point is that we need a strong network of other organizations.” Some of the groups cited by participants included: Bikebridge, Lethbridge Public Interest Research Group (LPIRG), Southern Alberta Council on Public Affairs (SACPA), Rentbridge, Southern Alberta Renewable Energy Co-Op (SABRE), Lethbridge Vegan Club, Lethbridge Family Services, Lethbridge Immigrant Services, Southern Alberta Ethnic Association, and student groups from Lethbridge College and the University of Lethbridge.

### **Study Conclusions**

From the findings and themes that emerged from this research, I have drawn several conclusions that will help answer my thesis question and sub questions. In the following discussion, I will outline the three conclusions I have drawn from this study and answer the following questions: How might Environment Lethbridge build a strategic plan that enhances environmental literacy and sustainability in the community? What types of environmental work are important to the community? Are there gaps in the current strategic plan that need to be

addressed? How can we meet the community where they are to better address current perceptions of environmental work in a way that spurs them into action? What are we doing now that the community feels is helping them live more sustainably? What are we doing now that needs to change?

**Table 2**

*Study Conclusions*

Conclusion Number	Description
1	Programming Improvements
2	New Initiatives
3	Strategic Orientation

**Conclusion one: programming improvements.** From what was discovered through the information collected during this study, it was evident the community strongly supported the programming EL is putting on and identified what it believed the organization was doing well. At the same time, the community also identified areas where there were opportunities for the organization's programming to be changed or adapted to better meet local wants and needs. The types of environmental work important to the community came though as well as some well-defined areas for change. In particular, the areas of local food sustainability and climate resiliency stood out. These two areas were present in the organization's current strategic plan and were addressed to a small degree over the last three years. However, it was also apparent the community felt these areas needed to be addressed in a more direct and robust way.

Additional programming improvements suggested by the community included a change in program delivery methods. While the effects of the pandemic are partially to blame, the community still felt strongly that the organization needed to put more emphasis on in-person programming opportunities. Although the concept of environmental communication was discussed at length in Chapter 2, none of the literature was specific about what type of communication method was more desirable or effective than another. However, the community members felt a more personal format allowed them to learn more about new environmental issues and ways to combat the climate crisis. One participant who is involved directly with the organization said “that kind of surprised me actually because a lot of the programming we do is visual and virtual ...I feel like a lot of the way we communicate is the newsletter and is online...but it was a helpful perspective that there is other ways too.” Small programming improvements such as these would go a long way to helping the community feel EL was prioritizing its needs.

**Conclusion two: new initiatives.** In addition to programming improvements, there are some opportunities that exist within the community the organization could take advantage of that would help EL meet the community where they are, in schools, in other organizations, or in the public sphere, to better address environmental issues and spur them into action. By engaging these new individuals and groups, EL can expand its audience and intensify its reach in terms of programming and education. Specifically, engaging the youth demographic as drivers of change would help the organization harness energy already devoted to environmental engagement by offering what one participant called a “guiding hand,” to lead them and help them get organized and mobilized. Further to what was discussed in the literature review, Akiyama et al. (2013)

contended leadership and engagement from all levels plays a crucial role in driving change.

“[U]nder the present circumstances it is more important to extend basic knowledge of how the world works for the common good than for a few specialists to master further details of their special disciplines” (Akiyama et al., 2013, p. 22).

At the same time, there is a need for the organization to expand its reach and engage new audiences in environmental action. In Chapter 2, the notion of an active audience was discussed as a critical factor in leading change. The organization has a core group of devoted supporters that are already taking environmentally minded actions on a regular basis, but to have a growing impact on the environmental wellbeing of the whole community, more people need to be doing the same. Harris (2017) said “Environmental movements result from deep ecological concern in ordinary people about threats to their natural habitat as a result of unsustainable development activity” (p. 65). One participant agreed and added, “if you actually want to achieve complex behavioural change it’s done through strong social ties rather than weak social ties” and social movements are one way to achieve this type of change. “Specifically, social movements seek to spread familiarity and acceptance of the alternative discursive frame, and to generate political pressure to implement institutional change based on this new worldview” (Brulle, 2010, p. 86). Harris (2017) expanded,

At the heart of such protest movements is an agenda for social, economic and political change which seeks a better deal for both the natural and human environment through policy reforms and promulgation of social values that ensure sustainable use of natural resources. (p. 65).

As discussed in Chapter 2, change is driven by social discourse that competes with status quo, and when it comes to environmental implications, small actions taken by larger numbers of people can have a significant impact on change. One participant asserted the need to leverage networks and groups with social ties. They said,

I think it's good to use social media but...people aren't going to share the things that we share or adopt our ideas if we don't also work those networks with stronger social ties and try to spread those ideas through that way.

This is supported by the discussion in Chapter 2 about the need to engage a group to incite action in both the fields of environmental leadership and environmental communication. If EL can take a leadership role within the community and successfully expand its reach by engaging new groups of followers in the community, it will have a more significant impact on community actions and change.

**Conclusion three: strategic orientation.** Building on the previous two conclusions, the third conclusion of Strategic Orientation is necessary to ensure the organization has continued direction internally and can translate it to external leadership in community moving forward. Going back to Gallagher's (2012) definition mentioned in Chapter 2, environmental leadership is a process. EL has an opportunity to take a leadership role in the pursuit of a more sustainable community by pulling individuals, groups, organizations and stakeholders together for a joint purpose. Building a community vision was identified as key success factor in Chapter 2. By considering the information that was found through this research, the organization should be able to build a strategic plan that addresses community concerns and interests. If EL follows through with the goals and areas of focus in its new plan, the organization will build momentum for



collective action and influence change by maintaining a strategic orientation. As discussed in Chapter 2, one of the main purposes of both environmental education and environmental leadership is to share knowledge. Akiyama et al. (2013) asserted “Environmental leaders are expected to transfer their knowledge, information and technology for solving environmental problems” (p. 33). For EL, this means, it is up to the organization to share its information and educational opportunities widely and loudly to help build a more environmentally aware community and equip them with the tools they need to take action.

### **Scope and Limitations of the Inquiry**

The scope of this project was intended to collect information from the community at large, and the Board of Directors and ED for the organization. The project was meant to provide the organization with up to date information about the current state of environmental issues and activities according to participants so it could build a new strategic plan that met community wants and needs. The scope and recommendations of this project did not intend to cover internal policy change recommendations for the organization. The scope of this project also did not intend to include any initiatives or programs that fall under the responsibility of the local municipality such as curbside recycling programs and bike lanes.

There are several limitations of this study that should also be noted here. The survey request was shared on Facebook and in the organization’s electronic newsletter which made it available only to those individuals who were connected to the organization through one of those groups. It also meant the survey was only available to individuals with internet access, and access to a computer, tablet, or mobile device. Although this group was intentionally targeted for the purpose of this study, if it were to be repeated in the future, engaging a more diverse group of

respondents could produce a wider variety of results. The primary reason for the web-based engagement was prompted by the limitations brought about by the COVID-19 pandemic and if the study were to be repeated, I would recommend dispersing the survey with at least a physical paper copy in addition to the web-based version. The survey size was relatively small with 34 participants which could have impacted the diversity of the results. Although the participation numbers could be perceived as small, this project is primarily a qualitative study: subsequently, statistical generalizability and potential for statistical bias in results are minimally significant. Additionally, because this method was completed anonymously, it is impossible to guess how many individuals from each of the invited groups participated.

It is likely the participant number would increase if the survey could have been promoted through physical venues and activities put on by the organization in a normal, non-pandemic time. The data collected in this study is based on self-reporting by individuals and was collected from a community group who presumably live in or near the City of Lethbridge; therefore general application of these findings to a broader audience should be done with caution since residents in a different geographical area might offer different types of insights. Although this study was focused on the Lethbridge community, in the future it could be helpful to include a question where respondents are asked to specify their location. Despite these limitations, this study offers important insights into new areas EL should focus on in its new strategic plan and highlights key strengths of the research such as offering EL an important first step towards new insights into the mindsets and behaviours surrounding environmental sustainability within the community they serve.

### Chapter 5: Inquiry Implications

In this chapter, I outline a set of recommendations based on my study conclusions that EL will be able to use as a guide to help direct its next strategic planning process. I will discuss four main recommendations and how they relate to my thesis question and sub-questions, which are: How might Environment Lethbridge build a strategic plan that enhances environmental literacy and sustainability in the community? What types of environmental work are important to the community? Are there gaps in the current strategic plan that need to be addressed? How can we meet the community where they are to better address current perceptions of environmental work in a way that spurs them into action? What are we doing now that the community feels is helping them live more sustainably? What are we doing now that needs to change? Finally, I will outline implications for further study and organizational implications that have arisen out of the findings, conclusions, and recommendations from this research.

**Table 3**

*Recommendations for Future Action*

Recommendation Number	Action
1	Environmental Action
2	Communication
3	Community Participation
4	Alignment with Strategic Plan

#### **Recommendation 1: Environmental Action**

Based on the findings around environmental action, the most important priority EL should address as it builds its next strategic plan is moving environmental actions back into the

minds and routines of community members. This recommendation will help answer the questions: what types of environmental work are important to the community? And how can we meet the community where they are to better address current perceptions of environmental work in a way that spurs them into action? As discussed in the Study Finding section, a shift in behaviour occurred because of the pandemic and EL needs to reinforce the fundamentals of environmental actions by reminding the community about what good habits are and by introducing them to some new environmental actions, as identified in this study's findings.

My recommendation is for EL to encourage the community to re-introduce sustainable choices back into their regular habits using key communication methods, as discussed in the findings. Some examples that showed up in the data included bringing a refillable coffee mug to a local shop for refill, bringing reusable bags to the grocery store, or saying no to single use cutlery and straws when ordering takeout at a restaurant. In addition to helping the community re-establish old habits, EL needs to introduce some new opportunities based on what the community said it was looking for in the research. The data showed the community wanted to learn more about local food and food sustainability. Examples of this could incorporate local and sustainable food, where to find local food suppliers, farmers markets, or local food boxes, and ways to produce their own food by hosting in-home gardening and community gardening activities. Some other, related activities the community was interested in included food waste reduction and at-home composting. There was a strong consensus about the demand for a curbside composting program run by the City of Lethbridge, and EL should consider advocating for the new program with the municipality. In addition, EL should also promote green transportation alternatives like active transit, the benefits of walking and biking, availability of

bike lanes in the city, and promoting alternative power with electric vehicles and household energy generation.

### **Recommendation 2: Communication**

Based on the findings presented in the previous chapter, there were two areas of communication identified by the community that indicated how EL could enhance how it communicates and who it communicates to. This recommendation will add supplementary information to answer the question how can we meet the community where they are to better address current perceptions of environmental work in a way that spurs them into action? Brulle (2010) suggested citizens should be involved in a mutual dialogue in an effort to mobilize them toward broad-based change. Similarly, the study showed the community values in-person methods of communication and indicated it was the best way for them to engage in, share information, and learn about environmental issues and initiatives. The data also showed the target audience of EL needed be expanded to include people of more diverse backgrounds and ages. My recommendation to EL is to get back to hosting in-person events, activities, and educational initiatives as soon as can be done safely with pandemic health protocols being followed. According to Brulle (2010) “To address environmental issues, we need to be able to have a broad-based democratic discussion to establish common goals” (p. 94). With this in mind, I also recommend the organization revisits its communications strategy to incorporate methods and opportunities that will reach community members in a wider range of demographics, which is supported by the data. This could include utilizing Instagram in a more interactive way or adding another platform that has a larger youth presence, like TikTok, to its social media toolbox

as well as find ways to meet other audiences where they already are to draw them in and engage their interests. I will discuss this further in the next section.

### **Recommendation 3: Community Participation**

Based on the findings examined in the previous chapter, it was identified that expanding community participation is a key factor in the continued growth and success of EL. The data showed there is a desire in the community to connect with different and more diverse population groups in the city to help spread awareness about environmental issues and actions. As discussed in the findings, there is a large segment in the community that are unaware of what environmental work is possible in the city, and another segment that is already interested and invested in environmental work that is not being engaged by EL as a target audience at the present time. My recommendation under this section is for EL to build and strengthen a network of groups and organizations that specialize in the areas of environmental work the community expressed an interest in. Senecah (2007) wrote about how collaborative processes “strengthen the fragile fabric of trust among stakeholders” (p. 29). By engaging new demographics in collaborative processes, EL could leverage the expertise of each group to help provide the community with the specific types of information and events it is looking for while extending its base of supporters at the same time. Similarly, Harris (2017) suggested networks are an integral component in building resilient communities. Broadly speaking, partnerships like this can be symbiotic in nature because both organizations are benefitting from an expanded audience and getting an opportunity to build relationships, share messages, and engage with new followers. Some examples of potential partner groups that participants suggested include Bikebridge, SABRE, Rentbridge, SACPA and LPIRG.

In more specific terms, I recommend EL works to build a more diverse following in terms of target age demographics and cultural background. The youth demographic is already interested and involved in environmental work, and they are currently not being directly engaged by the organization. Many study participants suggested that EL could benefit from more diversity in its audiences. To this end, I suggest EL tries to meet the people in these new desired demographics where they are, and use in-person methods to engage them rather than spending valuable staff time and energy attempting to draw them in. The best place to tap into the youth movement is in schools. There is an opportunity for EL to work with the school district or individual teachers to create and lead presentations at schools for youth in grades K-12 and partner with Students' Unions at the local college and university to gain access to related student clubs or the general student population. To expand community participation from other groups, the organization should consider sharing information through organizations like Lethbridge Immigrant Services and the Southern Alberta Ethnic Association to reach more culturally diverse groups.

With time and energy being spent on an expansion of demographics, it is essential for EL to maintain its established core base of supporters. The best way to do this would be to continue with core communications, programs, events, and initiatives, like Reuse Rendezvous and Seedy Saturday, which EL supporters have come to look forward to while beginning to expand in the areas discussed above. Harris (2017) contended "collaboration, sharing and participation are essential characteristics by which community members generate knowledge and build resilient communities" (p. 75). Along this same line, it is relevant to note that partnership and collaboration is one of the pillars of the organization's values as described in its current strategic

plan. My suggestion under this recommendation is for EL to build an actionable plan around this value and bring it into the community to enhance engagement in the short term and environmental resiliency in the long term.

#### **Recommendation 4: Alignment with Current Strategic Plan**

Based on a review of EL's current strategic plan combined with the findings from this study, this section will help answer the sub-questions: are there gaps in the current strategic plan that need to be addressed? What are we doing now that the community feels is helping them live more sustainably? And what are we doing that needs to change? As the organization begins work on its next strategic plan, it is vital to evaluate how the current strategic plan has worked. The community feels EL's current focus areas of waste reduction, climate and energy, and food sustainability are still relevant moving forward. As discussed in the previous recommendations, the community has also identified some new areas it believes should be addressed by the organization moving forward.

Overall, the current strategic plan has been working very well for the organization. As the data showed, the community is happy with core programs and initiatives and feels they are still important. It is also evident that the organization has been able to build up a core target demographic that are passionate about and active in environmental work and the offerings of EL. I recommend the organization continues to use its core programming and established target demographic as a sustainable and dedicated base while they continue to drive broader community engagement as the organization grows.

One area that could be improved upon is the work EL is doing in terms of local and sustainable food. Participants shared that the community was very interested in local and



sustainable food but didn't know enough about how to access it or weren't sure how to implement urban agricultural practices such as home and community gardens on their own. Local food was listed as a focus area in EL's current strategic plan, so I recommend the organization puts more emphasis on this area in its next strategic plan. One thing that was established through the community narrative that was absent from the current strategic plan was an interest in or need to involve and engage the youth demographic. Senge (2006) asserted "When young people develop basic leadership and collaborative learning skills, they can be a formidable force for change" (p. 370). Likewise, the community sees the energy and momentum this group has as it relates to the environmental movement and believes this demographic should be supported as ambassadors and leaders for future environmental action and change.

As this study was completed, I shared the findings and recommendations with my partner, Kathleen Sheppard, the ED for the organization. We undertook a series of debrief sessions where we discussed the findings and recommendations and what they mean for the organization now, and into the future. During these sessions, Sheppard (2021) repeatedly told me how valuable the study and all the information provided to her has been for the organization and for future goalsetting.

Based on the recommendations, the first thing the organization will need to begin its implementation process is to build a strategic plan to identify what its goals, objectives and focus areas will be for the next three-year period. To accomplish this, the ED will need to involve the board in a planning session so the whole organization is included and invested in setting the direction for the future. Sheppard said the study has been "super helpful for pulling things together for the upcoming strategic planning session with the Board of Directors" (K.

Sheppard, personal communication, June 10, 2021). Per the recommendations and through conversations with the ED, the organization plans to continue with its core work around sustainability practices with some refinements based on the suggestions made by the community. From the perspective of the ED, many of the findings and recommendations “were not a surprise and should be implementable easily enough” (K. Sheppard, personal communication, June 10, 2021). The organization recognized that some of its previous focus areas may not need to be priorities anymore, and some significant progress has been made in other areas. This means the organization can shift some of its focus to more emergent issues to support the community better. In particular, EL will be able reallocate some resources to green energy and away from waste reduction. “Waste reduction is still important, but there have been some big wins in the city, so it doesn’t need to be our top priority anymore” (K. Sheppard, June 10, 2020).

In the findings, the community expressed a desire for fossil fuel consumption reduction and an interest in green energy as one new area that needed to be addressed. According to Soni (2015), green energy technologies help to reduce the human impact on the environment. “By converting everyday products to alternative energy power sources, green technology can help reduce fossil fuel use and help users cut energy bills” (Soni, 2015, p. 2). If EL pursues green energy as one of its new focus areas, the organization should be able to help the community address its concern with fossil fuel consumption at the same time. Further to this, EL will be re-shaping its programming on resiliency to focus more on local food. According to the literature, local food movements have also been found to reduce fossil fuel consumption. Over and above this benefit, local food economies have been linked to the larger objective of sustainable

development in communities and can contribute to a more engaged civic population. (Peters, Bills, Wilkins & Fick, 2009; Schoolman, 2020).

### **Leadership Implications and Systems Change**

One of the key factors in successful environmental communication and leadership is engagement. To this end, the ED and organization as a whole should work to become environmental leaders for the entire community. To attain better community engagement, they will need to change the way they approach the community. This will require both the ED and the organization to influence the community and drive it toward collective change actions by creating a new vision for the future (Gallagher, 2012; Egri & Herman, 2000). In his work, Senge (2006) emphasized the role a shared vision of the future played in both leadership and systems change. “When there is a genuine vision... people excel and learn, not because they are told to, but because they want to” (Senge, 2006, p. 9). This article discussed a necessary goal of environmental leadership is to inspire others into action. Senge (2006) suggested a shared vision fosters genuine engagement. To create enough genuine engagement and action in the community to genuinely influence change on an appreciable level, the organization will need to grow its network and expand its sphere of influence. By using partnership building activities and new outreach efforts, it is likely EL will inspire new environmental leaders in the process. The youth demographic has emerged as a new and valuable demographic for the organization to engage in future programming. Senge (2006) advised the leadership required for systematic change is increasingly coming from young people. As discussed earlier, the community recognized the growing energy associated with the youth environmental movement as a key driver for more sustainable environmental practices in the future. Senge (2006) supported this notion and

explained how young people have the strongest stake in the future and are the least invested in the past which gives them “the courage to create something new” (p. 370). As the organization begins to engage new groups, build new partnerships, and grow its sphere of influence, its opportunities to lead the community and educate and inspire new environmental leaders will grow in parallel.

### **Contributions to Environmental Scholarship and Third Person Research**

This study has offered new applications to previous scholarship by adding a practical element to the many theoretical discussions present in current literature, as seen through the lens of the Environment Lethbridge organization. The research has taken theories and ideas from the literature and showed how they could be applied in a small organization located in the heart of the Canadian prairies. Through this action-oriented project, it was found that EL has already had a positive impact in the community and its members recognize and appreciate the work the organization has done. Looking ahead, EL should strive to meet the community where it is and offer the programming that addresses its wants and needs. The organization should also look to the future and create a path forward that allows for growth in its offerings to the community and strengthen its base of followers by employing the key success factors in environmental communication and leadership as discussed. Looking more broadly, there are two main takeaways from this study that could be translated to other communities and other similar organizations. According to the findings, people in Canada are just as likely to be environmentally conscious and seek out environmentally sustainable practices in smaller and more rural communities as they are in larger cities. From plastic reduction to green energy, people in small communities are interested in new technologies and environmental practices that

help them live more sustainable lives. Although this finding is not necessarily excluded in the current literature, it is not expressly explored or applied in the area of environmental leadership literature as reviewed above. Consequently, this finding offers new insights for application opportunities for environmental leadership in rural areas.

Another thing I learned was organizations like EL would benefit from spending more time in community dialogue. This affirms that environmental communication plays an integral role in raising awareness and encouraging discussions about environmental issues (Cox, 2007; Senecah, 2010; Brulle, 2010) as the literature review discussed. Whether that means offering a yearly community survey where community members can share their thoughts or giving them opportunities to connect on a more personal level at events and initiatives, organizations like EL have much to learn from the populations they serve.

### **Moving Forward**

At this time, the ED and Board of Directors have participated in a strategic planning session where they identified the three focus areas for the next three years. The areas they decided on were Waste Reduction, Green Energy, and Climate Resilience. During the session they also discussed several planning questions based on the study findings and recommendations presented to them. For next steps, the ED will be consolidating all the information gathered and discussed into a draft strategic plan that will be presented to the Board of Directors in the fall of 2021. An action plan with more detailed steps on how the organization will integrate the focus areas and recommendations into its regular offerings will be created in 2022, sometime after the proposed Strategic Plan has been approved by the Board of Directors.

**Implications for Future Inquiry**

This study has proven to EL that it has been on the right track with its goals and programming in the past several years. The community is behind its work and believes the organization has been doing a good job. The study has also revealed there is still much work to be done. Between the growing social trend to shop and support local businesses, an emergent interest in the farm-to-table lifecycle of the food we eat, and a desire to become more reliant on greener forms of energy to heat our homes and fuel our travel, this study has proven that our community is ready to change.

To this end, it would be worthwhile for the organization to revisit a community survey on an annual or bi-annual basis to ensure it continues to offer programming the community feels is relevant and could pivot its approach based on the responses. This will be especially important once EL begins to engage new demographics that typically were not involved with the organization in the past. Additionally, a future study to determine if and how engaging new demographics has affected the overall environmental health and sustainability practices in the community would be beneficial. This type of study could be completed prior to the next strategic cycle and could show the organization what affects its outreach efforts have had. Similarly, engaging the youth demographic is a component of the recommended course of action for EL. As part of this effort, future study of the youth demographic, specifically, to find out what environmental work is important to them and how EL, could support their environmental efforts. By supporting the young people in this community, EL could play a role in their journey to becoming environmental leaders and empower them to become the force of change the community, and the world needs.

A significant takeaway that emerged from this research was a realization that progress toward environmental sustainability does not need to be dependent on government policy or industry change. Instead, it was found that community is at the heart of change and it can be made one decision at a time, one individual at a time, one community at a time. If the future of environmental sustainability is to look different than today, it is up to environmental communicators to share their knowledge and environmental leaders to inspire people to commit to doing things differently.

### **First-Person Focus**

As part of this project, I included a focus on a reflexive first-person practice as it relates to action research. Coghlan (2013) wrote “first person practice means that our own beliefs, values, assumptions, ways of thinking and behaving are afforded explicit attention as we experience ourselves in inquiry and in action” (p. 334). During this project, I used a research journal to keep track of my own thoughts, feelings, questions, perceptions, or anything else that came to my mind during my research experience. Grant (2007) asserted “record keeping of one’s reflections, for the process of articulating what you are feeling is in itself a valuable learning tool” (p. 270).

Throughout the project, my regular reflexive practice helped me learn several things that I will continue to use in my own leadership practice. Using my journal, one of the first things I noticed was how much more insightful and helpful study results became when I placed the needs of the organization at the centre of the inquiry. By tailoring my research with that outcome in mind, I was able to provide the organization with the types of information that would benefit it the most. For example, EL wanted to have a broader impact on community participation in

sustainable activities. To help find out how the organization could achieve this, I asked questions about what sustainable activities the community was interested in and what they wanted to know more about. Another takeaway I learned was the power of listening without the distraction of thinking ahead to formulate a response. In my journal, I called this listening with intention. I used curious questions to start conversations, then listened with intention to the responses that followed, openly and without expectation. With some practice, I also learned to recognize my own bias during these conversations which supported non-judgmental collection and separation of information which lead to some themes, conclusions and recommendations that surprised me.

Writing in and reviewing my journal prompted reflections and learnings about more than just myself as a researcher/leader. I gained insights into the organization, the community, the action research process, the data I collected, and how it all fit together. Grant (2007) explained “The value of first-person action research practices cannot be underestimated, both in terms of contributing to our development as researchers, as well as the more tangible outcomes associated with research projects” (p. 269). With the deeper understanding that journaling offered me, I was able to engage participants in a more meaningful and intentional dialogue that helped me cultivate more pertinent findings and make more useful recommendations for the project, lead the organization to re-connect with the community and empower them to integrate their learnings into actions. In terms of my own leadership, this experience showed me the power deep understanding and open dialogue can have on positive outcomes and meaningful action. Subsequently, I have become more strategic in planning and open to unexpected outcomes and I intend to create more robust opportunities for dialogue, intentional listening and reflection in my work, life, and academic endeavours in the future.



**Summary**

This action-oriented research project, undertaken with Environment Lethbridge has shone new light on how a small non-profit organization can build a strategic plan that enhances environmental literacy and sustainability in its community. Using the ARE method of research that was informed by CBPAR as a guide, I was able to connect with the community by using an anonymous survey and focus group and establish a set of key findings. The community narrative that was uncovered through my research process informed the remaining sections of this paper. In Chapter Two, I introduced a brief look into the history of the fields of environmental communication and environmental leadership and established a set of definitions and principles that supported my findings and recommendations, and offered a guide for the strategic planning process. The work of other scholars bolstered my findings and helped me establish some key themes and ways forward the organization will be able implement as it builds and carries out its new strategic plan.

In this chapter, a set of four recommendations were introduced and are intended to guide EL through its strategic planning process and into the next three-year implementation cycle. The goal of the recommendations was to present EL with some direction about what the community said it was looking for, while combining that narrative with what the literature identified was vital to achieve positive results while addressing my thesis question and sub-questions at the same time. Implications for the organization and for future study were touched on and a list of contributions this study has made to the literature was discussed.

As briefly mentioned in the previous section, a meaningful theme that emerged was that a strong community of support is needed to create environmental change. This theme links

together key takeaways of the literature, community narrative, findings, and recommendations of this project. This study showed there is a foundational group of environmental advocates in the community who are committed to and active in environmental work. Now, it is up to EL to build a strategic plan that supports the community to continue to do good environmental work, educate new demographics about what is possible, and inspire a new generation of environmental leaders to take on the challenges present in the community today and lead change for a better tomorrow.

### References

- Akiyama, T., An, K. J., Furumai, H., & Katayama, H. (2013). The concept of environmental leader. In Mino, T., Hanaki, K. (Eds). *Environmental leadership capacity building in higher education*. Tokyo: Springer.
- Brulle, R. J. (2010). From environmental campaign to advancing the public dialog: Environmental communication for civic engagement. *Environmental Communication*, 4(1), 82-98.
- Burns, J. C., Cooke, D. Y., & Schweidler, C. (2011). *A short guide to community based participatory action research*. Retrieved from <https://hc-v6-static.s3.amazonaws.com/media/resources/tmp/cbpar.pdf>
- Canadian Institutes of Health Research, Natural Sciences and Engineering Research Council of Canada, and Social Sciences and Humanities Research Council of Canada, *Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans*, December 2014.
- Carson, R., Wilson, E. O., Lear, L. J., Darling, L., & Darling, L. (2002). *Silent spring*. Mariner Book, Houghton Mifflin Company.
- Coghlan, D. (2019). *What will I do? Toward an existential ethics for first person action research practice*. *International Journal of Action Research*, 9(3), 333–352.  
[https://doi.org/10.1688/1861-9916\\_IJAR\\_2013\\_03\\_Coghlan](https://doi.org/10.1688/1861-9916_IJAR_2013_03_Coghlan)
- Coghlan, D. (2019). *Doing action research in your own organization*. Thousand Oaks, CA: SAGE.
- Coghlan, D. & Brannick, T. (2005). *Doing action research in your own organization*. Thousand Oaks, CA: SAGE.

- Comfort, S. E., & Park, Y. E. (2018). On the field of environmental communication: a systematic review of the peer-reviewed literature. *Environmental Communication, 12*(7), 862–875. <https://doi.org/10.1080/17524032.2018.1514315>
- Cox, R. (2007). Nature's “crisis disciplines”: Does environmental communication have an ethical duty?. *Environmental Communication, 1*(1), 5-20. doi:10.1080/17524030701333948
- Cox, R., & Depoe, S. (2015). Emergence and growth of the field of environmental communication. In Hansen, A., & Cox, R. (Eds.), *The Routledge handbook of environment and communication*. (1st ed., pp. 13-25). Routledge. <https://doi-org.ezproxy.royalroads.ca/10.4324/9781315887586>
- Dechant, K., & Altman, B. (1994). Environmental leadership: From compliance to competitive advantage. *The Academy of Management Executive, 8*(3), 7-27.
- Environment Lethbridge. (2020). Retrieved September 27, 2020 from <https://environmentlethbridge.ca/board-staff/>
- Environment Lethbridge. (2018, October). *Strategic plan*. Retrieved from <https://environmentlethbridge.ca/wp-content/uploads/2015/12/Strategic-Plan-2018-Final-Oct-30-18.pdf>
- Egri, C. P., & Herman, S. (2000). Leadership in the North American environmental sector: Values, leadership styles, and contexts of environmental leaders and their organizations. *The Academy of Management Journal, 43*(4), 571-604.
- Evans, L. R., & Mathur, A. (2005). The value of online surveys. *Internet Research, 15*(2), 195-219.

- Fazey et al. (2018). Ten essentials for action-oriented and second order energy transitions, transformations and climate change research. *Energy Research and Social Science*, 40, 54-70.
- Firmin, M. W. (2012). Themes. In L. M. Given (Eds.), *The SAGE encyclopedia of qualitative research methods* (pp. 868-869). SAGE Publications, Inc. doi:  
<http://dx.doi.org/10.4135/9781412963909>
- Flor, A. G. (2004). *Environmental communication: Principles, approaches and strategies of communication applied to environmental management*. Philippines: UP Open University.
- Gallagher, D. R. (2012). Why environmental leadership?. In Gallagher, D. R. (Ed.), *Environmental Leadership: A reference handbook*. Thousand Oaks, CA: SAGE.
- Grant, S. (2007). Learning through “being” and “doing.” *Action Research*, 5(3), 265–274.  
<https://doi.org/10.1177/1476750307081017>
- Hallgren, L. (2017). The role of social constructionism as a reflexive tool in environmental communication education. In Milstein, T., Pileggi, M., & Morgan, E.L., (Eds.). *Environmental communication pedagogy and practice* (1st ed., pp. 65-75). Routledge.  
<https://doi-org.ezproxy.royalroads.ca/10.4324/9781315562148>
- Harris, U. S. (2017). Engaging communities in environmental communication. *Pacific Journalism Review*, 23(1), 65–79.
- Herr, K., & Anderson, G. (2005). Chapter 2: Action research traditions and knowledge interests. In *The action research dissertation: A guide for students and faculty* (pp. 8–28). Thousand Oaks, CA: SAGE.

- Ison, R. (2008). Systems thinking and practice for action research. In P. Reason & H. Bradbury (Eds.), *The SAGE handbook of action research* (pp. 238-251). SAGE Publications Ltd  
doi: 10.4135/9781848607934.n24
- Jurin, R. R., Roush, D., Danter, J. (2010) Communicating about the environment. In *Environmental communication* (2nd ed., pp. 27-39). Springer. [https://doi-org.ezproxy.royalroads.ca/10.1007/978-90-481-3987-3\\_2](https://doi-org.ezproxy.royalroads.ca/10.1007/978-90-481-3987-3_2)
- Katz-Kimchi, M., & Goodwin, B. (2015). Forum: Organizing and integrating knowledge about environmental communication. *Environmental Communication*, 9(3), 367–369.  
<https://doi.org/10.1080/17524032.2015.1042985>
- Lefever, S., Dal, M., & Matthiasdottir, A. (2007). Online data collection in academic research: advantages and limitations. *British Journal of Educational Technology*, 38(4), 574–582.
- Lipmanowicz, H., & McCandless, K. (2014). *The surprising power of liberating structures: Simple rules to unleash a culture of innovation*. Seattle, WA: Liberating Structures Press.
- Meadows, D. H. (2008). Introduction. In D. Wright, (Ed.), *Thinking in systems: A primer* (pp. 2-34). White River Junction, VT: Chelsea Green.
- Milstein, T., Pileggi, M., & Morgan, E.L., (2017). Introducing environmental communication pedagogy and practice. In Milstein, T., Pileggi, M., & Morgan, E.L., (Eds.). *Environmental communication pedagogy and practice* (1st ed., pp. 1-10). Routledge.  
<https://doi-org.ezproxy.royalroads.ca/10.4324/9781315562148>
- Norman, L., & Christensen, J. R. (2012). Environmental leadership as a practice. In Gallagher, D. R. (Ed.), *Environmental leadership: A reference handbook*. Thousand Oaks, CA: SAGE.

- Olson, B. D., Cooper, D. G., Viola, J. J., & Clark, B. (2016). Community narratives. In *Handbook of methodological approaches to community-based research: Qualitative, quantitative, and mixed methods*. Retrieved from <https://ebookcentral-proquest-com.ezproxy.royalroads.ca>
- Peters, C. J., Fick, G. W., Bills, N. L., & Wilkins, J. L. (2009). Foodshed analysis and its relevance to sustainability. *Renewable agriculture and food systems*, 24(1), 1–7. <https://doi.org/10.1017/S1742170508002433>
- Redekop, B. (2010). Introduction: Connecting leadership and sustainability. In Redekop, B. W., & Olson, S. (Eds.), *Leadership for environmental sustainability*. (pp.36-54). Retrieved from ProQuest Ebook Central <https://ebookcentral-proquest-com.ezproxy.royalroads.ca>
- Rowe, W., Graf, M., Agger-Gupta, N., Piggot-Irvine, E., & Harris, B. (2013). Action research engagement: Creating the foundations for organizational change. Victoria, BC: Action Learning, Action Research Association Inc.
- Saldana, M. J., & Omasta, M. (2017). *Qualitative research: Analyzing life*. Thousand Oaks, CA: SAGE.
- Schoolman, E. D. (2020). Local food and civic engagement: Do farmers who market local food feel more responsible for their communities?. *Rural Sociology*, 85(3), 806–839. <https://doi.org/10.1111/ruso.12326>
- Senecah, S. L. (2007). Impetus, mission, and future of the environmental communication commission/division: Are we still on track? Were we ever?. *Environmental Communication: A Journal of Nature and Culture*, 1(1), 21–33. <https://doi.org/10.1080/17524030701334045>

- Senge, P. M. (2006). *The fifth discipline: The art & practice of the learning organization*. New York, NY: Currency Doubleday.
- Sim, J. (2001). Collecting and analyzing qualitative data: Issues raised by the focus group. *Journal of Advanced Nursing* 28(2). Retrieved from <https://onlinelibrary-wiley-com.ezproxy.royalroads.ca/doi/full/10.1046/j.1365-2648.1998.00692.x>
- Soni, G. D. (2015). Advantages of Green Technology. *Social Issues and Environmental Problems*, 3(9), 1-5.
- Stroh, D. P. (2015). *Systems thinking for social change*. White River Junction, VT: Chelsea Green.
- Torbert, W. & Taylor, S. (2008). Action inquiry: Interweaving multiple qualities of attention for timely action. In P. Reason & H. Bradbury (Eds.), *The SAGE handbook of action research* (pp. 238-251). SAGE Publications Ltd doi: 10.4135/9781848607934.n24
- Trullen, J., & Torbert, B., (2018). First-, second-, and third-person research in practice. *The Systems Thinker*. Retrieved from <https://thesystemsthinker.com/first-second-and-third-person-research-in-practice/>
- Western, S. (2010). Eco-leadership: Towards the development of a new paradigm. In Redekop, B. W., & Olson, S. (Eds.), *Leadership for environmental sustainability*. (pp.36-54). Retrieved from ProQuest Ebook Central <https://ebookcentral-proquest-com.ezproxy.royalroads.ca>
- Zerva, A., Grigoroudis, E., Karasmanaki, E., & Tsantopolous, G. (2021) Multiple criteria analysis of citizens' information and trust in climate change actions. *Environment*,



*Development and Sustainability*, 23(5), 7706–7727. [https://doi.org/10.1007/s10668-020-](https://doi.org/10.1007/s10668-020-00942-4)

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## Appendices

### Appendix A

#### Online Survey Questions

1. What is your connection to Environment Lethbridge
  - a. Member of Environment Lethbridge
  - b. General public
  - c. Partner organization
  - d. Other
  
2. How familiar are you with the Environment Lethbridge organization?
  - a. Very Familiar
  - b. Familiar
  - c. Somewhat familiar
  - d. Not familiar
  
3. Have you participated in any programming put on by Environment Lethbridge in the last three years?
  - a. Yes
  - b. No
  - c. I don't know
  - d. Prefer not to answer
  
4. How familiar are you with the programs, initiatives, and events offered by Environment Lethbridge?
  - a. Very Familiar
  - b. Familiar
  - c. Somewhat familiar
  - d. Not familiar
  
5. Under normal circumstances, what types of programs and events are you most likely to participate in?
  - a. In-person workshops
  - b. Personal sustainability challenges that I can complete at home
  - c. Large public events
  - d. Programs for small business
  - e. Other
    - i. Please specify

6. How do you find information about current environmental issues in Lethbridge?
  - a. Facebook
  - b. Instagram
  - c. Friends/word of mouth
  - d. Other
    - i. Please specify
  
7. How do you find general information about ways to take action on environmental issues?
  - a. Social Media
  - b. Other News Sources
  - c. Friends/word of mouth
  - d. Other
    - i. Please specify
  
8. How has the COVID-19 pandemic affected the environmental actions you take at home and at work?
  - a. Open comment
  
9. What environmental trends do you see in the city of Lethbridge that you think are the most important to address in the next three years?
  - a. Open Comment
  
10. Over the past 3 years, Environment Lethbridge's focus has been on waste reduction, climate and energy, and local food sustainability. What areas would you like to see EL focus on for the next three years?
  - a. Open Comment

## Appendix B

### Focus Group Questions

1. Which themes align best with our mission and vision?
2. Can you describe what you believe are the top three best things that came out of the last strategic plan?
3. Reflecting on the past three years, what would you say was the biggest missed opportunity in the last strategic plan?
4. If you had access to unlimited funding and resources, what would you do right now to have the biggest impact on the future?
5. Of the ideas presented, which do you feel would have the most positive impact on the community?
6. Are there any themes that haven't been identified that you feel should be considered for the next strategic planning cycle?
7. Given that the survey showed that the community still feels strongly about similar concerns to what we have been focusing on over the last three years, is there pockets or groups in the community that we should be trying to reach as part of our next strategic plan?
8. Which of the ideas presented would you consider to be the most achievable for the organization as a whole?
9. What do you see as the most important issue to focus on as we move forward in the current pandemic and post-pandemic reality?

## Appendix C

## Team Member Letter of Agreement

In partial fulfillment of the requirement for a Master of Arts in Leadership Degree at Royal Roads University, *Melissa Wiebe* will be conducting an inquiry study at *Environment Lethbridge* to help the organization gather information that will inform its next strategic plan. The Student's credentials with Royal Roads University can be established by calling the RRU School of Leadership.

## Inquiry Team Member Role Description

As a volunteer Inquiry Team Member assisting the Student with this project, your role may include one or more of the following: providing advice on the relevance and wording of questions and letters of invitation, supporting the logistics of the data-gathering methods, including observing, assisting, or facilitating an interview or focus group, taking notes, transcribing, reviewing analysis of data, and/or reviewing associated knowledge products to assist the Student and Environment Lethbridge's change process. In the course of this activity, you may be privy to confidential inquiry data.

## Confidentiality of Inquiry Data

In compliance with the Royal Roads University Research Ethics Policy, under which this inquiry project is being conducted, all personal identifiers and any other confidential information generated or accessed by the inquiry team advisor will only be used in the performance of the functions of this project, and must not be disclosed to anyone other than persons authorized to receive it, both during the inquiry period and beyond it. Recorded information in all formats is covered by this agreement. Personal identifiers include participant names, contact information, personally identifying turns of phrase or comments, and any other personally identifying information.

Personal information will be collected, recorded, corrected, accessed, altered, used, disclosed, retained, secured and destroyed as directed by the Student, under direction of the Royal Roads Academic Supervisor.

Inquiry Team Members who are uncertain whether any information they may wish to share about the project they are working on is personal or confidential will verify this with *Melissa Wiebe*, the Student.

**Statement of Informed Consent:** I have read and understand this agreement.

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 Name (Please Print)

---

 Signature

---

 Date

## Appendix D

### Survey Email Invitation

Dear community member,

I would like to invite you to be part of a research project that I am conducting. This project is part of the requirement for my Master's Degree in Leadership, at Royal Roads University. This project has been approved by the Executive Director, Environment Lethbridge and I have been given permission to contact potential participants for this purpose.

The purpose of my research is to gain a better understanding about the public perceptions of environmental work in the Lethbridge community and the role Environment Lethbridge has played.

Your name was chosen as a prospective participant because you have subscribed to be a member Environment Lethbridge's email list.

This phase of my research project will consist of an anonymous survey that is estimated to take 10-15 minutes.

You are not required to participate in this research project. If you do choose to participate, you are free to withdraw any time before the final submission of your survey without prejudice.

Please feel free to contact me at any time should you have additional questions regarding the project and its outcomes.

**<Link to survey here>**

If you would like to participate in my research project, please contact me at:

Name: Melissa Wiebe

Email:

Sincerely,

Melissa Wiebe

MA Leadership Student  
Royal Roads University

## Appendix E

## Online Survey Preamble

My name is Melissa Wiebe, and this research project in partnership with Environment Lethbridge, is part of the requirement for a Master's Degree in Leadership at Royal Roads University. The research includes this survey and is estimated to take 10-15 minutes to complete depending on the level of feedback you provide. The information you provide will be summarized, in anonymous format, in the body of the final report. At no time will any specific comments be attributed to any individual. All data received will be kept confidential and anonymous.

Your completion of this survey will constitute your informed consent.

- By clicking the survey link below, I confirm that I have read the information above that provides details of the research (please click to proceed to the online survey)

## Appendix F

## Focus Group Letter of Invitation

Dear [Insert Name], Environment Lethbridge Board of Directors,

I would like to invite you to be part of a research project that I am conducting. This project is part of the requirement for my Master's Degree in Leadership, at Royal Roads University. This project has been approved by the Executive Director of Environment Lethbridge, and I have been given permission to contact potential participants for this purpose.

The purpose of my research is to help Environment Lethbridge gain a better understanding of current conditions and community interests so they can envision appropriate goals for the next three year planning cycle and address the mandate outlined in its mission and vision statements.

Your name was chosen as a prospective participant because you serve on the board of directors for Environment Lethbridge

This phase of my research project will consist of a focus group and is estimated to last up to two hours.

The attached document contains further information about the study conduct and will enable you to make a fully informed decision on whether or not you wish to participate. Please review this information before responding.

You are not required to participate in this research project. If you do choose to participate, you are free to withdraw your responses from the data record up to ten days after the event without prejudice.

Please feel free to contact me at any time should you have additional questions regarding the project and its outcomes.

If you would like to participate in my research project, please contact me at:

Name: Melissa Wiebe

Email:

Telephone:

Sincerely,

Melissa Wiebe

MA Leadership Student  
Royal Roads University



Appendix G

Focus Group Consent Form

By signing this form, you agree that you are over the age of 18 and have read the information letter for this study. Your signature states that you are giving your voluntary and informed consent to participate in this project and have data you contribute used in the final report and any other knowledge outputs (articles, conference presentations, newsletters, etc.).

- I consent to the audio recording of the focus group
- I consent to quotations and excerpts expressed by me through the focus group be included in this study, provided that my identity is not disclosed
- I consent to the material I have contributed to and/or generated e.g. Jamboard through my participation in focus group be used in this study
- I commit to respect the confidential nature of the focus group by not sharing identifying information about the other participants

Name: (Please Print): \_\_\_\_\_

Signed: \_\_\_\_\_

Date: \_\_\_\_\_

Appendix H

Environment Lethbridge Board Presentation

## Environment Lethbridge Future Planning

Data summary and photos from community survey

### SURVEY STATS:

34 total respondents

73.5% were familiar or very familiar with Environment Lethbridge as an organization

### Programs & Participation

- 78.5% were familiar or very familiar with programs, initiatives and events offered by EL
- 85.3% have participated in programming you have offered in the last 3 years
- 64.7% would attend in-person workshops
- 58.8% would attend large public events
- 55.9% would participate in personal sustainability challenges

### WHERE DO THEY FIND INFORMATION

### CURRENT ENVIRONMENTAL ISSUES IN LETHBRIDGE

- 58.8% get information through friends or word of mouth
- 47% get information through Social Media: Facebook (35.5%), Instagram (8.3%) & Twitter (2.0%)
- 28.5% stay informed through emails or EL e-newsletter
- 23.5% use any other news source including internet search/online news, newspaper, and local news networks

### WAYS TO TAKE ACTION ON ENVIRONMENTAL ISSUES

- 76.5% get information through internet searches
- 58.8% get information from all other news sources
- 55.9% rely on friends or word of mouth
- 44.1% use social media
- 8.5% use email/e-newsletters from organizations they belong to

### Lessons Learned from the COVID-19 Pandemic

### MAIN THEMES

- Most respondents are familiar with your programming and have participated in something over the last three years.
- Under normal circumstances, they prefer to attend in-person or large public events (vs. individual initiatives or online events)
- They get most of their information about environmental issues from word of mouth or social media (mostly Facebook)
- They will use internet searches when looking to find ways to take action

### PEOPLE ARE TRAVELLING LESS AND SPENDING MORE TIME OUTSIDE

Respondents showed they were driving and travelling much less and want to see a reduction in GHG emissions in the city. They want to see more electric vehicles and charging stations and encourage cycling as an alternative to driving. They want to see more bike lanes, and better bike ability in the city.

With people spending much more time outside, sustainability of our natural spaces has become a concern. They would like to see education about how to enjoy spaces now and protect our natural spaces for the future.

### SINGLE USE WASTE IS STILL A MAJOR ISSUE

Most respondents confirmed they were using more single use items than they normally would because of online ordering, single use restaurant takeout, masks, face masks, antibacterial soap, shopping bags etc.

The pandemic has made them aware of the urgency of climate change, and the need for more sustainable habits and products.

### LOOKING AHEAD TO THE FUTURE

There were a handful of topics that were mentioned or used in all of the surveys which respondents were asked about what they felt were the most important things to concentrate on in the future.

Local food sustainability, general waste reduction, curb-side compost, renewable energy, watershed health, climate change/awareness and education.

### WHAT TIES IT ALL TOGETHER?

**Climate Change**  
Building awareness around climate change and what we can do to help.

**Education**  
Sharing info about why it is important to take environmental action and how.

### LOCAL FOOD SUSTAINABILITY




Respondents talked about having an interest in local food availability, sustainability and security.

They were interested in some education opportunities about how to support our local growers as well as to eat! or community garden activities.

- Home and community gardens
- Access to locally grown agriculture resources
- Food waste reduction

### RENEWABLE ENERGY & BUILDING PRACTICES




Respondents talked about increasing urban renewable energy projects, green building practices, and reducing GHG production in the city.

Rate awareness about urban and residential solar and wind energy possibilities.

Encourage greener ways to get around the city including car-pooling, biking, adoption of electric cars.

### WATERSHED HEALTH AND SUSTAINABILITY



Build awareness on water friendly practices individuals and families can undertake at home.

Native planting, recycling, rain water collection.

Build awareness about watershed health on a larger scale (eg. swimming & the Chikoum Watershed or the Osoyoos Basin) to our local farming community.

### WASTE REDUCTION



Reduction in single-use plastic waste was the most common answer in all sections of the survey.

Fostering a more circular economy in the city where citizens can share and trade their "stuff" instead of creating more waste.

Curbside & community compost projects to keep food waste out of the landfill was an initiative the community is VERY interested in.

## Do you have any questions?

Thanks for following along!



## Appendix I

### Additional Participant Responses

The responses in this document were not referenced in the main study but can be referenced for additional support of the study findings.

#### Finding 1: Waste and Consumption Reduction

- Ways to support local economies & re-use/sharing
- I think people really don't know how to do at-home compost.
- I was wanting to just add organic waste reduction
- for me it all has to do with net zero and whatever we need to do to try to stimulate people to try to have a net zero life or house
- Waste reduction, energy efficiency
- commercial recycling and composting
- Composting with access to compost material. 2 compost tubs not enough for our home efforts

#### Finding 2: Local Food Sustainability

- Increasing support for local food initiatives
- I think we do have to think about the fact that it's not something that is accessible to everyone.
- With people looking at saving \$, continue to emphasize how being environmentally conscious can save \$\$
- Seedy Saturday

#### Finding 3: Climate Resiliency

- Circular economy, green transportation
- Increased renewable energy integration (community PV projects, residential PV, municipal-buildings, etc.). A regional approach that leads to greater focus and awareness on climate change and the need for climate resiliency in order for our region to succeed in the long-term!

- Residential solar
- too many empty buses
- bike lanes, solar power, electric vehicles (EVs) and EV charging stations

#### Finding 4: Messaging and Communications

- Public engagement, in person events
- Discussion about “sustainability” and the need for all of us to have a shared understanding
- Opportunities are curtailed to engage in raising environmental awareness and environmental actions through meetings and events. However, online meetings and networking by email and telephone allows us to continue to inform ourselves and actively volunteer for environmental initiatives locally and regionally.

#### Finding 5: Engaging New Demographics and Building Partnerships

- Opportunity to connect with 18-24 year old demographic
- Youth engagement
  - They're becoming more engaged, they're starting to really have an opinion and they're really wanting to get out there
  - I also don't want to miss out on that energy, that we're seeing in students and the youth.
  - And so I always think okay so they just need a guiding hand. And then the activist in there is going to say okay this is what I want to do something
- It's really only folks that are neutral, or, sort of, not sure that you can really hope to move. People that are entrenched in anti anti climate change, that is not our audience
- We have deliberately focussed on sort of a slightly older, home-owner type of demographic, that's probably late 20s to mid-50s is our key demographic.
- So it's something for us to really explore and keep in mind when we are doing our strategic planning. Like what is realistic to actually get expertise if we are looking to do as good a job as we do with a different audience.
- examining ways to connect with and support other related initiatives and organizations in a Lethbridge context

Appendix J

Environment Lethbridge Funding and Community Influences

